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9/21/1979

OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS

DEQ

State of Oregon
Department of Environmental Quality

OREGON ENVIRONMENTAL QUALITY COMMISSION MEETING

September 21, 1979

Portland City Council Chambers
1220 Southwest Fifth Avenue
Portland, Oregon

A G E N D A

9:00 am CONSENT ITEMS

Items on the consent agenda are considered routine and generally will be acted on without public discussion. If a particular item is of specific interest to a Commission member, or sufficient public interest for public comment is indicated, the Chairman may hold any item over for discussion.

A. Minutes of the June 29, 1979, July 11, 1979, and August 31, 1979 Commission meetings

~~B. Monthly Activity Report for August 1979~~ POSTPONED

C. Tax Credit Applications

D. Request for Authorization for Public Hearing to consider modifying primary aluminum plant regulations pursuant to OAR 340-25-265(5)

PUBLIC FORUM

9:05 am E. Opportunity for any citizen to give a brief oral or written presentation on any environmental topic of concern. If appropriate, the Department will respond to issues in writing or at a subsequent meeting. The Commission reserves the right to discontinue this forum after a reasonable time if an unduly large number of speakers wish to appear.

INFORMATIONAL ITEMS

9:15 am F. Rogue Valley Mall, Medford--Informational Report on Indirect Source Permit Application

G. Amendments to Tax Credit Statutes--Informational Report

ACTION ITEMS

The Commission will hear testimony on these items at the time designated, but may reserve action until the Work Session later in the meeting.

9:45 am H. Variance Request - Request by Lake County for continuation of a variance to allow open burning dumps at Summer Lake, Christmas Valley, Silver Lake, Fort Rock, Plush, Adel, and Paisley (OAR 340-61-040(2)(c))

(MORE)

10:00 am I. Field Burning - Public Hearing to consider adoption as permanent rules amendments to OAR 340-26-005, 26-013 and 26-015 adopted as temporary rules June 29, 1979 and August 6, 1979 and submission to EPA as a State Implementation Plan (SIP) revision

10:15 am J. DEQ v. Mr. and Mrs. E. W. Mignot - Request to present additional evidence

10:30 am K. Appeal of Subsurface Variance Decisions

1. Joel Boyce, Douglas County

~~2. Darlene M. Steigleder, Clackamas County~~ POSTPONED

3. Clark Whitley, Josephine County

4. Edwin Campbell - Clackamas County (appeal from two decisions)

11:00 am L. Log Handling - Consideration of adoption of additional guidelines for log storage in Coos Bay

M. Water Quality Rule Adoption - Proposed adoption of revisions to Oregon's Water Quality Standards (OAR Chapter 340, Division 4)

WORK SESSION

The Commission reserves this time if needed to further consider proposed action on any item on the agenda.

Because of the uncertain time span involved, the Commission reserves the right to deal with any item at any time in the meeting except those items with a designated time certain. Anyone wishing to be heard on an agenda item that doesn't have a designated time on the agenda should be at the meeting when it commences to be certain they don't miss the agenda item.

The Commission will breakfast (7:30 am) in Conference Room A off the Standard Plaza Building Cafeteria, 1100 Southwest Sixth Avenue, Portland. The Commission will lunch ~~in Room 511 off the DEQ Headquarters Offices, 522 Southwest Fifth Avenue, Portland~~. in room 106 of the Portland City Hall.

THESE MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EQC

MINUTES OF THE ONE HUNDRED THIRTEENTH MEETING
OF THE
OREGON ENVIRONMENTAL QUALITY COMMISSION

September 21, 1979

On Friday, September 21, 1979, the one hundred thirteenth meeting of the Oregon Environmental Quality Commission convened in the Portland City Council Chambers, 1220 Southwest Fifth Avenue, Portland, Oregon.

Present were Commission members: Mr. Albert H. Densmore, Vice-Chairman; Mr. Ronald M. Somers; and Mr. Fred J. Burgess. Chairman Joe Richards was absent. Present on behalf of the Department were its Director, William H. Young, and several members of the Department staff.

The staff reports presented at this meeting which contain Director's recommendations mentioned in these minutes, are on file in the Director's office of the Department of Environmental Quality, 522 Southwest Fifth Avenue, Portland, Oregon.

BREAKFAST MEETING

The Commission met for breakfast at 7:30 a.m. in Conference Room A of the Standard Plaza Building Cafeteria at 1100 Southwest Sixth Avenue, Portland, and discussed the following items without taking any action on them.

1. Subsurface sewage disposal status report for the LaPine area of Deschutes and Klamath counties. Mr. Richard Nichols, Central Region Manager, reported that corrections have been made that the residents seemed to be satisfied with. It was found, he continued, that what was thought to be a permanent high-water table was only temporary.

2. Report on potential use of Pollution Control Bond Fund to finance planning and construction of sewage treatment facilities. Mr. George Lee of the Department's Budget and Planning Section presented the report on this matter which is made part of the Commision's record. Commissioner Densmore requested the staff to follow up with a meeting with the Metropolitan Service District, Association of Oregon Counties, etc. and report back at the next Commission meeting.

3. Status Report on Murphy Veneer compliance schedule. The Commission was given a letter written to the company by the Noise Section outlining the negotiated compliance schedule.

4. Proposed reply to Governor Atiyeh's memorandum on 1979 amendments to the Administrative Procedures Act. Linda Zucker, the Commission's hearing officer, reviewed the Governor's memorandum of September 5 which is made part of the Commission's record. Ms. Zucker indicated there was some question about interpretation of the phrase "unless the hearings officer is authorized or required by law or agency rule to issue an order." She said discussions were in progress between the Attorney General's office and the Governor's office. Commission Somers indicated he did not favor changing the present appeal process.

Ms. Zucker said a response to the Governor would be prepared by October 15 and the Commission would have the opportunity to review and comment before it was sent to the Governor.

5. Status Report on Martin Marietta compliance with Stipulated Consent Order. The company has been instructed to reduce fluoride discharge into the Columbia River. A stipulated consent order has been issued for a schedule to install a Japanese system which reduces fluroide emissions. The company has had problems meeting this schedule due to delays in getting equipment delivered. The company has exceeded their discharge limits but DEQ will not fine them unless the Commission feels otherwise.

FORMAL MEETING

AGENDA ITEM A--MINUTES OF THE JUNE 29, 1979, JULY 11, 1979, AND AUGUST 31, 1979, EQC MEETINGS.

It was MOVED by Commissioner Somers, seconded by Commissioner Burgess, and carried unaminously that the minutes of the June 29, 1979, July 11, 1979, and August 31, 1979, meetings be approved as presented.

AGENDA ITEM C--TAX CREDIT APPLICATIONS.

Commissioner Somer's questioned the description of "miscellaneous equipment" in the review report of application T-1099, Bohemia, Inc. Mr. McCall, Bohemia, Inc., indicated a complete audit was submitted with the application. He showed this audit to Commissioner Somers and Commissioner Somers was satisfied with it.

It was MOVED by Commissioner Somers, seconded by Commissioner Burgess, and carried unanimously that tax credit appications T-1075 (Seneca Sawmill Company), T-1087 (Edward W. Earnest), and T-1099 (Bohemia, Inc.) be approved.

AGENDA ITEM D--REQUEST FOR AUTHORIZATION FOR PUBLIC HEARING TO CONSIDER MODIFYING PRIMARY ALUMINUM PLANT REGULATIONS PURSUANT TO OAR 340-25-265(5).

The current aluminum plant regulation requires the Commission to review during calendar year 1979 the feasibility of applying "new plant" emission limits to "existing plants." Both Reynolds Metals and Martin Marietta have experienced problems which resulted in neither facility being able to adequately evaluate emissions from their new control system during normal conditions.

The Department is, therefore, requesting authorization to hold a public hearing to consider extending by two years, the date set forth in OAR 340-25-265(4)(b) and (5).

Summation

1. An adequate data base is not available at this time to conduct the required review regarding applying "new plant" emission limits to existing aluminum plants.

2. The Department estimates that two years additional time is needed to accumulate and analyze emission data obtained during normal operating conditions.

3. Subsequent to authorization by the Commission, the Department will hold a public hearing in late November or early December, 1979.

Director's Recommendation

Based upon the Summation, it is recommended that the Commission authorize the Department to hold a public hearing regarding proposed amendments to the primary aluminum plant regulations, OAR 340-25-265(4)(b) and 340-25-265(5).

It was MOVED by Commissioner Burgess, seconded by Commissioner Somers and carried unanimously that the Director's recommendation be approved.

AGENDA ITEM E--PUBLIC FORUM.

Mr. David J. Phillips, Clackamas County Department of Environmental Services, appeared regarding the proposed ban on backyard burning. He asked that this proposal be referred back to the Portland AQMA Committee for further discussion on the questions: (1) what would the result be of the ending of open burning, i.e., would it cause that much reduction in air contaminants; and (2) what would the extent of the ban be--only the metropolitan area? Mr. Phillips also asked how this ban would be applied to rural areas. He proposed that it should only apply completely to the Metropolitan Portland area and only to household waste in rural areas. Mr. Phillips said the solid waste system in Clackamas County had no room for the waste if backyard burning was completely banned.

AGENDA ITEM F--ROGUE VALLEY MALL, MEDFORD--INFORMATIONAL REPORT ON INDIRECT SOURCE PERMIT APPLICATION.

This item is an informational report concerning the indirect source construction permit application for the Rogue Valley Mall. The proposed project is a major regional shopping center which would be located in Medford in the area just south and west of the north interchange with I-5. The developer of the shopping center indicates that it will have a gross leasable area of 764,000 square feet with 3,820 parking spaces provided; five department stores in addition to other retail and commercial activity will be located on the site. The developer has requested consideration of their application by the Commission because the Department indicated that the issuance of a proposed permit based on the application was difficult to justify because of the substantial air quality impact. The Department must either issue the proposed permit or deny the application on or before October 4, 1979.

Mr. Howard Harris, Air Quality Division, presented an amendment to the staff report.

Director Young read into the record a resolution from the City/County Air Quality Liaison Committee of Jackson County stating that the indirect source permit on this project should be approved after one of the two following conditions is met:

1. It is demonstrated that an adequate air quality increment for increased concentration of carbon monoxide emissions can be accommodated without jeopardizing carbon monoxide attainment plans; or

2. The applicants meet the requirements of OAR 340-20-110(16)(k) and that they secure written agreements with the city of Medford as to their stated intent to contribute substantially to the transportation study currently being undertaken by city of Medford; and be further required to seek written agreements with the Rogue Valley Transportation District specifying the amount and type of service to be provided by the district and the financial contributions by the developer to the district as indicated on page 10 of the original application.

This Resolution is made a part of the Commission's record on this matter.

Mr. James Dixon, Northwest Commercial (one of the applicants on this project), testified that they felt the process they went through with the city of Medford for approval of their project was very comprehensive. They were meeting with the Rogue Valley Transportation District to work out service to the mall area. Mr. Dixon said they have made considerable effort to work out all problems and comply with all requirements.

In regard to the proposal that the applicant be required to provide full- or partial-startup funding for the implementation of a mandatory Inspections/Maintenance (I/M) Program in the Medford area, Commissioner Densmore responded that he felt that this was an unreasonable burden to place on an applicant especially when the city and county have not been asked to set up their own I/M Program. Director Young replied that it was probably beyond the developer's capability to set up this program alone but that perhaps partial funding from the developer could be required.

Mr. John Platt, Oregon Environmental Council, testified that the council were strong supporters of the Indirect Source Program and supported the recommendation of a mandatory I/M Program in the Medford area.

Mr. Young emphasized that this was being presented to the Commission on an informational basis and that it was the responsibility of the Director to make a judgment on the issuance of the proposed permit or the denial of one. He asked for guidance from the Commission on how best to approach this matter.

Mr. Young summarized the consensus of the Commission was that the Department move forward on issuing the permit after maximum mitigating efforts have been undertaken. The major mitigating capability of the Department had was to look at some way to bring the I/M Program on line in the Medford area. This might include requiring the developer to participate in some kind of prefunding of an impending mandatory program or the contribution of a like some of dollars to whatever the next best mitigative measure might be approached, assuming that the mandatory program did not come on line.

It was MOVED by Commissioner Somers, seconded by Commissioner Burgess and carried with the Commissioner Densmore dissenting that the Director be instructed to issue the permit and institute maximum mitigative measures which may include some prefunding toward a mandatory Inspection/Maintenance Program in the Medford, or some like funding devoted to the next best mitigative measures if the mandatory program did not materialize.

AGENDA ITEM H--REQUEST BY LAKE COUNTY FOR CONTINUATION OF A VARIANCE TO ALLOW OPEN BURNING DUMPS AT SUMMER LAKE, CHRISTMAS VALLEY, SILVER LAKE, FORT ROCK, PLUSH, ADEL, AND PAISLEY (OAR 340-61-040(2)(c))

Lake County has previously been granted a short-term variance from rules prohibiting open burning of solid wastes at disposal sites. The County has requested an extension to July 1, 1980. The staff report discusses the Lake County situation and makes a recommendation regarding the extension.

Summation

1. The Environmental Quality Commission on April 27, 1979, granted a variance to OAR 340-61-040(2)(c) to allow open burning of garbage at seven rural Lake County disposal sites. The Commission extended the variance on June 29, 1979, to expire October 1, 1979. This extension was granted to allow time for staff to negotiate with Lake County.

2. Department staff met with Lake County to determine a schedule for submission of cost and other related information.

3. Lake County has submitted a request for extension of variances to July 1, 1980. This coincides with the budget process for both the city of Paisley and Lake County. The request included some preliminary cost information.

4. The Department concurs with Lake County request. The extension of the variance will provide time for development of accurate cost estimates (for submission to the Department by March 1, 1980) and will allow for reasonable increases in budgets for solid waste disposal to start in a new budget year.

5. Strict compliance at this time would result in probable closure of those disposal sites with no alternative facility or method of solid waste disposal available.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Environmental Quality Commission grant an extension of variances to OAR 340-61-040(2)(c) until July 1, 1980, for Plush, Adel, Paisley, Summer Lake, Silver Lake, Fort Rock, and Christmas Valley subject to the following:

1. Prior to March 1, 1980, a schedule for upgrading the sites to landfills with no further burning or cost figures which justify continued variances be submitted to the Department for review.

2. Staff shall return to the June, 1980, Commission meeting with a recommendation regarding the Lake County solid waste program.

It was MOVED by Commissioner Somers, seconded by Commissioner Burgess and carried unanimously that the Director's recommendation be approved.

AGENDA ITEM I--PUBLIC HEARING TO CONSIDER ADOPTION OF PERMANENT RULES AMENDMENTS TO OAR 340-26-005, 26-013, AND 26-015 ADOPTED AS TEMPORARY RULES JUNE 29, 1979, AND AUGUST 6, 1979, AND SUBMISSION TO EPA AS A STATE IMPLEMENTATION PLAN (SIP) REVISION.

The proposed field burning rule revisions are to be submitted to the Environmental Protection Agency supporting DEQ's field burning SIP package. It is believed these revisions will complete the field burning related portions of the SIP and are approvable by the EPA after the public comment process is complete. The proposed rule revisions are identical to those originally outlined in the August 31, 1979, staff report.

Summation

The Environmental Protection Agency (EPA) Region X has reviewed the Department's proposed revisions to Oregon's Clean Air Act State Implementation Plan (SIP) and has requested additional clarification and changes affecting field burning regulations and procedures. In addition, in view of the potential for burning 180,000 as a result of an Executive Order issued by Governor Atiyeh, the city of Eugene has asked for revisions to certain field burning regulations.

At this September 21, 1979, public hearing the Department hopes to address these requests through rule revisions as shown in Attachment II of the staff report.

1. Modify OAR 340-26-005 to clearly define "Unlimited Ventilation Condition" and delete its definition from OAR 340-26-015;

   In combination with rule revisions regulating moisture content and lighting techniques, this clarifying revision is supposed to meet Clean Air Act requirements for continuous emission control of field burning.

2. Modify OAR 340-26-013(6)(a) to allow up to 7,500 acres of experimental burning to be conducted each year rather than for the specific year 1979;

3. Delete OAR 340-26-013(1)(c) removing the Commision's authority to set annual acreage limitation under administrative rules;

   The change is proposed to preclude the possible preemption of the EPA Administrator in establishing annual acreage levels.

4. Modify OAR 340-26-015(4)(f) to implement the 50/65 percent maximum relative humidity restrictions on burning under forecast notherly and southerly winds respectively. Such restrictions would be based upon information from the nearest measuring station and be implemented through the daily smoke management burn releases;

5. Modify OAR 26-015(4)(d)(B) to prohibit the burning of South Valley priority acreages upwind of the Eugene/Springfield area and thereby reduce the potential for smoke impact from these acreages.

Director's Recommendation

Based upon the Summation, it is recommended that the Commission take the following action:

1. Acknowledge as of record the consultation with and recommendations of Oregon State University, as presented at the public hearing, and the Department and any other parties consulted pursuant to ORS 468.460(3).

2. Subject to any changes found appropriate as as result of the September 21, 1979 public hearing, recommendations made to the Commission or findings reached after this public hearing, adopt the proposed amendments to OAR Chapter 340, Sections 26-005, 26-013, and 26-015 identified in the Summation as rules to become effective immediately upon filing the Secretary of State.

3. Instruct the Department to file promptly the adopted revised rules with the Secretary of State as permanent rules to become effective immediately upon such filing and forward the rules and pertinent information to the EPA as the supplement to the previously submitted revision to Oregon's Clean Air Act State Implementation Plan.

Mr. Jack Kondrasuk, Oregon Environmental Council testified that OEC was disappointed that agricultural field burning acreage were not reduced further. Also, he said they were concerned that the proposed regulations may tend to switch areas of pollution rather than reduce them. Mr. Kondrasuk expressed the opinion that those areas with greater political influence can have pollution reduced in their areas while those with less political influence have no reduction and bear the brunt of the change by having pollution increased in their areas. He said it would be preferable to have burning restrictions the same throughout the Valley. Mr. Kondrasuk's written statement is made a part of the Commission's record on this matter.

Mr. Terry Smith, city of Eugene, said the city's position had been made clear at past hearings and they supported the staff recommendations.

Mr. Dave Nelson, Oregon Seed Council, testified they had no problem with the majority of the proposed rules except the south priority burning rule. He said there were approximately 5,000 to 8,000 acres in this area that can be burned only under specific conditions. It is possible to these fiels burn without impact on Eugene, Mr. Nelson said. He asked for some opportunity for these farmers to sanitize their fields.

Mr. Scott Freeburn, Air Quality Division, said for the record that the Department had conferred with Oregon State University on these proposed rules and they had no comment.

It was MOVED by Commissioner Burgess, seconded by Commissioner Somers, and carried unanimously that the Director's recommendation be approved.

AGENDA ITEM I--DEQ vs. MR. AND MRS. E. W. MIGNOT--REQUEST TO PRESENT ADDITIONAL EVIDENCE.

It was MOVED by Commissioner Somers, seconded by Commissioner Burgess, and carried unanimously that the Department's Motion to Dismiss be granted, that the Hearing Officer's Findings be sustained, and that Mignot's September 14 request be denied.

AGENDA ITEM K(4)--APPEAL OF SUBSURFACE VARIANCE DECISIONS--EDWIN CAMPBELL, CLACKAMAS COUNTY

This agenda item concerns the appeal of a Variance Officer's decision to deny specific variances from Oregon Administrative Rules pertaining to subsurface sewage disposal systems.

Summation

1. The pertinent legal authorities are summarized in Attachment A of the staff report.

2. Mr. Campbell applied to Clackamas County for soil investigation on two parcels of land.

3. Mr. Polson visited the properties and evaluated the soil to determine if a standard subsurface sewage disposal system could be installed on each. Mr. Polson found an area on each parcel that contained soils meeting the Department's minimum standards except that on one parcel this area was located almost directly within the bounds of the BPA power line right-of-way. The area on the second parcel was located either within the BPA power line right of way or just north of the right-of-way on one of the three proposed lots, while the two remaining proposed lots were not approved.

4. Mr. Morgan requested that the denial and the reasons for the denial be reviewed by the Department's Northwest Regional Office.

5. Mr. Gray reviewed the denial and found the county's decision to be correct. He also concurred with their interpretation of the Department's rule (OAR 340-71-020(1)(k)).

6. Two variance applications were submitted to the Department in April and May, 1978, and were assigned to Mr. Olson.

7. Mr. Olson examined portions of each parcel both in and outside of the BPA right-of-way. He found those areas outside the right-of-way to contain soils with shallow depths to restrictive soil horizons and shallow depths to seasonally perched water tables. The areas within the right-of-way exhibited soil depths which complied with the Department's minimum requirements for drainfield placement.

8. A public information-type hearing was conducted by Mr. Olson so as to allow Mr. Campbell and others the opportunity to supply the facts and reasons in support of the variance request.

9. Mr. Olson reviewed the variance record and found that the testimony provided did not support a favorable decision for either parcel. Mr. Olson was unable to develop a modified subsurface system for either parcel that he believed could reasonably function in a satisfactory manner without creating a public health hazard. He was also unable to find that the Department's rule relating to drainfield placements within areas encumbered by easement to be unreasonable or impractical.

10. Mr. Olson notified Mr. Campbell by letter that his variance requests were denied.

11. Mr. Campbell's attorney filed for appeal of the decision by letter dated July 31, 1979.

Director's Recommendation

Based upon the findings in the Summation it is recommended that the Commission adopt the findings of the Variance Officer as the Commission's findings and uphold the decision to deny the variances.

Commissioner Somers stated that subsurface systems are being installed in Clackamas County within BPA easements without any problems. He said the BPA easement could not forbid a system under the ground beneath power lines, Director Young replied that the BPA easement allowed maintenance of the power lines, and the equipment necessary to do this maintenance might damage a system under the ground.

Mr. Ray Underwood, Department of Justice, summarized the legal issue. He said the rule provided that "before approval of any lot or parcel for subsurface sewage disposal was granted, it must be determined that the proposed drainfield site and the replacement site are free from encumbrances that might in the future prevent that site from being used for disposal or encumbrances that might in the future cause physical damage to occur to the system."

Mr. Underwood said the question was whether there could be a variance from that rule in view of those particular circumstances. He said the question was not whether or not the system could be installed pursuant to the BPA easement--it could be put in--but if by being put in, it was subject to damage in the future through BPA's exercise of its lawful rights under the easement.

Mr. Terry Morgan, attorney representing Edwin Campbell, testified that the property had no value without a variance for a subsurface system. He said all variance criteria had been met in this case. Commissioner Burgess said it seemed to be unreasonable, burdensome, and impractical to deny the use of the land within an easement if it otherwise meets all the requirements for a subsurface disposal field and if the risk is low

and there is some mechanism so that future property owners are fully aware of the fact that they are totally responsible for repairing, replacing, and improving the system, if it is damaged because of use within that easement.

It was MOVED by Commissioner Somers to overrule the Variance Officer's decision and grant the variance on condition that prior to the issuance of any permit there be evidence that there is recorded in the deed records of Clackamas County the conditions of the variance, an affidavit of the owner, and the copies of the two letters from BPA setting forth the conditions of the easement, so that any lender or future purchaser would have knowledge from the deed records. Commissioner Burgess seconded the motion with the understanding that the system meet all other requirements for a variance. The motion passed unanimously.

AGENDA ITEM K(1)--APPEAL OF SUBSURFACE VARIANCE DECISION--JOEL BOYCE, DOUGLAS COUNTY

This matter also deals with appeal of a Variance Officer's decision to deny specific variances from the Oregon Administrative Rules pertaining to subsurface sewage disposal systems.

Summation

1. The pertinent legal authorities are summarized in Attachment A of the staff report.

2. Mr. Boyce submitted an application for site evaluation to Douglas County.

3. Mr. Greg Farrell, visited the property and evaluated the soils to determine if the standard subsurface sewage disposal system could be installed. He observed that the proposed site had excessive ground slopes. He, therefore, found that the site was not approvable for installation of a standard subsurface sewage disposal system.

4. Mr. Boyce's variance application was found to be complete on January 26, 1979, and was assigned to Mr. Baker.

5. On the morning of March 12, 1979, Mr. Baker examined Mr. Boyce's proposed drainfield site and found that it was located within an area of potential land movement and limited useable area.

6. On the afternoon of March 12, 1979, Mr. Baker conducted a public information-type hearing to allow Mr. Boyce and others the opportunity to supply the facts and reasons to support the variance request.

7. Mr. Baker reviewed the variance record and found that the testimony provided did not support a favorable decision. He further determined that he was not able to modify the variance proposal to overcome the site limitations.

8. Mr. Baker notified Mr. Boyce by letter dated May 11, 1979, that his variance request was denied.

9. Mr. Boyce filed for appeal of the decision by letter dated May 29, 1979.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Commission adopt the findings of the Variance Officer as the Commission's findings and uphold the decision to deny the variance.

No one was present to testify on this matter.

It was MOVED by Commissioner Somers, seconded by Commissioner Burgess, and carried unanimously that the Variance Officer's decision be sustained.

AGENDA ITEM K(3)--APPEAL OF SUBSURFACE VARIANCE DECISION--CLARK WHITLEY, JOSEPHINE COUNTY

No one was present to testify on this matter.

Summation

1. The pertinent legal authorities are summarized in Attachment A to the staff report.

2. Mr. Whitley submitted an application for a domestic sewage disposal permit on September 19, 1973.

3. Mr. John Skyles approved the domestic sewage disposal permit which was issued on September 25, 1973. The expiration date on the permit was March 25, 1974.

4. Mr. Whitley applied for both the site evaluation and subsurface sewage disposal permit on June 21, 1978.

5. Mr. Hollis Gunther visited the site on two occasions and evaluated the site for subsurface sewage disposal suitability. He observed a permanent water table to be present at a depth of 5 1/2 feet from the ground surface. The site was found to be unapprovable for a standard subsurface sewage disposal system. The permit application fee was refunded to Mr. Whitley on August 3, 1978.

6. Mr. Whitley submitted an incomplete variance application to the Department on September 13, 1978.

7. Mr. Whitley's application was found to be complete on April 10, 1979, and assigned to Mr. David Couch on April 11, 1979.

8. On May 10, 1979, Mr. Couch examined Mr. Whitley's proposed drainfield site and found that a permanent water table could be expected to rise within 30 inches of the ground surface.

9. Mr. Couch conducted a public information-type hearing on May 10, 1979, so as to allow Mr. Whitley and others the opportunity to supply the facts and reasons to support the variance reqwest.

10. Mr. Couch reviewed the variance record and found that the testimony provided did not support a favorable decision. He determined that he was not able to modify the proposal to overcome the site limitations.

11. Mr. Couch notified Mr. Whitley by letter dated June 11, 1979, that his variance request was denied.

12. Mr. Whitley filed for an appeal of the decision by letter dated June 23, 1979.

Director's Recommendation

Based upon the findings in the Summation it is recommended that the Commission adopt the findings of the Variance Officer as the Commission's findings and uphold the decision to deny the variance.

It was MOVED by Commissioner Somers, seconded by Commissioner Burgess, and carried unanimously that the Variance Officer's decision be sustained.

AGENDA ITEM L--CONSIDERATION OF ADOPTION OF ADDITIONAL GUIDELINES FOR LOG STORAGE IN COOS BAY

The Department has completed a biological study in the Coos Bay on the affect of intertidal log storage of organisms living in the tideflats. Based on the work done, the Department proposed revisions to the log handling policy dealing with the location and manner of storing logs.

Summation

1. In October 1975, the EQC adopted a statement of policy regarding log handling in Oregon's public waters. Section 4 of this policy statement required phaseout of tideland log storage (where logs go aground on tide change) if more than nominal damage to acquatic life and/or water quality result. Section 7 required that storage times in water be minimized but established no firm time limit.

2. The Department completed the study in Coos Bay in December, 1978, which demonstrated significant damage to acquatic life in the areas where stored logs go aground. Fishery agencies support a conclusion of signficant damage to acquatic life.

3. Industry views the damage as insignificant when compared to the productivity of unaffected tideland in the Coos Bay Estuary.

4. The Department has investigated apparent alternatives to tideland storage and believes options are available to reduce, but not eliminate tideland storage in the near future. However, futher site specific evaluation is necessary to develop the details and determine the practicability of alternatives.

5. The Department has identified three alternative management strategies for Commission consideration based on the desirable, long-range goal of protecting and enhancing estuary aquatic productivity.

Director's Recommendation

Based on the summation, the Director recommends that Sections 4 and 7 of the Statement of General Policy of the October 1975, EQC-adopted program, and Policy on Log Handling on Oregon's Public Waters be amended to read as follows to establish a systematic long-range approach for minimizing tideland storage of logs in public waters:

4. Establishment of new log storage areas were logs go aground on tidal or low flow cycles will not be approved by the Department without specfic authorization of the Environmental Quality Commission. [Where there is evidence that such areas result in more than nominal damages to aquatic life and/or water quality, phased-out in accordance with approved schedule unless specific authorization for continuance is granted by the Commission in consideration of environmental trade-offs. Any phase-out program taking more than five years shall be subject to approval by the EQC.]

   In order to protect and enhance aquatic productivity, existing storage areas were logs go aground on tidal changes or low flow cycles shall be minimized in an orderly fashion as follows: (a) within in 120 days affected industries shall submit to the Department for approval a proposed program and time tables for minimizing the tideland areas impacted by loose log storage. Any program taking longer than two years to implement shall be approved by the EQC. (b) Prior to the EQC sign-off on each application to the Corps of Engineers and/or Division of State Lands for a permit to place or replace piling for log-raft mooring, the applicant shall provide evidence to DEQ that storage where logs go aground will be minimized. No approval for replacement of pilings in areas were logs go aground will be granted without substantial evidence that no other alternative exists. Any adverse decision of the Department may be appealed to the Commission.

7. The inventory of logs in public waters for any purpose shall be kept to the lowest practicable number for the shortest practicable time considering market conditions and the quality of the water at the storage site. Storage for longer than 12 months shall be approved by the Department. Prior to Department approval, the applicant must submit information demonstrating the need for such storage, the location and anticipated duration of storage, the alternatives investigated to minimize tideland storage, and the demonstration that no other practicable alternative is available.

   In addition to the above proposed amendments to the policy, it is recommmended that the staff work with industry to determine the economic and physical feasibility and environmental benefits of further reductions in tideland storage through bundling of logs. A report shall be submitted to the EQC within one year.

Commissioner Somers noted for the record that the Commission had received letters from Southwest Oregon Central Labor Trades Council, Weyerhaeuser, Georgia Pacific, Knutson Towboat Company, Coos Head Timber Company, and those letters are made a part of the Commission's record on this matter.

Ms. Marrie Buel, Governmental Affairs Coordinator for Oregon Environmental Council, requested stronger control measures than those outlined in the staff report. She said they realized that the economic burden which immediate elimination of water storage of logs would impose, but the cost of elimination of the damaging practice would not make it right. Ms. Buel's statement is made part of the record on this matter. Ms. Buel also read into the record a letter from The Association of Northwest Steelheaders which also asked for stronger measures.

Mr. Harold Hartman, Industrial Forestery Association, testified that all means of transporting and storage of logs need to remain available to industry. He said the Director's commitment to not eliminate log storage seemed to be contradicted by the staff report. There is no evidence that the impact of removal of logs would be significant. Mr. Hartman also presented a letter from the Menasha Corporation expressing their belief that the present policy provides sufficient latitude in which to regulate existing mills and their log storage operations. This letter is made a part of the Commission's record on this matter.

Mr. Michael Houck, Audubon Society of Portland, urged the Department to place more stringent restrictions on the storage of log rafts in the estuarine ecosystems. Mr. Houck's written statement is made a part of the Commission's record on this matter.

Mr. Al Mick, International Paper Company, testified that although the staff report said these guidelines would affect only Coos Bay, they would have impact statewide. He said he had not had adequate time to review the staff report and requested a delay until others in the state concerned with these guidelines could be notified.

Ms. Nancy Hoover, League of Women Voters, testified in support of the amendments to the Log Handling Policy. Her written statement is made a part of the Commission's record on this matter.

Mr. Howard B. Mellors, Crown Zellerbach, expressed concern that a local matter in Coos Bay might require a statewide policy amendment. He also stated that they did not have adequate time to prepare for this meeting. Mr. Mellors said they believed a change in the statewide guidelines at this time was inappropriate.

A statement was submitted from the Oregon Department of Fish and Wildlife which supported the staff recommendation on this matter. This statement is made a part of the Commission's record.

Mr. George Grove, Director, Port of Astoria, assumed these guidelines would affect Astoria. He said the proposed amendments would have an adverse impact on the Port of Astoria and urged delay until the impact could be fully assessed.

Mr. Don O. Corkill, Clatsop County Commissioner, appeared on behalf of the Oregon Coastal Zone Mangement Associaton. He presetned the following recommendations of the Association:

1. That the EQC delay action on the proposed amendments regarding log handling.

2. That the Oregon Coastal Zone Management Association be given an opportunity to work with DEQ personnel toward resolution of concerns with the proposed amendments.

3. That the EQC give attention to the relationship of the proposed policy amendments to the on-going comprehensive planning efforts.

4. That an opportunity be provided for affected parties (exclusive of the Coos Bay area) to review and provide input on the proposed policy amendments.

5. That DEQ staff meet with CREST to develop coordination of the Oregon Log Storage Policy and CREST log storage problem.

Mr. Corkill's written statement is made part of the Commission record.

Mr. John McGhehey, Georgia Pacific, testified in opposition to the proposed amendments and recommended that the only action that the Commission take would be to affirm the adequacy of the existing log handling practices established in 1975 and let the Fish and Wildlife Commission pursue the question of whether or not log storage is adversely affecting the total productivity of estuaries in Oregon. Mr. McGhehey's written statement is made a part of the Commission record.

Ms. Sandra Diedrich, Director of Coos/Curry Council of Government, urged the Commission to hold further consideration of revisions to its policies until the issue has been properly addressed and the Coos Bay Estuary Mangement Planning Process. Ms. Diedrich's written statement is made a part of the Commission's record.

Mr. R. B. Herrmann, Weyerhaeuser, presented technical testimony on the impact of log storage in Coos Bay. He determined that the grounding of logs was not significant in fish population. Mr. Herrmann's written statement is made a part of the Commission's record.

Mr. John Knutson, Knutson Towboat Company, Coos Bay, presented an aerial photograph of the Coos River log handling system. He testified that the EQC's current policy provided DEQ with sufficient regulatory authority and opposed the new amendments. Mr. Knutson's written statement is made a part of the Commission's record.

Mr. C. Wylie Smith, Coos Head Timber Company, testified in opposition to the proposed amendments to the guidelines. Mr. Smith's written statement is made a part of the Commission's record.

Mr. Bob Howry, Weyerhaeuser, said the aquatic productivity in the Coos Bay estuary was adequately protected by the existing policy and permit process and areas were logs go aground have already been minimized. He said Weyerhaeuser would support deep water storage providing adequate

protection was afforded. He said no policy change should be considered until alternative deep water storage areas which afforded adequate protection could specifically be identified. Mr. Howry's written statement is made a part of the Commission's record.

Mr. Douglas Keim, Southwest Oregon Central Labor Council, testified in opposition to the proposed amendments and expressed concern that if adopted, the proposed amendments to the log storage guidelines would put people out of jobs. Mr. Keim's written statement is made a part of the Commission's record.

Mr. John Foss, Al Peirce Lumber Company, testified in opposition to the proposed amendments to the log storage guidelines.

Mr. Harold L. Walton, International Woodworkers of America, expressed concern that proposed amendments would put people in the area out of jobs. He was opposed to the adoption of the proposed amendments. Mr. Walton's written statement is made a part of the Commission's record.

Mr. Jeff F. Kaspar, Port of Coos Bay, testified that they recognized the efforts of DEQ to protect the states waters, but felt that in view of resultant economic hardships and the existence of adequate restrictions, no change in the current log storage areas or methods should be allowed. Mr. Kaspar's written statement is made a part of the Commission's record.

Mr. Milo Summerville, International Woodworkers of America, opposed adoption of the amendments to the log storage guidelines and expressed concern that if adopted, it would mean a loss of jobs in the area.

Mr. Greg Baker, Oregon Department of Economic Development, said they were concerned that the proposed guidelines would have an inordinate economic impact on the Coos Bay area while achieving only small benefits to the enhancement of the Coos Bay estuary. They opposed adoption of the guidelines. Mr. Baker's written statement is made a part of the Commission's record.

Mr. Jeff Campbell, Coos Bay Log Patrol, testified in opposition to the proposed guidelines. He said there was a possibility of public liability if the logs were moved to unsafe deep water storage. He asked if this was a policy or a rule. He maintained that the present policy was being implemented as a rule. Mr. Campbell also stated that notice of this meeting was not in conformance with the Administrative Procedures Act because inadequate notice was given to other areas of the state which would be effected by the guidelines.

Ms. Barbara Burton, DEQ Southwest Region, said there was no chance that the proposed amendments to the log storage guidelines would result in mill closure. She said that the Department was sympathetic to the economic hardship to sawmills and the proposed guidelines take that into account.

Commissioner Somers said that the Commission was sympathetic to the testimony received on this matter but that these guidelines would not result in mill closure. He suggested that perhaps some rulemaking might need to be undertaken on this matter.

It was MOVED by Commission Somers that the Director's recommmendation be approved, and realizing the specific uniqueness of the report and studies to the Coos Bay area, have it apply at this time only to the Coos Bay area because of the notice. Further, the Department be directed to meet with other concerned areas of the state to promulgate similar policies or rules or further amendments to the guidelines and report back to the Commission as soon as possible. It was also moved to make the following wording change in the proposed amendment to 4 as follows:

> In order to protect [and enhance aquatic productivity] beneficial uses of estuarine waters and water quality existing storage areas...
>
> No approval for replacement piling in areas were the logs go aground will be granted without substantial evidence that no other reasonable alternative exists.

The motion was seconded by Commissioner Burgess who specified that the DEQ policy was an interim policy until such time as comprehensive plans, in which DEQ and all other agencies and interested parties participate, concerning the activities within the estuaries as to specific activities in specific places are adopted.

The motion was passed unaminously.

AGENDA ITEM M-PROPOSED ADOPTIONS OR REVISIONS TO OREGON'S WATER QUALTIY STANDARDS (OAR Chapter 340, Division 4).

The U.S. Environmental Protection Agency (EPA) disapproved and requested revision of some of the standards adopted by the Commission in December 1976, by letter to the Governor dated July 18, 1977. EPA requested changes in three areas to permit their full approval of Oregon standards: (1) anti-degradation expansion and clarification, (2) clarification of procedures for granting variances in temperature and turbibity standards to accomodate essential instream construction or elimination of such variances, and (3) relaxtion of total dissolved gas standard to be consistent with adjacent states. EPA also, by separate communication, urged the Department to consider more specific standards relative to toxics and consider substitution of fecal coliform standards for the present coliform standards. The Department has employed the public participation process to make the revisions necessary for EPA approval of these standards which are proposed to the Commission for adoption at this meeting.

Summation

1. For EPA approval of Oregon standards, the revisions are necessary for six water quality standards as follows:

   a. Antidegradation policy expansion and clarification.

   b. Clarification of procedures for granting variances for the:
      (1) Temperature Standard
      (2) Turbidity Standard

c. Relaxation of the total dissolved gas standard to be consistent with adjacent states.

d. Substitution of a Fecal Coliform Standard for the Total Coliform Standard.

e. Consideration of more specific standarads for Toxic substances.

2. The Department employed the following public participation process in revising the standards.

a. Issue papers and possible alternatives were developed and circulated to governmental agencies and the public for review.

b. Comments received were evaluated and further revisions to the standards were proposed.

c. The second set of draft proposals were circulated for review and comment in April, 1979. Also included in this mailing was a public notice announcing the scheduled public hearings in June, 1979.

d. Four public hearings were held in Portland, Roseburg, Bend, and Pendleton between June 4 and 7, 1979, and the record was left open through June 18, 1979, to receive additional testimony.

e. Evaluation of hearing testimony and development of recommended standards revisions are consistent with input from the interested public and governmental agencies.

Director's Recommendation

Based upon the summation, it is recommended that the Commission approve the revisions as proposed for each of the six Water Quality Standards.

Ms. Llewellyn Matthews, Northwest Pulp and Paper Association, presented some concerns regarding the proposed rules. In regard to background, Ms. Matthews said that where background is greater than standard, it is standard. They were concerned that any industry on that body of water would not be able to discharge at all because any discharge would result in conditions worse than background. She referenced EPA's quality criteria for water and said EPA did not recommend that its criteria be used as standard as the rules propose.

It was MOVED by Commissioner Somers, seconded by Commissioner Burgess and carried unaimously that the Director's Recommendation be approved.

AGENDA ITEM G - INFORMATION REPORT ON AMENDMENTS TO TAX CREDIT STATUTES

The 1979 Legislature made several changes to the Pollution Control Facilities Tax Credit Statutes. The purpose of this report was to inform the Commission of those changes and to determine what improvements to the tax credit program, if any, the Commission would like the Department to initate to aid in its administration.

Commissioner Somers was concerned that no rules had ever been adopted to administer the tax credit program. So far, he said, there had been no problems. He asked for a Department of Justice opinion on the need for rules.

Mr. Ray Underwood, Department of Justice, responded that no rules were necessary because it would be impossible to improve on the specificity of the statutory authority. However, he did indicate it would be a good idea to document past decisions.

No action of the Commission was necessary on this item.

There being no further business, the meeting was adjourned.

Respectfully Submitted,

Carol A. Splettstaszer
Recording Secretary

MS5990.7

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item C, September 21, 1979, EQC Meeting

TAX CREDIT APPLICATIONS

Director's Recommendation

It is recommended that the Commission issue Pollution Control Facility Certificates to the following applicants (see attached review reports):

T-1075	Seneca Sawmill Company
T-1087	Edward W. Earnest
T-1099	Bohemia, Inc.

Bill

WILLIAM H. YOUNG

MJDowns:cs
229-6485
9/7/79
Attachments

PROPOSED SEPTEMBER 1979 TOTALS

Air Quality	$ 63,781
Water Quality	-0-
Solid Waste	503,536
Noise	-0-
	567,317

CALENDAR YEAR TOTALS TO DATE

Air Quality	$ 3,505,369
Water Quality	6,015,473
Solid Waste	1,322,930
Noise	94,176
	$10,937,948

Appl T-1075
Date 6/29/79

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Seneca Sawmill Co.
Box 851
Eugene, OR 97440

The applicant owns and operates a sawmill at Seneca, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Claimed Facility

The facility described in this application consists of a vacuum system to collect airborne sawdust at the saws. The sawdust is air transported to a cyclone and then to an existing truck bin. Material from the chipper is also added to the cyclone.

Request for Preliminary Certification for Tax Credit was made on February 27, 1978, and approved on May 1, 1979.

Construction was initiated on the claimed facility in July, 1978, completed in September, 1978, and the facility was placed into operation in December, 1978.

Facility Cost: $59,281.42 (Accountant's Certification was provided).

3. Evaluation of Application

This system has been installed in addition to the conventional mechanical conveyors to remove sawdust from the plant. No water is used at the saws and more sawdust becomes airborne in the turbulence created by the saws. There is a potential for some of this sawdust to leave the plant site.

The proposed system consists of vacuum pickup points at the saws to collect airborne dust. The material is then ducted to the cyclone. The conventional mechanical conveyor system separates the large pieces for additional size reduction and then all collected wood waste, including that from the vacuum system, is blown to an existing bin.

In addition to the cost of the vacuum system, the applicant has included the cost of the feeder, blower, motor, and auger located at the discharge of the mechanical conveyor system. These items are necessary to blow waste material to the storage bin whether the vacuum system is installed or not. Therefore, these items do not qualify as pollution control facilities.

The vacuum system will reduce fugitive emissions from the plant site. It is, therefore, eligible for tax credit.

4. Summation

a. Facility was constructed after receiving approval to construct and preliminary certification issued pursuant to ORS 468.175.

b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).

c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing air pollution.

d. A motor, blower, screwdriver, and feeder were included in the cost of the suction system which are a necessary part of the mechanical conveyor system and not a part of the vacuum system. These items do not qualify for tax credit.

The company has provided the cost of the nonqualifying items as $4808.00 or 8 percent of the total cost.

The primary purpose of the remaining equipment is air pollution control with 80 percent or more of the remaining cost ($54,473.42) allocable to pollution control.

5. Director's Recommendation

Based upon the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of $54,473.42 with 80 percent or more allocated to pollution control be issued for the facility claimed in Tax Credit Application No. T-1075.

FASkirvin:o
(503) 229-6414
6/29/79
PA2762

Appl T-1087
Date 8-20-79

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Edward W. Earnest
7121 Dark Hollow Road
Medford, Oregon 97501

The applicant owns and operates a pear orchard at Medford, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Claimed Facility

The facility described in this application is one used Tropic Breeze wind machine used for frost protection.

Request for Preliminary Certification for Tax Credit was made on July 17, 1978, and approved on July 19, 1978.

Construction was initiated on the claimed facility on July 19, 1978, completed on March 10, 1979, and the facility was placed into operation on March 10, 1979.

Facility Cost: $4,500

3. Evaluation of Application

There is no law limiting the use of fuel oil fired heaters to control frost damage to fruit trees even though the heaters produce signficant smoke and soot air emissions. The orchard farmers desire a secure, long-range solution to frost control that includes the reduction or elimination of the smoke and soot nuisance.

An orchard fan blows warmer air from above the trees--when there is a temperature inversion--down into the trees.

The facility has eliminated the use of oil heaters on marginal heating nights in the circular area effectively covered by the air circulation. On colder nights, the time that normal heating is required is reduced by varying periods of time depending upon how fast the temperature drops.

4. Summation

a. Facility was constructed after receiving approval to construct and preliminary certification issued pursuant to ORS 468.175.

b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).

c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing air pollution.

d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468 and the rules adopted under that chapter.

e. The investment and cost of operating the wind machine during marginal heating periods is similiar to traditional heating equipment cost.

5. Director's Recommendation

Based upon the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of $4,500 with 80% or more allocated to pollution control be issued for the facility claimed in Tax Credit Application No. T-1087.

F. A. Skirvin:np
(503) 229-6414
September 5, 1979
AN8053.4

Application No. T-1099
Date: August 30, 1979

STATE OF OREGON - DEPARTMENT OF ENVIRONMENTAL QUALITY

Tax Relief Application Review Report

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1. Applicant

Bohemia, Inc.
Coburg Division
2280 Oakmont Way
Eugene, Oregon 97401

The applicant owns and operates a bark extraction plant at Coburg, Oregon.

Application was made for tax credit for solid waste pollution control facility.

2. Description of Claimed Facility

The facility described in this application is an expansion of the Coburg bark plant (T-623) and includes the following:

1. Truck dump, 20 units Carothers bin and storage area to receive bark from outside sources.

2. Two PC-38 grinders.

3. One Model 532 Rotex screen.

4. Feed air system to accommodate the increased volume.

5. Conversion of bag house.

6. An additional building to house the equipment and miscellaneous equipment.

Request for Preliminary Certification for Tax Credit was made April 3, 1978 and approved June 14, 1978.

Construction was initiated on the claimed facility June 1, 1978, completed August 10, 1979, and the facility was placed into operation August 10, 1979.

Facility Cost: $503,536 (Accountant's certification was provided).

3. Evaluation of Application

The claimed equipment is an expansion of the existing solid waste utilization facility (T-623) at Coburg. This new equipment has increased the capacity of the plant by 40%, or approximately 800 tons/month. The facility utilizes 100% of the waste bark, leaving no residue for disposal. Products of this process include a wax and an extender, which are used by different industries. The primary reason for installation of this facility was to increase utilization of a waste material.

4. Summation

A. Facility was constructed under a preliminary certificate of approval issued pursuant to ORS 468.175.

B. Facility was under construction on or after January 1, 1973, as required by ORS 468.165(1)(c).

C. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing solid waste.

D. The facility is necessary to satisfy the intents and purposes of ORS Chapter 459, and the rules adopted under that chapter.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of $503,536 be issued for the facility claimed in Tax Credit Application Number T-1099.

WHD:dro
8/30/79
229-6266

Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

TO: Environmental Quality Commission

FROM: Director

SUBJECT: Agenda Item No. D, September 21, 1979 EQC Meeting
Request for Authorization to Hold Public Hearing
Regarding Proposed Amendments of Primary Aluminum
Plant Regulation OAR 340-25-265(4)(b) and OAR 340-25-265(5).

Background

OAR 340-25-265(5) requires the Commission to review, during calendar year 1979, the feasibility of applying "new plant" emission limits to "existing plants". For reasons discussed later herein, this review is not practical at this time. Therefore, the Department is proposing to extend the review date and related compliance date by two years.

Statement of Need for Rule Making

Pursuant to ORS 183.335 (7), this statement provides information on intended action to amend a rule.

Legal Authority

ORS 468.295 authorizes the Commission to adopt rules limiting air contaminant emissions.

Need for the Rule

The subject rule amendment is needed to allow sufficient time to accumulate representative emission data necessary for determining if "existing plants" can ultimately comply with "new plant" emission limits.

Principle Documents Relied Upon in this Proposed Rulemaking

Primary Aluminum Plants regulation OAR 340-25-255 through 340-25-290.

Evaluation

Both existing aluminum plants, i.e., Martin Marietta in The Dalles and Reynolds Metals in Troutdale, have essentially replaced their primary control systems since the Commission modified the Primary Aluminum Plant regulations in 1973. In each case, unanticipated operational problems occurred which in effect has not allowed the accumulation of emission data under normal operating conditions.

OAR 340-25-265(5) requires the Commission to review, during calendar year 1979, the feasibility of applying "new plant" emission limits to "existing plants" based on the following considerations:

(a) The then current state of the art of controlling emissions from primary aluminum plants;
(b) The progress in controlling and reducing emissions exhibited at that time by then existing aluminum plants;
(c) The need for further emissions control at those facilities based on discernible environmental impact of emissions up to that time.

This review is not practical at this time due to the lack of emission data obtained during normal operations.

The Department estimates that two years additional time is required to achieve an adequate data base. Therefore, it is proposed to amend the regulation by extending the dates in OAR 340-25-265(4)(b) and 340-25-265(5) by two years and minor word changes. The proposed amended sections and the current regulation are attached hereto.

If authorized by the Commission, the Department will hold a public hearing on the proposed amendments in late November or early December, 1979.

Summation

1. An adequate data base is not available at this time to conduct the required review regarding applying "new plant" emission limits to existing aluminum plants.

2. The Department estimates that two years additional time is needed to accumulate and analyze emission data obtained during normal operating conditions.

3. Subsequent to authorization by the Commission, the Department will hold a public hearing in late November or early December, 1979.

Director's Recommendation

Based upon the summation, it is recommended that the Commission authorize the Department to hold a public hearing regarding proposed amendments to the Primary Aluminum Plant Regulations, OAR 340-25-265(4)(b) and 340-25-265(5).

Bill

WILLIAM H. YOUNG

Attachments:

1. Proposed Amendments
2. Existing Regulations

FAS:nlb

Attachment 1 - Proposed Amendments to OAR 340-25-265(4)(b) and 340-25-265(5)

(b) Existing plants shall comply with emission standards in section 340-25-265(1) by no later than January 1, [~~1984~~] 1986, pending a review by the Commission as described in 340-25-265(5).

(5) The Commission shall review, [~~during calendar year 1979~~] by no later than December 31, 1981, the feasibility of applying subsection 340-25-265(4)(b) based on their conclusions regarding:

(a) The then current state of the art of controlling emissions from primary aluminum plants;

(b) The progress in controlling and reducing emissions exhibited at that time by then existing aluminum plants;

(c) The need for further emissions control at those facilities based on discernible environmental impact of emissions up to that time.

Note: Brackets, [ ] indicate proposed deletions.

Underlining, no later than, indicates proposed additions.

FAS:nlb

Primary Aluminum Plants

[ED. NOTE: Administrative Order DEQ 60 repealed previous rules 340-25-255 through 340-25-290 (consisting of DEQ 19, filed 7-14-70 and effective 8-10-70).]

Statement of Purpose

340-25-255 In furtherance of the public policy of the state as set forth in ORS 449.765, it is hereby declared to be the purpose of the Commission in adopting the following regulations to:

(1) Require, in accordance with a specific program and time table for each operating primary aluminum plant, the highest and best practicable collection, treatment, and control of atmospheric pollutants emitted from primary aluminum plants through the utilization of technically feasible equipment, devices, and procedures necessary to attain and maintain desired air quality.

(2) Require effective monitoring and reporting of emissions, ambient air levels of fluorides, fluoride content of forage, and other pertinent data, The Department will use these data, in conjunction with observation of conditions in the surrounding areas, to develop emission and ambient air standards and to determine compliance therewith.

(3) Encourage and assist the aluminum industry to conduct a research and technological development program designed to reduce emissions, in accordance with a definite program, including specified objectives and time schedules.

(4) Establish standards which, based upon presently available technology, are reasonably attainable with the intent of revising the standards as needed when new information and better technology are developed.

Statutory Authority:
Hist: Filed 12-5-73 as DEQ 60,
Eff. 12-25-73

Definitions

340-25-260 (1) "All Sources" means sources including, but not limited to, the reduction process, alumina plant, anode plant, anode baking plant, cast house, and collection, treatment, and recovery systems.

(2) "Ambient Air". The air that surrounds the earth, excluding the general volume of gases contained within any building or structure.

(3) "Annual Average" means the arithmetic average of the twelve most recent consecutive monthly averages reported to the Department.

(4) "Anode Baking Plant" means the heating and sintering of pressed anode blocks in oven-like devices, including the loading and unloading of the oven-like devices.

(5) "Anode Plant" means all operations directly associated with the preparation of anode carbon except the anode baking operation.

(6) "Commission" means Environmental Quality Commission.

(7) "Cured Forage" means hay, straw, ensilage that is consumed or is intended to be consumed by livestock.

(8) "Department" means Department of Environmental Quality.

(9) "Emission" means a release into the outdoor atmosphere of air contaminants.

(10) "Emission Standards" means the limitation on the release of contaminant or multiple contaminants to the ambient air.

(11) "Fluorides" means matter containing fluoride ion.

(12) "Forage" means grasses, pasture, and other vegetation that is consumed or is intended to be consumed by livestock.

(13) "Monthly Average" means the arithmetic average of three test results obtained during any calendar month, utilizing test methods and procedures approved by the Department.

(14) "Opacity" means the degree to which an emission reduces transmission of light or obscures the view of an object in the background.

(15) "Particulate Matter" means a small discrete mass of solid or liquid matter, but not including uncombined water.

(16) "Primary Aluminum Plant" means those plants which will or do operate for the purpose of, or related to, producing aluminum metal from aluminum oxide (alumina).

(17) "Pot Line Primary Emission Control Systems" means the system which collects and removes contaminants prior to the emission point. If there is more than one such

system, the primary system is that system which is most directly related to the aluminum reduction cell.

(18) "Regularly Scheduled Monitoring" means sampling and analyses in compliance with a program and schedule approved pursuant to rule 340-25-280.

(19) "Ringlemann Smoke Chart" means the Ringlemann Smoke Chart with instructions for use as published in May, 1967, by the U.S. Department of Interior, Bureau of Mines.

(20) "Standard Dry Cubic Root of Gas" means that amount of the gas which would occupy a cube having dimensions of one foot on each side, if the gas were free of water vapor at a pressure of 14.7 P.S.I.A. and a temperature of 60°F.

[Publications: The publication(s) referred to or incorporated by reference in this rule is available in the office of the Department of Environmental Quality or Secretary of State.]

Statutory Authority:

Hist: Filed 12-5-73 as DEQ 60,
Eff. 12-25-73

Emission Standards

340-25-265 (1) The exhaust gases from each primary aluminum plant constructed on or after January 1, 1973, shall be collected and treated as necessary so as not to exceed the following minimum requirements:

(a) Total fluoride emissions from all sources shall not exceed:

(A) a monthly average of 1.3 pounds of fluoride ion per ton of aluminum produced; and

(B) an annual average of 1.0 pound of fluoride ion per ton of aluminum produced; and

(C) 12.5 tons of fluoride ion per month from any single aluminum plant without prior written approval by the Department.

(b) The total of organic and inorganic particulate matter emissions from all sources shall not exceed:

(A) a monthly average of 7.0 pounds of particulate per ton of aluminum produced;

(B) an annual average of 5.0 pounds of particulate per ton of aluminum produced.

(c) Visible emissions from any source shall not exceed ten (10) percent opacity or 0.5 on the Ringlemann Smoke Chart at any time.

(2) Each primary aluminum plant constructed and operated after January 1, 1973, shall be in full compliance with these regulations no later than 180 days after completing potroom start-up and shall maintain full compliance thereafter.

(3) The exhaust gases from each primary aluminum plant constructed on or before January 1, 1973, shall be collected and treated as necessary so as not to exceed the following minimum requirements:

(a) Total fluoride emissions from all sources shall not exceed:

(A) a monthly average of 3.5 pounds of fluoride ion per ton of aluminum produced; and

(B) an annual average of 2.5 pounds of fluoride ion per ton of aluminum produced; and

(C) 22.0 tons of fluoride ion per month from any single aluminum plant without prior written approval by the Department.

(b) The total organic and inorganic particulate matter emissions from all sources shall not exceed:

(A) a monthly average of 13.0 pounds of particulate per ton of aluminum produced; and

(B) an annual average of 10.0 pounds of particulate per ton of aluminum produced.

(c) Visible emissions from any source shall not exceed 20 percent opacity or 1.0 on the Ringlemann Smoke Chart at any time.

(4) Each existing primary aluminum plant shall proceed promptly with a program to comply as soon as practicable with these regulations. A proposed program and implementation plan shall be submitted by each plant to the Department not later than 180 days after the effective date of these amended regulations.

The Department shall establish a schedule of compliance for each existing primary aluminum plant. Each schedule shall include the dates by which compliance shall be achieved, but in no case, shall full compliance be later than the following dates:

(a) Existing plants shall comply with emission standards in section 340-25-265(3) by January 1, 1977;

(b) Existing plants shall comply with emission standards in section 340-25-265(1)

by January 1, 1984, pending a review by the Commission as described in 340-25-265(5).

(5) The Commission shall review, during calendar year 1979, the feasibility of applying subsection 340-25-265(4)(b) based on their conclusions regarding:

(a) The then current state of the art of controlling emissions from primary aluminum plants;

(b) The progress in controlling and reducing emissions exhibited at that time by then existing aluminum plants;

(c) The need for further emissions control at those facilities based on discernible environmental impact of emissions up to that time.

[Publications: The publication(s) referred to or incorporated by reference in this rule is available in the office of the Department of Environmental Quality or Secretary of State.]

Statutory Authority:
Hist: Filed 12-5-73 as DEQ 60,
Eff. 12-25-73

Special Problem Areas

340-25-270 The Department may require more restrictive emission limits than the numerical emission standards contained in rule 340-25-265 for an individual plant upon a finding by the Commission that the individual plant is located, or is proposed to be located, in a special problem area. Such more restrictive emission limits for special problem areas may be established on the basis of allowable emissions per ton of aluminum produced or total maximum daily emissions to the atmosphere, or a combination thereof, and may be applied on a seasonal or year-round basis.

Statutory Authority:
Hist: Filed 12-5-73 as DEQ 60,
Eff. 12-25-73

Highest and Best Practicable Treatment and Control Requirement

340-25-275 In order to maintain the lowest possible emissions of air contaminants, the highest and best practicable treatment and control currently available shall in every case be provided, but this section shall not be construed to allow emissions to exceed the specific emission limits set forth in rule 340-25-265.

Statutory Authority:
Hist: Filed 12-5-73 as DEQ 60,
Eff. 12-25-73

Monitoring

340-25-280 (1) Each primary aluminum plant constructed and operated on or before January 1, 1973, shall submit, within sixty (60) days after the effective date of these amended regulations, a detailed, effective monitoring program. The program shall include regularly scheduled monitoring and testing by the plant of emissions of gaseous and particulate fluorides and total particulates. The plant shall take and test a minimum of three (3) representative emission samples each calendar month. The samples shall be taken at specified intervals. A schedule for measurement of fluoride levels in forage and ambient air shall be submitted. The Department shall establish a monitoring program for the plant which shall be placed in effective operation within ninety (90) days after written notice to the plant by the Department of the established monitoring program.

(2) Each primary aluminum plant proposed to be constructed and operated after January 1, 1973, shall submit a detailed preconstruction of post-construction monitoring program as a part of the air contaminant discharge permit application.

Statutory Authority:
Hist: Filed 12-5-73 as DEQ 60,
Eff. 12-25-73

Reporting

340-25-285 (1) Unless otherwise authorized in writing by the Department, data shall be reported by each primary aluminum plant within thirty (30) days of the end of each calendar month for each source and station included in the approved monitoring program as follows:

(a) Ambient air: Twelve-hour concentrations of gaseous fluoride in ambient air expressed in micrograms per cubic meter of air, and in parts per billion (ppb); also 28-day test results using calcium formate ("limed") paper expressed in micrograms of

fluoride per centimeter squared per cubic meter (ug/-cm^2/m^3).

(b) Forage: Concentrations of fluoride in forage expressed in parts per million (ppm) of fluoride on a dried weight basis.

(c) Particulate emissions: Results of all emission sampling conducted during the month for particulates, expressed in grains per standard dry cubic foot, in pounds per day, and in pounds per ton of aluminum produced. The method of calculating pounds per ton shall be as specified in the approved monitoring programs. Particulate data shall be reported as total particulates and percentage of fluoride ion contained therein.

(d) Gaseous emissions: Results of all sampling conducted during the month for gaseous fluorides. All results shall be expressed as hydrogen fluoride in micrograms per cubic meter and pounds per day of hydrogen fluoride, and in pounds per ton of aluminum produced.

(e) Other emission and ambient air data as specified in the approved monitoring program.

(f) Changes in collection efficiency of any portion of the collection or control system that resulted from equipment or process changes.

(2) Each primary aluminum plant shall furnish, upon request of the Department, such other data as the Department may require to evaluate the plant's emission control program. Each primary aluminum plant shall report the value of each emission test performed during that reporting period, and shall also immediately report abnormal plant operations which result in increased emission of air contaminants.

(3) No person shall construct, install, establish, or operate a primary aluminum plant without first applying for and obtaining an air contaminant discharge permit from the Department. Addition to, or enlargement or replacement of, a primary aluminum plant or any major alteration thereof shall be construed as construction, installation, or establishment.

Statutory Authority:
Hist: Filed 12-5-73 as DEQ 60,
Eff. 12-25-73

340-25-290 [Filed 7-14-70 as DEQ 19,
Eff. 8-10-70
Repealed 12-5-73 by DEQ 60,
Eff. 12-25-73]

Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

Victor Atiyeh
Governor

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Amendment No. 1, Agenda Item No. F,
September 21, 1979, EQC Meeting
Rogue Valley Mall, Medford - Informational Report on
Indirect Source Construction Permit Application

Purpose of the Amendment

Since the submittal of the original staff report, the Department has received the additional information that the consultant volunteered to produce. Also, the Department has re-examined the alternatives and has decided to place additional emphasis on the viability of alternative 7c, which appears in the Summation section of the original report.

Although the Department still has some unresolved technical objections to the background CO methodology employed by the consultant in the revised analysis, resolution of this issue would not change our position on the alternatives being proposed for consideration.

Evaluation and Alternatives

Attachment 1 is a tabulation that compares the results of the original analysis versus the revised analysis, received on September 14, 1979. Receptors 6 through 16 were screened, and for each case and year, the total cumulative number of sites that are modeled to exceed 10 mg/m^3 8-hour average carbon monoxide (CO) concentration have been tabulated. The revised analysis does not include credits for a biennial Inspection/Maintenance (I/M) program, whereas the original analysis applied credits accruing from an I/M program assumed to be in operation in the Medford area in 1984.

As can be seen, the revised analysis shows a substantial increase in the number of Receptors (6 through 16) that are modeled to exceed 10 mg/m^3 8-hour average CO. The new analysis underscores the importance of I/M and its effects on future CO levels around the Mall.

Additionally, the Department believes alternative 7c should also be given special consideration because:

a. The meeting of CO standards by 1987 at most of the modeled receptors is contingent upon I/M.

b. A mandatory I/M program is among other things contingent upon start-up funding.

c. Mandatory I/M would more than offset CO contributions of the project.

d. Start-up funding assistance could logically be part of the Emission Control Program and roadway improvements already proposed by the developer (contingent upon Legislative authority to implement I/M).

e. A reasonably assured I/M program in conjunction with the other mitigating measures proposed by the developer might provide a reasonable basis for immediate project approval.

f. The cost of I/M start-up funding (approximately $150,000) or .25% of the project cost is substantially lower than 10-30% of capital costs normally spent by industrial point sources for air pollution control (The $600,000 roadway improvement program is not included in this calculation as it is a requirement of local officials and the Oregon Department of Transportation.)

Director's Recommendation

It is recommended that the subject staff report be amended as follows:

On page 4, 5 lines from the bottom of the page, item 3 is replaced as indicated below.

3. Include as an element of an Emission Control Program, proposed or agreed to by the developer, full or partial start-up funding for the implementation of a mandatory Inspection/Maintenance (I/M) program in the Medford area.

On page 6, 6 lines from the bottom of the page, item 7c is replaced as indicated below.

7c. Include as an element of an Emission Control Program, proposed or agreed to by the developer, full or partial start-up funding for the implementation of a mandatory Inspection/Maintenance (I/M) program in the Medford area.

The Director's recommendation is modified as follows:

Based upon the summation, the Director recommends that the Commission give the Department guidance as to the approvability of the Rogue Valley Mall Indirect Source Construction Permit application. Special considerations should be given to alternatives 7a, 7b, and 7c as being the most protective of the critical Medford airshed.

William H. Young

JFK:m
229-6459
September 20, 1979
A4163

Attachment 1

Carbon Monoxide Standards Violations: Original Analysis Versus Revised Analysis

Original Analysis

	1982	1987
Average Day without Mall and Peak Day without Mall	4 sites	0 sites
Average Day with Mall	8 sites	0 sites
Peak Day with Mall	10 sites	1 site

Revised Analysis *

	1983	1987
Average Day without Mall and Peak Day without Mall	3 sites	1 site
Average Day with Mall	7 sites	4 sites
Peak Day with Mall	10 sites	9 sites

*No Inspection/Maintenance program assumed.

A4163

Victor Atiyeh
Governor

Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

TO: Environmental Quality Commission

FROM: William H. Young, Director

SUBJECT: Agenda Item F, September 21, 1979, EQC Meeting

Rogue Valley Mall, Medford - Informational Report on Indirect Source Construction Permit Application

Background

At the October 27, 1978 EQC meeting, the Department presented a status report on the Indirect Source Program . At that time, the Director recommended and the EQC concurred that the present administrative review policy be continued. That policy called for bringing any potential denials to the EQC for resolution and generally using a 0.5 mg/m^3 8-hour carbon monoxide impact as the level which would be considered significant in contributing to violations of the carbon monoxide health standard.

The Department's evaluation of the material submitted in support of the Indirect Source Construction Permit application for the above referenced project indicates that OAR 340-20-130(5) could be invoked to deny the application, as the project will cause or contribute to a delay in attainment and cause or contribute to violations of the State Ambient Air Standard for CO. The Department believes that the consultant has seriously underestimated potential air quality levels, nevertheless, the consultant impact analysis shows impacts exceeding the Department's "significant" guideline by a factor of 12 in 1982 and 5 in 1987. The submitted material also includes an Indirect Source Emission Control Program which has been judged to have a minimal effect on the reduction of Mall carbon monoxide (CO) impacts. The program is attached as Exhibit 1.

Because of a possible denial decision by the Department, the consultant (Seton, Johnson and Odell) for the developers requested a meeting with the Department. At that meeting Mr. F. Glen Odell indicated that he would calculate new speed data in order to present more carefully the CO impact of the Mall. The calculation of the Mall CO impact is complicated by the fact that the developer has committed to a $600,000 roadway improvement

program for Mall impacted roadways which, of course, would not be undertaken if the Mall is not constructed. Mr. Odell intends to submit a revised analysis and solicited the Department's input for the revision. Mr. Odell believes that the revision would not significantly change the Department's views of the project. The Department sent a letter (attached as Exhibit 2) to Mr. Odell on August 31, 1979 with the requested input.

The letter also stated that the application would not be considered complete for processing until the necessary revisions were received to generally satisfy Department objections to the analysis.

The developers, wishing to avoid further delay to their project, requested that their application be considered at the EQC September meeting rather than their waiting for formal Department action upon the soon to be received revised application.

ALTERNATIVES and EVALUATION

Table 4 (attached as Exhibit 3) on page 17 of the application shows the CO concentrations at 16 modeled receptors around the Mall site. Exhibit 4 shows the location of the sites. The years 1978, 1982, 1987, and 1992 were analyzed. Average weekday and peak day conditions were analyzed for two cases: one, assuming the mall is built and in operation and the other, assuming that the Mall is not constructed. The difference between the two cases is labeled in Table 4 as "Impact". Summer time traffic conditions were assumed for the average weekday analysis. The peak day analysis, which is required by the Indirect Source Rules in order to approximate worse case conditions and also realistically address the CO standard that may only be exceeded one day out of a year, reflects traffic conditions that could occur on any of several days just before the Christmas Holiday.

Receptors 1 through 5 correspond to sites where the Department, in a joint effort with Jackson County, monitored CO concentrations during December 1978 through February 1979. The purpose of that monitoring was to establish the CO non-attainment area in Medford. The sites were located at curb side and do not really represent critical receptors, i.e., places where people could be exposed to CO for an 8 hour period.

Receptors 6 through 16 are thought to be representative of critical receptors and the remainder of this discussion will focus on them.

What are the Mall impacts for receptors 6 through 16? Based on the consultant's analysis and taking 1982 average weekday conditions first, the analysis shows that four receptors would have CO concentrations that exceed the 8 hour average CO standard of 10 milligrams per cubic meter (mg/m^3), even if the Mall were not built.

However, with the Mall in operation under 1982 average weekday conditions, eight receptors would have 8 hour CO concentrations greater than 10 mg/m^3

and the greatest impact is at receptor 15 (3.8 mg/m^3). The 1982 peak day conditions without the Mall in operation were assumed by the consultant to be identical to the summer time average weekday conditions without the Mall, and, therefore, the same four receptors would exceed 10 mg/m^3.

However, with the Mall in operation under 1982 peak day conditions, the number of receptors exceeding 10 mg/m^3 increases to ten, and the greatest impact is at receptor 6 (6.3 mg/m^3).

For 1987 average weekday conditions with and without the Mall, receptors 6 through 16 are shown as being below 10 mg/m^3, with the greatest impact at receptor 15 (1.6 mg/m^3). The 1987 peak day conditions without the Mall in operation are also assumed to be identical to the 1987 summer time average weekday conditions without the Mall, and, therefore, none of the receptors would exceed 10 mg/m^3. With the Mall in operation under 1987 peak day conditions, receptor 14 shows a CO concentration of 10.5 mg/m^3. It is the only receptor exceeding 10 mg/m^3, but the impact is 2.7 mg/m^3.

For 1992 receptors 6 through 16 are below 10 mg/m^3 8 hour average for both average weekday conditions and peak day conditions, with and without the Mall.

To conclude the discussion of Table 4, the Mall has a significant effect on the number of receptors shown to exceed 10 mg/m^3 8 hour average CO in 1982, i.e., four sites exceed the level without the Mall and eight and ten sites for average weekday and peak day conditions, respectively, are above 10 mg/m^3 with the Mall. Although only one receptor is shown as exceeding 10 mg/m^3 in 1987, the background CO assumptions and the inclusion of Inspection/Maintenance Credits for the 1987 and 1992 emission factors tend to significantly reduce the magnitude of predicted CO concentrations for these years. These two issues are examined below.

The 1982 data clearly shows that the proposed project would result in more exceedances of 10 mg/m^3 8-hour average CO standards than if the Mall were not built.

The above projected impacts are based on the consultant's analysis and the Department has some disagreement with the methodology used. The main technical disagreement between the consultant and the Department is over the methodology employed for estimating background CO. Exhibit 5 shows the Department's original response to the modeling analysis. Exhibit 6 explains what background CO is, and it critically examines the consultant's arguments and methodology. The magnitude of background CO is important because it is added to the CO concentrations calculated by the line source model to yield total predicted CO concentrations. To summarize, the Department believes that the methodology used by the consultant to determine background CO may very well result in an underestimation of the total magnitude of future CO concentrations.

Another technical consideration which impacts the total magnitude of future CO concentrations is the assumption by the consultant that an Inspection/Maintenance (I/M) program would begin in the Medford-Ashland Air Quality Maintenance Area (AQMA) in 1984. This has the effect of significantly lowering the resulting 1987 and 1992 CO concentrations below what they would be without an I/M program. The Department requested that the consultant, in his revised analysis, calculate CO concentrations without an I/M program, since the establishment of such a program in the Medford-Ashland AQMA appears to be less than certain.

Even with the questionable application of background, it is evident that this project would contribute significantly to violations of the ambient CO standard at least until 1987 even if a mandatory vehicle Inspection/Maintenance program is adopted, which is not certain at this time.

To put the proposed project into a comparative perspective from the standpoint of its being a major source of CO (359 tons/year) in the Medford-Ashland AQMA, the following requirements would be placed on a direct source having the greater than a 100 tons per year impact:

1. Offsets (no growth increment is identified in the Medford-Ashland AQMA State Implementation Plan (SIP) for CO).
2. Compliance with Lowest Achievable Emissions Rate (LAER).
3. Demonstration that other sources in the State are in compliance or on a compliance schedule with the adopted SIP.
4. Analysis to determine if there is an alternative location which would have a lessor environmental impact.

The following alternative courses of action could be considered relative to the proposed indirect source permit:

1. Request the developer to withdraw his application until the Parking and Traffic Circulation Plan, now being started, is completed. By February, 1980 the Plan's air quality analysis should be completed and it should be known whether the project can be accommodated within air quality constraints.
2. Request the developer to extend the phasing of the development in order to be in compliance with the requirements of OAR 340-20-130(5).
3. Require offsets such as funding for the adequately sized Inspection/Maintenance program.
4. Issue a proposed permit subject to Department approved roadway improvements and the submitted Emission Control Program.
5. Deny the permit application.

The developer indicated at the August 28, 1979 meeting that Alternative 2 would not be acceptable. Alternative 3 would require more consideration and might not ultimately be that practical. Alternative 1 would have the advantage of providing more flexibility for the development of a detailed CO attainment plan. The disadvantage of Alternative 1 is that at a minimum it would impose an additional 6-9 month delay to the proposed project which has been under consideration for over two years by local officials. Alternative 4 would be acceptable to the developers.

The significant question is: should a project of this magnitude, with regard to CO impact, be imposed on an area which already has a substantial, widespread CO violation problem, before the area has developed a program which shows it can accommodate this project and still attain and maintain standards?

SUMMATION

1. At the October 27, 1978, EQC meeting, the Department stated that it would bring any potential denials of indirect sources to the EQC for resolution. The Commission concurred with that policy by adopting the Director's recommendation.

2. The Rogue Valley Mall Indirect Source Construction Permit application for a 3820 parking space facility indicates that OAR 340-20-130(5) could be invoked to deny the application, because the project results in more violations of the 10 mg/m^3 8 hour average CO standard level than would be the case without the Mall in 1982. Furthermore, the 1982 impact of the Mall on CO concentrations is as high as 6.3 mg/m^3 at one of the modeled receptors.

3. At the August 28, 1979, meeting between the Department, the developers and their consultants, Mr. F. Glen Odell stated their intention to correct the speed data and resubmit the analysis. However, he also stated that he did not believe the revised analysis would significantly change the results of the original analysis. Rather than waiting for the revised analysis and the Department's formal response, the developers requested that their application be considered at the September, 1979, EQC meeting.

4. The Department believes that the methodology used to determine background CO may very well result in an underestimation of the total magnitude of future CO concentrations. The Department, in an August 31, 1979, letter (Exhibit 2) to the consultant, insisted on certain changes to the background CO calculations.

5. The consultant calculated 1987 CO concentrations, assuming that an Inspection/Maintenance program would be in place by 1984. The Department requested that the consultant calculate CO emissions without an I/M program, since the establishment of such a program in the Medford-Ashland AQMA appears to be less than certain. Inclusion of I/M credits to the CO emission factors lowers the resulting CO concentrations significantly below what they would be without the assumption of an I/M program.

6. The Rogue Valley Mall shows a modeled increase in CO of 349 tons per year. For a direct source having an increase greater than 100 tons per year, the State Implementation Plan revisions would place the following requirements on such a development:

   Since no growth increment is identified in the Medford-Ashland AQMA SIP for CO, the New Source Review Rule would require:

   1. Offsets.
   2. Compliance with LAER.
   3. Demonstration that other sources in the State are in compliance or on a compliance schedule with the adopted SIP.
   4. Alternative site analysis.

7. The following alternative courses of action should be considered:

   a. Request the developer to withdraw his application until the Parking and Traffic Circulation Plan is completed, so as to determine whether the proposed project can be accommodated within air quality constraints. The air quality analysis results should be available by February, 1980.

   b. Request the developers to extend the phasing of the development in order to be in compliance with the requirements of OAR 340-20-130.

   c. Provide offsets, such as requiring the developer to provide funding for the operation of the necessary size voluntary Inspection/Maintenance program.

   d. Issue a proposed permit subject to Department approved roadway improvements and the submitted Emission Control Program.

   e. Deny the permit application.

DIRECTOR'S RECOMMENDATION

Based upon the summation, the Director recommends that the Commission give the Department guidance as to the approvability of the Rogue Valley Mall Indirect Source Construction Permit application . Special considerations should be given to alternatives 7a and 7b as being the most protective of the critical Medford airshed.

Bill

WILLIAM H. YOUNG
Director

A4159
HWH:M

Exhibit 1

seton, johnson & odell, inc.
consulting engineers

317 s.w. alder street
portland, oregon 97204
(503) 226-3921

August 20, 1979

Howard Harris, Coordinator
Transportation Control Program
Dept. of Environmental Quality
522 S.W. 5th
Portland, OR 97207

Dear Mr. Harris:

In response to your letter of August 9, we hereby submit the proposed Indirect Source Emission Control Program for Rogue Valley Mall. As described in the attached letter from the applicant, Ernest W. Hahn, Inc., the ISECP consists of the following measures:

1. Year-round coordination of car pooling among employees.

2. Free passes issued to shoppers during the Christmas and Easter peak shopping periods.

3. Provision of bus shelters and coordination of interior bus routes to maximize visibility and convenience of bus usage.

5. Promotion of transit usage in shopping center advertising programs.

6. Provision of bicycle racks consistent with planned extension of a major bike path onto the site.

7. Installation of traffic counters at mall access points and one continuous carbon monoxide monitoring station at a location appropriate for monitoring local CO concentrations and the effectiveness of mitigating measures.

The beneficial air quality impacts of the ISECP are currently being evaluated. Based on past experience, however, we believe that they will not achieve the goal suggested in your August 9 letter, of reducing incremental impacts in 1983 to 0.5 mg/m^3 8 hour average. We do not believe this objective can be attained by any feasible program under the control of the developer.

Attainment of CO standards in the vicinity of the site and elsewhere in Medford, regardless of whether the shopping center is built, can only be achieved by major revisions in the regional circulation system. The City of Medford, with support and participation by ODOT, is currently beginning study of such revisions and will be developing specific proposals in the next year. Since Rogue Valley Mall has received all local government approval, its existence will be assumed as a basic part of the comprehensive transportation plan that is being developed.

To our knowledge, the ISECP proposed by our client is as comprehensive as any established to date by any shopping center in Oregon. The ultimate solution to the CO problem is being undertaken by appropriate public agencies. Given these considerations, we request your acceptance of the ISECP and a favorable recommendation on issuance of the Indirect Source Permit.

Yours very truly,

F. Glen Odell

Glen Odell
Principal

FGO/kgh
Enclosure
cc: Richard Moewe, Ernest W. Hahn
William H. Young, DEQ
James Dixon, Northwest Commercial
Bruce Shaw, Jackson County

ERNEST W. HAHN, INC.
200 CONTINENTAL BOULEVARD, EL SEGUNDO, CALIFORNIA 90245 • PHONE (213) 772-4200

August 15, 1979

Mr. Glen Odell
Secton, Johnson & Odell, Inc.
317 S.W. Alder
Portland, Oregon 97204

Reference: Rogue Valley Mall
Medford, Oregon

Dear Glen:

We have considered various alternatives which may be employed to mitigate air quality problems generated by Rogue Valley Mall. Our analysis of alternatives parallels the recent application for an Indirect Source Parking Permit which is required for this project.

Several alternatives can be implemented which would serve to reduce vehicle trip mile counts and increase the average vehicle speed in the general vicinity of the site. These alternatives involve strategies for encouraging the use of rapid transit and other means of transportation besides individual vehicles.

It is anticipated that the greatest air quality problems will occur during peak retail periods (Christmas & Easter seasons). The mall management can promote a program of issuing free bus passes to the shoppers during such peak periods. Further, a continuous program of coordinating car pooling among employees can be implemented by the mall management the year around.

The development will coordinate locations of bus shelters and interior bus routes with the Rapid Transit Authority, thus increasing the visibility and convenience of bus usage. Rapid Transit can be promoted within the general shopping center's advertising programs as well as placing posters on the busses themselves.

A program to provide a Park-and-Ride area on the site can be implemented. An area of some twenty-five parking spaces could be set aside to promote bus usage around the vicinity. Such a program should be monitored for effectiveness during the first year of operation as the site's close proximity between the North Interchange and the Central Business District may reduce the effectiveness of this program. If the Park-and-Ride program proves ineffective then the applicant would elect to terminate the program.

The development presently provides for extending a major bike path onto the site. Bike racks will be provided adjacent to the building face in order to further encourage this mode of transportation into the shopping center.

The combined effect of these measures should certainly reduce the vehicle trip mile counts and increase the average vehicle speed in the general vicinity of the shopping center site. These positive measures are offered for consideration as strategies that ultimately can be monitored and controlled by the mall's management.

In an effort to continuously record the effectiveness of these measures, we propose to install a carbon monoxide monitoring station on the site. The facility provided would be available for operation by the appropriate public agency. Data from this station can be analyzed in conjunction with information provided by traffic counters (installed by the developer) at the entrances to the site.

Hopefully, the measures outlined herein will demonstrate our intent to exercise our best efforts to help offset any negative air quality impacts imposed by this project. We trust that our plan for positive action will prove adequate during the environmental review process currently underway.

Sincerely,

Ernest W. Hahn, Inc.

Richard P. Moewe
Project Manager
Development Division

RPM:ja

cc: Jim Dixon
Bill Law

August 24, 1979

M E M O R A N D U M

TO: Glen Odell

FROM: Candice Hatch ch

SUBJECT: Rogue Valley Mall

Attached is a table, (Table 1) summarizing the effectiveness of the proposed Indirect Source Emission Control Program (ISECP) in terms of reducing air quality impacts.

According to the transportation consultant, traffic volumes added to local streets by the Mall can be reduced by approximately 4% with ISECP implementation. The streets effected include Court, McAndrews, Riverside and Biddle. The links involved are listed in Table 2. There will be no impact on predicted speeds.

As can be seen in Table 1, the ISECP does not reduce Mall impacts to below the DEQ allowable CO 8-hour average increment of 0.5 mg/m^3.

TABLE 2
Links Effected by ISECP

Street	Links
McAndrews	6, 16, 30, 31, 33
Court	1, 2, 3, 4, 5, 7, 10, 12, 13
Riverside	9, 14, 25, 26, 27, 28, 29
Biddle	32, 34
On Site Traffic	49, 50, 51, 52

TABLE 1

Effect of ISECP

on 1983 Air Quality

(mg/m^3)

Receptor	CO Level[1] w/o Mall	AWT Impact[2] w/o I S E C P	AWT Impact w/ I S E C P	Peak Day Impact w/o I S E C P	Peak Day Impact w/ I S E C P
1	18.8	1.9	1.3	7.1	6.2
2	12.3	.8	.5	2.1	1.7
3	15.8	1.4	1.0	2.6	2.3
4	6.9	.9	.8	1.5	1.1
5	7.8	.3	.3	.6	.6
6	8.7	1.6	1.6	6.3	6.3
7	9.7	.9	.9	5.1	5.1
8	8.6	1.0	1.0	2.4	2.4
9	10.2	.9	.9	2.1	2.1
10	9.6	1.1	.9	2.1	2.0
11	7.3	1.9	1.8	2.6	2.4
12	7.3	1.0	.8	2.9	2.8
13	11.4	.5	.3	1.3	1.0
14	12.5	.3	.3	4.6	4.6
15	8.7	3.8	3.6	5.0	4.7
16	11.8	1.6	1.3	4.0	3.6

1) Predicted maximum 8-hour average CO concentration.

2) Impact of project = concentration w/mall - concentration w/o mall.

Exhibit 2

Department of Environmental Quality

522 SOUTHWEST 5TH AVE. PORTLAND, OREGON

MAILING ADDRESS: P.O. BOX 1760, PORTLAND, OREGON 97207

August 31, 1979

Mr. F. Glen Odell, Principal
Seton, Johnson & Odell, Inc.
317 SW Alder ST
Portland, OR 97204

Re: Rogue Valley Mall
Parking File No. 15-7926
Modeling Analysis Revision

Dear Mr. Odell:

At the August 28, 1979 meeting between the Department and the developers of the above referenced project, you indicated that a revised analysis would be submitted and you solicited our input. Three items need to be considered: calculation of background carbon monoxide (CO), traffic volumes and speeds, and inspection/maintenance.

As you know, we strongly disagree with your methodology employed to calculate background CO. Since you remain steadfast in that methodology, we insist that you revise the ratios applied to the borrowed background CO value so that your methodology is employed on a consistent basis. The consistent set of background CO gross emission ratios (R_b) are shown below for each year and each case:

1982

$$R_b(1982)\ \text{AWT-W/} = \frac{8.73\ \text{T/Day}}{7.52\ \text{T/Day}}$$

$$R_b(1982)\ \text{Peak Day-W/} = \frac{10.17\ \text{T/Day}}{7.52\ \text{T/Day}}$$

1987

$$R_b(1987)\ \text{AWT-W/} = \frac{6.43\ \text{T/Day}}{7.52\ \text{T/Day}}$$

$$R_b(1987)\ \text{Peak Day-W/} = \frac{7.62\ \text{T/Day}}{7.52\ \text{T/Day}}$$

1992

$$R(1992)_b \text{ AWT-W/} = \frac{5.41 \text{ T/Day}}{7.52 \text{ T/Day}}$$

$$R(1992)_b \text{ Peak Day-W/} = \frac{6.32 \text{ T/Day}}{7.52 \text{ T/Day}}$$

Calculation of the above background CO gross emission ratios and application of resulting revised background CO to the appropriate CO concentrations will require a minimal amount of time.

Relative to the traffic volumes and speeds, please correct the 4-5 PM volume listed for link 30 for 1987 AWT-W/ and 1987 Peak Weekday-W/. The error appears to be due to incorrect transcription. Since the speeds are being revised, please provide documentation indicating the methodology employed to calculate those speeds. The speeds used in the model must take into account delay encountered at traffic control devices.

Lastly, CO concentrations need to be estimated assuming that no inspection/maintenance program is in place to affect the 1987 and 1992 emission factor computations. We consider the likelihood of a future inspection/maintenance program to be very uncertain at this time, especially since the Environmental Protection Agency is not likely to require such a program. In order to save time, revise the CO concentrations by applying a ratio of the CO emission factors, calculated by dividing the CO emission factors without inspection/maintenance by the CO emission factors with inspection/maintenance.

You should be able to complete the above changes within the September 14, 1979 time frame. We will not consider the application complete for processing until the above revisions have been submitted to us.

If you have any questions as to how to proceed, please call me at 229-6086.

Sincerely,

Howard W. Harris

Howard W. Harris, Coordinator
Transportation Control Program

HWH:nlb
cc: Richard Moewe, Ernest W. Hahn, Inc.
Senator Lenn Hannon
Bruce Shaw, Jackson County
Carolyn Layton, Medford Mail Tribune
Candee Hatch, SJO

Department of Environmental Quality

522 SOUTHWEST 5TH AVE. PORTLAND, OREGON

MAILING ADDRESS: P.O. BOX 1760, PORTLAND, OREGON 97207

August 30, 1979

Ernest W. Hahn, Inc.
Attn: Mr. Richard P. Moewe
200 Continental Boulevard
El Segundo, CA 90245

Re: Rogue Valley Mall
Parking File No. 15-7926

Gentlemen:

Based upon the August 28, 1979 meeting between the Department, you, Mr. Dixon, and your consultants, we understand that additional information will be submitted in support of your application. Pursuant to OAR 340-20-129(1)(g)(A) your application will not be considered complete for processing until all necessary additional information is received by the Department.

We are acceding to your request for consideration of your application by the Environmental Quality Commission (EQC) at their September 21, 1979 meeting, upon the condition that the additional information being prepared by your consultants will be submitted to us no later than September 14, 1979. If we have not received the additional information by the above date, I will ask the Commission not to consider this matter until its October 19, 1979 meeting. Additionally, we understand that you would not object to a postponement of the matter to October if, however unlikely, the revised analysis radically changes the character of the original analysis. Your application will be scheduled as an informational item.

By a separate letter to your consultant, Mr. F. Glen Odell, we will provide additional comments, as requested, on the modeling analysis.

If you have any questions about our action, please contact Howard Harris at (503) 229-6086.

Sincerely,

William H. Young

WILLIAM H. YOUNG
Director

WHY:nlb
cc: Senator Lenn Hannon
Mr. F. Glen Odell
Mr. Bruce Shaw
Ms. Carolyn Layton
Mr. James Dixon

TABLE 4

PREDICTED CARBON MONOXIDE CONCENTRATIONS (mg/m^3)

		1978	1982					1987					1992				
Receptor	Avg. Time	AWT	W/O	AWT W/	Impact[1]	Peak W/	Impact[1]	W/O	AWT W/	Impact[1]	Peak W/	Impact[1]	W/O	AWT W/	Impact[1]	Peak W/	Impac
1	1	29.5	26.0	28.5		40.0		15.7	16.8		19.6		12.4	13.2		15.3	
	8	20.0	18.8	20.7	1.9	25.9	7.1	11.7	12.7	1.0	14.5	2.8	8.9	9.4	.5	10.5	1.6
2	1	18.7	15.5	16.3		18.9		9.7	10.1		11.5		7.7	8.0		9.4	
	8	13.7	12.3	13.1	.8	14.4	2.1	7.9	8.3	.4	9.2	1.3	6.2	6.4	.2	7.0	.8
3	1	20.7	19.7	21.3		23.1		11.6	12.5		14.5		8.8	9.4		10.9	
	8	16.7	15.8	17.2	.4	18.4	2.6	9.5	10.2	.7	11.7	2.2	7.2	7.7	.5	8.5	1.3
4	1	12.3	11.0	12.3		14.5		7.5	7.9		8.6		4.6	6.1		6.3	
	8	7.0	6.9	7.8	.9	8.4	1.5	4.9	5.3	.4	5.6	.7	4.1	4.3	.2	4.5	.4
5	1	9.4	8.8	9.6		10.4		5.5	5.6		6.0		4.4	4.9		4.6	
	8	8.4	7.8	8.1	.3	8.4	.6	5.3	5.4	.1	5.5	.2	4.3	4.5	.1	4.4	.1
6	1	10.6	10.6	12.6		23.7		7.3	8.4		12.9		6.0	6.8		9.4	
	8	8.9	8.7	10.3	1.6	15.0	6.3	6.0	6.7	.7	9.3	3.3	5.0	5.5	.5	6.6	1.6
7	1	11.5	12.4	13.5		24.3		8.4	9.0		13.4		6.3	6.6		9.9	
	8	9.3	9.7	10.6	.9	14.8	5.1	6.5	7.0	.5	9.0	2.5	5.3	5.5	.2	6.7	1.4
8	1	11.1	9.7	10.9		13.7		6.4	6.9		8.8		5.2	5.5		6.6	
	8	9.6	8.6	9.6	1.0	11.0	2.4	5.8	6.2	.4	7.3	1.5	4.7	4.9	.2	5.6	.9
9	1	13.1	12.1	13.6		15.3		7.6	8.2		10.1		6.0	6.5		7.5	
	8	10.9	10.2	11.1	.9	12.3	2.1	6.7	7.0	.3	8.2	1.5	5.3	5.5	.2	6.1	.8
10	1	12.7	11.1	13.0		15.2		7.6	8.6		9.0		5.8	6.3		6.5	
	8	11.2	9.6	10.7	1.1	11.7	2.1	6.4	6.9	.5	7.3	.9	5.1	5.4	.3	5.5	.4
11	1	10.6	9.4	10.2		11.3		6.2	6.4		7.6		5.0	5.2		5.8	
	8	9.4	7.3	9.2	1.9	9.9	2.6	5.7	6.0	.3	6.7	1.0	4.6	4.8	.2	5.2	.6
12	1	9.1	8.6	9.3		11.1		6.0	6.3		6.9		4.3	4.9		5.5	
	8	7.8	7.3	8.3	1.0	10.2	2.9	5.2	5.7	.5	6.5	1.3	4.2	4.5	.3	5.1	.9
13	1	14.6	14.7	15.4		16.9		9.0	9.6		10.1		6.7	6.9		7.8	
	8	11.5	11.4	11.9	.5	12.7	1.3	7.4	7.6	.2	8.0	.6	5.6	5.7	.1	6.1	.5
14	1	14.8	15.8	16.7		28.9		9.7	10.1		15.8		7.2	7.4		11.9	
	8	11.6	12.5	12.8	.3	17.1	4.6	7.8	8.1	.3	10.5	2.7	6.0	6.1	.1	7.7	1.7
15	1	12.2	11.0	13.9		15.6		7.1	8.1		8.9		6.1	6.6		6.5	
	8	9.5	8.7	12.5	3.8	13.7	5.0	5.8	7.4	1.6	8.1	2.3	4.9	5.9	1.0	6.0	1.1
16	1	14.6	14.6	16.7		21.2		9.0	9.8		11.7		6.7	7.2		8.7	
	8	11.9	11.8	13.4	1.6	15.8	4.0	7.6	8.3	.7	9.5	1.9	5.8	6.2	.4	7.2	1.4

[1] Impact is difference between with and without cases

Figure 4

RECEPTOR

LOCATIONS

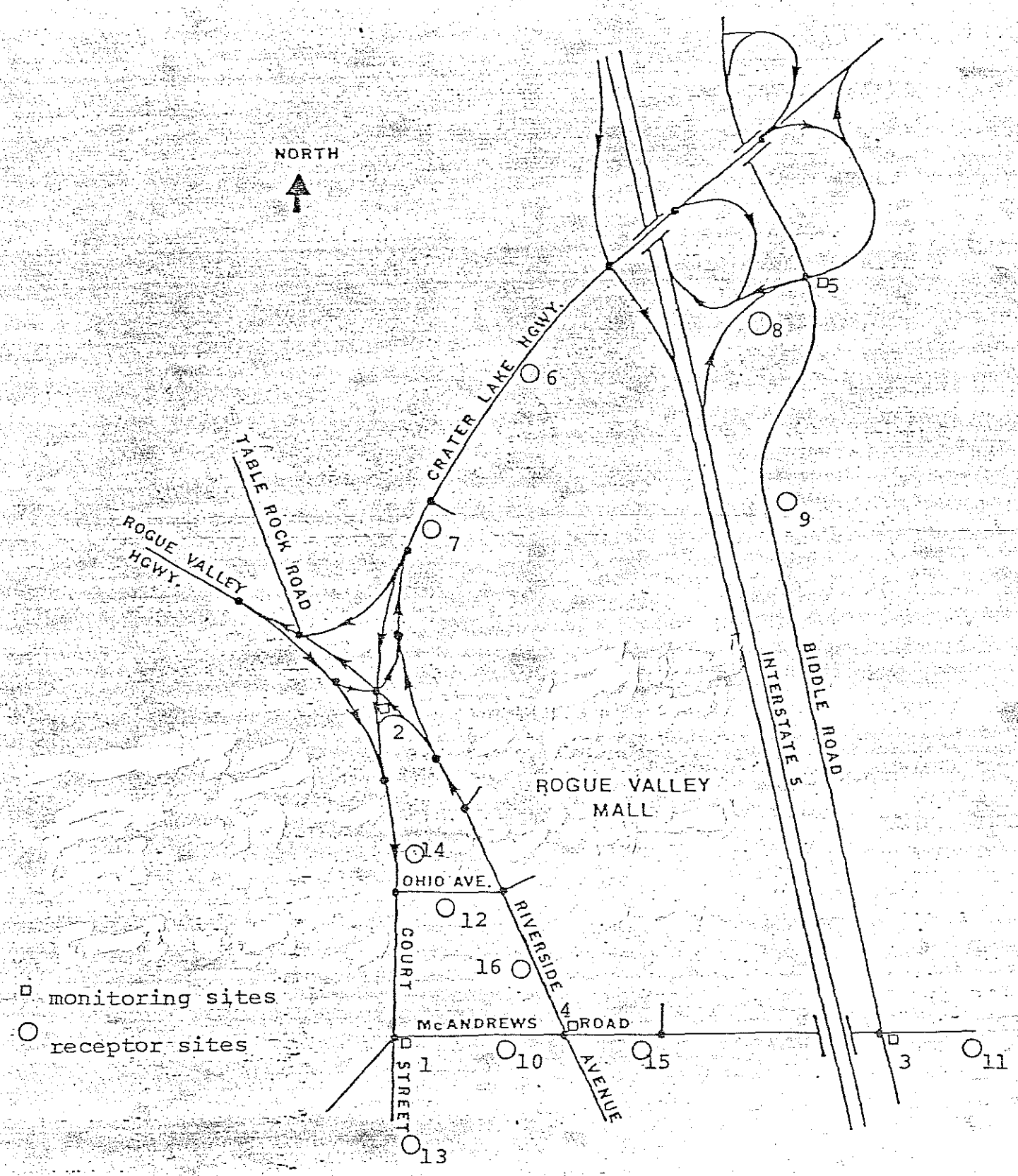

Exhibit 5

STATE OF OREGON

INTEROFFICE MEMO

Air Quality — DEPT.

6092 — TELEPHONE

TO: F. Glenn Odell

DATE: August 9, 1979

FROM: Howard Harris, AQ Division

SUBJECT: Comments on Indirect Source Permit Application, Rogue Valley Mall

The modeling analysis employed to estimate future carbon monoxide (CO) air quality in the vicinity of the above referenced project gives rise to several concerns. In general we question the use of the CALINE 2 based DMISE CO concentration model, given the fact that basically parallel winds at very low wind speeds were chosen as modeling inputs. The CALINE 2 model is not known to perform well in comparison with other models under such conditions. We are most particularly concerned about the method chosen to determine background CO at the Mall site.

Because of Medford's unique physical setting and associated meteorology, the line source models successfully employed in the Portland Metropolitan area to model CO concentrations may not work that well when applied to the Medford situation. Most desirably either a CO concentration model that could be expected to yield realistic results for the Medford situation should be used, or the parameters of a traditional line source model should be adjusted, based upon monitored data, to give satisfactory results. We would not expect you to do the latter, but the former course of action should have been given more careful consideration before employing DMISE. Although we are in agreement with your choice of modeling meteorology to yield maximum estimates of CO concentration at the Mall, we note that the actual meteorological data had to be altered so that DMISE would not "blow up".

Given the uniqueness of Medford's air quality situation, we believe that estimates of background CO should have been based upon applying your CO model to monitored CO concentrations approaching the second highest yearly levels that have been measured at the DEQ Brophy Building continuous monitor. There is no reasonable basis for concluding that background CO levels determined for Beaverton, Oregon bear any necessary relationship to background CO levels in Medford. However, without actually running DMISE or CALINE 2 in a similar manner as was used by the Department in the State Implementation Plan CO modeling work conducted for Medford, the Department can only suspect that your background CO levels used to predict future CO concentrations may be underestimated.

On page 14, we are not sure what the basis is for the 11.5 mg/m^3 background. The Department used a 1977 background for the downtown of 10.7 mg/m^3.

Lastly, we can find no reference as to whether parking lot emissions were included in your analysis. We would appreciate receiving clarification on this point, since in past submittals to the Department you have incorporated estimates of parking lot emissions.

HWH:nlb

81-125-1367

EXHIBIT 6

Development of Background Carbon Monoxide Concentrations for the Rogue Valley Mall Indirect Source Construction Permit Application

The purpose of this paper is to examine the issue of background carbon monoxide (CO) determination and specifically to examine critically the methodology employed by Seton, Johnson & Odell to estimate background CO for the Rogue Valley Mall.

What is background CO? A good approach is to consider it from two different perspecitives: monitoring and modeling.

Taking monitoring first, the Draft Environmental Impact Statement (DEIS) for the Nyberg Road Bypass, Volume 2: Technical Report of March 15, 1979, contains an instructive section regarding background CO. Quoting from page 82 of that document: "Measured ambient CO levels are considered as the sum of two components: (1) background levels resulting from area emissions from roadways and parking areas within and near the city, and (2) localized incremental levels resulting from adjacent sources which principally consist of heavily used roadways and congested intersections. . . . "

Quoting from the first sentence of the next paragraph:

> "Background CO levels are generally reflective of the aggregate vehicle miles travelled (VMT) on vicinity roadways, although individual congested parking areas and intersections may occasionally contribute significantly to the background."

Background CO may also be characterized in a time dependent manner, ie., under poor dispersion conditions, CO emitted in a given time period will not disperse and may actually accumulate. This may be considered as residual CO.

Again, quoting from the DEIS report: "Night inversion conditions were found to produce elevated background levels of carbon monxide (CO) from residual CO emitted during the evening peak hour of traffic. The highest observed such nighttime level was 7.2 ppm, occurring between the hours of 7 p.m. and 9 p.m. on November 14, 1978. In this short term monitoring study, the background level of CO (was) observed to increase from midday until it reached a plateau in late evening, 7 p.m. to 2 a.m. ... . The effect of residual CO, coupled with nighttime inversions and low wind speeds, is to shift the period of expected worst eight hour CO levels to approximately 4 p.m. through 12 midnight."

Summarizing the issue of background CO from a monitoring perspective, its source can be area emissions and residual amounts remaining from sources that emitted in a time period well separated from the time of measurement.

From a modeling perspective, background CO can be defined as the pollutant concentrations not accounted for by the particular predictive model. The unaccounted portion is usually determined by comparing modeled results with measured results. Line source models are not able to calculate background CO, so it is determined separately and added to the model predictions.

A commonly employed practice for estimating background CO to be applied to model predictions is to perform a regression analysis of model predictions versus measured CO concentrations. A straight line results of the form

$$y = mx + b$$

where y is measured CO
m is the slope of the line
x is model predicted CO
b is the intercept

The intercept is usually treated as representing background CO. In past submittals to the Department, Seton, Johnson & Odell has added the 95 percent confidence interval to the intercept to produce a "conservative" background value. To achieve good results this technique requires traffic data measurements taken at the same time as the ambient air monitoring.

Another approach for determining background CO on a modeling basis is to apply a line source model to a continuous monitor, such as the Brophy site in Medford. The difference between the CO concentrations measured and

the CO concentrations modeled would be treated as a model derived background CO level. This latter approach was used by the Department in the State Implemenation Plan revisions for all four of the designated nonattainment areas in the state. The Department buttressed this technique by examining the CO recording charts at the continuous monitoring stations in Portland, Salem, Eugene, and Medford. The validity of using this data as an indicator of background CO is based upon the assumption that the platooning of vehicles due to traffic signals would allow the monitors to record essentially the base line CO concentration levels in between flow of passing vehicles. The Medford charts do, in fact, go to zero on days with relatively good dispersion, but stay at fairly high levels on days with poor dispersion.

Having explained the two different perspectives of background CO, what is the relationship between the two? To answer, modeling attempts to estimate the phenomenon observed in ambient monitoring. However, modeling error may bias the results so that a model that over estimates CO concentrations would show relatively low background CO levels, whereas a model that under estimates CO concentrations would show relatively high background CO levels. For this reason modeling results should be closely tied to local ambient CO measurements.

The following section of this paper examines in detail the inconsistencies contained in the methodology employed by Seton, Johnson & Odell (SJO) for estimating Rogue Valley Mall background CO. Three separate statements from the SJO application document are quoted and then followed by the Department's response.

1) "Calibration analysis for a study performed in Beaverton, Oregon in a similar high density traffic area resulted in an estimated 5.8 mg/m^3 existing CO background."

The argument was made that Beaverton's emission denisty would be similar to the Rogue Valley Mall's emission density in 1982. On the basis of this similarity, the 1982 Rogue Valley Mall background was assumed to be identical to the 1983 Beaverton background. This argument is faulty because it does not account for difference in meteorology between the two sites. This is best illustrated by comparing the cases of downtown Portland and downtown Medford where continuous monitors are located. The downtown Portland monitor is located 12 feet from a roadway with an average weekday traffic (AWDT) volume of 26,000 and in a grid with an emission density of 78,000 kilograms per day (kg/d). The monitor in downtown Medford is located within 12 feet of a roadway with AWDT of 15,000 and in a grid with an emission density of 12,000 kg/d. If meteorology were similar in the two cases, one would expect the Medford site to measure lower CO concentrations, since it is in an area of significantly lower traffic. However, in 1978 the Medford site experienced five times as many violations as the downtown site with maximum and second highest concentrations of more than 5.5 mg/m^3 greater than those measured in Portland. Due to the disparity in expected versus measured results, one could assume that it would be incorrect to apply Portland results to Medford. The same assumption would apply to Beaverton data.

2) "This figure corresponds fairly well with the data collected at a Medford residential site (Main and Elm) in the DEQ monitoring program. The average of all CO data collected at this location was 5.3 mg/m^3. On the day with meteorology selected for modeling the maximum eight-hour CO concentration was 4.9 mg/m^3."

SJO claimed that the background of 5.8 determined in Beaverton and applied to the Medford Mall site was substantiated by DEQ's observations at the Main and Elm site. However, SJO used different methods for determining background in Beaverton than they applied to the Main and Elm site.

To determine background in Beaverton, the 0600-2200 carbon monoxide measurements at their background site were averaged. Two standard deviations were added to the mean to approximate "worst-day" background. At the Main and Elm site, all 24 hours of carbon monoxide measurements were averaged instead of just the 0600-2200 measurements. No standard deviations were added to the mean.

When the Elm and Main site was treated like the Beaverton site, the 0600-2200 mean was found to be 6.5 mg/m^3 and the standard deviation was 2.7 mg/m^3. The "background" according to SJO's method would become 6.5 + 2 (2.7) = 11.9 mg/m^3. Even without adding the two standard deviations to the Main and Elm site, SJO's comparison between the Beaverton and Main and Elm site should have been between the 0600-2200 concentrations; or 5.8 in Beaverton and 6.5 at the Medford residential site.

3) "The existing (1978) background concentration used in predictive modeling was 5.8 mg/m^3. Future year backgrounds were determined using factors based on the expected reduction in tailpipe emissions. Future year average background calculations employed in this analysis were 5.5 mg/m^3 (1982), 4.2 mg/m^3 (1987) and 3.6 mg/m^3 (1992)."

On days with poor ventilation, carbon monoxide accumulates rather than rapidly dispersing as it does on good ventilation days. In areas of high traffic volumes and, therefore, high emission densities, the amount of carbon monoxide which accumulates is higher than in areas of low emission densities. In recognition of this phenomenon, SJO determined their future backgrounds by ratioing the emission densities of each year with the 1982 emission density at the Mall site without the Mall in operation.

The emission densities are higher for the build versus no--build case for the Rogue Valley Mall. Since background is predicted on the basis of emission densities, the build background would be expected to be higher than the no--build background. However, SJO overlooked the fact that the emission densities were different and applied the no--build background to both the build and no--build cases.

Were the build and no--build background calculated individually, the values would be as listed below:

	Background (mg/m^3)	
	1982	1987
AWDT & Peak day--without	5.5	4.2
AWT--with	6.4	4.7
Peak day--with	7.5	5.6

This results in a peak day background in 1982 of 7.5, or 2.0 mg/m^3 higher than was used in the analysis. Likewise, the peak day background in 1987 should be 1.4 mg/m^3 higher than was used. Without making any other changes to the analysis, this would have the effect of putting three additional receptors (6, 7 and 16) into the category of exceeding the 10 mg/m^3 8-hour CO level in 1987, for peak day conditions with the Mall in operation.

This paper sought to define background CO and also critically examine the methodology employed by Seton, Johnson & Odell to determine background CO at the Rogue Valley Mall site. As has been demonstrated, the magnitude of future background CO has an important bearing on the ultimate levels of CO concentrations forecast for future years.

\D RE/Jackson County/Belsky 09:45 79/09/20 79/09/20
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\C
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\T 5 10 15 20 25 30 35 41 45 50 55 60 65 70 75
\V 6

Be it resolved that the Jackson County City County Air Quality Liaison Committee acing as a committee finds the indirect source permit applicati should be considered for approval, after one of the two following conditions is met: (a) it is demonstrated that an adequate air quality increment for increased consentration of carbon monoxide emissions can be accommodated without jeprodizing carbon monoxide attainment plan or (b) the applicant meet the requirements of OAR 340-20-110 paragraph 16 sub K in that they secure written agreement with the city of Medford as to the stated intent to contribute substancially to the transportation study currently being undertaken by the city of Medford and be further required to seek written agreements with the Rogue Valley Transportation District specifying the amounts and type of service to be provided by the District and the financial contribution by the developer to the District as indicated on page 10 of the original application.

MN8265

\D M Modify this documen79/09/20 09:45 09:52

Victor Atiyeh
Governor

Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. G, September 21, 1979, EQC Meeting

Informational Report: Amendments to Tax Credit Statutes

Background

The 1979 Legislative Assembly made several changes to the Pollution Control Facilities Tax Credit Statutes, ORS 468.155 through 468.190, as summarized in Attachment A. The purpose of this report is to inform the Commission of those changes and determine whether the Commission wishes the Department to initiate rulemaking proceedings to aid in administration of the tax credit program.

Discussion

Briefly summarized, the amendments are intended to accomplish the following things:

1. Allow tax credit for facilities that utilize hazardous wastes or used oil.

2. Make it clear that portions of the solid waste, hazardous wastes, or used oil facility which are only indirectly related to the facility's purpose of waste utilization are not eligible for tax credit certification.

3. Require that Oregon law regulating solid waste be at least "substantially equivalent to" federal law regulating solid waste, rather than "more stringent than" federal law, for purposes of determining whether solid waste facilities can receive tax credits.

4. Allow the Commission to waive the filing of an application for preliminary certification if it finds that "special circumstances" make the filing unreasonable and that the facility would otherwise be eligible for tax credit.

5. Remove references to statute (ORS 448.305) unrelated to pollution control or tax credit statutes.

6. Make solid waste utilization facilities that are constructed or used by, or for the benefit of, any governmental or quasi-governmental body or public corporation eligible for tax credit certification. Adopted specifically to ensure eligibly of the Metropolitan Service District's proposed resource recovery facility in Oregon City.

7. Make it clear that portions of the same facility can be certified to separate owners if more than one person owns portions of the facility. Adopted for the same purpose as number six above.

8. Deny tax credit eligibility to pollution control facilities that have already received tax credit as an energy conservation facility from the State Department of Energy.

A copy of each of the bills (SB 139, HB 2846 and 2843) that resulted in these amendments is attached for your information as Attachments B, C, and D. All these amendments are effective October 3, 1979. All Department forms and instructions to applicants have been revised in preparation for this implementation date.

One final issue that needs discussion and a course of action, is whether administrative rules need to be developed to implement any of these amendments or to improve the administration of the program. Some of the questions to be answered are:

1. Are rules needed to set criteria for "special circumstances" that would allow the Commission to waive preliminary certification application, or are they best determined on a case-by-case basis?

2. Are rules needed to make it clear that application for preliminary certification or tax credit must be on forms prescribed by the Department and may not be made verbally or in writing by any other means?

3. Are rules needed to define or set criteria for determining "a substantial purpose?"

4. Are rules needed to define the dividing line between "reconstruction" of a facility which is eligible for tax credit and maintenance which generally is not eligible?

5. Are rules needed to define what constitutes the commencement of "erection, construction, or installation" of a facility?

6. Are rules needed to set criteria for determining when a material ceases to be a solid waste and therefore its utilization is no longer eligible for tax credit certification?

7. Are rules needed to specify whether facilities installed only to control occupational air pollution or noise fit within the definition of pollution control facility?

8. Are rules needed to set criteria for determining what portion of the cost of a facility is allocable to pollution control?

None of these questions, except the first, is new. It could be argued that the program has run reasonably well for several years without rules because: (1) the procedural steps outlined in the statues are generally quite specific; (2) precedents have been established by the Commission over the years that are followed by the agency; (3) the agency's forms and instructions for applicants are quite detailed and have been followed meticulously by most applicants; (4) Attorney General opinions provide guidance on questions that are not clearly answered by the statutes; and (5) agency administrative procedures for processing applications are well established.

What is missing is a codification of Commission-established precedents, Attorney General opinions, and agency procedures that can be used by staff and Commission alike to ensure consistency of decision-making and used by potential applicants to know what is expected of them.

Therefore, the staff believes that such documentation should be prepared and presented to the Commission, along with agency forms and instructions, for Commission approval and concurrence. Rulemaking is not recommended.

Director's Recommendation

It is recommended that the Commission take note of the amendments to the tax credit statutes and direct the staff to prepare program documentation for its review and approval at the November, 1979, EQC meeting.

Bill

William H. Young

Mike Downs:ojc
229-6485
MO2065.2

Attachments

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY
1979 AMENDMENTS TO POLLUTION CONTROL FACILITIES TAX CREDIT LAW

1. Pollution control facilities for hazardous wastes and used oil, constructed on or after October 3, 1979, are eligible for tax credit certification. Senate Bill 139 amending ORS 468.155, 160, 165, 170, 175, and 185.

2. Distinct portions of solid waste, hazardous wastes, or used oil facilities, which make an insignificant contribution to the purpose of utilization of solid waste, hazardous waste, or used oil, are not eligible for tax credit certification effective October 3, 1979. The following specific items shall be among those portions considered for exclusion: office buildings and furnishings, parking lots and road improvements, landscaping, external lighting, company signs, artwork, and automobiles. Senate Bill 139 amending ORS 468.155(2).

3. The Oregon law regulating solid waste must impose standards at least substantially equivalent to the federal law in order for solid waste, hazardous wastes, and used oil facilities to be eligible for tax credit. Senate Bill 139 amending ORS 468.165(1)(c)(D).

4. For facilities constructed on or after October 3, 1979, the Commission may waive the filing of the application for preliminary certification if it finds the filing inappropriate because special circumstances render the filing unreasonable and if it finds such facility would otherwise qualify for tax credit certification. Senate Bill 139 amending ORS 468.175(1), 468.170(4), and 468.180(1).

5. All references to ORS 448.305 have been deleted from the tax credit statutes. Senate Bill 139 amending ORS 468.170, 175, and 180.

6. Effective October 3, 1979, no tax relief shall be allowed under ORS 307.405, 316.097, or 317.072 for any pollution control facility constructed or used by or for the benefit of any governmental or quasi-governmental body or public corporation or form thereof, except where such facilities are used for resource recovery. House Bill 2846 amending ORS 314.255(2).

7. Effective October 3, 1979, portions of a solid waste, hazardous waste, or used oil facility may be certified separately if ownership of a portion is in more than one person. Certification of such portions of a facility shall include certification of the actual cost of the portion of the facility to the person receiving the certification.

   The actual cost certified for all portions of a facility separately certified, shall not exceed the total cost of the facility that would have been certified under one certificate. The provisions of subsection (10) of ORS 316.097 or 317.072, whichever is applicable, shall apply to any sale, exchange, or other disposition of a certified portion of a facility. House Bill 2846 amending ORS 468.170.

8. Any person who applies for and receives a tax credit on an energy conservation facility is not eligible to apply for and receive a tax credit on the same facility as a pollution control facility under ORS 316.097 or 317.072. House Bill 2843 effective October 3, 1979.

This document does not attempt to provide all the details contained in the 1979 amendments to the tax credit statutes. Please refer to the bills for specifics.

HB 2846 - HSD, passed
HB 2843 - passed House rec 6/14
Subsequent referral.

Submitted 5-17

Comment

File

A-Engrossed

Senate Bill 139

Ordered by the Senate May 14
(Including Amendments by Senate May 14)

Ordered printed by the President of the Senate in conformance with presession filing rules and indicates neither advocacy nor opposition on the part of the President (at the request of Department of Environmental Quality)

SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure.

[*Authorizes Environmental Quality Commission to waive certain procedural requirements for obtaining precertification approval for pollution control tax credits.*] **Redefines "pollution control facility" to include control of hazardous wastes or used oil. Specifies certain items to be excluded under the definition of "pollution control facility." Extends ability to apply for certificate as a pollution control facility to include those hazardous wastes or used oil facilities under construction on or after January 1, 1973. Specifies procedures to be followed in granting applications for such facilities. Permits waiver of application procedure in certain instances.**

A BILL FOR AN ACT

Relating to pollution control tax credits; creating new provisions; and amending ORS 468.155, 468.160, 468.165, 468.170, 468.175, 468.180 and 468.185.

Be It Enacted by the People of the State of Oregon:

Section 1. ORS 468.155 is amended to read:

468.155. (1) As used in ORS 468.155 to 468.190, unless the context requires otherwise, "pollution control facility" or "facility" means any land, structure, building, installation, excavation, machinery, equipment or device, or any addition to, reconstruction of or improvement of, land or an existing structure, building, installation, excavation, machinery, equipment or device reasonably used, erected, constructed or installed by any person if a substantial purpose of such use, erection, construction or installation is the prevention, control or reduction of air, water or noise pollution or solid waste, **hazardous wastes or used oil** by:

(a) The disposal or elimination of or redesign to eliminate industrial waste and the use of treatment works for industrial waste as defined in ORS 468.700;

(b) The disposal or elimination of or redesign to eliminate air contaminants or air pollution or air contamination sources and the use of air cleaning devices as defined in ORS 468.275;

(c) The substantial reduction or elimination of or redesign to eliminate noise pollution or noise emission sources as defined by rule of the commission; or

(d) The use of a resource recovery process which obtains useful material or energy resources from material that would otherwise be solid waste as defined in ORS 459.005, **hazardous wastes as defined in ORS 459.410, or used oil as defined in ORS 468.850.** For the purposes of ORS 468.155 to 468.190, "solid waste facility" shall also include subsequent additions, made either to an already certified facility or to an operation which would have qualified as a facility but for the fact that it was erected, constructed or installed prior to January 1, 1973, which will increase the production or recovery of useful materials or energy over the amount being produced or recovered by the original facility whether or not the materials or energy produced or recovered are similar to

NOTE: Matter in **bold face** in an amended section is new; matter [*italic and bracketed*] is existing law to be omitted; complete new sections begin with SECTION.

those of the original facility.

(2) "Pollution control facility" or "facility" does not include air conditioners, septic tanks or other facilities for human waste, nor any property installed, constructed or used for the moving of sewage to the collecting facilities of a public or quasi-public sewerage system, nor any distinct portion or portions of a solid waste, hazardous wastes or used oil facility [*or portion or portions thereof whose substantial purpose is not for the direct utilization of materials as described in subparagraph (A) of paragraph (c) of subsection (1) of ORS 468.165.*] which make an insignificant contribution to the purpose of utilization of solid waste, hazardous wastes or used oil. The following specific items shall be among those portions considered for exclusion hereunder: Office buildings and furnishings, parking lots and road improvements, landscaping, external lighting, company signs, artwork and automobiles.

Section 2. ORS 468.160 is amended to read:

468.160. In the interest of the public peace, health and safety, it is the policy of the State of Oregon to assist in the prevention, control and reduction of air, water and noise pollution and solid waste, hazardous wastes and used oil in this state by providing tax relief with respect to Oregon facilities constructed to accomplish such prevention, control and reduction.

Section 3. ORS 468.165 is amended to read:

468.165. (1) Any person may apply to the commission for certification under ORS 468.170 of a pollution control facility or facilities or portion thereof erected, constructed or installed by him in Oregon if:

(a) The air or water pollution control facility was erected, constructed or installed on or after January 1, 1967.

(b) The noise pollution control facility was erected, constructed or installed on or after January 1, 1977.

(c) The solid waste, hazardous wastes or used oil facility was under construction on or after January 1, 1973, and if:

(A) The substantial purpose of the facility is to utilize material that would otherwise be solid waste as defined in ORS 459.005, hazardous wastes as defined in ORS 459.410 or used oil as defined in ORS 468.850 by burning, mechanical process or chemical process or through the production, processing including presegregation or otherwise, or use of materials for their heat content or other forms of energy of or from the material, or the use of materials which have useful chemical or physical properties and which may be used for the same or other purposes, or materials which may be used in the same kind of application as its prior use without change in identity;

(B) The end product of the utilization is a usable source of power or other item of real economic value;

(C) The end product of the utilization, other than a usable source of power, is competitive with an end product produced in another state; and

(D) The Oregon law regulating solid waste imposes standards [*more stringent than*] at least substantially equivalent to the federal law [*requires*].

(2) The applications shall be made in writing in a form prescribed by the department and shall contain information on the actual cost of the facility or facilities, a description of the materials incorporated therein, all machinery and equipment made a part thereof, the existing or proposed operational procedure thereof, and a statement of the purpose of prevention, control or reduction of air, water or noise pollution or solid waste, hazardous wastes or used oil served or to be served by the facility or facilities and, for a facility constructed under

paragraph (a) or (b) of subsection (1) of this section, the portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution as set forth in subsection (2) of ORS 468.190.

(3) The director may require such further information as he considers necessary prior to issuance of a certificate.

Section 4. ORS 468.170 is amended to read:

468.170. (1) The commission shall act on an application for certification before the 120th day after the filing of the application under ORS 468.165. The action of the commission shall include certification of the actual cost of the facility and, for facilities qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, the portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution as set forth in subsection (2) of ORS 468.190. Each certificate shall bear a separate serial number for each such facility.

(2) If the commission rejects an application for certification, or certifies a lesser actual cost of the facility or a lesser portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution or solid waste, **hazardous wastes or used oil** than was claimed in the application for certification, the commission shall cause written notice of its action, and a concise statement of the findings and reasons therefor, to be sent by registered or certified mail to the applicant before the 120th day after the filing of the application. Failure of the commission to act constitutes rejection of the application.

(3) If the application is rejected for any reason, including the information furnished by the applicant as to the cost of the facility, or if the applicant is dissatisfied with the certification of actual cost or portion of the actual cost properly allocable to prevention, control or reduction of air, water or noise pollution or solid waste, **hazardous wastes or used oil**, the applicant may appeal from the rejection as provided in ORS 468.110. The rejection or the certification is final and conclusive on all parties unless the applicant takes an appeal therefrom as provided in ORS 468.110 before the 30th day after notice was mailed by the commission.

(4) If the commission finds that a pollution control or solid waste, **hazardous wastes or used oil** facility or portion thereof, for which an application has been made under ORS 468.165, was erected, constructed or installed [*under a certificate of approval issued pursuant to ORS 468.175 and*] in accordance with the requirements of ORS 468.175 and subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, **hazardous wastes or used oil**, and that the facility is necessary to satisfy the intents and purposes of ORS [*448.305,*] 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, ORS chapters 459 and 467 and this chapter and rules thereunder, it shall certify such facility. No determination of the proportion of the actual cost of the facility to be certified shall be made until receipt of the application. Where one or more facilities constitute an operational unit, the commission may certify such facilities under one certificate. A certificate under this section is effective for purposes of tax relief in accordance with ORS 307.405, 316.097 and 317.072 if erection, construction or installation of the facility was commenced prior to December 31, 1988. The commission shall attach to the front of each certificate a copy of the notice and election requirements imposed by subsection (5) of this section.

(5) A person receiving a certificate under this section shall make an irrevocable election to take the tax credit relief under ORS 316.097 or 317.072 or the ad valorem tax relief under ORS 307.405 and shall notify the commission, within 60 days after the receipt of such certificate, of his election. This election shall apply to the

facility or facilities certified and shall bind all subsequent transferees. Failure to make a timely notification shall make the certificate ineffective for any tax relief under ORS 307.405, 316.097 and 317.072.

(6) If the person receiving the certificate is an electing small business corporation as defined in section 1371 of the Internal Revenue Code, and if the corporation elects to take tax credit relief, such election shall be on behalf of the corporation's shareholders. Each shareholder shall be entitled to take tax credit relief as provided in ORS 316.097, based on that shareholder's pro rata share of the certified cost of the facility.

(7) Certification under this section of a pollution control facility qualifying under subsection (1) of ORS 468.165 shall be granted for a period of 10 consecutive years which 10-year period shall begin with the tax year of the person in which the facility is certified under this section, except that if the person elects ad valorem tax relief the provisions of ORS 307.405 shall apply.

(8) (a) A facility commenced prior to December 31, 1980, and qualifying under paragraph (c) of subsection (1) of ORS 468.165 shall be certified if it meets such requirements.

(b) For a facility commenced after December 31, 1980, and prior to December 31, 1983, the commission, in addition to, and not in lieu of, the requirements under paragraph (c) of subsection (1) of ORS 468.165, shall only certify such a facility if it meets one of the following conditions:

(A) That the facility is necessary to assist in solving a severe or unusual solid waste, **hazardous wastes or used oil** problem;

(B) That the facility will provide a new or different solution to a solid waste, **hazardous wastes or used oil** problem than has been previously used, or the facility is a significant modification and improvement of similar existing facilities; or

(C) That the department has recommended the facility as the most efficient or environmentally sound method of solid waste, **hazardous wastes or used oil** control.

(c) However, such a facility certified after December 31, 1983, shall be certified pursuant to the procedures, costs properly allocable and all other matters as if it were a facility subject to certification under paragraph (a) of subsection (1) of ORS 468.165.

"Section 5. ORS 468.175 is amended to read:

"468.175. (1) Any person proposing to apply for certification of a pollution control facility pursuant to ORS 468.165, before the commencement of erection, construction or installation of the facility, shall file a request for preliminary certification with the Department of Environmental Quality. The request shall be in a form prescribed by the department. **For facilities constructed on or after the effective date of this 1979 Act, the commission may waive the filing of the application if it finds the filing inappropriate because special circumstances render the filing unreasonable and if it finds such facility would otherwise qualify for tax credit certification pursuant to ORS 468.150 to 468.190.**

(2) Within 30 days of the receipt of such request, the department may require, as a condition precedent to issuance of a preliminary certificate of approval, the submission of plans and specifications. After examination thereof, the department may request corrections and revisions to the plans and specifications. The department may also require any other information necessary to determine whether the proposed construction is in accordance with the provisions of ORS [*448.305,*] 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, this chapter and ORS chapters 459 and 467 and applicable rules and standards adopted pursuant thereto.

(3) If the department determines that the proposed erection, construction or installation is in accordance with the provisions of ORS [*448.305,*] 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, this chapter and ORS *chapters 459 and 467 and applicable rules or standards adopted pursuant thereto, it shall issue a preliminary certificate approving the erection, construction or installation. If the department determines that the erection, construction or installation does not comply with the provisions of ORS [*448.305,*] 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, this chapter and ORS chapters 459 and 467 and applicable rules or standards adopted pursuant thereto, the commission shall issue an order denying certification.

"(4) If within 60 days of the receipt of plans, specifications or any subsequently requested revisions or corrections to the plans and specifications or any other information required pursuant to this section, the department fails to issue a preliminary certificate of approval and the commission fails to issue an order denying certification, the preliminary certificate shall be considered to have been issued. The construction must comply with the plans, specifications and any corrections or revisions thereto, if any, previously submitted.

"(5) Within 20 days from the date of mailing of the order, any person against whom an order is directed pursuant to subsection (3) of this section may demand a hearing. The demand shall be in writing, shall state the grounds for hearing and shall be mailed to the director of the department. The hearing shall be conducted in accordance with the applicable provisions of ORS [*chapter 183*] **183.310 to 183.500.**

"Section 6. ORS 468.180 is amended to read:

"468.180. (1) No certification shall be issued by the commission pursuant to ORS 468.170 unless the facility, facilities or part thereof was erected, constructed or installed [*under a certificate of approval issued pursuant to*] **in accordance with the requirements of** ORS 468.175 and in accordance with the applicable provisions of ORS [*448.305,*] 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, this chapter and ORS chapters 459 and 467 and the applicable rules or standards adopted pursuant thereto.

"(2) Nothing in this section or ORS 468.175 is intended to apply to erection, construction or installation of pollution control facilities begun before October 5, 1973.

"Section 7. ORS 468.185 is amended to read:

"468.185. (1) Pursuant to the procedures for a contested case under ORS chapter 183, the commission may order the revocation of the certification issued under ORS 468.170 of any pollution control or solid waste, **hazardous wastes or used oil** facility, if it finds that:

"(a) The certification was obtained by fraud or misrepresentation; or

"(b) The holder of the certificate has failed substantially to operate the facility for the purpose of, and to the extent necessary for, preventing, controlling or reducing air, water or noise pollution or solid waste, **hazardous wastes or used oil** as specified in such certificate.

"(2) As soon as the order of revocation under this section has become final, the commission shall notify the Department of Revenue and the county assessor of the county in which the facility is located of such order.

"(3) If the certification of a pollution control or solid waste, **hazardous wastes or used oil** facility is ordered revoked pursuant to paragraph (a) of subsection (1) of this section, all prior tax relief provided to the holder of such certificate by virtue of such certificate shall be forfeited and the Department of Revenue or the proper

county officers shall proceed to collect those taxes not paid by the certificate holder as a result of the tax relief provided to the holder under any provision of ORS 307.405, 316.097 and 317.072.

"(4) If the certification of a pollution control or solid waste, hazardous wastes or used oil facility is ordered revoked pursuant to paragraph (b) of subsection (1) of this section, the certificate holder shall be denied any further relief provided under ORS 307.405, 316.097 or 317.072 in connection with such facility, as the case may be, from and after the date that the order of revocation becomes final.

"SECTION 8. The amendments to ORS 468.155, 468.160, 468.165, 468.170 and 468.185 by sections 1 to 4 and 7 of this Act that relate to pollution control facilities for hazardous wastes and used oil shall not apply to erection, construction or installation of such facilities begun before the effective date of this Act.".

A-Engrossed

House Bill 2843

Ordered by the House June 14
(Including Amendments by House May 28 and June 14)

Sponsored by Representative FAWBUSH, Senator BROWN, Representatives BYERS, FADELEY, KAFOURY, MASON, Senator KAFOURY

SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure.

Declares policy. Defines terms relevant to Act. Specifies preferences to be given for determining eligibility of energy conservation facilities for tax credits. Provides that the total of all costs of energy conservation facilities certified for tax credits in any calendar year shall not exceed $30 million. [*Specifies that*] **Specifies that not less than $5 million of the $30 million annual certification limit shall be allocated to facilities having a certified cost of $100,000 or less for any facility. Provides that in respect to the balance of the certification limit** the maximum cost certified for any facility shall not exceed $10 million. **Permits director to increase such limit for previously certified facilities if applications certified in any one calendar year do not total $25 million.** Permits application for preliminary certification in specified situations. Permits Director of Department of Energy to require submission of plans and specifications of proposed facility. Prohibits issuance of certification unless facility was constructed or installed under preliminary certificate. Permits application for final certification in specified situations. Requires final certification to obtain tax credits provided under this Act. Permits director to order revocation of certificate. Allows tax credit based upon the certified cost of an energy conservation facility during the time the facility is certified under provisions of this Act. Limits tax credit for first two years of operation to 10 percent of the certified cost, but not exceeding the tax liability of the taxpayer. Specifies that credits for the next three years shall be five percent of certified costs. Limits maximum total credit allowable to 35 percent of certified costs. Applies to tax years beginning on or after January 1, 1980. Permits carry-over of unused credits to offset tax liability in the next succeeding tax year. Prohibits tax credit for facilities constructed or used by governmental body or public corporation. Prohibits tax credit under this Act for facilities now receiving tax credit for pollution control facility or alternative energy device.

A BILL FOR AN ACT

Relating to taxation.

Be It Enacted by the People of the State of Oregon:

SECTION 1. Sections 2 to 10 of this Act are added to and made a part of ORS 469.010 to 469.180.

SECTION 2. In the interest of the public health, safety and welfare, it is the policy of the State of Oregon to encourage the conservation of electricity, petroleum and natural gas by providing tax relief for Oregon facilities that conserve energy resources or meet energy requirements through the use of renewable resources.

SECTION 3. As used in sections 2 to 10 of this 1979 Act:

(1) "Cost" means the capital costs and expenses necessarily incurred in the acquisition, erection, construction and installation of an energy conservation facility.

(2) "Energy conservation facility" or "facility" means any land, structure, building, installation, excavation, machinery, equipment or device, or any addition to, reconstruction of or improvement of, land or an existing structure, building, installation, excavation, machinery, equipment or device necessarily acquired, erected, constructed or installed by any person in connection with the conduct of a trade or business and actually used in the processing or utilization of renewable energy resources to:

(a) Replace a substantial part or all of an existing use of electricity, petroleum or natural gas;

(b) Provide the initial use of energy where electricity, petroleum or natural gas would have been used;

(c) Generate electricity to replace an existing source of electricity or to provide a new source of electricity

NOTE: Matter in bold face in an amended section is new; matter [*italic and bracketed*] is existing law to be omitted; complete new sections begin with SECTION.

for use in the trade or business; or

(d) Perform a process that obtains energy resources from material that would otherwise be solid waste as defined in ORS 459.005.

(3) "Person" means any individual or legal entity except an entity whose principal business activity is directly or indirectly the production, transportation or distribution of electricity, petroleum or natural gas for wholesale or retail use.

(4) "Renewable energy resource" includes, but is not limited to straw, forest slash, wood waste or other wastes from farm or forest land, industrial or municipal waste, solar energy, wind power, water power or geothermal energy.

SECTION 4. In determining the eligibility of energy conservation facilities for tax credits, preference shall be given to those projects which:

(1) Are not routinely used in a commercial or industrial trade or business;

(2) Have the potential, if developed at other suitable locations, for making a significant contribution to meeting the energy needs of the state; or

(3) Are not reasonably expected, in the absence of the tax credit granted under this 1979 Act, to be cost effective within five years of erection, construction or installation.

SECTION 5. (1) The total of all costs of energy conservation facilities certified by the director for tax credits in any calendar year shall not exceed $30 million. If the applications exceed the $30 million limit, the director, in his discretion, shall determine the dollar amount certified for any facility and the priority between applications for certification based upon the criteria contained in sections 2 to 10 of this 1979 Act.

(2) Not less than $5 million of the $30 million annual certification limit shall be allocated to facilities having a certified cost of $100,000 or less for any facility.

(3) With respect to the balance of the annual certification limit, the maximum cost certified for any facility shall not exceed $10 million. However, if the applications certified in any calendar year do not total $25 million, the director, in his discretion, may increase the certified costs above the $10 million maximum for previously certified facilities. Such increases shall be allocated according to the director's determination of how the previously certified facilities meet the criteria of sections 2 to 10 of this 1979 Act. The increased allocation to previously certified facilities under this subsection shall not include any of the $5 million reserved under subsection (2) of this section.

SECTION 6. (1) Prior to erection, construction or installation of a proposed facility any person may apply to the department for preliminary certification under section 7 of this 1979 Act if:

(a) The erection, construction or installation of the facility is to be commenced on or after the effective date of this 1979 Act and before December 31, 1983;

(b) The facility complies with the standards or rules adopted by the director; and

(c) The applicant is the owner or contract purchaser of a trade or business that plans to utilize an energy conservation facility in connection with Oregon property or a person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes the facility in connection with Oregon property.

(2) Applications for preliminary certification shall be made in writing on a form prepared by the department and shall contain:

(a) A statement that the applicant is using or would have used an energy source that uses electricity, petroleum or natural gas and that the applicant:

(A) Intends to convert from that energy source to a renewable energy resource;

(B) Plans to construct a facility that will use a renewable energy resource or solid waste instead of electricity, petroleum or natural gas; or

(C) Plans to use a renewable energy resource in the generation of electricity that will replace an existing or proposed use of an existing source of electricity.

(b) A detailed description of the proposed facility and its operation and information showing that the facility will operate as represented in the application.

(c) Information on the amount by which consumption of electricity, petroleum or natural gas by the applicant will be reduced as the result of using the facility.

(d) The projected cost of the facility.

(e) Any other information the director deems necessary to determine whether the proposed facility is in accordance with the provisions of sections 2 to 10 of this 1979 Act, and any applicable rules or standards adopted by the director.

(3) The director may waive the filing of the preliminary application if he finds the filing inappropriate because special circumstances render the filing unreasonable, and if he finds such facility would otherwise qualify for tax credit certification pursuant to sections 2 to 10 of this 1979 Act.

SECTION 7. (1) The director may require the submission of plans and specifications and, after examination thereof, may request corrections and revisions of the plans and specifications.

(2) If the director determines that the proposed acquisition, erection, construction or installation is technically feasible and should operate in accordance with the representations made by the applicant, and is in accordance with the provisions of sections 2 to 10 of this 1979 Act and any applicable rules or standards adopted by the director, the director shall issue a preliminary certificate approving the acquisition, erection, construction or installation of the facility. If the director determines that the acquisition, erection, construction or installation does not comply with the provisions of sections 2 to 10 of this 1979 Act and applicable rules and standards, the director shall issue an order denying certification.

(3) If within 120 days of the receipt of an application for preliminary certification, the director fails to issue a preliminary certificate of approval or an order denying certification, the preliminary certificate shall be considered to have been denied.

(4) Within 60 days from the date of mailing of the order under subsection (2) of this section or from a denial under subsection (3) of this section, any person whose preliminary application has been denied may request a hearing. The request shall be in writing, shall state the grounds for hearing and shall be mailed to the director. The hearing shall be conducted in accordance with the provisions of ORS 183.310 to 183.500 applicable to contested cases.

SECTION 8. (1) No certification shall be issued by the director under this section unless the facility was acquired, erected, constructed or installed under a preliminary certificate of approval issued under section 7 of this 1979 Act, except where the filing of a preliminary application has been waived under section 6 of this 1979 Act, and in accordance with the applicable provisions of sections 2 to 10 of this 1979 Act and any applicable rules or standards adopted by the director.

(2) Any person may apply to the department for final certification of a facility:

(a) Unless filing has been waived, after having obtained preliminary certification for the facility under section 7 of this 1979 Act; and

(b) After completion of erection, construction or installation of the proposed facility.

(3) Applications shall be made in writing on a form prepared by the department and shall contain:

(a) Unless filing has been waived, a statement that the conditions of the preliminary certification have been complied with;

(b) The actual cost of the facility certified to by a certified public accountant who is not an employe of the applicant;

(c) A statement that the facility is in operation or, if not in operation, that the applicant has made every reasonable effort to make the facility operable; and

(d) Any other information determined by the director to be necessary prior to issuance of a final certificate, including inspection of the facility by the department.

(4) The director shall act on an application for certification before the 60th day after the filing of the application under this section. The action of the director shall include certification of the actual cost of the facility. However, in no event shall the director certify an amount for tax credit purposes which is more than 10 percent in excess of the amount approved in the preliminary certificate issued for the facility.

(5) If the director rejects an application for final certification, or certifies a lesser actual cost of the facility than was claimed in the application, the director shall send to the applicant written notice of the action, together with a statement of the findings and reasons therefor, by certified mail, before the 60th day after the filing of the application. Failure of the director to act constitutes rejection of the application.

(6) If the application is rejected for any reason, or if the applicant is dissatisfied with the certification of cost, then, within 60 days of the date of mailing of the notice under subsection (5) of this section or from a denial under subsection (5) of this section, the applicant may request a hearing to appeal the rejection under the provisions of ORS 183.310 to 183.500 governing contested cases.

(7) Upon approval of an application for final certification of a facility, the director shall certify the facility. Each certificate shall bear a separate serial number for each device. Where one or more devices constitute an operational unit, the director may certify the operational unit under one certificate.

SECTION 9. A certificate issued under section 8 of this 1979 Act is required for purposes of obtaining tax credits in accordance with sections 12 and 14 of this 1979 Act. Such certification shall be granted for a period not to exceed five years. The five-year period shall begin with the tax year of the applicant during which a certified facility is placed into operation, or the year the facility is certified under section 8 of this 1979 Act, at the election of the applicant.

SECTION 10. (1) Under the procedures for a contested case under ORS 183.310 to 183.500, the director may order the revocation of the certificate issued under section 8 of this 1979 Act if the director finds that:

(a) The certification was obtained by fraud or misrepresentation; or

(b) The holder of the certificate has failed substantially to construct or to make every reasonable effort to operate the facility in compliance with the plans, specifications and procedures in such certificate.

(2) As soon as the order of revocation under this section becomes final, the director shall notify the Department of Revenue of such order.

(3) If the certificate is ordered revoked pursuant to paragraph (a) of subsection (1) of this section, all prior tax credits provided to the holder of the certificate by virtue of such certificate shall be forfeited and upon

notification under subsection (2) of this section the Department of Revenue immediately shall proceed to collect those taxes not paid by the certificate holder as a result of the tax credits provided to the holder under section 12 or 14 of this 1979 Act. The Department of Revenue shall have the benefit of all laws of this state pertaining to the collection of income and excise taxes. No assessment of such taxes shall be necessary and no statute of limitation shall preclude the collection of such taxes.

(4) If the certificate is ordered revoked pursuant to paragraph (b) of subsection (1) of this section, the certificate holder shall be denied any further relief under section 12 or 14 of this 1979 Act in connection with such facility from and after the date that the order of revocation becomes final.

SECTION 11. Section 12 of this Act is added to and made a part of ORS chapter 316.

SECTION 12. (1) A credit is allowed against the taxes otherwise due under this chapter, based upon the certified cost of the facility during the period for which that facility is certified under sections 2 to 10 of this 1979 Act. The credit allowed in each of the first two tax years in which the credit is claimed shall be 10 percent of the certified cost of the facility, but shall not exceed the tax liability of the taxpayer. The credit allowed in each of the succeeding three years shall be five percent of the certified cost, but shall not exceed the tax liability of the taxpayer.

(2) The facility must be in Oregon and owned or leased during the tax year by the taxpayer claiming the credit.

(3) A credit under this section may be claimed by a taxpayer for a facility only in those tax years which begin on and after January 1, 1980.

(4) The maximum total credit allowable shall not exceed 35 percent of the certified cost of such facility.

(5) Upon any sale, exchange or other disposition of the facility, notice thereof shall be given to the Director of the Department of Energy who shall revoke the certificate covering the facility as of the date of such disposition. The transferee may apply for a new certificate under section 8 of this 1979 Act, but the tax credit available to that transferee shall be limited to the amount of credit not claimed by the transferor.

(6) Any tax credit otherwise allowable under this section which is not used by the taxpayer in a particular year may be carried forward and offset against the taxpayer's tax liability for the next succeeding tax year. Any credit remaining unused in that next succeeding tax year may be carried forward and used in the second succeeding tax year, and likewise, any credit not used in that second succeeding tax year may be carried forward and used in the third succeeding tax year, but may not be carried forward for any tax year thereafter. Credits may be carried forward to and used in a tax year beyond the years specified in subsection (1) of this section.

(7) The credit provided by this section is not in lieu of any depreciation or amortization deduction for the facility to which the taxpayer otherwise may be entitled under this chapter for such year.

(8) The taxpayer's adjusted basis for determining gain or loss shall not be further decreased by any tax credits allowed under this section.

(9) If the taxpayer is a shareholder of a Subchapter S corporation, the credit shall be computed using the shareholder's pro rata share of the corporation's certified cost of the facility. In all other respects, the allowance and effect of the tax credit shall apply to the corporation as otherwise provided by law.

SECTION 13. Section 14 of this Act is added to and made a part of ORS chapter 317.

SECTION 14. (1) A credit is allowed against the taxes otherwise due under this chapter, based upon the certified cost of a facility during the period for which that facility is certified under sections 2 to 10 of this 1979

Act. The credit allowed in each of the first two tax years in which the credit is claimed shall be 10 percent of the certified cost of the facility, but shall not exceed the tax liability of the taxpayer. The credit allowed in each of the succeeding three years shall be five percent of the certified cost, but shall not exceed the tax liability of the taxpayer.

(2) The facility must be in Oregon and owned or leased during the tax year by the taxpayer claiming the credit.

(3) A credit under this section may be claimed by a taxpayer for a facility only in those tax years which begin on and after January 1, 1980.

(4) The maximum total credit allowable shall not exceed 35 percent of the certified cost of such facility.

(5) Upon any sale, exchange or other disposition of a facility, notice thereof shall be given to the Director of the Department of Energy who shall revoke the certificate covering the facility as of the date of such disposition. The transferee may apply for a new certificate under section 8 of this 1979 Act, but the tax credit available to that transferee shall be limited to the amount of credit not claimed by the transferor.

(6) Any tax credit otherwise allowable under this section which is not used by the taxpayer in a particular year may be carried forward and offset against the taxpayer's tax liability for the next succeeding tax year. Any credit remaining unused in that next succeeding tax year may be carried forward and used in the second succeeding tax year, and likewise, any credit not used in that second succeeding tax year may be carried forward and used in the third succeeding tax year, but may not be carried forward for any tax year thereafter. Credits may be carried forward to and used in a tax year beyond the years specified in subsection (1) of this section.

(7) The credit provided by this section is not in lieu of any depreciation or amortization deduction for the facility to which the taxpayer otherwise may be entitled under this chapter for such year.

(8) The taxpayer's adjusted basis for determining gain or loss shall not be further decreased by any tax credits allowed under this section.

SECTION 15. If a taxpayer obtains grants or tax credits from the Federal Government other than investment credits granted under section 46 of the Internal Revenue Code of 1954 as it reads on the effective date of this Act, in connection with a facility which has been certified by the Director of the Department of Energy, the certified cost of the equipment shall be reduced on a dollar for dollar basis. Any income or excise tax credits which such taxpayer would be entitled to under this Act after any such reduction shall not be reduced by such federal grants or tax credits: Taxpayers applying for federal grants or credits shall notify the Department of Revenue by certified mail within 30 days of each such application, and of the receipt of any such grant.

SECTION 16. No tax credit shall be allowed under this Act for any facility constructed or used by or for the benefit of any governmental or quasi-governmental body or public corporation or form thereof.

SECTION 17. A person who applies for and receives a tax credit on a pollution control facility or an alternate energy device under ORS 316.097, 316.116 or 317.072 is not eligible to apply for and receive a tax credit on the same facility or device under the provisions of this Act.

CAS

B-Engrossed

House Bill 2846

Ordered by the Senate June 27
(Including Amendments by House April 12
and May 22 and by Senate June 27)

Sponsored by Representatives OTTO, LINDQUIST, WHALLON, BAUMAN, CEASE, MONROE (at the request of Metropolitan Service District)

SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure.

Prohibits establishment of public or private solid waste disposal, transfer or resource recovery sites or facilities within boundaries of metropolitan service district without prior approval of metropolitan service district council. Authorizes district council to approve or deny application to establish, modify or extend solid waste disposal, transfer or resource recovery sites or facilities on consideration of certain factors. Provides that licenses or franchises granted by district may be exclusive. Authorizes district regulation and control of public or private solid waste disposal, transfer and resource recovery sites and facilities located within the district. Permits district to lease landfills, transfer and resource recovery facilities and other equipment necessary for waste disposal. Specifies that such leases can be lease-purchase agreements. Establishes 30-year term for leases and lease-purchase agreements. Provides that existing landfills authorized to accept food wastes which, on March 1, 1979, are franchised by a county or owned by a city are exempt from district's franchising and rate regulation. Specifies that certain tax relief shall not be available for certain pollution control facilities unless such facilities are used for [*solid waste disposal or*] resource recovery. Provides that portions of pollution control facilities may be certified separately if ownership of portions is in more than one person. Specifies that provisions relating to pullution control credits apply in sales, exchanges or other dispositions of certified portions of facilities. Exempts from operation of antitrust statutes lawful activities of metropolitan service district or of persons regulated by metropolitan service district.

A BILL FOR AN ACT

Relating to pollution control; creating new provisions; and amending ORS 268.020, 268.317, 314.255, 468.170 and 646.740.

Be It Enacted by the People of the State of Oregon:

SECTION 1. Section 2 of this Act is added to and made a part of ORS chapter 268.

SECTION 2. (1) No public or private disposal, transfer or resource recovery site or facility in the district shall be established, modified or extended without the prior approval of the council. The council may deny an application for the establishment, modification or extension of a site or facility if pursuant to its solid waste management plan the district has either:

(a) Entered into contracts obligating the district to supply or direct minimum quantities of solid wastes to sites or facilities designated in the contract in order that those sites or facilities will operate economically and generate sufficient revenues to liquidate any bonded or other indebtedness incurred by reason of those sites or facilities; or

(b) Adopted a franchise system for the disposal of solid or liquid wastes.

(2) In considering an application for the establishment, modification or extension of a site or facility, the council may take into account the location and number of existing sites or facilities and their remaining capacities, whether the proposed establishment, modification or extension complies with the district's solid waste management plan and whether the applicant has complied with all other applicable regulatory requirements.

NOTE: Matter in bold face in an amended section is new; matter [*italic and bracketed*] is existing law to be omitted; complete new sections begin with SECTION.

Section 3. ORS 268.020, as amended by section 2, chapter 665, Oregon Laws 1977, is further amended to read:

268.020. As used in this chapter:

(1) "Council" means the governing body of a district.

(2) "District" means a metropolitan service district established under this chapter.

(3) "Metropolitan area" means that area which lies within the boundaries of Clackamas, Multnomah and Washington Counties.

(4) "Improvement" means the facilities and other property constructed, erected or acquired by and to be used in the performance of services authorized to be performed by a district.

(5) "Metropolitan significance" means having major or significant district-wide impact.

(6) "Person" means the state or a public or private corporation, local government unit, public agency, individual, partnership, association, firm, trust, estate or any other legal entity.

Section 4. ORS 268.317 is amended to read:

268.317. For purposes of solid and liquid waste disposal, a district may:

(1) Build, construct, acquire, lease, improve, operate and maintain landfills, transfer facilities, resource recovery facilities and other improvements, facilities or equipment necessary or desirable for the solid and liquid waste disposal system of the district. **Leases authorized by this section include lease-purchase agreements whereunder the district may acquire ownership of the leased property at a nominal price. Such leases and lease-purchase agreements may be for a term of up to 30 years.**

(2) Sell, enter into short or long-term contracts, solicit bids, enter into direct negotiations, deal with brokers or use other methods of sale or disposal for the products or by-products of the district's facilities.

(3) Require any person or class of persons who generate solid or liquid wastes to make use of the disposal, **transfer or resource recovery** sites or facilities of the district or disposal [*site*], **transfer or resource recovery sites** or facilities designated by the district.

(4) Require any person or class of persons who pick up, collect or transport solid or liquid wastes to make use of the disposal, **transfer or resource recovery** sites or facilities of the district or disposal, **transfer or resource recovery** sites or facilities designated by the district.

(5) [*Grant or enter into contracts, licenses or franchises to one or more persons for the purposes described in subsection (1) of this section and set and collect fees from the person or persons holding such contract, license or franchise.*] **Regulate, license, franchise and certify disposal, transfer and resource recovery sites or facilities; establish, maintain and amend rates charged by disposal, transfer and resource recovery sites or facilities; establish and collect license or franchise fees; and otherwise control and regulate the establishment and operation of all public or private disposal, transfer and resource recovery sites or facilities located within the district. Licenses or franchises granted by the district may be exclusive. Existing landfills authorized to accept food wastes which, on March 1, 1979, are either franchised by a county or owned by a city are exempt from the district's franchising and rate regulation.**

(6) Prescribe a procedure for the issuance, administration, renewal or denial of contracts, licenses or franchises granted under subsection (5) of this section.

(7) Regulate the service or services provided by contract, license or franchise and order modifications, additions or extensions to the equipment, facilities, plan or services as shall be in the public interest.

(8) Receive, accept, process, recycle, reuse and transport solid and liquid wastes.

Section 5. ORS 314.255 is amended to read:

314.255. (1) Upon receipt of notice of the revocation of a certification of a pollution control facility pursuant to subsection (1) of ORS 468.185, the Department of Revenue immediately shall collect any taxes due by reason of such revocation, and shall have the benefit of all laws of this state pertaining to the collection of income and excise taxes. No assessment of such taxes shall be necessary and no statute of limitation shall preclude the collection of such taxes.

(2) No tax relief shall be allowed under ORS 307.405, [*316.092 (1973 Replacement Part)*] 316.097 or [*ORS*] 317.072 for any pollution control facility constructed or used by or for the benefit of any governmental or quasi-governmental body or public corporation or form thereof, except where such facilities are used for resource recovery.

Section 6. ORS 468.170 is amended to read:

468.170. (1) The commission shall act on an application for certification before the 120th day after the filing of the application under ORS 468.165. The action of the commission shall include certification of the actual cost of the facility and, for facilities qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, the portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution as set forth in subsection (2) of ORS 468.190. Each certificate shall bear a separate serial number for each such facility.

(2) If the commission rejects an application for certification, or certifies a lesser actual cost of the facility or a lesser portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution or solid waste than was claimed in the application for certification, the commission shall cause written notice of its action, and a concise statement of the findings and reasons therefor, to be sent by registered or certified mail to the applicant before the 120th day after the filing of the application. Failure of the commission to act constitutes rejection of the application.

(3) If the application is rejected for any reason, including the information furnished by the applicant as to the cost of the facility, or if the applicant is dissatisfied with the certification of actual cost or portion of the actual cost properly allocable to prevention, control or reduction of air, water or noise pollution or solid waste, the applicant may appeal from the rejection as provided in ORS 468.110. The rejection or the certification is final and conclusive on all parties unless the applicant takes an appeal therefrom as provided in ORS 468.110 before the 30th day after notice was mailed by the commission.

(4) If the commission finds that a pollution control or solid waste facility or portion thereof, for which an application has been made under ORS 468.165, was erected, constructed or installed under a certificate of approval issued pursuant to ORS 468.175 and in accordance with the requirements of subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, and that the facility is necessary to satisfy the intents and purposes of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, ORS chapters 459 and 467 and this chapter and rules thereunder, it shall certify such facility. No determination of the proportion of the actual cost of the facility to be certified shall be made until receipt of the application. Where one or more facilities constitute an operational unit, the commission may certify such facilities under one certificate. A certificate under this section is effective for purposes of tax relief in accordance with ORS 307.405, 316.097 and 317.072 if erection, construction or

installation of the facility was commenced prior to December 31, 1988. The commission shall attach to the front of each certificate a copy of the notice and election requirements imposed by subsection (5) of this section.

(5) A person receiving a certificate under this section shall make an irrevocable election to take the tax credit relief under ORS 316.097 or 317.072 or the ad valorem tax relief under ORS 307.405 and shall notify the commission, within 60 days after the receipt of such certificate, of his election. This election shall apply to the facility or facilities certified and shall bind all subsequent transferees. Failure to make a timely notification shall make the certificate ineffective for any tax relief under ORS 307.405, 316.097 and 317.072.

(6) If the person receiving the certificate is an electing small business corporation as defined in section 1371 of the Internal Revenue Code, and if the corporation elects to take tax credit relief, such election shall be on behalf of the corporation's shareholders. Each shareholder shall be entitled to take tax credit relief as provided in ORS 316.097, based on that shareholder's pro rata share of the certified cost of the facility.

(7) Certification under this section of a pollution control facility qualifying under subsection (1) of ORS 468.165 shall be granted for a period of 10 consecutive years which 10-year period shall begin with the tax year of the person in which the facility is certified under this section, except that if the person elects ad valorem tax relief the provisions of ORS 307.405 shall apply.

(8) (a) A facility commenced prior to December 31, 1980, and qualifying under paragraph (c) of subsection (1) of ORS 468.165 shall be certified if it meets such requirements.

(b) For a facility commenced after December 31, 1980, and prior to December 31, 1983, the commission, in addition to, and not in lieu of, the requirements under paragraph (c) of subsection (1) of ORS 468.165, shall only certify such a facility if it meets one of the following conditions:

(A) That the facility is necessary to assist in solving a severe or unusual solid waste problem;

(B) That the facility will provide a new or different solution to a solid waste problem than has been previously used, or the facility is a significant modification and improvement of similar existing facilities; or

(C) That the department has recommended the facility as the most efficient or environmentally sound method of solid waste control.

(c) However, such a facility certified after December 31, 1983, shall be certified pursuant to the procedures, costs properly allocable and all other matters as if it were a facility subject to certification under paragraph (a) of subsection (1) of ORS 468.165.

(9) Portions of a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165 may be certified separately under this section if ownership of the portions is in more than one person. Certification of such portions of a facility shall include certification of the actual cost of the portion of the facility to the person receiving the certification. The actual cost certified for all portions of a facility separately certified under this subsection shall not exceed the total cost of the facility that would have been certified under one certificate. The provisions of subsection (10) of ORS 316.097 or 317.072, whichever is applicable, shall apply to any sale, exchange or other disposition of a certified portion of a facility.

Section 7. ORS 646.740 is amended to read:

646.740. No provisions of ORS 136.617, 646.705 to 646.805 and 646.990 shall be construed to make illegal:

(1) The activities of any labor organization or individual working men and women permitted by ORS chapters 661 to 663;

(2) The right of producers of agricultural commodities to join, belong to and act through cooperative bargaining associations under ORS 646.515 to 646.545;

(3) The activities of any person subject to regulation by the Public Utility Commissioner under ORS chapters 756 to 773 to the extent that such activities are so regulated and are lawful thereunder or the activities of any person conducted or carried out in accordance with any agreement or procedure approved as provided in 49 U.S.C. 5b or 5c;

(4) The activities of any person subject to regulation by the Insurance Commissioner under ORS chapters 731 to 751 to the extent that such activities are so regulated and are lawful thereunder;

(5) The activities of any state or national banking institution or savings and loan association, and of any other lending institution, to the extent that such activities are regulated by the Superintendent of Banks or Savings and Loan Supervisor under the banking and loan association laws of Oregon under ORS chapters 706 to 726 and are lawful thereunder; [*or*]

(6) Any other activity specifically authorized under state law or local ordinance[.] ; **or**

(7) The activities of any metropolitan service district formed under ORS chapter 268 and the activities of any person subject to regulation by a metropolitan service district formed under ORS chapter 268 to the extent that those activities are so regulated and are lawful thereunder.

Victor Atiyeh
Governor

Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. H, September 21, 1979, EQC Meeting

Request by Lake County for Continuation of Variances from Rules Prohibiting Open Burning Dumps (OAR 340-61-040(2)(c))

Background

At the April 27, 1979, EQC meeting, variances to continue open burning until July 1, 1979, at seven rural solid waste disposal sites were granted by the Commission (Agenda Item No. J(2) attached). At the June 29, 1979, ECQ meeting staff presented a request to extend the variances until October 1, 1979, to allow for negotiations with the County by staff (Agenda Item No. H(1) attached.

Discussion

Department staff met with Lake County on August 15, 1979, to determine a time schedule for submission of information, including cost data, to support continued variances or development of a proposed plan for site upgrading. During the meeting, March 1, 1980, was discussed as a date for submission of tentative costs and schedules with the variances to expire on July 1, 1980, (to coincide with the new budget year).

As a result of the meeting, the Lake County Counsel has submitted a letter request for continuation of the variances to July 1, 1980, to allow for preparation of accurate cost estimates and possible changes in the city of Paisley and Lake County budgets. Preliminary cost estimates were also included (letter and cost estimates attached).

Alternatives and Evaluation

Alternatives were discussed in the April 27, 1979, staff report.

Summation

1. The Environmental Quality Commission on April 27, 1979, granted a variance to OAR 340-61-040(2)(c) to allow open burning of garbage at seven rural Lake County disposal sites. The Commission extended the variance on June 29, 1979, to expire October 1, 1979. This extension was granted to allow time for staff to negotiate with Lake County.

2. Department staff met with Lake County to determine a schedule for submission of cost and other related information.

3. Lake County has submitted a request for extension of variances to July 1, 1980. This coincides with the budget process for both the city of Paisley and Lake County. The request included some preliminary cost information.

4. The Department concurs with the Lake County request. Extension of the variance will provide time for development of accurate cost estimates (for submission to the Department by March 1, 1980) and will allow for reasonable increases in budgets for solid waste disposal to start in a new budget year.

5. Strict compliance at this time would result in probable closure of the disposal sites with no alternative facility or method of solid waste disposal available.

Directors Recommendation

Based upon the findings in the Summation, it is recommended that the Environmental Quality Commission grant an extension of variances to OAR 340-61-040(2)(c) until July 1, 1980, for Plush, Adel, Paisley, Summer Lake, Silver Lake, Fort Rock, and Christmas Valley subject to the following:

1. Prior to March 1, 1980, a schedule for upgrading the sites to landfills with no further burning, or cost figures which justify continued variances, be submitted to the Department for review.

2. Staff shall return to the June, 1980, Commission meeting with a recommendation regarding the Lake County solid waste program.

Bill

WILLIAM H. YOUNG

Bob Brown:n
229-5157
September 6, 1979
Attachments:
1. Agenda Item J(2)
2. Agenda Item H (1)
3. Letter from Lake County Counsel

SN8174.2

Attachment 1
9/21/79 EQC Meeting
Agenda Item No. 1

Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. J(2) April 27, 1979, EQC Meeting

Request by Lake County for Variance from Rules Prohibiting Open Burning Dumps (OAR 340-61-040(2)(c)

Background

Lake County operates solid waste disposal sites at Adel, Christmas Valley, Fort Rock, Plush, Silver Lake and Summer Lake (hereafter, these sites will be referred to collectively as the Lake County rural disposal sites). The City of Paisley owns and operates a disposal site near Paisley. Except for the Silver Lake and Summer Lake sites, all county-operated sites are on land owned by the U.S. Bureau of Land Management (BLM). The Silver Lake site is owned by Lake County and the Summer Lake site is owned by the Oregon Department of Fish and Wildlife.

On November 26, 1975, the Department approved the solid waste management plan for Lake County's rural disposal sites. The plan was approved on the basis of insignificant volumes of putrescible wastes and allowed the County to control-burn the wastes with a truck-mounted propane burner. The fire was to be extinguished following incineration of the wastes and was not to be allowed to smolder. The Paisley site was not approved for such incineration. Instead, the Paisley site was required to operate as a modified landfill. Non-putrescible and combustible wastes would be disposed of separately for open burning when specifically approved by the Department. The staff felt the Paisley site served too many people and contained too much putrescible matter to allow controlled-burning as permitted at the other rural sites.

Currently, all the rural disposal sites and the Paisley site are routinely open-burned. Both the City of Paisley and Lake County have requested a variance from Department regulations prohibiting open-burning of garbage. No justification was provided with the requests other than to claim that open-burning did not create significant environmental impact.

Discussion

The environmental impact of open-burning of wastes at the Lake County rural sites is a questionable matter. Due to the remote location of the sites and the relatively small amount of garbage, few people, if any, are subjected to the odors created by burning garbage. The visual impact, however, is very noticeable. Due to the large open space of Lake County, the black smoke plumes can be seen from incredible distances. The overall impact of open-burning on air quality is probably immeasurable except for short-term, visible emissions.

Other rural Eastern Oregon counties operate their waste disposal sites without open-burning. Harney County, as an example, uses its road crews to frequently and routinely maintain its rural sites. The estimated annual cost for Harney County to maintain nine (9) rural sites is about $5,000 - $10,000. The cost must be estimated because the cost for this is not separated from the Road Department budget. Lake County has claimed it would cost about $12,000 for them to operate the rural sites without burning.

Actually, Lake County cannot legally open burn on sites leased from BLM because of the Federal Resource Conservation and Recovery Act (RCRA). As a matter of practice, however, BLM has allowed the leases to continue as long as the disposal sites are regulated under DEQ permit. RCRA regulations require that all open dumps be closed or upgraded within a five-year period from date of inventory (sometime in 1979-80).

Possible Alternatives and Expected Consequences

A. Deny the variance request and order Lake County and the City of Paisley to stop open-burning immediately.

This option, of course, would end open-burning of garbage. The staff has discussed this option with the Lake County Commissioners. The Commissioners have indicated that, should this occur, they may close the sites and leave people to their own devices for disposing of their garbage. Undoubtedly, this would result in numerous, illegal, uncontrolled dumps all over Lake County. Also, Lake County probably would need some time (a year, perhaps) to budget additional monies for operating the rural sites if they chose to.

B. Approve the variance request for an indefinite time.

In this case, open-burning would continue. Those other counties that operate acceptable solid waste management programs may decide to review their programs and request open-burning variances for economic considerations.

C. Approve the variance until July 1, 1979.

Prior to June 1, 1979, the City of Paisley and Lake County would submit justification to the Commission for continued open burning of garbage. If the justification was insufficient, then the Commission could order an end to open-burning on July 1, 1980. This would allow the City and County one year to develop alternatives to open-burning and to budget expenses as needed.

The advantage to this option is that it requires Paisley and Lake County to provide the burden of evidence justifying open-burning. As it now stands, the Department and Commission have no real basis for considering a variance to the open-burning rule.

The disadvantage of this option is that it implies that open-burning may be justifiable in certain cases. The Department believes open-burning garbage is inappropriate and the rules prohibiting open-burning of garbage were promulgated to apply to all Oregonians, not just those who agree with the rule.

D. Approve the variance until July 1, 1980.

The Commission would order the staff to negotiate a time schedule for eliminating open-burning of all Lake County sites and for implementing an acceptable solid waste management plan by July 1, 1980.

The advantage to this approach is that it provides for a consistent, state-wide program for solid waste management.

The disadvantage is that Lake County and the City of Paisley may decide to close the sites after July 1, 1980. This would result in many uncontrolled, illegal dumps in Lake County.

Thus, strict compliance with the rules would result in the closing of the existing facilities and no alternative facility or alternative method is available. The Environmental Quality Commission may grant a variance upon making such a finding. ORS 459.225(3)(C).

Summation

1. The City of Paisley and Lake County routinely open-burn garbage at rural disposal sites in Lake County.

2. OAR 340-61-040(2)(c) specifically prohibits open-burning of garbage in Oregon.

3. The City of Paisley and Lake County have requested a variance to this regulation citing that open-burning creates no significant impact on the environment.

4. The City of Paisley and Lake County have not presented adequate evidence of special or unusual circumstances to justify a variance.

5. Strict compliance at this time would result in probable closure of the disposal sites with no alternative facility or method of solid waste disposal available.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Environmental Quality Commission grant a variance to OAR 340-61-040(2)(c) until July 1, 1979, subject to the following conditions:

The City of Paisley and Lake County be required to submit evidence to the Department to justify a variance past July 1, 1979.

Department staff shall review this evidence and return to the June Commission meeting with a recommendation regarding extension of the variance.

Bill

WILLIAM H. YOUNG

Robert L. Brown:dro
229-5157
April 11, 1979
Attachments (2)

1. Letter request from Lake County

2. Letter request from City of Paisley

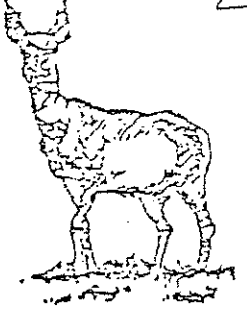
Board of Commissioners

Lake County

STATE OF OREGON

LAKEVIEW, OREGON 97630

GEORGE CARLON LESLIE SHAW LOUIS LAMB



cc: Bob Brown-SWR file SWR-Lake Co.

February 8, 1979

TO: Richard Nichols, Regional Manager, DEQ

FROM: George Carlon, Lake County Board of Commissioners

RE: Variance Request

This letter is in answer to your letter of February 6, 1979 regarding our Solid Waste Disposal Permits and our variance request.

During our meeting of January 24, 1979, we summarized our position of amending our Solid Waste Plan to our present practice of burning with a fuel starter rather than propane. We also discussed our present practice and the need to continue with our present policy.

Attached is our letter of November 1, 1978, summarizing our situation. The letter was discussed with you and Bob Brown.

Please consider this letter a request to continue with our present practice and your help in obtaining Lake County the needed variance would be appreciated.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
FEB 9 1979
BEND DISTRICT OFFICE

RECEIVED
FEB 13 1979

Board of Commissioners
Lake County
STATE OF OREGON
LAKEVIEW, OREGON 97630

GEORGE CARLON LESLIE SHAW DON FITZGERALD

TO: Department of Environmental Quality

FROM: Lake County Commissioners

RE: Solid Waste Plan Amendment

Lake County has reviewed its Solid Waste Plan, having recognized a discrepancy in the present practices, and has amended the Plan to cover our present practices.

Enclosed is a copy of our amendment to the Lake County Solid Waste Plan dated 11/1/78.

It is our intention to change the plan to the present practice of controlling incineration by the use of a flammable fuel. With the present practise, there has been no public objection and the solid waste disposal cost has been held to a minimum.

It is our contention that the present practise is the most practical for our County. The alternative of a Modified Land Fill, Plan Alternative F, Modified Landfills for Rural Sites, has been compared with Plan Alternative G, Modified Land Fills with trench incineration, and the following problems exist:

1. The time between coverages on an equipment-available basis would not be satisfactory. Lake County does not have the equipment-time available to cover at a frequency satisfactory to keep rodents, snakes and other animals away, papers from blowing, foul smells from emitting, and an unhealthy condition from existing.

2. Cost calculations were made on an alternative of covering the land fills at Christmas Valley, Summer Lake, Adel, Plush and Fort Rock every two months with a new pit at six-month intervals. Silver Lake was figured at one coverage per month and a new pit at three-month intervals and our cost, if the equipment was available, would be approximately $33,940 per year. The Road Department schedule would prevent the availability of equipment during many times of the year. Comparing with present cost of approximately $22,241 per year with burning with one new pit per year. Equipment is available for this frequently.

3. The factor of safety to the operator is an important criterion. The ignition of the pits with a propane torch has proven hazardous. The concept of the propane torch omits the hazard of the operator's

exposure to heat, gases, and other obnoxious fumes.

These are only a few of the reasons we have made the decision to amend the plan. We believe with the modification of the method of ignition in the burning of the waste in the trenches that Lake County would be served with the best alternative of solid waste disposal.

November 1, 1978

Chairman, Board of Commissioners

Commissioner

Commissioner

CITY OF PAISLEY

P. O. Box 100
PAISLEY, OREGON 97636

April 5, 1979

DEQ Central Region
Richard J. Nichols, Regional Manager
2150 N.E. Studio Road
Bend, Oregon 97701

RE: SW - Permit #178

Dear Mr. Nichols:

In reply to your letter of February 28, 1979, The City of Paisley is financially unable to comply with the land fill program. our only sanitary means is occasional burning. Our population is only 300.

In the mid 1960's, garbage and trash was scattered all over BLM land. The City dug a pit and cleaned this land and burned the trash in the pit, and since then has kept the garbage and trash burned.

As for nuisance and health problems, it is far healthier to keep the pit clean by burning. It keeps down the flies and vermine. As for nuisance there is no one around to bother. The smoke does not drift over town nor any residence.

As stated above, burning is the only feasible means of sanitation for us. We thereby feel we are justified in requesting a variance for occasional pit burning.

Sincerely,

C. E. Young

C. E. Young, Mayor

CEY:hc

Attachment 2
9/21/79 EQC Meeting
Agenda Item I

Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

To: Environmental Quality Commission

From: Director

Subject: Agenda Item H(1), June 29, 1979, EQC Meeting

Request for an Extension of Variances from Rules Prohibiting Open Burning Dumps, OAR 340-61-040(2)(c), for Lake County

Background

At the April 27, 1979 EQC meeting, staff presented variance requests from Lake County and the City of Paisley (Agenda Item No. J(2) attached) to allow for continued open burning at seven rural solid waste disposal sites. At that time staff was directed to meet with Lake County and the City of Paisley and request information to support a variance past July 1, 1979.

Discussion

Department staff met with Lake County and the City of Paisley on June 6, 1979 to request further information to support the variance extension. Possible phasing to upgrade the larger sites first (Paisley - Christmas Valley - Silver Lake and Summer Lake during hunting season) was discussed. In response to the meeting, the Lake County attorney has written to request attendance at an EQC meeting to present Lake County's position regarding open burning (copy attached). No information to support a continued variance was submitted.

Lake County and the City of Paisley have been notified of the location of the June 29, 1979 meeting and have been invited to attend.

Possible Alternatives and Expected Consequences

Alternatives were discussed in the April 27, 1979 staff report.

Summation

1. The City of Paisley and Lake County routinely open burn garbage at rural disposal sites in Lake County.

2. The Environmental Quality Commission, on April 27, 1979, granted a variance to OAR 340-61-040(2)(c) to allow open burning of garbage. The variance expires July 1, 1979.

3. Department staff has contacted Lake County and the City of Paisley to request information in support of a continued variance.

4. Lake County and the City of Paisley have requested a meeting with the Environmental Quality Commission to present their position and have been notified of the June 29, 1979 meeting.

5. Adequate evidence to support an extended variance has not been received by the Department.

6. Strict compliance at this time would result in probable closure of the disposal sites with no alternative facility or method of solid waste disposal available.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Environmental Quality Commission not grant an extension of the variance until such time as adequate justification for granting of a variance is received.

Bill

WILLIAM H. YOUNG

Robert L. Brown:dro
229-5157
6/14/79
Attachments (2)

1. Agenda Item No. J(2), 4/27/79 EQC Meeting

2. Letter from Lake County attorney

Agenda Item H-1
June 29, 1979 EQC Meeting

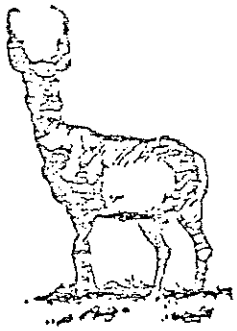
Amended Director's Recommendation

Based on the summary and recent contacts with Lake County, it is the Director's recommendation that:

An extension of the variance to rules prohibiting open burning dumps at Paisley, Fort Rock, Christmas Valley, Silver Lake, Summer Lake, Plush and Adel, OAR 340-61-040 (2)(c), be granted to October 1, 1979, and that the Commission urge Lake County and the City of Paisley to work with the Department staff to prepare by September 1, 1979, a schedule for upgrading and/or justification for continuation of the variance.

Board of Commissioners
Lake County
STATE OF OREGON
LAKEVIEW, OREGON 97630

GEORGE CARLON LESLIE SHAW DON FITZGERALD



June 7, 1979

Richard J. Nichols
Regional Manager - DEQ
2150 NE Studio Road
Bend, Oregon 97701

Dear Mr. Nichols:

George Carlon has referred to me your letter of May 7, 1979.

The Commissioners, myself and representatives of the City of Paisley met with Gil Hargreaves of your Klamath Falls office yesterday. Mr. Hargreaves was unable to provide the Commissioners with sufficient information regarding the procedures facing the County and City of Paisley in seeking a variance to DEQ's no-burn rule. He was unable to provide us with even a specific date that the Environmental Quality Commission would meet to consider the solid waste problems faced here in Lake County.

The Commissioners have requested that I contact you and Mr. Bob Brown and indicate that Lake County would like to have the opportunity to present to the EQC its position on solid waste disposal in Lake County.

Please inform me of the necessary procedures and the date, time and location of the EQC meeting.

Your cooperation in this matter will be greatly appreciated.

Sincerely,

William F. Hanlon

William F. Hanlon
County Counsel

WFH:ma

-4844

RECEIVED
JUN
SOLID WASTE SECTION

CITY OF PAISLEY

P. O. Box 100
PAISLEY, OREGON 97636

June 14, 1979

Department of Environmental Quality
Solid Waste Division
522 S.W. 5th
P.O. Box 1760
Portland, Oregon 97207

SW - Solid Waste Variance

Gentlemen:

In compliance with DEQ request to show justification for occasional open pit burning in Paisley beyond your July 1, 1979 deadline, we are submitting the following.

Before the City acquired the 80 acres for the present dump site, garbage was scattered over several miles of BLM land. the City cleaned this land, burned the garbage and has since kept the land clean by furnishing the public a place to dispose of solid waste. By dumping into the pit and keeping the garbage and trash burned has kept paper from scattering in the wind, and keeps the flies down, rats and other vermine. The smoke from the pit does not drift over town nor any residence in the area. No one is bothered by the smoke.

It is economically unfeasable for the City to land fill, as required by DEQ. Further, the City only has 80 acres of land for solid waste purposes. The land fill method would soon use up the present site and no other land is available.

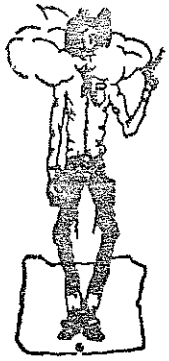
The tax payers in Paisley are burdened with an FHA obligation for sewer and water and will not accept additional tax for land fill operation. Without financial means to comply with DEQ regulations and no further means of land acquisition, the only alternative the City has is to close the dump and allow the land to become covered with garbage again creating unsightly and unsanitary conditions. We here in Paisley, surely feel this is evidence of justification for variance.

Sincerely,

C.E. Young

C.E. Young, Mayor

Attachment 3
9/21/79 EQC Meeting
Agenda Item No. I



Board of Commissioners
Lake County
STATE OF OREGON
LAKEVIEW, OREGON 97630

GEORGE CARLON LESLIE SHAW LOUIS LAMB

August 31, 1979

RECEIVED
SEP 5 1979
SOLID WASTE SECTION

Department of Environmental Quality
Post Office Box 1760
Portland, Oregon 97207

Attention: Bob Brown

Dear Mr. Brown

By this letter Lake County and the City of Paisley request continuation of the variance which allows burning at the following disposal sites in Lake County:

1) Plush
2) Adel
3) Paisley (City)
4) Summer Lake
5) Silver Lake
6) Fort Rock
7) Christmas Valley

This request is based on the enclosed information relating to the present operations and alternatives as explored to date. The enclosed map indicates the location of the sites in relation to land uses, residence locations, population densities, prevailing winds etc.

I feel that the enclosed information is sufficient justification to extend the variance to July 1, 1980. Such an extension will permit Lake County/City of Paisley and your staff the opportunity to more thouroughly explore the feasible alternatives and do a more accurate cost comparison of the available alternatives. This will coincide with the preparation of the budgets for the County and City and permit an analysis through the budgetary process.

Please present the enclosed information to the Environmental Quality Commission at the September meeting. I regret that I will be unable to attend do to a schedule conflict with the State Bar Convention. If you feel that a representative of Lake County/City of Paisley should be present please so advise and I will make the necessary arrangements for such.

Sincerely,

William F. Hanlon
County Counsel

WFH/bg
Enclosure (2)
cc: Lake County Commissioners
cc: City of Paisley

Density

Total population of the County is 6800, approximately 5,000 living in the Lakeview site use are, 1800 additional spread among some 8,000 square miles, with no other considerable population centers. Paisley residents count for approximately 300.

Low density results in no great quantities of solid waste.

In Lakeview, where demand makes it practical, land fill, meeting all D.E.Q. standards is operated.

II. Solid Waste Management Plan:

Adopted in 1974. Updated to meet existing conditions 11/1/78.

Plan called for burning of the sites with ignition by propane burner. Propane burning proved dangerous to the operator and not effective for a complete burn. Plan amended to use liquid fuel.

III. Air Pollution:

Air pollution is not presently nor for the foreseeable future will be a problem.

Placement of all sites are such that the prevailing winds direct the emissions away from residences or areas of public use.

No complaints have been received by the Commissioners siting air pollution.

The sites are located in relatively desert environments. Decomposition of buried material is very slow.

IV. Need for the Disposal Sites:

Until the present system was established most disposal occurred on private land, widely dispersed, being very detrimental. Generally they had no cover or burning.

Population consists of very small communities with great distances separating.

Each community needs its own site.

Due to winds in the area the sites need weekly attention.

Alternative methods would be prohibitively expensive and not as effective as the present method.

V. Costs:

Current: 1 man 3/4 time, (shared with Road Department), 1 pick-up, minimal fuel. $ 22,000.00

Projected:

Contract Hauling (1974 figure) $136,000.00

Landfill or Modified Landfill

Cat	$110,000.00
Tractor or Lowboy	$ 50,000.00
Initial Investment.....	$160,000.00

Board of Commissioners
Lake County
STATE OF OREGON
LAKEVIEW, OREGON 97630

GEORGE CARLON LESLIE SHAW LOUIS LAMB

June 28, 1979

Environmental Quality Commission

Lake County - Town of Paisley

Request for Variance Extension

The factors stated in ORS 459.265 (2) have been used as a guide in organizing this request for variance. Factors are:

a) the nature and magnitude of the problems created by the site or its operation
b) the applicable solid waste management plan
c) the existence or threat of air or water pollution
d) the need for the particular disposal site and alternative methods of disposal or alternate sites
e) the costs, funds available to meet the costs and the minimum time required for a change in disposal method or disposal site

I. Sites Affected:

1) Plush
2) Adel
3) Paisley - (City)
4) Summer Lake
5) Silver Lake
6) Fort Rock
7) Christmas Valley

Present Operations

Present operations involve a weekly contact with each site for clean-up and burning of refuse. This involves 1 employee and pick-up truck, and serves the additional function of a check of roads for deterioration, rocks, dead deer, road signs, etc. The pits are presently ignited with gasoline. Primary substances burned are paper and wood. Most burning occurs early in the morning. Pits are filled and new sites opened as needed, approximately once a year. Signs direct the separation of wire, tin, etc. from the burnable debris.

Summer Lake - Site is unique in that the problems exist during the hunting season when feathers and entrails are discarded in significant quantities.

Operational Costs:

2 moving vehicles for each move	$ 20,000.00
3 employees full time	$ 45,000.00
Fuel; transportation & operation, miscellaneous.	$ 10,000.00
	$ 75,000.00

Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

TO: Environmental Quality Commission

FROM: Director

SUBJT: Agenda Item I, September 21, 1979, EQC Meeting
Field Burning--Public Hearing to Consider Adoption as Permanent Rules Amendments to OAR 340-26-005, 26-013, and 26-015 Adopted as Temporary Rules June 29, 1979, and August 6, 1979, and Submitted to EPA as a State Implementation Plan (SIP) Revision

Background

In May, 1979, the staff submitted a proposed State Implementation Plan (SIP) revision to the Environmental Protection Agency (EPA). That agency has subsequently reviewed the proposed change and has asked the Department to: (1) Clarify certain parts of the submittal and their understanding of our operational field burning program; (2) Provide further technical support for previous field burning rule changes; and (3) Respond to certain procedural issues affecting the Eugene/Springfield Air Quality Maintenance Area. Certain of EPA's questions indicated the need for revisions to the regulations controlling field burning. To address these, temporary rule revisions were proposed to and adopted by the Commission at its June 29, 1979, meeting in order to:

1. Identify the regulatory authority to burn more than one quota per day in a fire district.

2. Identify the use of continuous emission control techniques.

3. Clarify wording regarding prohibition conditions criteria.

The Commission further directed the staff to expedite procedures for proper public hearing and consideration of the temporary rules for adoption as permanent. After public hearing on August 31, 1979, the Commission adopted rules which: (1) Authorized more than one quota per day to be issued; (2) Provided for the use of strip-lighting, perimeter, or regular headfire burning at all times to reduce emissions and their impact; and (3) Revised the definition of prohibition conditions.

After examination of the Department's SIP submittal with respect to both proposed field burning regulations and the technical support documentation regarding potential field burning impacts, the EPA indicated that the field burning portion

of Oregon's SIP could be proposed for approval provided problems with certain procedural, technical, and regulatory issues are satisfactorily resolved. These issues may be summarized as follows:

4. The regulations provide exemptions to certain requirements for days classified as having "unlimited ventilation," yet the proposed wording may be interpreted to preclude a classification of unlimited ventilation thus making the exemptions inoperative.

5. If a classification of unlimited ventilation is established and the exemptions to requirements for burning techniques, moisture content, and acreage restrictions become operative, the constant emission control requirements of the Clean Air Act may not be satisfied.

6. The proposed regulations only limit the amount of acrage that can be burned experimentally for the 1979 season. Therefore, after 1979, there would be no limit on the amount of experimental burning allowed thus making the SIP revision unapprovable since it could not show continuing maintenance of the standards.

7. The proposed regulation would allow the EQC to establish new annual acreage limitations every other year and that by including this provision in the SIP, the Administrator could be preempted in his responsibility to approve any revision to a SIP as required by the Clean Air Act.

8. The use of relative humidity as an indicator of fuel moisture content, if implemented in the manner suggested in the proposed rules, in unlikely to be effective in reducing actual emissions. It is suggested that, rather than classifying days as prohibition conditions based on relative humidity, the burning of individual fields or areas be restricted based on relative humidity in a manner similar to the rainfall restriction.

The Department is currently responding to other EPA requests relating to field burning but not requiring rule revisions.

As a result of action taken by the City of Eugene to enforce the current Oregon SIP and thereby restrict open field burning to 50,000 acres during 1979, and subsequent action taken by Governor Atiyeh, through executive order, to set aside provisions of the current SIP, the EQC met on August 6, 1979, to hear proposed rule revisions offered by the City of Eugene. The rules were proposed to provide additional protection to the City in view of the increase to an allowable 180,000 acres afforded by the Governor's executive order. Rule revisions proposed by the City for immediate implementation as temporary rules, and subsequent adoption as permanent rules, may be summarized as follows:

9. Prohibit the burning of South Valley priority area acreages upwind of the Eugene-Springfield Air Quality Maintenance Area.

10. Prohibit burning when the relative humidity exceeds 50 percent under forecast northerly winds or 60 percent under forecast southerly winds.

11. Require the use of strip-lighting on annual and cereal crops and require the use of perimeter lighting on perennial crops.

The Commission, on August 6, 1979, adopted the proposals of the City with modifications that provided for a 65 percent maximum relative humidity under southerly winds and removed the strip-lighting requirement whenever the mixing depth is equal to 5,000 feet or greater. However, language adopted after the August 31, 1979, public hearing further revised the August 6 language with regard to continuous emission controls and burning techniques. Consequently, items (1), (2), (3), and (11) were addressed at the August 31, 1979, hearing. This September 21, 1979, public hearing is proposed to address items (4) through (10) above.

Oregon Revised Statutes (ORS) 468.450 establishes the Commission's authority to regulate field burning through identification of "marginal days" and development of a schedule identifying the extent and types of burning to be allowed on such days. ORS 468.460 specifically authorizes the Commission to promulgate rules for the control of field burning in the Willamette Valley. ORS 468.460(3) requires the Commission to consult with Oregon State University prior to such promulgation.

In order to comply with State statutes, a "Statement of Need for Rulemaking" is attached (Attachment 1).

Alternatives and Evaluation

Rule changes addressed in the Department's recent public notice and proposed for adoption at this September 21, 1979, EQC meeting and public hearing would:

a. Modify sections 26-005 and 26-015 to define "Unlimited Ventilation Conditions" to address items (4) and (5) identified above.

The EPA believes submitted regulations provide exemptions to certain regulatory requirements for days classified as having "unlimited ventilation," and that the proposed wording appears to preclude a classification of unlimited ventilation thus making the exemptions inoperative. The EPA states that either the exemptions should be removed or the ability to classify a day as unlimited ventilation should be established. The EPA further states that if classification of unlimited ventilation is established and the exemptions to requirements for burning techniques, moisture content and acreage restrictions become operative parts of the regulation, the constant emission control requirements of the Clean Air Act may not be satisfied.

All days during the summer burning season must be classified as marginal or prohibited. Criteria for such classification are established by rule. If sufficient mixing depth and wind speed exist, unlimited ventilation conditions are said to exist. However, days are not specifically classified as unlimited ventilation days. To clarify its use a definition of Unlimited Ventilation

Conditions is proposed for inclusion in section 26-005 and removal from section 26-015.

Rules adopted for the 1978 burning season provided for restrictions on straw moisture content and required strip-lighting of annual and cereal crops which could be waived by the Department when "unlimited ventilation" conditions were found to exist. In addition, if the 150,000 acre limitation is effected as a result of smoke intrusions into Eugene/Springfield, burning could be authorized beyond the 150,000 acres only during periods of unlimited ventilation. The ability to waive moisture content and strip-lighting requirements based specifically on unlimited ventilation conditions was deleted as part of the revisions made since the 1978 season--thus unlimited ventilation conditions now only play a role after the establishment of the 150,000 acre limitation. With recently adopted and proposed rule revisions continuous emission controls are maintained since in no instance is burning beyond 187,500 acres allowed.

b. Modify section 26-013(6)(a) to provide for experimental burning of up to 7,500 acres each year to address item (6).

The present rules were drafted in an effort to achieve SIP approval prior to the 1979 season and with the intention of submitting another SIP revision prior to the 1980 season in response to new legislation. Thus rules were included which were specific to 1979.

Experimental burning is highly regulated under current rules and would not be expected to exceed current levels under projected research efforts. However, since present wording is specific to 1979, it is proposed to remove references to specific years and thereby limit experimental burning to the present 7,500 acre level for each year.

c. Delete section 26-013(1)(c) to remove Commission authority under administrative rule to set new acreage limitations to address item (7).

The Department believes current rule language, 26-013(1)(a), specifically limits burning to no more than 180,000 acres annually and acreage changes made by the Commission pursuant to 26-013(1)(c) would be restricted by the aforementioned limitation. Further, upward changes in acreage would require revision to subsection (1)(a) which would in turn be subject to EPA Administrator review and approval. However, to date the EPA has indicated that SIP revision containing (1)(c) would be unacceptable and cause for SIP rejection; therefore, it is proposed to delete the section.

d. Modify section 26-015(4)(f) to provide for restrictions on burning due to relative humidity and to apply such restrictions based upon local measurements to address items (8) and (10).

The EPA is concerned that the use of relative humidity as an indicator of fuel moisture content, if implemented in the manner suggested in previously proposed rules, is unlikely to be effective in reducing actual emissions. It suggests that, rather than classifying days as prohibition conditions based on relative

humidity, the burning of individual fields or areas be restricted based on relative humidity in a manner similar to the rainfall restriction.

All aspects of the smoke management program are implemented on an area-by-area basis when necessary. Though variations in relative humidity are much less extreme than is the case with rainfall patterns, restrictions on burning due to humidity would be based upon data from the nearest measuring point such as an airport or local fire protection faciltities. Thus the implementation of relative humidity controls would be (and is) essentially identical to the system proposed by the EPA.

It is proposed to permanently adopt the relative humidity (RH) restrictions adopted as temporary at the August 6, 1979, special EQC meeting. However, to clarify its application in the rule, it is also proposed to implement the 50/65 RH rule based upon the best available local measurements in a manner analagous to the current rule regulating burning after rainfall. The proposed language would provide for local humidity determinations to be used in identifying areas affected by the restrictions.

e. Modify section 26-015(4)(d)(B) to prohibit burning of south priority acreages upwind of Eugene/Springfield to address item (9).

During the 1978 season south priority burning was allowed upwind of the City of Eugene but was restricted to certain special south priority areas. North wind burning was allowed in these areas because of their direct impact on sensitive areas when burning under other wind conditions. It was found, as a result of the 1978 experience, that only limited amounts of burning could be accomplished in these areas because of the "nephelometer rule" which now effectively establishes an upper limit for smoke intrusions in the Eugene/Springfield area. Because of the protection afforded the City by the nephelometer rule, the Department eliminated the special south priority areas as part of the December, 1978, rule revision process, and instead provided in rules the opportunity to burn upwind of the City of Eugene only if the smoke would be effectively passed over the City at an altitude of 3,000 feet or greater. While the City of Eugene is still protected by the nephelometer rule, the rule change was proposed to allow some burning under two possible modes: 1) when rapid ignition techniques could put essentially all smoke from field burning at an altitude of 3,000 feet or greater, or 2) when wind flow fields are such that only winds above 3,000 feet would carry smoke toward the City of Eugene and low-level winds would carry smoke away from the City of Eugene.

Experience through August 6, 1979, had been similar to 1978 in that opportunities for burning in these priority areas are very limited. It is proposed to permanently adopt the temporary rule approved at the August 6, 1979, EQC meeting prohibiting the burning of South Valley priority acreages upwind of the Eugene/Springfield area. This revision will further reduce burning opportunities in these South Valley priority areas with a consequent reduction in smoke effects that might have resulted from this type of burning.

Summation

The Environmental Protection Agency (EPA), Region X, has reviewed the Department's proposed revisions to Oregon's Clean Air Act State Implementation Plan (SIP) and has requested additional clarification and changes affecting field burning regulations and procedures. In addition, in view of the potential for burning 180,000 acres as a result of an executive order issued by Governor Atiyeh, the City of Eugene has asked for revisions to certain field burning regulations.

At this September 21, 1979, public hearing the Department would propose to address these requests through rule revisions as shown in Attachment II to:

1. Modify OAR 340-26-005 to clearly define "Unlimited Ventilation Conditions" and delete its definition from OAR 340-26-015;

   In combination with rules revisions regulating moisture content and lighting techniques, this clarifying revision is proposed to meet Clean Air Act requirements for continuous emission controls on field burning.

2. Modify OAR 340-26-013(6)(a) to allow up to 7,500 acres of experimental burning to be conducted each year rather than for **the specific year 1979;**

3. Delete OAR 340-26-013(1)(c) removing the Commission's authority to set annual acreage limitation under administrative rules;

   The change is proposed to preclude the possible preemption of the EPA Administrator in establishing annual acreage levels.

4. Modify OAR 26-015(4)(f) to implement the 50/65 percent maximum relative humidity restrictions on burning under forecast northerly and southerly winds, respectively. Such restrictions would be based upon information from the nearest measuring station and be implemented through the daily smoke management burn releases;

5. Modify OAR 26-015(4)(d)(B) to prohibit the burning of South Valley priority acreages upwind of the Eugene/Springfield area and thereby reduce the potential for smoke impact from these acreages.

Director's Recommendation

Based upon the Summation, it is recommended that the Commission take the following action:

1. Acknowledge as of record the consultation with and recommendations of Oregon State University, as presented at the public hearing, and the Department and any other parties consulted pursuant to ORS 468.460(3).

2. Subject to any changes found appropriate as a result of September 21, 1979, recommendations made to the Commission or findings reached after this public hearing, adopt the proposed amendments to OAR Chapter 340,

Sections 26-005, 26-013, and 26-015, identified in the Summation, as rules to become effective immediately upon filing with the Secretary of State.

3. Instruct the Department to file promptly the adopted rules with the Secretary of State as permanent rules to become effective immediately upon such filing and to forward the rules and other pertinent information to the EPA as a supplement to the previously submitted revision to Oregon's Clean Air Act State Implementation Plan.

Bill

WILLIAM H. YOUNG

Attachments: I Statement of Need for Rulemaking
II Proposed Revisions to OAR Chapter 340, Section 26-005, 26-013, and 26-015

SAF:pas
686-7837
September 6, 1979

ATTACHMENT I

Agenda Item I, September 21, 1979, EQC Meeting

Field Burning--Public Hearing to Consider Adoption as Permanent Rules to Amendments to OAR 340-26-005, 26-013, and 26-015 Adopted as Temporary Rules June 29, 1979, and August 6, 1979, and Submitted to EPA as a State Implementation Plan (SIP) Revision

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183,335(7), this statement provides information on the Environmental Quality Commission's intended action to adopt a rule.

(1) Legal Authority.

Oregon Revised Statutes 468.020, 468.450, and 468.460.

(2) Need for the Rule.

Proposed amendment of open field burning regulations, OAR 340, 26-005, 26-013, and 26-015 is needed to:

1. Clearly define "Unlimited Ventilation Conditions";

2. Limit experimental burning to 7,500 acres annually;

3. Remove from the regulations the Commission's authority to establish annual open field burning acreage limitations;

4. Limit burning under high relative humidity conditions and identify those conditions; and

5. Prohibit burning in South Willamette Valley priority areas upwind of the Eugene/Springfield area.

All such changes are required to achieve Environmental Protection Agency acceptance of a field burning State Implementation Plan revision.

(3) Principle Documents Relied Upon in This Rulemaking.

1. Staff report Willima H. Young, Director, Department of Environmental Quality, presented at the December 15, 1979, April 27, 1979, June 29, 1979, August 6, 1979, and August 31, 1979, EQC meetings.

2. Personal communication with Clark Gaulding, Air Programs Branch Administrator, U. S. Environmental Protection Agency, June 14, 1979.

3. Record of the Environmental Quality Commission meeting, August 31, 1979, and September 21, 1979.

4. Personal communications with Terry Smith, Environmental Analyst, City of Eugene, August 3, 1979.

5. Personal communication with Keith Martin, Assistant City Manager, City of Eugene, August 3, 1979.

6. Personal communication with Tim Sercombe, City Attorney, City of Eugene, August 3, 1979.

7. Personal communication with Dave Nelson, Executive Secretary, Oregon Seed Council, et. al., August 3, 1979.

8. Memorandum to the EQC from Terry Smith, Environmental Analyst, City of Eugene, August 6, 1979.

9. Notice of Proposed Rulemaking regarding the field burning portion of Oregon's State Implementation Plan, August 3, 1979, Federal Register.

SAF:pas
686-7837
September 6, 1979

Attachment II

DEPARTMENT OF ENVIRONMENTAL QUALITY
Chapter 340

Agricultural Operations
AGRICULTURAL BURNING

26-005 DEFINITIONS. As used in this general order, regulation and schedule, unless otherwise required by context:

(1) Burning seasons:

(a) "Summer Burning Season" means the four month period from July 1 through October 31.

(b) "Winter Burning Season" means the eight month period from November 1 through June 30.

(2) "Department" means the Department of Environmental Quality.

(3) "Marginal Conditions" means conditions defined in ORS 468.450(1) under which permits for agricultural open burning may be issued in accordance with this regulation and schedule.

(4) "Northerly Winds" means winds coming from directions in the north half of the compass, at the surface and aloft.

(5) "Priority Areas" means the following areas of the Willamette Valley:

(a) Areas in or within 3 miles of the city limits of incorporated cities having populations of 10,000 or greater.

(b) Areas within 1 mile of airports servicing regularly scheduled airline flights.

(c) Areas in Lane County south of the line formed by U. S. Highway 126 and Oregon Highway 126.

(d) Areas in or within 3 miles of the city limits of the City of Lebanon.

(e) Areas on the west side of and within 1/4 mile of these highways; U. S. Interstate 5, 99, 99E, and 99W. Areas on the south side of and within 1/4 mile of U. S. Highway 20 between Albany and Lebanon, Oregon Highway 34 between Lebanon and Corvallis, Oregon Highway 228 from its junction south of Brownsville to its rail crossing at the community of Tulsa.

(6) "Prohibition Conditions" means atmospheric conditions under which all agricultural open burning is prohibited (except where an auxiliary fuel is used such that combustion is nearly complete, or an approved sanitizer is used).

"[----]" represents material deleted
<u>Underlined material</u> represents proposed additions

(7) "Southerly Winds" means winds coming from directions in the south half of the compass, at the surface and aloft.

(8) "Ventilation Index (VI)" means a calculated value used as a criterion of atmospheric ventilation capabilities. The Ventilation Index as used in these rules is defined by the following identity:

$$VI = \frac{\text{Mixed depth (feet)}}{1000} \times \text{Average wind speed through the mixed depth (knots)}$$

(9) "Willamette Valley" means the areas of Benton, Clackamas, Lane, Linn, Marion, Multnomah, Polk, Washington and Yamhill Counties lying between the crest of the Coast Range and the crest of the Cascade Mountains, and includes the following:

(a) "South Valley," the areas of jurisdiction of all fire permit issuing agents or agencies in the Willamette Valley portion of the Counties of Benton, Lane or Linn.

(b) "North Valley," the areas of jurisdiction of all other fire permit issuing agents or agencies in the Willamette Valley.

(10) "Commission" means the Environmental Quality Commission.

(11) "Local Fire Permit Issuing Agency" means the County Court or Board of County Commissioners or Fire Chief of a Rural Fire Protection District or other person authorized to issue fire permits pursuant to ORS 477.515, 447.530, 476.380 or 478.960.

(12) "Open Field Burning Permit" means a permit issued by the Department pursuant to ORS 468.458.

(13) "Fire Permit" means a permit issued by a local fire permit issuing agency pursuant to ORS 477.515, 477.530, 476.380 or 478.960.

(14) "Validation Number" means a unique three-part number issued by a local fire permit issuing agency which validates a specific open field burning permit for a specific acreage of a specific day. The first part of the validation number shall indicate the number of the month and the day of issuance, the second part the hour of authorized burning based on a 24 hour clock and the third part shall indicate the size of acreage to be burned (e.g., a validation number issued August 26 at 2:30 p.m. for a 70 acre burn would be 0826-1430-070).

(15) "Open Field Burning" means burning of any perennial grass seed field, annual grass seed field or cereal grain field in such manner that combustion air and combustion products are not effectively controlled.

(16) "Backfire Burning" means a method of burning fields in which the flame front does not advance with the existing surface winds. The method requires ignition of the field only on the downwind side.

(17) "Into-the-Wind Strip Burning" means a modification of backfire burning in which additional lines of fire are ignited by advancing directly into the existing surface wind after completing the initial backfires. The technique increases the length of the flame front and therefore reduces the time required to burn a field. As the initial burn nears approximately 85% completion, the remaining acreage may be burned using headfiring techniques in order to maximize plume rise.

(18) "Perimeter Burning" means a method of burning fields in which all sides of the field are ignited as rapidly as practicable in order to maximize plume rise. Little or no preparatory backfire burning shall be done.

(19) "Regular Headfire Burning" means a method of burning fields in which substantial preparatory backfiring is done prior to ignition of the upwind side of the field.

(20) "Approved Field Sanitizer" means any field burning device that has been approved by the Department as an alternative to open field burning.

(21) "Approved Experimental Field Sanitizer" means any field burning device that has been approved by the Department for trial as a potential alternative to open burning or as a source of information useful to further development of field sanitizers.

(22) "After-Smoke" means persistent smoke resulting from the burning of a grass seed or cereal grain field with a field sanitizer, and emanating from the grass seed or cereal grain stubble or accumulated straw residue at a point 10 feet or more behind a field sanitizer.

(23) "Leakage" means any smoke resulting from the use of a field sanitizer which is not vented through a stack and is not classified as after-smoke.

(24) "Approved Pilot Field Sanitizer" means any field burning device that has been observed and endorsed by the Department as an acceptable but improvable alternative to open field burning, the operation of which is expected to contribute information useful to further development and improved performance of field sanitizers.

(25) "Approved Alternative Method(s)" means any method approved by the Department to be a satisfactory alternative method to open field burning.

(26) "Approved Interim Alternative Method" means any interim method approved by the Department as an effective method to reduce or otherwise minimize the impact of smoke from open field burning.

(27) "Approved Alternative Facilities" means any land, structure, building, installation, excavation, machinery, equipment or device approved by the Department for use in conjunction with an Approved Alternative Method or an Approved Interim Alternative Method for field sanitation.

(28) "Drying Day" means a 24-hour period during which the relative humidity reached a minimum less than 50% and no rainfall occurred.

(29) "Unlimited Ventilation Conditions" means atmospheric conditions which provide a mixing depth of 5000 feet or greater and a ventilation index of 32.5 or greater.

26-010 GENERAL PROVISIONS. The following provisions apply during both summer and winter burning seasons in the Willamette Valley unless otherwise specifically noted.

(1) Priority for Burning. On any marginal day, priorities for agricultural open burning shall follow those set forth in ORS 468.450 which give perennial grass seed fields used for grass seed production first priority, annual grass seed fields used for grass seed production second priority, grain fields third priority and all other burning fourth priority.

(2) Permits required.

(a) No person shall conduct open field burning within the Willamette Valley without first obtaining a valid open field burning permit from the Department and a fire permit and validation number from the local fire permit issuing agency for any given field for the day that the field is to be burned.

(b) Applications for open field burning permits shall be filed on Registration/Application forms provided by the Department.

(c) Open field burning permits issued by the Department are not valid until acreage fees are paid pursuant to ORS 468.480(1)(b) and a validation number is obtained from the appropriate local fire permit issuing agency for each field on the day the field is to be burned.

burning provided that all of the following conditions are met:

(a) Field sanitizers are not available or otherwise cannot accomplish the burning.

(b) The field stubble will not sustain an open fire.

(c) One of the following conditions exist:

(A) The field has been previously open burned and appropriate fees paid.

(B) The field has been flailchopped, mowed, or otherwise cut close to the ground and loose straw has been removed to reduce the straw fuel load as much as practicable.

26-012 REGISTRATION AND AUTHORIZATION OF ACREAGE TO BE OPEN BURNED.

(1) On or before April 1 of each year, all acreages to be open burned under this rule shall be registered with the local fire permit issuing agency or its authorized representative on forms provided by the Department. A nonrefundable $1.00 per acre registration fee shall be paid at the time of registration.

(2) Registration of acreage after April 1 of each year shall require:

(a) Approval of the department.

(b) An additional late registration fee of $1.00 per acre if the late registration is determined by the Department to be the fault of the late registrant.

(3) Copies of all Registration/Application forms shall be forwarded to the Department and the Executive Department promptly by the local fire permit issuing agency.

(4) The local fire permitting agency shall maintain a record of all registered acreage by assigned field number, location, type of crop, number of acres to be burned and status of fee payment for each field.

(5) Burn authorizations shall be issued by the local fire permit issuing agency up to daily quota limitations established by the Department and shall be based on registered feepaid acres and shall be issued in accordance with the priorities established by subsection 26-010(1) of these rules, except that fourth priority burning shall not be permitted from July 15 to September 15 of any year unless specifically authorized by the Department.

(6) No local fire permit issuing agency shall authorize open field burning of more acreage than may be sub-allocated annually to the District by the Department pursuant to Section 26-013(5) of these rules.

26-013 LIMITATION AND ALLOCATION OF ACREAGE TO BE OPEN BURNED.

(1) Except for acreage to be burned under 26-013(6) and (7), the maximum acreage to be open burned under these rules:

(a) Shall not exceed 180,000 acres annually.

(b) May be further reduced such that, if by September 7 of each year, the average of total cumulative hours of nephelometer readings exceeding 2.4×10^{-4} B-scat units at Eugene and Springfield, which have been deteremined by the Department to have been significantly caused by field burning, equals or exceeds 16 hours, the maximum acreage to be open burned under these rules shall not exceed 150,000 acres and the sub-allocation to the fire permit issuing agencies shall be reduced accordingly, subject to the further provisions that:

(A) Unused permit allocations may be validated and used after the 150,000 acre cut-off only on unlimited ventilation days as may be designated by the Deaprtment, and

(B) The Commission may establish a further acreage limitation not to exeed 15,000 acres over and above the 150,000 acre limitation and authorize permits to be issued pursuant thereto, in order to provide growers of bentgrass seed crops and other late maturing seed crops opportunity to burn equivalent to that afforded growers of earlier maturing crops.

[~~(c) During 1979 and each year thereafter shall be determined and established by the Commission by January 1 of each odd year. The Commission shall after taking into consideration the factors listed in subsection (2) of ORS 468.460, by order indicate the number of acres for which permits may be issued for the burning of such acreage as it considers appropriate and necessary, upon finding that open burning of such acreage will not substantially impair public health and safety and will not substantially interefere with compliance with relevant state and federal laws regarding air quality.~~]

(2) Any revisions to the maximum acreage to be burned, allocation procedures, permit issuing procedures or any other substantive changes to these rules affecting the open field burning program for any year shall be made prior to June 1 of that year. In making htese rules changes the Commission shall consult with Oregon State University (OSU) and may consult with other interested agencies.

(3) Acres burned on any day by approved field sanitizers and approved experimental field sanitizers and propane flamers shall not be applied to open field burning acreage allocations or quotas, and such equipment may be operated under either marginal or prohibition conditions.

(4) In the event that total registration is less than or equal to the acreage allowed to be open burned under section 26-013(1) all registrants shall be allocated 100 percent of their registered acres.

(5) In the event that total registration exceeds the acreage allowed to be open burned under 26-013(1) the Department may issue acreage allocations to growers totaling not more than 110 percent of the acreage allowed under Section 26-013(1). The Department shall monitor burning and shall cease to issue burning quotas when the total acreage reported burned equals the maximum acreage allowed under section 26-013(1).

(a) Each year the Department shall sub-allocate 110 percent of the total acre allocation established by the Commission, as specified in Section 26-013(1), to the respective growers on a pro rata share basis of the individual acreage registered as of April 1 to the total acreage registered as of April 1.

(b) Except as provided in sub-section (1)(b) of this section, the Department shall sub-allocate the total acre allocation established by the Commission, as specified in Section 26-013(1) to the respective fire permit issuing agencies on a pro rata share basis of the acreage registered within each fire permit issuing agency's jurisdication as of April 1 to the total acreage registered as of April 1.

(c) In an effort to insure that permits are available in areas of greatest need, to coordinate completion of burning, and to achieve the greatest possible permit utilization, the Department may adjust, in cooperation with the fire permit utilization, the Department may adjust, in cooperation with the fire districts, allocations of the maximum acreage allowed in Section 26-013(1).

(d) Transfer of allocations for farm management purposes may be made within and between fire districts on a one-in/one-out basis under the supervision of the Department. Transfer of allocations between growers are not permitted after the maximum acres specified in Section 26-013(1) have been burned within the Valley.

(e) Except for additional acreage allowed to be burned by the Commissions as provided for in (6) and (7) of this subsection no fire district shall allow acreage to be burned in excess of their allocations assigned pursuant to (b), (c) and (d) above.

(6) Notwithstanding the acreage limitations under 26-013(1), the Department may allow experimental open burning pursuant to Section 9 of the 1977 Oregon Laws, Chapter 650, (HB 2196). Such experimental open burning shall be conducted only as may be specifically authorized by the Department and will be conducted for gathering of scientific data, or training of personnel or demonstrating specific practices. The Department shall maintain a record of each experimental burn and may require a report from any person conducting an experimental burn stating factors such as:

1. Date, time and acreage of burn.
2. Purpose of burn.
3. Results of burn compared to purpose.
4. Measurements used, if any.
5. Future application of results of principles featured.

(a) Experimental open burning, exclusive of that acreage burned by experimental open field sanitizers, shall not exceed 7500 acres [during 1979] annually.

(b) For experimental open burning the Department may assess an acreage fee equal to that charged for open burning of regular acres. Such fees shall be segregated from other funds and dedicated to the support of smoke management research to study variations of smoke impact resulting from differing and various burning practices and methods. The Department may contract with research organizations such as academic institutions to accomplish such smoke management research.

(7) Pursuant to ORS 468.475(6) and (7) the Commission may permit the emergency open burning under the following procedures:

(a) A grower must submit to the Department an application form for emergency field burning requesting emergency burning for one of the following reasons;

(A) Extreme hardship documented by:

An analysis and signed statement from a CPA, public accountant, or other recognized financial expert which establishes that failure to allow emergency open burning as requested will result in extreme financial hardship above and beyond mere loss of revenue that would ordinarily accrue due to inability to open burn the particular acreage for which emergency open burning is requested. The analysis shall include an itemized statement of the applicant net worth and include a discussion of potential alternatives and probable related consequences of not burning.

(B) Disease outbreak, documented by:

An affidavit or signed statement from the County Agent, State Department of Agriculture or other public agricultural expert authority that, based on his personal investigation, a true emergency exists due to a disease outbreak that can only be dealt with effectively and practically by open burning.

The statement must also include at least the following:

i) time field investigation was made,
ii) location and description of field,
iii) crop,
iv) infesting disease,
v) extent of infestation (compared to normal),
vi) necessity and urgency to control,
vii) availability, efficacy and practicability of alternative control procedures,
viii) probable damages or consequences of non-control.

(C) Insect infestation, documented by:

Affidavit or signed statement from the County Agent, State Department of Agriculture or other public agricultural expert authority that, based on his personal investigation, a true emergency exists due to an insect infestation that can only be dealt with effectively and practicably by open burning. The statement must also include at least the following:

i) time field investigation was made,
ii) location and description of field,
iii) crop,
iv) infesting insect,
v) extent of infestation (compared to normal),
vi) necessity and urgency to control,
vii) availability, efficacy, and practicability of alternative control procedures,
viii) probable damages or consequences of non-control.

(D) Irreparable damage to the land documented by an:

An affidavit or signed statement from the County Agent, State Department of Agriculture, or other public agricultural expert authority that, based on his personal investigation, a true emergency exists which threatens irreparable damage to the land and which can only be dealt with effectively and practicably by open burning. The statement must also include at least the following:

i) time of field investigation,
ii) location and description of field,
iii) crop,
iv) type and characteristics of soil,
v) slope and drainage characteristics of field,
vi) necessity and urgency to control,
vii) availability, efficacy and practicability of alternative control procedures,
viii) probable damages or consequences of non-control.

(b) Upon receipt of a properly completed application form and supporting documentation the Commission shall within 10 days, return to the grower its decision.

(c) An open field burning permit, to be validated upon payment of the required fees, shall be promptly issued by the Department for that portion of the requested acreage which the Commission has approved.

(d) Application forms for emergency open field burning provided by the Department must be used and may be obtained from the Department either in person, by letter or by telephone request.

(8) The Department shall act, pursuant to this section, on any application for a permit to open burn under these rules within 60 days of registration and receipt of the fee provided in ORS 468.480.

(9) The Department may on a fire district by fire district basis, issue limitations more restrictive than those contained in these regulations when in their judgment it is necessary to attain and maintain air quality.

26-015 WILLAMETTE VALLEY SUMMER BURNING SEASON REGULATIONS

As provided for in Section 6 of Oregon Law 1977, Chapter 650, the Department shall conduct a smoke management program which shall include in addition to other provisions covered in these rules the following provisions:

(1) Classification of Atmospheric Conditions. All days will be classified as marginal or prohibition days under the following criteria:

(a) Marginal Class N conditions: Forecast northerly winds and a mixing depth greater than 3500 feet.

(b) Marginal Class S conditions: Forecast southerly winds.

(c) Prohibition conditions: Forecast northerly winds and a mixing depth of 3500 feet or less.

~~[(d) Unlimited Ventilation conditions: A mixing depth of 5000 feet or greater and a ventilation index of 32.5 or greater.]~~

(2) Quotas.

(a) Except as provided in this subsection, the total acreage of permits for open field burning shall not exceed the amount authorized by the Department for each marginal day. Authorizations of acreages shall be issued in terms of single, multiple, or fractional basic quotas or priority area quotas as listed in Table 1, attached as Exhibit A and incorporated by reference into this regulation and schedule, and defined as follows:

(A) The basic quota of acreage shall be established for each permit jurisdiction, including fields located in priority areas, in a manner to provide, as reasonably as practicable, an equitable opportunity to burn.

(B) The priority area quota of acreage shall be established for each permit jurisdiction, for fields in priority areas, in a manner to provide, as reasonably as practicable, an equitable opportunity to burn.

(b) Willamette Valley permit agencies or agents not specifically named in Table 1 shall have a basic quota and priority area quota of 50 acres only if they have registered acreage to be burned within their jurisdiction.

(c) In no instance shall the total acreage of permits issued by any permit issuing agency or agent exceed that allowed by the Department for the marginal day except as provided for jurisdictions with 50 acres quotas or less as follows: When the Department has authorized one quota or less, a permit may be issued to include all the acreage in one field providing that field does not exceed 100 acres and provided further that no other permit is issued for that day. Permits shall not be so issued on two consecutive days.

(d) The Department may designate additional areas a Priority Areas, and may adjust the basic acreage quotas or priority area quotas of any permit jurisdiction, where conditions in its judgment warrant such action.

(3) Burning Hours.

(a) Burning hours may begin at 9:30 a.m. PDT, under marginal conditions but no open field burning may be started later than one-half hour before sunset or be allowed to continue burning later than one-half hour after sunset.

(b) The Department may alter burning hours according to atmospheric ventilation conditions when necessary to attain and maintain air quality.

(c) Burning hours may be reduced by the fire chief or his deputy when necessary to protect from danger by fire.

(4) Extent and Type of Burning.

(a) Prohibition. Under prohibition conditions, no fire permits or validation numbers for agricultural open burning shall be issued and no burning shall be conducted, except where an auxiliary liquid or gaseous fuel is used such that combustion is essentially complete, or an approved field sanitizer is used.

(b) Marginal Class N Conditions. Unless specifically authorized by the Department, on days classified as Marginal Class N burning may be limited to the following:

(A) North Valley: one basic quota may be issued in accordance with Table 1 except that no acreage located within the permit jurisdictions of Aumsville, Drakes Crossing, Marion County District 1, Silverton, Stayton, Sublimity, and the Marion County portions of the Clackamas-Marion Forst Protection District shall be burned upwind of the Eugene-Springfield non-attainment area.

(B) South Valley: one priority area quota for priority area burning may be issued in accordance with Table 1.

(c) Marginal Class S Conditions. Unless specifically authorized by the Department on days classified as Marginal Class S conditions, burning shall be limited to the following:

(A) North Valley: one basic quota may be issued in accordance with Table 1 in the following permit jurisdictions: Aumsville, Drakes Crossing, Marion County District 1, Silverton, Stayton, Sublimity, and the Marion County portion of the Clackamas-Marion Forest Protection District. One priority area quota may be issued in accordance with Table 1 for priority area burning in all other North Valley jurisdictions.

(B) South Valley: one basic quota may be issued in accordance with Table 1.

(d) Special Restrictions on Priority Area Burning.

(A) No priority acreage may be burned on the upwind side of any city, airport, or highway within the same priority areas.

(B) No south priority acreage shall be burned upwind of the Eugene-Springfield non-attainment area [~~unless when burned the resultant smoke is effectively passed over the city at no less than 3000 feet above mean sea level.~~]

(e) Restrictions on burning techniques.

(A) The Department shall require the use of into-the-wind strip-lighting on annual grass seed and cereal crop fields when fuel conditions or atmospheric conditions are such that use of into-the-wind strip-lighting would reduce smoke effects, and specifically the Department shall require such use when,

i) burning occurs shortly after restrictions on burning due to rainfall have been lifted or when the fields to be burned are wet; or

ii) it is estimated that plume rise over 3500 feet will not occur.

(B) The Department shall require the use of perimeter burning on all dry fields where no severe fire hazard conditions exist and where strip-lighting is not required. "Severe fire hazards" for purposes of this subsection means where adjacent and vulnerable timber, brush, or buildings exist next to the field to be burned.

(C) The Department shall require regular headfire burning on all fields where a severe fire hazard exists.

(f) Restrictions on burning due to rainfall and relative humidity.

(A) Burning shall not be permitted in an area for one drying day for each 0.10 inch of rainfall received at the nearest measuring station up to a maximum of four drying days.

(B) The Department may on a field-by-field or area-by-area basis waive the restrictions of (A) above when dry fields are available through special preparation or unusual rainfall patterns and wind direction and dispersion conditions are appropriate for burning with minimum smoke impact.

(C) Burning shall not be permitted in an area when relative humidity at the nearest measuring station exceeds 50 percent under forecast northerly winds or 65 percent under forecast southerly winds.

Agenda Item J

September 12, 1979

Joe B. Richards, Chairman
Environmental Quality Commission
Post Office Box 10747
Eugene, OR 97401

Albert H. Densmore
Environmental Quality Commission
411 West Eighth Street
Medford, OR 97501

Ronald M. Somers
Environmental Quality Commission
106 East Fourth Street
The Dalles, OR 97058

Fred J. Burgess
Environmental Quality Commission
Dean's Office, Engineering
Oregon State University
Corvallis, OR 97331

Gentlemen:

The above referenced matter is scheduled for the Commission's consideration at its September 21, 1979 meeting. I have enclosed the following:

1. Proposed Order (Proposed Findings of Fact, Conclusions of Law, and Final Order dated February 17, 1977
2. Environmental Quality Commission Order dated July 2, 1979
3. Respondents' requests for rehearing and for access to records
4. Environmental Quality Commission Order dated August 22, 1979, with cover letter
5. Department's Motion to Dismiss and supporting Memorandum

As of this date, the filings contemplated in paragraphs 1. and 2. of the August 22, 1979 Order have not been made.

Sincerely,

Linda K. Zucker
Hearings Officer

LKZ:ahe
Attachments (5)

September 12, 1979

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. and Mrs. E. W. Mignot
2660 Vine Street
Grants Pass, OR 97526

Re: DEQ v. MIGNOT, Mr. & Mrs. E. W.
Case No. 06-SW-SWR-76-228
Josephine County

Dear Mr. & Mrs. Mignot:

Matters relating to your appeal will be before the Environmental Quality Commission at its September 21, 1979 meeting.

I have enclosed a copy of the Tentative Agenda. The Final Agenda will include the Department's Motion to Dismiss as a scheduled matter. You are welcome to attend the meeting.

Sincerely,

SEP 12 1979

Linda K. Zucker
Hearings Officer

LKZ:ahe
Attachment (1)

cc: Department of Justice, Portland Office
Regional Operations Division, DEQ
Southwest Region, DEQ

Alice –

RECEIPT FOR CERTIFIED MAIL

No. 348484

SENT TO: E.W. Mignot

STREET AND NO.: 2660 Vine St

P.O., STATE AND ZIP CODE: Grants Pass Or 97526

POSTMARK OR DATE: 9-12-79

OPTIONAL SERVICES FOR ADDITIONAL FEES

RETURN RECEIPT SERVICES
1. Shows to whom and date delivered ..... With restricted delivery .....
2. Shows to whom, date and where delivered With restricted delivery X

RESTRICTED DELIVERY .....

SPECIAL DELIVERY (extra fee required) .....

CONSULT POSTMASTER FOR FEES

PS Form 3800 Jan. 1976

NO INSURANCE COVERAGE PROVIDED— NOT FOR INTERNATIONAL MAIL

(See other side)

☆ GPO: 1975—O-591-452

PS Form 3811, Aug. 1978

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

● SENDER: Complete items 1, 2, and 3.
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one).
- ☐ Show to whom and date delivered ..... ¢
- ☒ Show to whom, date, and address of delivery. ..... ¢
- ☐ RESTRICTED DELIVERY
  Show to whom and date delivered ..... ¢
- ☐ RESTRICTED DELIVERY.
  Show to whom, date, and address of delivery. $
  (CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:
Mr. + Mrs E.W. Mignot
2660 Vine St
Grants Pass Or 97526

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	348484	

(Always obtain signature of addressee or agent)

I have received the article described above.

SIGNATURE ☐ Addressee ☐ Authorized agent

Peggy Mignot

4. DATE OF DELIVERY: SEP 15 1979 POSTMARK: GRANTS PASS, OR

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: CLERK'S INITIALS

☆ GPO: 1978-272-382

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

(Hearings Section)

OF THE

STATE OF OREGON

Department of Environmental Quality, Department v. Mr. & Mrs. E. W. Mignot, Respondents	PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND FINAL ORDER No. SW-SWR-76-228

SUMMARY

By letter of November 4, 1976, the Director assessed a civil penalty against Respondents in the sum of $500; alleging inter alia that Respondents had, since June 27, 1976, allowed solid waste and polluting substances to remain upon their property to the annoyance of citizens of the State and to the endangerment of waters of the State. Respondents, on November 11, 1976, denied all of the Department's allegations and requested a hearing.

The hearing was held on February 1, 1977 in the City Hall at Grants Pass, Oregon. Present to represent Respondents were Mrs. E. W. Mignot and Mr. Van Honeycutt (Respondents' attorney-in-fact).

FINDINGS OF FACT

1. At all times herein material, E. W. Mignot and Dorothy Irene Mignot (hereinafter Respondents) are and have been the owners of Tax Lot 1400, Section 6, Township 36S; Range 5W, Willamette Meridian in Josephine County, Oregon (hereinafter Respondents' property).

2. Respondents' property contains at least two intermittent drainage ways which, in seasons of flow, empty into Gilbert Creek and flow into the Rogue

River, some two and one-half miles south of Respondents' property.

3. The Rogue River and the one and one-half mile stretch of Gilbert Creek immediately preceding its confluence with the Rogue are fish habitats and recreational streams.

4. The drainage ways across Respondents' property and that portion of Gilbert Creek unmentioned in FINDING numbered 3 above are waterways tributary to and necessary to Gilbert Creek and the Rogue River. The quality and quantity of the waters they contribute to Gilbert Creek and the Rogue River contribute to the capacity of the latter waterways to function as fish habitats and recreational waterways.

5. Respondents' property is used as a mobile home park. There is located on the property a culvert which channels one of the above-mentioned drainage ways under a roadway.

6. At the times of hearing and at all previous material times since before June of 1976, Respondents' property has contained abandoned materials including auto parts, appliances, furniture and tires.

7. Some two to six hundred tires were deposited by Respondent E. W. Mignot's employees at his direction on his property within the drainage way downstream and upstream of the afore-mentioned culvert in numbers and at times undisclosed to the record. Most of these tires were removed from the drainage way by June 30 of 1976. They were stacked on the property next to the drainage way. In addition, tires are deposited in various other areas on the property.

8. Except for the tires placed on the property by Respondent E. W. Mignot's employees as mentioned above, none of the abandoned materials were placed on the property by Respondents or at their direction.

9. Most of the materials were abandoned on Respondents' property before

they purchased the same in February of 1969.

10. Like the property to its east and to its west, Respondents' property has been used frequently to deposit unwanted materials by the public at large.

11. Much of the material abandoned on Respondents' property is in ditches at lower elevations, entangled by vegetation, partially buried, and otherwise entrenched so as to render its removal difficult.

12. By letters of January 23, 1976, March 1, 1976, April 12, 1976, May 27, 1976, June 9, 1976 and August 9, 1976, Respondents were advised that allowing the tires to remain upon their property constituted violation of one or more laws or regulations regarding disposal of materials on land or in or near waters of the State.

13. When abandoned tires become laden with standing water from rain or other sources, they may provide an environment for mosquito larvae. Abandoned tires may harbor rodents.

14. No impairment of the quality of the waters entering Gilbert Creek has been observed to result from Respondents' deposition of tires and other materials on their property.

15. Respondents' placement of the tires in the drainage way was an ill-advised and ineffectual attempt to prevent soil erosion.

16. Respondents have indicated to the record no intention of removing the desposited materials mentioned above other than as is indicated by removal of most of the tires placed in the drainage way.

17. On two occasions Respondent E. W. Mignot attempted unsuccessfully to communicate by telephone with personnel in the Josephine County Health Department concerning letters mailed him about the materials abandoned on his property. Respondent was unable to reach the persons with whom he wished to speak.

18. None of the tires placed on Respondents' property were placed there after being treated according to plan for disposal approved by the Department. Respondents have no solid waste disposal site permit for the property here in issue.

19. By letter of June 9, 1976, Department warned Respondents of the violations alleged herein and informed them that continued existence of the same or similar violations could result in assessment of a civil penalty for each day of violation.

20. The Director chose the amount of $500 to be an appropriate civil penalty after considering aggravating and mitigating factors including prior violations, attempts by Respondents to correct the violation, Respondents' financial ability, the gravity of the violation, the continual nature thereof, the degree to which the violation was intentional, Respondents' cooperation, and Department's cost in this matter.

21. From time to time household garbage has been observed on Respondents' property. The record is silent as to whether Respondents deposited it, permitted its deposition, knew of its deposition, or permitted it to remain.

ISSUES

1. Whether the deposition of tires and other materials on Respondents' property violates ORS 164.775(1), ORS 164.785(1) and (2), ORS 468.720(1)(a), ORS 468.775 and OAR Chapter 340, Section 61-060(3).

2. Whether the Director properly considered mitigating and aggravating factors pursuant to OAR, Section 340-12-045(1)(a) through (i) in determining the precise amount of the penalty assessed.

CONCLUSIONS OF LAW

1. Respondent has not, since on or about June 27, 1976 deposited tires or

any other trash upon the property herein issue within 100 yards of waters of the State, save and except he may have removed some tires from a drainage way to higher ground. Since June 27, 1976, Respondent has not violated ORS 164.775(1).

2. There is no evidence on the issue of whether any of Respondents' activities since on or about July 27, 1976 have constituted discarding of substances prohibited or impairing water quality prohibited by ORS 164.785(1). We conclude they did not engage in the proscribed activities.

3. The Respondents' activities since on or about June 27, 1976 have not been shown to have caused pollution of any waters of the State or otherwise violated ORS 468.720(1)(a).

4. Since on or about June 27, 1976, Respondents do not appear to have placed additional vehicle tires or other vehicle remnants in or near waters of the State in violation of ORS 468.775.

5. Since on or about June 27, 1976, Respondents do not appear from the record to have open dumped loose waste tires into ravines, canyons, gullies, or trenches in violation of OAR Chapter 340-61-060(3).

6. While there was evidence that household garbage was deposited on the property, we find no evidence that Respondents knew of this, permitted this, or knowingly permitted it to remain on their property in violation of ORS 164.785(2).

7. Respondents are chargeable with knowledge of large quantities of tires and general debris on their property. They failed to remove such. As a matter of law this constituted a violation of ORS 164.785(2) on or about June 27, 1976.

8. The civil penalty in the sum of $500 as assessed in this matter should be affirmed.

OPINION

Department has proven one or more violations by Respondents occurring at

uncertain times prior to June 27, 1976. The record is unclear whether Respondents were guilty of further unlawful deposition since on or about June 27, 1976. The record discloses that on June 30, 1976 most of the tires had been removed from the drainage way. The previous visit by the Department's witnesses was May 5, 1976. We are not permitted the inference that Respondents placed more tires on their property on or about June 27, 1976 as exact counts are unavailable. Moreover, the record indicates that only 3 days later the majority of tires had been removed from the drainage way. We cannot infer that Respondents deposited more tires on their property within what subsequently turned out to be a segment of time wherein removal of tires from the drainage way had commenced. Since Respondents' purpose in bringing the tires in was to prevent erosion in the drainage way, his commencement of removal leaves the inference he had abandoned his scheme for erosion control and would have no use for additional tires.

As a technical matter, we do not find that removal of tires from a drainage way and placing them on higher ground (even if such higher ground were within 100 yards of waters of the State) would constitute a violation of ORS 164.775(1) since it amounts to improvement of a situation sought to be averted by the statute, and since the tires may have been stacked only to await further removal, not "deposited" in the sense implied by the statute.

Department's pleading indicates Respondents "knowingly allowed" certain materials to remain on the property. Our reading of all but one of the statutory and regulatory provisions invoked by the Department leads us to conclude that, in each case, the act of discarding, depositing, placing, etc. is proscribed.

Failure to remove the proscribed materials does not appear to be punishable except as provided for polluting materials under ORS 164.785(2). As a matter of law, in that evidence showed them to be havens for the breeding of mosquitos and

the encouragement of rodents, we conclude that tires of such quantities and in such a posture as we find here, are polluting and injurious to public health.

The fact that removal of all of the debris on Respondents' property would be a difficult task is offset by the fact that they went to substantial effort to place much of it there and presumably were quite able to effectuate its removal in a reasonable time. Also, it is noteworthy that Respondents accomplished little progress in abatement over a generous period of time. They continued, in our view, to maintain a solid waste disposal site without a permit; therefore, we find no reasons in the record to disturb the Director's judgement as to the amount of the civil penalty to be imposed.

Respectfully submitted

this 17th day of February, 1977

Peter W. McSwain
Hearing Officer

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY, Department	)	
MIGNOT, Mr. and Mrs. E. W., Respondents	)	ORDER ALLOWING EXTENSION OF TIME

Respondents shall have until August 28, 1979, to file with the Commission and serve upon the Department written exceptions and arguments to the proposed order dated February 17, 1977. The exceptions and arguments shall include proposed alternative findings of fact, conclusions of law and order and shall include specific references to those portions of the record upon which Respondents rely.

Dated this 2nd day of July, 1979.

ENVIRONMENTAL QUALITY COMMISSION

by William H. Young

WILLIAM H. YOUNG, Director

Department of Environmental Quality

Pursuant to OAR 34-11-136(2)

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BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON.

MIGNOT, MR. & MRS. E. W.,
Respondents

RESPONDENTS REPLY

Pursuant to Case Number
06-SW-SWR-76-228
Josephine County.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Department

COMES NOW Respondents in reply to the Order for Extension of Time of July 2, 1979.

Respondents hereby request another Administrative Hearing to be able to produce documentary evidence and witnesses to support their allegations that there was no violation as alleged by the Environmental Quality Commissioners.

Dated this 14th day of August 14, 1979.

Respectfully Submitted,

E W Mignot

Respondents: Mignot, Mr. & Mrs. E. W.

Environmental Quality Commission
522 S. W. 5th Avenue
P. O. Box 1760
Portland, Oregon 97207

RE: Freedom of Information Request.

Dear Sirs:

Pursuant to the Freedom of Information Act, and 1974 Privacy Act, 5 USC. Section 552(a), I hereby request access to copies of all investigation reports, photograghs, letters, and any other documents relating to the subject pursuant to Case No. 06-SW-SWR-76-228, Josephine County, Oregon.

If this request is denied either in whole or in part, please inform me as to your agency's appeal procedure. If any expenses in excess of $5.00 are incurred in connection with this request, please inform me of all such charges prior to their being incurred for my approval. If you do not grant my request within ten working days, I will deem my request denied.

Thank you for your prompt attention to this matter.

Dated this 15 day of Aug, 1979.

Very truly yours,

E W Mignot

E. W. MIGNOT.

CERTIFICATE OF SERVICE

We hereby certify that we served the forgoing Reply to the Environmental Quality Commission by mailing them a true and correct copy thereof. We further certify that said copy was placed in a sealed envelope addressed to the Department at 522 S. W. 5th Avenue, Portland, Oregon 97207, their last known address, and deposited in the Post Office at Grants Pass, Oregon, on the 14th day of August 14, 1979, and that the postage thereon was prepaid.

Respectfully Submitted,

Respondents E W Mignot
MIGNOT, E. W.

Mrs E. W. Mignot
MIGNOT, MRS. E. W.

August 22, 1979

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. and Mrs. E. W. Mignot
2660 Vine Street
Grants Pass, OR 97526

Re: DEQ v. MIGNOT, Mr. & Mrs. E. W.
Case No. 06-SW-SWR-76-228
Josephine County

Dear Mr. & Mrs. Mignot:

The enclosed Order, issued at the direction of the Chairman of the Environmental Quality Commission, addresses your requests for rehearing and for access to records.

Your request to provide additional evidence will be heard by the Environmental Quality Commission at its Friday, September 21, 1979 meeting. The meeting will be held at the City of Portland Council Chambers, 1220 Southwest Fifth Avenue, Portland, Oregon. A copy of the meeting agenda will be mailed to you in September.

Because of the distance and time constraints involved, I am providing to you photocopies of the entire Department file except for those portions which are privileged, and will limit the charges for this to $5.00. If you require copies of other documents, the usual charge of $.25 per page will apply. I have also enclosed a copy of the statutes relating to inspection of public documents.

Sincerely,

/s/ AUG 1979

WILLIAM H. YOUNG, Director

LKZ:ahe
Enclosures (2)

cc: Joe B. Richards, Chairman, Environmental Quality Commission
Robert L. Haskins, Assistant Attorney General, Portland Office
Fred Bolton, Regional Operations, DEQ
Solid Waste Division, DEQ
Southwest Region, DEQ

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY, Department v. MIGNOT, Mr. and Mrs. E. W. Respondents	ORDER Case No. 06-SW-SWR-76-228

Having considered Respondents' requests for rehearing and for access to public records, IT IS ORDERED THAT:

1. In accordance with ORS 192.410 et seq, Department shall allow Respondents a proper and reasonable opportunity to inspect and examine investigation reports, photographs, letters, and other documents relating to the within case which are in the Department's possession and control. Photocopies shall be provided to Respondents on a basis decided upon by Respondents and Department.
2. Respondents shall have until September 5, 1979 to support their request to present additional evidence by filing with the Commission an affidavit specifying the reasons for their failure to present that evidence at the February 1, 1977 hearing. The Commission will consider Respondents' request at its September 21, 1979 meeting.
3. The time for Respondents to file with the Commission and serve upon Department written exceptions and arguments to the proposed order dated February 17, 1977 is extended to September 5, 1979. The exceptions and arguments shall include proposed findings of fact, conclusions of law and order and shall include specific references to those portions of the record upon which Respondents rely.

4. Any writing allowed or required by this Order shall be deemed filed upon receipt by mail in the office of the Director, Department of Environmental Quality at 522 Southwest Fifth Avenue, Portland, Oregon 97204 (Post Office Box 1760, Portland, Oregon 97207), or when personally served upon the Director or his authorized representative.

Dated at Portland, Oregon this 22nd day of August, 1979.

Environmental Quality Commission

by William H. Young

WILLIAM H. YOUNG, Director

by Order of

Joe B. Richards, Chairman

Environmental Quality Commission

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

EQC
Hearing Section

SEP 11 1979

DEPARTMENT OF ENVIRONMENTAL QUALITY, OF THE STATE OF OREGON,

v.

Mr. & Mrs. E. W. Mignot,

Respondents.

No. 06-SW-SWR-76-228

MOTION TO DISMISS

The Department moves the Commission for an order dismissing Respondents' request for another Administrative Hearing and Respondents' request for Commission review of the proceedings and the proposed order of the presiding officer in the above-captioned matter, for the reason that Respondents have defaulted by their failure to prosecute their appeal.

Dated this 10th. day of September, 1979.

Van A. Kollias

Van A. Kollias, Supervisor
Investigation & Compliance
Dept. of Environmental Quality

VAK:hk

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

EQC
Hearing Section

SEP 11 1979

DEPARTMENT OF ENVIRONMENTAL QUALITY, OF THE STATE OF OREGON,

Department,

v.

Mr. & Mrs. E. W. Mignot,

Respondent

NO. 06-SW-SWR-76-228

DEPARTMENT'S MEMORANDUM IN SUPPORT OF DEPARTMENT'S MOTION TO DISMISS

POINTS AND AUTHORITIES

Respondents began their appeal of hearing officer McSwain's proposed findings of fact, conclusions of law, and final order on February 28, 1977. However, Respondents did not file written exceptions and arguments nor alternative findings, conclusions, and order. Hearing officer McSwain requested Respondents to do so by letter of March 4, 1977. Respondents still failed to make the required filing but instead proposed to settle the case.

On March 23, 1977, Respondents and the Department jointly requested an indefinite extension of time be granted Respondents to file their written arguments and proposed alternative findings. The extension was granted to allow parties to explore settlement.

A tentative settlement was reached, but was never fully implemented. Negotiations reached an impasse when Respondents refused to complete the removal of the remaining wastes and dismissed their attorney.

On January 8, 1979, the Director of the Department gave the Respondents 30 days in which to file their exceptions and arguments, etc.

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On April 12, 1979, more than 30 days after the Director's January 8th order, Department moved the Commission for an order dismissing Respondents' request for Commission review of the proposed order of the presiding officer for the reason that Respondents had defaulted by their failure to prosecute their appeal.

On June 29, 1979, the Commission heard oral arguments from Larry Schurr on behalf of the Department and from E. W. Mignot on behalf of Respondents on Department's Motion to Dismiss. At that meeting and in the presence of Respondents, the Commission, while taking no formal action on the motion, did grant Respondents an extension of time until August 28, 1979 to file written exceptions and agruments to the proposed order. The extension was confirmed by written order signed by the Director on July 2, 1979.

On August 21, 1979, the Director received for filing Respondents' request for another administrative hearing along with a separate request for access to and copies of the Department's complete file in the above captioned case.

On August 22, 1979, the Director, by formal order, transmitted a photocopy of Department's file to Respondents. In addition, the Director, by order, gave Respondents until September 5, 1979 to file the evidence required by rule to support their August 21st request for a new administrative hearing. Finally, the Director, by order, extended Respondents' time limit for filing written exceptions and arguments to the proposed order dated February 17, 1977.

The extended deadline to receive Respondents' exceptions and arguments has passed. Also, the deadline to receive Respondents' evidence in support of their request for a new hearing has also passed. Respondents have not filed the specified material nor requested additional time to do so.

OAR 340-11-132 (4) (g) states:

"(g) Failure to prosecute - The Commission may dismiss any appeal or cross

appeal if the appellent or cross appellent fails to timely file and serve any exceptions or brief required by these rules."

Oregon Revised Statutes and Oregon Administrative Rules protect the rights of both parties in a contested action to due process in the resolution of their dispute. One of those due process rights, the right to reasonable appeal of an adverse judgment, has been involved in this case. That right of appeal is not intended as a method of delaying the implementation of a final judgment. Therefore, once an appeal is involved, the appealing party is obligated to proceed with the prosecution of their appeal in a timely fashion. Failure to do so results in the loss of that right.

CONCLUSION

Respondents have again failed in their obligation to prosecute their appeal in a timely fashion. As a result, they are again in default. They have offered no excuse for their failure. Therefore, the Commission should issue a final order dismissing Respondents' request for a new hearing and their request for review, and adopting and affirming the hearing officer's proposed findings of fact, conclusions of law, and final order dated February 17, 1977.

Van A. Kollias

Van A. Kollias, Supervisor
Investigation & Compliance Section
Department of Environmental Quality

Department of Environmental Quality

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-

SEP 10 1979

EQC Hearing Section

SEP 11 1979

Environmental Quality Commission
P. O. Box 1760
Portland, Oregon 97207

Subject: DEQ v. Mr. & Mrs. E. W. Mignot
No. 06-SW-SWR-76-228
Josephine County

Enclosed for filing, please find Department's Motion to Dismiss and an accompanying Memorandum in support of Department's Motion to Dismiss in the above captioned case. The Certificate of Service upon Respondents is also enclosed.

Van A. Kollias

Van A. Kollias, Supervisor
Investigation & Compliance Section
Department of Environmental Quality

VAK:hk

Enclosures

cc: Mr. & Mrs. E. W. Mignot, Respondents
Dept. of Justice Raymond Underwood, Chief Counsel
DEQ Southwest Regional Office, Roseburg
Josephine County Health Department

Memorandum

JOSEPHINE COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH SERVICES
101 N.W. "A" St. Grants Pass, Oregon Ph. 476-8881, Ext. 333
Mailing Address: Josephine County Courthouse

TO : Mr. E.W. Mignot

DATE: August 20, 1979

FROM : Jim Brown

SUBJECT: Freedom of Information Act

Pursuant to your request, enclosed is a xerox copy of all investigation reports, photographs, letters, and other documents relating to the violation at Inland Mobile Estates.

Copies of the photographs from the negatives are not included for the following reasons:

1. Mrs. Mignot received most of them during the original hearing.
2. The cost would exceed the five dollar ($5.00) stipulation in your letter.
3. The xerox copies give a reliable facsimile.

If we can be of further assistance please feel free to call on us.

James C. Brown, M.S., R.S.

JCB:dj
cc: Larry Schurr, DEQ
cc to Linda Zucker

Victor Atiyeh
Governor

Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. K(1), September 21, 1979, EQC Meeting

Joel Boyce--Appeal of Subsurface Variance Denial

Background

The pertinent legal authorities are summarized in Attachment "A".

On March 22, 1978, the Department of Environmental Quality's Douglas County Contract Agent received a site evaluation application for property known as tax lots 2-61 and 2-62 of Township 27 South, Range 6 West, Section 16, Douglas County, Oregon. Test pits being provided Greg Farrell, then Douglas County Sanitarian, conducted an on-site inspection of the property on July 10, 1978. Five (5) test pits and topographic features were evaluated and a determination made that the site was unsuitable for the installation of a standard subsurface sewage disposal system. In a letter of July 13, 1978, the contract agent cited Oregon Administrative Rules, Chapter 340, 71-030(1)(e), slopes in excess of twenty-five (25) percent, as the reason of unsuitability. On the formal evaluation report (7-11-78), under remarks, it is recommended that a variance be applied for.

Mr. Farrell's field notes report that slopes in the area range from twenty-seven (27) to forty (40) percent, restrictive soil layers and mottles at forty-eight (48) inches or greater, water at fifty-nine (59) inches or greater and gleying at forty-two (42) inches or greater. Mr. Farrell further states that the soils encountered are of the Rosehaven series which are classified by the U.S.D.A. Soil Conservation Service as severe for septic tank absorption fields and dwellings, with or without basements.

On November 1, 1978, Mr. Joel Boyce wrote to and requested of the Department a variance to install a septic tank and drainfield for a three(3) bedroom dwelling. His application was completed on January 26, 1979, and assigned to Mr. Ronald E. Baker, Variance Officer, for hearing. Mr. Baker scheduled a visit to the proposed installation site and the variance hearing for March 12, 1979.

The completed variance application now included a request for variance to OAR 340-71-020(3)(a) requiring a full replacement area meeting all applicable rules.

During Mr. Baker's March 12, 1979 site inspection, he observed site conditions similar to Mr. Farrell's with the addition of slopes of forty(40) to forty-six (46) percent in the proposed repair area and water from thirty (30) inches in one pit as well as being present in another. Mr. Baker further stated that in his opinion, the proposed installation area is located on or within fifty (50) feet of an unstable land form and that Mr. Boyce's variance request should be expanded to include a request for variance to OAR 71-020(1)(i) and 71-020(2)(f) which relate to such land forms.

During the hearing Mr. Boyce provided the following information: 1) a short history of his development experience with regard to this parcel; 2) Soil Scientist Steve Wert augered a hole in the proposed repair area, with the following results: 0-4' sandy loam, 4'-5' loam with clay skins, well drained; 3) Greg Farrell recommended that Mr. Boyce consider a variance; 4) test holes one (1), four (4) and five (5) have no bearing on the application; 5) he feels that a variance should be granted.

After Mr. Boyce's testimony was placed on the record, Mr. Baker listed for the applicant those things which he would be considering during his review of the proposal. They were:

1. Usable area: It's understandable that Mr. Baker be convinced that there is sufficient usable area available to install both an initial variance system and equal repair.

2. Slope deviation: Mr. Baker had to determine whether or not the slope depth deficiency of the site could be overcome by the proposal.

3. Unstable land forms--possible slippage: Mr. Baker had to determine what effect the lubricating potential of the drainlines would have on the possibility of slippage.

4. Distance between trench sidewall and ground surface: This question is of great importance as this distance encompasses the available treatment area.

5. Prevention of possible health hazard: This consideration is specifically required by ORS 454.657 and OAR 75-015(1).

6. Protection of Public Waters: Again, Mr. Baker is required by ORS 454-657 and OAR 75-015(1) to consider this area of public protection.

As Mr. Baker valued Mr. Wert's expertise and as his (Mr. Wert's) report was not provided during the variance hearing, Mr. Baker set the hearing to close on April 1, 1979, to allow Mr. Boyce the opportunity to provide Mr. Wert's report. At Mr. Boyce's request (March 30, 1979), Mr. Baker extended the closing date to May 1, 1979, as Mr. Boyce had to that date not received Mr. Wert's report.

Mr. Wert's (April 17, 1979) report indicated that in his opinion the proposed installation area (Area A) is not suitable for the installation of the proposed system and repair. In his opinion the system as proposed would concentrate water and could cause mass movement.

Mr. Wert did provide that in his opinion the proposed area could support half of the proposed drainlines provided the water was spread out along the entire shelf and the lines kept as close to the back of the shelf as possible. He therefore suggested an alternate repair area some two hundred twenty (220) vertical and five hundred fifty (550) lineal feet above the proposed site.

Mr. Baker was unable to consider this alternate repair area as (1) it is not located on the property of application, (2) it is not known to be available to the applicant for use (easement), (3) it may be approvable for a standard system and if available to Mr. Boyce a variance therefore is unnecessary.

Mr. Baker felt that he was obligated to make his decision based on Mr. Boyce's original application and suggested, therefore, that Mr. Boyce request that the owner of the alternate site apply for a site evaluation and if approved, attempt to obtain an easement which would allow him to install a subsurface system to serve the variance property.

The easement would have to contain a large enough area for both initial and repair area as Mr. Baker is in agreement with Mr. Wert that a system installed in the original area could cause mass movement.

Mr. Baker further feels that the installation of three lines (Wert's April 17, 1979 letter) could not spread the water sufficiently over the entire shelf and at the same time keep them close enough to the back of the shelf to remove the threat of mass movement. To place the lines close together in an attempt to place them nearer the shelf back will also compress the available treatment area between lines and necessitate additional lines which would have to be placed further out on the shelf.

Evaluation

Pursuant to ORS 454.660, decisions of the variance officer may be appealed to the Environmental Quality Commission. Mr. Boyce has made such an appeal. The Commission must determine if a subsurface sewage disposal system of either standard or modified construction can reasonably be expected to function in a satisfactory manner at Mr. Boyce's proposed site.

After evaluating the site and after holding a public information type hearing to gather testimony relevant to the requested variance, Mr. Baker was not able to find that a subsurface sewage disposal system, of either standard or modified construction, would function in a satisfactory manner so as not to create a public hazard. He was also unable to find that special physical conditions exist which render strict compliance with the rules unreasonable, burdensome, or impractical.

Summation

1. The pertinent legal authorities are summarized in Attachment "A".

2. Mr. Boyce submitted an application for site evaluation to Douglas County.

3. Mr. Greg Farrell visited the property and evaluated the soils to determine if a standard subsurface sewage disposal system could be installed. He observed that the proposed site had excessive ground slopes. He therefore found that the site was not approvable for installation of a standard subsurface sewage disposal system.

4. Mr. Boyce's variance application was found to be complete on January 26, 1979, and was assigned to Mr. Baker.

5. On the morning of March 12, 1979, Mr. Baker examined Mr. Boyce's proposed drainfield site and found that it was located within an area of potential land movement and limited in usable area.

6. On the afternoon of March 12, 1979, Mr. Baker conducted a public information type hearing so as to allow Mr. Boyce and others the opportunity to supply the facts and reasons to support the variance request.

7. Mr. Baker reviewed the variance record and found that the testimony provided did not support a favorable decision. He further determined that he was not able to modify the variance proposal to overcome the site limitations.

8. Mr. Baker notified Mr. Boyce by letter dated May 11, 1979, that his variance request was denied.

9. Mr. Boyce filed for appeal of the decision by letter dated May 29, 1979.

Director's Recommendation

Based upon the findings in the summation, it is recommended that the Commission adopt the findings of the variance officer as the Commission's finding and uphold the decision to deny the variance.

Bill

William H. Young

Attachments:

Ron E. Baker/T. Jack Osborne:l
229-6218
August 29, 1979
X4038.1

ATTACHMENT "A"

1. Administrative rules governing subsurface sewage disposal are provided for by Statute: ORS 454.625.

2. The Environmental Quality Commission has been given statutory authority to grant variances from the particular requirements of any rule or standard pertaining to subsurface sewage disposal systems if after hearing, it finds that strict compliance with the rule or standard is inappropriate for cause or because special physical conditions render strict compliance unreasonable, burdensome or impractical: ORS 454.657.

3. The Commission has been given statutory authority to delegate the power to grant variances to special variance officers appointed by the Director of the Department of Environmental Quality: ORS 454.660.

4. Decisions of the variance officers to grant variances may be appealed to the Commission: ORS 454.660.

5. Mr. Baker was appointed as a variance officer pursuant to the Oregon Administrative Rules: OAR 340-75-030.

ATTACHMENT "B"

Department of Environmental Quality
SOUTHWEST REGION
1937 W. HARVARD BLVD., ROSEBURG, OREGON 97470 PHONE (503) 672-8204

May 11, 1979

Mr. Joel Boyce
392 Cherokee Avenue
Roseburg, Oregon 97470

RE: WQ-SS-Douglas County
Variance Hearing
Twp. 27 S, R, 6 W, Sec. 16
Lot 2-61 & 2-62

Dear Mr. Boyce:

This correspondence will serve to verify that your requested Variance Hearing, provided for in Oregon Administrative Rules, Chapter 340, Section 75-045 was held at 1937 West Harvard Boulevard, in Roseburg, Oregon, at 3:30 P.M., march 12, 1979. Persons present at the hearing were yourself and Ms. Barbara Burton, observer. Prior to the hearing at 10:30 A.M., on March 12, 1979, an on-site inspection of the property in question was conducted by the Variance Officer for the purpose of gathering soils and topographic information with regard to your request. Persons present during the inspection were: Ms. Burton and Mr. Greg Farrell, R.S., DEQ Supervising Sanitarian.

Your request was for a variance to the following rules:

OREGON ADMINISTRATIVE RULES, CHAPTER 340

71-020(3)(a)	Requiring a full replacement area meeting all applicable rules.
71-030(1)(e)	Slope depth relationship - 25% maximum slope.
71-030(1)(i)	Relating to unstable land forms.
71-020(2)(f)	Requiring minimum setbacks to unstable land forms.

The property in question is described as Township 27 South, Range 6 West, Section 16, Tax Lot 2-61 and 2-62 of Douglas County, Oregon. Said property is approximately five and fifty-eight-one-hundreds (5.58) acres in size.

All exhibits provided to the Variance Officer before the hearing were entered into the record by number.

The exhibits are as follows:

Exhibit I	Mr. Boyce's variance application dated and signed November 11, 1978.

Exhibit I Attachment	A November 1, 1978 letter to the DEQ from Mr. Boyce, with enclosures verifying his variance application.
Exhibit II	A signed copy of a two (2) page January 26, 1979 letter to Mr. Boyce from Sherman O. Olson in verifying the Department's receipt of Mr. Boyce's Variance application and assignment of same to Mr. Baker for hearing.
Exhibit II Attachment (a)	A copy of the proposed system layout on contours.
Exhibit II Attachment (b)	A signed copy of a two (2) page March 7, 1979 letter to Mr. Boyce from the Variance Officer, setting forth the time, date, and location of the proposed Variance Hearing and site inspection
Exhibit III	A copy of a legal description of Tract 10. Also includes descriptions for Tract 9 and 11.
Exhibit IV	A copy of a Surveyor's map of a portion of sections 9 & 16, township 27 South, Range 6 West, W.M., Douglas County, Oregon, containing the property in question (Tract 10).
Exhibit V	A signed copy of a December 29, 1978 letter to "Whom it may concern" from Ramon T. Treanor (Douglas County Planning Department) indicating that a single family residence could be placed on the property in question.
Exhibit VI	A copy of an unsigned DEQ (Douglas County) sewage disposal site evaluation application for a fifteen plus (15+) acres parcel known as Tax Lots 2-61 and 2-62 of Township 27, Range 6, Section 16, Douglas County, Oregon.
Exhibit VII	An unsigned copy of a July 13, 1978 letter to Joel Boyce from Gregory J. Farrell, R.S. verifying site evaluation denial of S.I. #10712 of Tax Account No. 8842.58.
Exhibit VIII	A copy of that portion of an assessors map which contains Tax Lots 2-62, 2-61 and part of 2-63 as well as others.
Exhibit IX	Field notes of the Joel Boyce property (five test pits) signed by Greg Farrell.
Exhibit X	A copy of OR-Soils-1, 10/76, Rosehaven Series.
Exhibit X Attachment	A four (4) page copy of Rosehaven tentative series report

Exhibit XI	A narrative description of the proposed systems.
Exhibit XII	A detailed diagram of the proposed installation.
Exhibit XIII	A copy of Page 79 of Oregon Subsurface Rules showing a serial distribution system installation without drop box.
Exhibit A	A March 30, 1979 letter to the Variance Officer from Joel Boyce requesting additional time to provide data. (May 1, 1979).
Exhibit B	A copy of a two (2) page April 17, 1979 letter to Joel Boyce from Steve Wert, Soil Scientist.

Prior to accepting verbal testimony, the Variance Officer reported that during his March 12, 1979 inspection of the property he found slopes around test pit No. 3, Exhibit XII, were 46 percent up, 40 percent across and 43 percent down and soils to be loam over sandy loam, water in pit 4 at 30 to 36 inches. Water was also noted in pit five (5).

Verbal testimony was given by Mr. Joel Boyce, Applicant, provided the following information: 1) a short history of his development experience with regards to this parcel; 2) Soil Scientist Steve Wert augered a hole near test pit No. 3, Exhibit XII, with the following results, 0 - 4' sandy loam, 4' - 5' loam with clay skins, well drained; 3) Greg Farrell recommended that Mr. Boyce consider a variance; 4) test holes one (1) and five (5) have no bearing on the application; 5) he feels that a variance should be granted.

At this point the Variance Officer provided that during his March 12, 1979 site inspection, he was convinced that the site was located or within fifty feet of an unstable land form and that Mr. Boyce's variance request should be expanded to include a request to OAR 71-030(1)(i) and 71-020 (2)(f). (Mr. Boyce had no objecton to this addition.

The Variance Officer further listed, for the applicant, those things he will be considering during the review process:

a. Usable area.

b. Slope deviation.

c. Unstable land forms - possible slippage.

d. Distance between trench sidewall and ground surface.

e. Prevention of possible health hazard.

f. Protection of public waters.

As you requested the hearing was set to be closed April 1, 1979 or on the date of receipt of a soils report from Mr. Steve Wert (Exhibit b).

The Variance Officer reserved the right to review the property in the presence of the applicant for the purpose of reviewing Mr. Wert's report (if received) and left the record open through April 1, 1979 for submittal of other information by the applicant.

On March 30, 1979, Mr. Boyce (12:55 P.M.) called the Variance Officer and requested that the hearing be left open through May 1, 1979. This request was granted subject to Mr. Boyce submitting the request in writing within ten days. Said written request was received April 2, 1979, (Exhibit a).

Variance from particular requirements of the rules or standards pertaining to subsurface sewage disposal systems may be granted if it is found that the proposed subsurface sewage disposal system will function in a satisfactory manner so as not to create a public health hazard or to cause pollution of public waters, and special physical conditions exist which render strict compliance unreasonable, burdensome, or impractical.

Therefore, based on the verbal and written testimony contained in the record, I am not convinced that the proposed drainfield will function in a satisfactory manner so as not to create a public health hazard. Your variance request is, therefore, regretfully denied.

Pursuant to OAR 340-75-050, my decision to deny your variance request may be appealed to the Environmental Quality Commission. Requests for appeal must be made by letter, stating the grounds for appeal, and addressed to the Environmental Quality Commission, in care of Mr. William H. Young, Director, Department of Environmental Quality, PO Box 1760, Portland, Oregon, 97207, within twenty (20) days of the date of the certified mailing of this letter.

If you have any questions with regard to this action, please feel free to contact the undersigned at any time.

Sincerely,

R.E. Baker, R.S.
Variance Officer

REB/mg
cc: T. Jack Osborne

ATTACHMENT "C"

May 29, 1979

Environmental Quality Commission
Dept. of Environmental Quality
P. O. Box 1760
Portland, Or. 97207

Attn: Mr. William H. Young, Director

Dear Mr. Young:

I hereby formally appeal the denial of my variance request on the following grounds:

1. Mr. Ron Baker, variance officer assigned to my request for variance, has suggested that my non objection to his conviction that the site is located within 50 feet of an unstable land form is my admission that it is unstable. I do not agree with his assessment that a septic system installed on the proposed site would possibly cause slippage of the land. My evaluation is the result of conferences by a qualified Soil Scientist, Steve Wert, who has inspected the site and general area on several occasions. May I ask if Mr. Baker's qualifications to evaluate the geologic characteristics supercede Mr. Wert's? This would seem impossible, comparing their training. I make this point due to the reaction I noted from Mr. Baker when he indicated he has utterly no concern for Mr. Wert's opinion unless it specifically involves soil alone, without any reference to other considerations (i.e. sub-strata, rock formations, site stability, etc.). This is taking the matter of expertise and qualified counsel to the absurd, because Mr. Baker has indicated testimony would be needed from numerous other sources to be certain as to the characteristics of the site. This attitude suggests to me that this process isn't conducted in the spirit of open inquiry, but in the spirit of "authority makes right".

2. My variance application was initiated upon the recommendation of Greg Farrell R.S., D.E.Q. When Mr. Farrell made his recommendation he indicated he felt there was every reason to believe the variance would be granted, also stating he wouldn't otherwise be making the recommendation. Because of this, I see extreme inconsistency in the viewpoints and interpretation, within the same office, and am again given to challenge the decision of Mr. Baker.

3. In several instances Mr. Baker has chosen to take a course of action that would appear to be selectively arranging information as argument against my proposal for variance, which may be a prejudiced approach. For example:

A. Mr. Wert's slope readings were in a lesser percent, as I recall between 28% and 35% for much (but not all) of the site in question. Mr. Baker has evidently chosen to select areas of greater slope to use in his report.

B. Mr. Baker has introduced at his recommendation an expansion of the variance request OAR 71-030 (1) (i), which places the question of stability as a major factor, suggesting there is instability, when in fact that has not been decided.

C. As above, pertaining to 71-020 (2) (f).

D. Mr. Baker has listed as things he will be considering during the review process some six items, all of which appear to me to be reducible to three items, that is items a, b and c. Again this suggests we may be seeing "case building", or a prejudiced viewpoint.

E. Mr. Baker has ignored an important new aspect of my variance proposal, which was to use the original site as the initial drainfield site, but to locate a repair area at another site several hundred feet away and in an entirely different drainage location. This is significant data and should not be eliminated from the record, as Mr. Baker seems to have done.

For these reasons, it would seem most practical to reassign the variance application to another individual.

Although there are also other reasons for my appeal, I trust these will suffice for the purpose of reconsidering my variance application. I would like to request that Bob Pace, Soil Scientist, be directed to conduct an evaluation of the site to add further insight as to its suitability for a drainfield.

I look forward to receiving word from you concerning the next stage of our business on this matter.

With best regards,

Joel Boyce

Joel Boyce

JLB/deb

Joel Boyce
392 Cherokee Ave.
Roseburg, Ore.
97470

Victor Atiyeh
Governor

Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. K(3), September 21, 1979, EQC Meeting

Clark Whitley--Appeal of Subsurface Variance Denial

Background

The pertinent legal authorities are summarized in Attachment "A".

On September 16, 1973, Mr. Whitley applied to Josephine County for a Domestic Sewage Disposal Permit for a 1.57 acre parcel of land he owns identifed as Tax Lot 501; Sec. 24; T. 36 S.; R. 5 W., W.M.; Josephine County. Mr. John Skyles, a Sanitarian working for the Josephine County Health Department, approved the issuance of a Domestic Sewage Disposal Permit on September 25, 1973. The permit authorized the construction of a subsurface sewage disposal system to serve a two (2) bedroom dwelling. A special condition was that the swale cutting through the property be avoided. The permit indicated an expiration date of March 25, 1974.

On June 21, 1978, Mr Whitley applied for both a site evaluation and construction permit. Mr. Hollis Gunther, R.S., with Josephine County Department of Environmental Health Services, visited the property on June 25, 1978, to determine its suitability for subsurface sewage disposal. Mr. Gunther concluded that the property was in a terrace position. Two (2) pits examined that day had observed water levels at thirty-nine (39) inches and forty-six (46) inches. Mr. Gunther concluded that the water table was regional, and therefore, permanent in nature. Mr. Gunther found the site not to be acceptable for drainfield placement. Four (4) additional pits examined on August 2, 1978, by Mr. Gunther were also found to be unacceptable because of the presence of a shallow regional water table. Josephine County refunded the permit application fee when the site evaluation was denied on August 3, 1978.

An incomplete application for variance from the subsurface rules [OAR 340-71-020(3)(a) and 030(1)(c)] was received by Water Quality Division on September 13, 1978. The application was completed on April 10, 1979, and assigned to Mr. David Couch, R.S., Variance Officer, on the following day. Mr. Couch scheduled a visit to the proposed site and the variance hearing on May 10, 1979. The hearing record remained open until June 8, 1979, when additional information from Mr. Whitley was received. After closing the hearing Mr. Couch evaluated the information provided by Mr. Whitley and others. Mr. Couch found that the site development was limited because of several factors: shallow depth to a permanent water table (mottling indicates it will rise to within thirty (30) inches of the ground surface); the ability of an agricultural drainage system to lower the permanent water table; the amount of area available to install a subsurface system with area for reasonable repair; and the likelihood of degradation and pollution of public waters given the very rapid soil permeability with the shallow water depth. Mr. Couch was not convinced that a modified subsurface sewage disposal system could be installed at the site and reasonably expect that degradation of public waters would not occur. Mr. Couch denied the variance request on June 11, 1979. (Attachment "B").

Mr. Whitley's letter (Attachment "C") appealing the variance officer's decision was received on July 6, 1979.

Evaluation

Pursuant to ORS 454.660, decisions of the variance officer to grant variances may be appealed to the Environmental Quality Commission. Mr. Whitley made such an appeal. The Commission must determine if a subsurface sewage disposal system, of either standard or modified construction, would function in a satisfactory manner at Mr. Whitley's proposed site.

After evaluating the site and after holding a public information type hearing to gather testimony relevant to the requested variance, Mr. Couch was not able to find that a subsurface sewage disposal system, of either standard or modified construction, would function in a satisfactory manner so as not to cause pollution of public waters. Mr. Couch was not able to modify the proposal in such a way so as to effectively reduce the water table and thereby eliminate his concerns about possible groundwater contamination.

Summation

1. The perlinent legal authorities are summarized in Attachement "A".

2. Mr. Whitley submitted an application for a Domestic Sewage Disposal Permit on September 19, 1973.

3. Mr. John Skyles approved the Domestic Sewage Disposal Permit, which was issued on September 25, 1973. The expiration date on the permit was March 25, 1974.

4. Mr. Whitley applied for both a site evaluation and subsurface sewage disposal permit on June 21, 1978.

5. Mr. Hollis Gunther visited the site on two occasions and evaluated the site for subsurface sewage disposal suitability. He observed a permanent water table to be present at a depth closer than five and one-half (5 1/2) feet from the ground surface. The site was found to be unapprovable for a standard subsurface sewage disposal system. The permit application fee was refunded to Mr. Whitley on August 3, 1978.

6. Mr. Whitley submitted an incomplete variance application to the Department on September 13, 1978.

7. Mr. Whitley's application was found to be complete on April 10, 1979, and assigned to Mr. David Couch on April 11, 1979.

8. On May 10, 1979, Mr. Couch examined Mr. Whitley's proposed drainfield site and found that a permanent water table could be expected to rise to within thirty (30) inches of the ground surface.

9. Mr. Couch conducted a public information type hearing on May 10, 1979 so as to allow Mr. Whitley and others the opportunity to supply the facts and reasons to support the variance request.

10. Mr. Couch reviewed the variance record and found that the testimony provided did not support a favorable decision. He further determined that he was not able to modify the proposal to overcome the site limitations.

11. Mr. Couch notified Mr. Witley by letter dated June 11, 1979, that his variance request was denied.

12. Mr. Whitley filed for appeal of the decision by letter dated June 23, 1979.

Directors Recommendation

Based upon the findings in the summation, it is recommended that the Commission adopt the findings of the variance officer as the Commission's findings and uphold the decision to deny the variance.

Bill

William H. Young
Director

Sherman O. Olson, Jr.:n
XN8145.2
229-6443
August 31, 1979

ATTACHMENT "A"

1. Administrative rules governing subsurface sewage disposal are provided for by Statute: ORS 454.625.

2. The Environmental Quality Commission has been given statutory authority to grant variances from the particular requirements of any rule or standard pertaining to subsurface sewage disposal systems if after hearing, it finds that strict compliance with the rule or standard is inappropriate for cause or because special physical conditions render strict compliance unreasonable, burdensome or impractical: ORS 454.657.

3. The Commission has been given statutory authority to delegate the power to grant variances to special variance officers appointed by the Director of the Department of Environmental Quality: ORS 454.660.

4. Decisions of the variance officers to grant variances may be appealed to the Commission: ORS 454.660.

5. Mr. Couch was appointed as a variance officer pursuant to the Oregon Administrative Rules: OAR 340-75-030.

XN8145.A

WQ-SS-Josephine

MEDFORD BRANCH OFFICE
SOUTHWEST REGION
201 W. Main St., Room 2D
Medford, OR 97501 – 776-6010

ATTACHMENT "B"

Department of Environmental Quality

SOUTHWEST REGION
1937 W. HARVARD BLVD., ROSEBURG, OREGON 97470 PHONE (503) 672-8204

June 11, 1979

Clark F. Whitley
260 Marigold Avenue
Freedom, CA. 95019

RE: WQ-SS-Josephine County
Variance Hearing - DENIED
36-5W-24C-501

Dear Mr. Whitley:

This correspondence will serve to verify that your requested Variance Hearing, provided for in Oregon Administrative Rules, Chaper 340, Section 75-045 was held in Room 162, Josephine County Courthouse in Grants Pass, Oregon, at 11:00 a.m., May 10, 1979. Persons present at the hearing were: Mr. & Mrs. Clark F. Whitely, Mr. Hollis Gunter, and Mr. David H. Couch as Variance Officer.

The hearing record was left open for a thirty (30) day period to allow Mr. Whitley to submit additional information. On June 5, 1979 I spoke by phone with Mr. Whitley. He indicated additional information had been mailed. A letter from Mr. Whitley, dated June 5, 1979 was received on June 8, 1979. The June 5, 1979 letter is entered into the record as Exhibit XXI.

Prior to the hearing at 9:00 a.m. on May 10, 1979, an on-site inspection of the property in question was conducted, in your presence, by the Variance Officer for the purpose of gathering soils and topographic information with regard to your request. Persons present during the inspection were: Mr. Whitley and Mr. Couch.

Your request was for a variance to the following rules:

OREGON ADMINISTRATIVE RULES, CHAPTER 340

71-020(3)(a) Sufficient suitable area for full replacement and initial system.

71-030(1)(c) Area where the highest level attained by a permanent water table or permanently perched water table will be within four (4) feet of the bottom point of the effective sidewall.

The property in question is described as Township 36 South, Range 5 West, Section 24C, Tax Lot 501 of Josephine County, Oregon. Said property is approximately one and fifty-seven hundreths (1.57) acres

in size. The property is further described as located in W. B. Sherman's Subdivision No. 8 at 4647 Averill Drive, Grants Pass, Oregon 97526.

All exhibits provided to the Variance Officer before the hearing were entered into the record by Roman Numeral. The exhibits are as follows:

EXHIBITS

I Application for variance in the name of Clark F. Whitley, dated 8-6-78.

II Plot plan (indicated as Pg.1) showing slope, subject parcel, test holes, vicinity location and parcel dimension.

III Plot plan (indicated as Pg.2) showing parcel, proposed house, septic tank, drainfield, test holes and slope indications.

IV Page 3 indicating cross section of septic tank, inlet views, top view of proposed system and diagramming proposed trenches and lines.

V Page 4, view of disposal trench with material and fill indications.

VI Page 5, overview of house and system location.

VII Letter dated 11-28-78 from Sherman O. Olson to C. Whitley requesting further submittals.

VIII Portion of tax lot map T36S, Range 5 West, Section 24C, including tax lot 501.

IX Warranty Deed from Berton Martin to Clark F. Whitley dated 1-21-72.

X Josephine County site evaluation application dated 6-21-78 in the name of C. Whitley.

XI Josephine County application for permit dated 6-21-78 in the name of C. Whitley.

XII Josephine County letter of denial dated 8-3-78 to C. Whitley and signed by Hollis Gunter.

XIII Josephine County sewage disposal permit #4280 dated 9-24-73 for subject parcel in name of Clark Whitley.

XIV Josephine County zoning clearance for C. Whitley dated 9-19-73.

XV Josephine County zoning clearance for C. Whitley dated 6-21-78.

XVI Letter dated 9-4-78 from C. Whitley to DEQ Portland requesting application "for approval".

XVII Letter dated 3-20-79 transmitting requested submittals to Sherman O. Olson.

XVIII Letter dated 4-11-79 from Sherman Olson to C. Whitley assigning David H. Couch as Variance Officer.

XIX Letter dated 4-20-79 from David Couch to C. Whitley setting time, date and place of variance hearing.

XX Variance Hearing attendance list.

XXI Letter dated June 5, 1979 from Mr. C. Whitley to D. Couch regarding variance proposal.

Four test holes were inspected by the Variance Officer. They were located in the area originally evaluated by Hollis Gunter on June 27, 1978. One of the existing test holes was open and there were three additional test holes located in the proposed disposal area. The four test holes had somewhat similar profiles. Typically 0-60 inches was a sandy loam. Texture was somewhat finer in the bottom of the profile but was not quite a sandy clay loam. There was water standing in the four test holes at 41", 45", 50" and 60". A scum line was noted on the side walls showing that the water had risen to within 32", 42", 44" and 41 inches of the surface. Indistinct mottling or faint mottling was noted in the soil profile beginning at about 30 inches from the surface of the ground. Slopes were towards the Rogue River at about 0 to 2%. Just below the property there was a slight slope break which went into a noticeably wetter area. Abundant horse tail and swamp grass were present. There were horse tails present in the proposed drainfield area. The proposed disposal area is bounded above by single-family residences served by individual wells. No wells located on the property. The property is 165 feet wide and 420 feet deep, and is about 600 feet from the Rogue River.

Oregon Administrative Rules (OAR) Chapter 340, 75-015 states ". . .a special variance officer may grant specific variances from the particular requirements of the rules or standards pertaining to subsurface sewage disposal systems if he finds that:

1. The subsurface sewage disposal system will function in a satisfactory manner so as not to create a public health hazard, or to cause pollution of public water; and

2. Special physical conditions exist which render strict compliance unreasonable, burdensome, or impractical."

O.A.R. 340, 75-035 requires, ". . . The burden of presenting the supportive facts shall be the responsibility of the applicant."

Upon review of the information submitted in terms of the soil, landscape and hydrologic characteristics of this site, the requisite findings can not be made.

During the hearing the Variance Officer had the following questions about the feasibility of the proposal: the ability to effectively drain the proposed disposal area, the limited available area, the very rapidly permeable soils in the proposed disposal site, evidence of saturated conditions (mottling) at relatively shallow depths, proximity of the Rogue River, protection of public waters (ground water) from possible degradation and pollution, contamination of the regional water system, and the impact on ground water supplies and the Rogue River.

Testimony and information in the record did not provide conclusive answers.

Your proposal, although well prepared, does not give assurance that it will overcome the limitations present at the site. Therefore, based on the verbal and written testimony contained in the record I am not convinced that the proposed drainfield will function in a satisfactory manner so as not to cause a public health hazard or degrade the quality of the public waters of the State of Oregon. Your variance is regretfully denied.

Pursuant to OAR 340-75-050, my decision to deny your variance request may be appealed to the Environmental Quality Commission. Requests for appeal must be made by letter, stating the grounds for appeal, and addressed to the Environmental Quality Commission, in care of Mr. William H. Young, Director, Dept. of Environmental Quality, P. O. Box 1760, Portland, OR. 97207, within twenty (20) days of the date of the certified mailing of this letter.

I personally regret having to make this decision, but the required findings could not be made. If you have any questions regarding the above, or if I can be of assistance in any way, please do not hesitate to call.

Sincerely,

David H. Couch
Variance Officer

DHC:mc

cc: Sherman O. Olson, Jr., DEQ, Portland
Ronald E. Baker, SWR
Environmental Health Services, Josephine County

ROUTE SLIP ATTACHMENT "C"

TO: Bolton (cc TJO) [response] Date 7-2

FROM: [William] Young, Director, ...ty Comm.

File Josephine Co. 6-23-79.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
JUN 28 1979
OFFICE OF THE DIRECTOR

Dear Sir:-

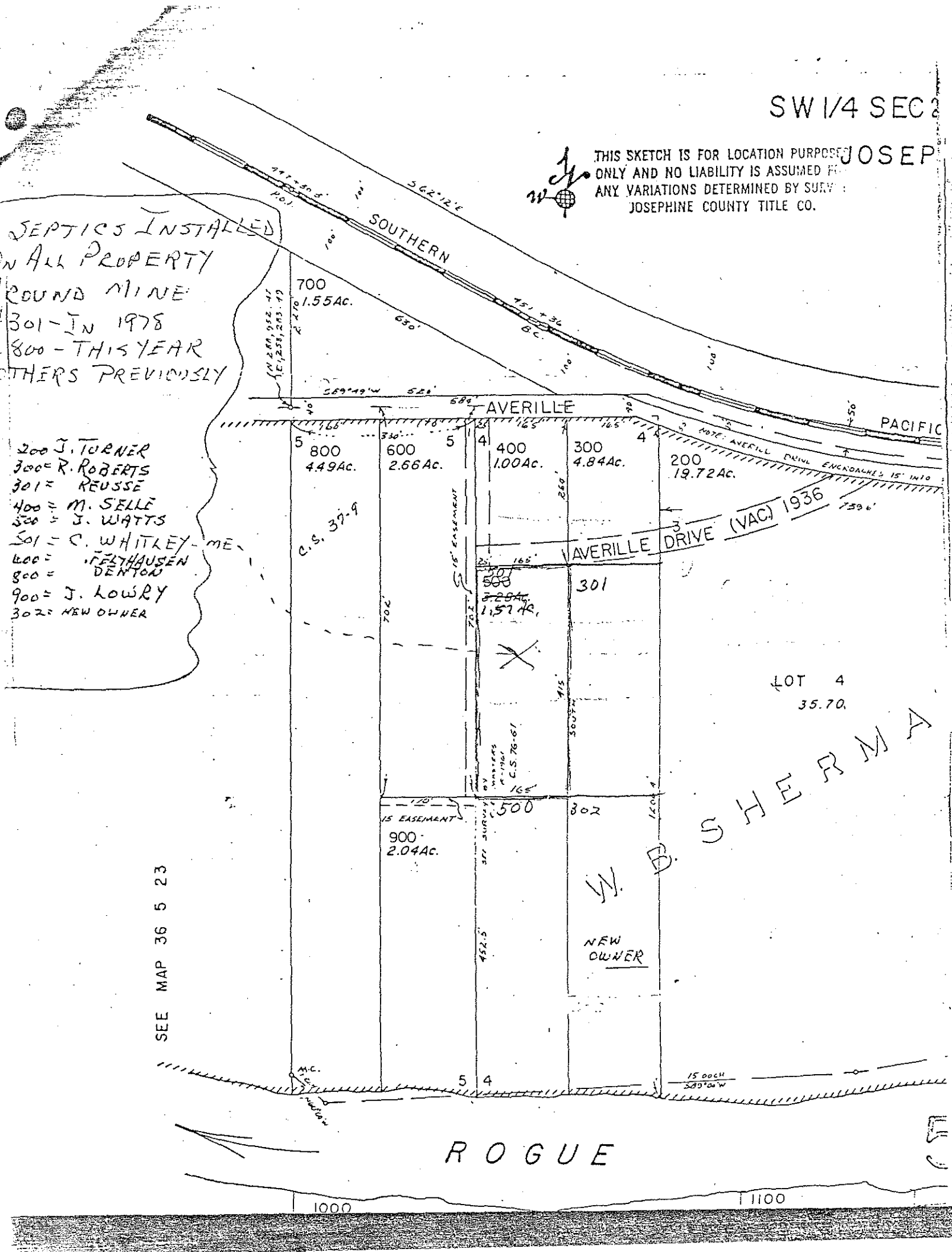
I am appealing to your better judgement the recent denial I received for a septic system on my property (map enclosed), each parcel surrounding mine have septic systems, and most of them have been used for years, I ask no more or less. Three of the septics are on ground level much lower than mine on a 2½% slope and I cannot understand that even with a new land fill of three feet or what ever why it is denied.

This means nothing to you, but it is the rest of my retired life to myself & my wife. Please look upon this needed action favorably.

Property Description
Township-36
Range --- 5 West
Section --24 C
Tax Lot -- 501
Josephine County - 4647 Averill Dr, Grants Pass - Oregon 97526

1.57 Acres

Sincerely,
Clair Whitley
260 Marigold Ave,
Freedom,
Calif 95019


SW 1/4 SEC 2
JOSEP
THIS SKETCH IS FOR LOCATION PURPOSES ONLY AND NO LIABILITY IS ASSUMED FOR ANY VARIATIONS DETERMINED BY SURVEY
JOSEPHINE COUNTY TITLE CO.
SEPTICS INSTALLED ON ALL PROPERTY ROUND MINE
301 - IN 1978
800 - THIS YEAR
OTHERS PREVIOUSLY
200 J. TURNER
300 = R. ROBERTS
301 = REUSSE
400 = M. SELLE
500 = J. WATTS
501 = C. WHITLEY - ME -
600 = FELTHAUSEN
800 = DENTON
900 = J. LOWRY
302 = NEW OWNER
SOUTHERN PACIFIC
AVERILLE
AVERILLE DRIVE (VAC) 1936
700
1.55Ac.
800
4.49Ac.
600
2.66Ac.
400
1.00Ac.
300
4.84Ac.
200
19.72Ac.
500
1.57Ac.
301
900
2.04Ac.
500
802
NEW OWNER
C.S. 39-9
C.S. 76-61
15' EASEMENT
15' EASEMENT
LOT 4
35.70
W. B. SHERMA
SEE MAP 36 5 23
ROGUE
1000
1100

Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

Victor Atiyeh
Governor

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. K(4), September 21, 1979, EQC Meeting

Edwin Campbell--Appeal of Subsurface Variance Denials

Background

The pertinent legal authorities are summarized in Attachment "A".

Mr. Campbell applied to Clackamas County for a soil investigation for two parcels of land described as follows: Tax Lot 102, Section 12A, T. 3 S., R. 2 E.; and Tax Lot 4600, Section 1, T. 3 S., R. 2 E. Mr. Richard L. Polson, Soil Scientist with Clackamas County, evaluated the two parcels for subsurface sewage disposal suitability. An area on Tax Lot 102 was located which contained soils meeting the Department's minimum requirements, but because most of the acceptable soil lies within the bounds of a Bonneville Power Administration powerline right-of-way, the site was not approved for drainfield placement. Tax Lot 4600 also was found to contain two (2) areas of acceptable soil, but because most of the acceptable soil is located either within a B.P.A. powerline right-of-way or just north of the right-of-way on one of the three (3) proposed lots, the two (2) remaining lots were not approved.

Mr. Campbell's attorney, Mr. Terry D. Morgan, requested that Mr. Charles Gray, with the Department's Northwest Regional Office, review the Clackamas County denials for Tax Lots 102 and 4600, particularly their interpretation of the Department's rule [OAR 340-71-020(1)(k)] as it relates to potential drainfield locations in areas encumbered by easement.

After review of the facts before him, Mr. Gray notified Mr. Morgan of his findings, by letter dated March 26, 1979. The BPA easements contain language which allows them to operate over the drainfield, and therefore subjects the drainfield to possible damage. Mr. Gray concurred with Clackamas County's interpretation of the administrative rule.

The Department received separate variance applications for two (2) parcels within Tax Lots 4600 and 102, in April and May of 1978. The completed applications were then assigned to Mr. Sherman O. Olson Jr., a Variance Officer with the Department. Mr. Olson scheduled a visit to the proposed sites and the information gathering hearing for May 24, 1979. After closing the hearing, Mr. Olson evaluated the information provided by Mr. Campbell and others. Mr. Olson found that the soils on each parcel lying outside of the BPA right-of-way had shallow depths to restrictive soil horizons and seasonally perched water tables. It was Mr. Olson's opinion that a modified subsurface sewage disposal system could not reasonably be expected to function properly during the winter months on either parcel (in areas out of the BPA right-of-way). The soils within the areas examined in the BPA right-of-way were found to comply with the Department's minimum requirements, except for being within areas encumbered by easement. It was the variance officer's opinion that, if the drainfield and auxiliary areas were undisturbed, it was unlikely that either subsurface sewage disposal system would function improperly. But because of the potential for damage to an installed system or the future replacement area exists, and because BPA could require the removal of all or part of the system within the right-of-way, the variance officer was unable to find that special physical conditions exist which render strict compliance with the rules to be unreasonable or impractical. Mr. Olson, therefore, denied the variance requests. (Attachments "B" and "C")

Mr. Morgan's letter, with enclosures (Attachment "D"), appealing the variance officer's decision, was received on August 3, 1979.

Evaluation

Pursuant to ORS 454.660, decisions of the variance officer to grant variances may be appealed to the Environmental Quality Commission. Mr. Campbell (through his attorney) made such an appeal. The Commission must determine if strict compliance with the rule or standard is inappropriate for cause or because special physical conditions render strict compliance unreasonable, burdensome, or impractical.

After evaluating the site and after holding a public information type hearing to gather testimony relevant to the requested variance, Mr. Olson was not able to find that special physical conditions exist which render strict compliance with the rules to be unreasonable or impractical. Mr. Olson considered areas outside of the BPA right-of-way for drainfield placement, but was unable to find that a system modified to address the site limitations (shallow depths to restrictive soil horizons and high seasonally perched water tables) could reasonably be expected to function in a satisfactory manner so as not to create a public health hazard.

Summation

1. The pertinent legal authorities are summarized in Attachment "A".

2. Mr. Campbell applied to Clackamas County for a soil investigation for two parcels of land.

3. Mr. Polson visited the properties and evaluated the soils to determine if a standard subsurface sewasge disposal system could be installed on each. Mr. Polson found an area on each parcel that contained soils meeting the Department's minimum standards, except that on one parcel this area is located almost entirely within the bounds of a BPA powerline right-of-way. The area on the second parcel is located either within the BPA powerline right-of-way or just north of the right-of-way on one of the three (3) proposed lots, while the two (2) remaining proposed lots were not approved.

4. Mr. Morgan requested that the denial and the reasons for the denial, be reviewed by the Department's Northwest Regional Office.

5. Mr. Gray reviewed the denial and found the county's decision to be correct. He also concurred with their interpretation of the Department's Rule [OAR 340-71-020(1)(k)] .

6. Two variance applications were submitted to the Department in April and May, 1978, and were assigned to Mr. Olson.

7. Mr. Olson examined portions of each parcel, both in and outside of the BPA right-of-way. He found those areas outside the right-of-way to contain soils with shallow depths to restrictive soil horizons and shallow depths to seasonally perched water tables. The areas within the right-of-way exhibited soil depths which complied with the Department's minimum requirements for drainfield placement.

8. A public information type hearing was conducted by Mr. Olson so as to allow Mr. Campbell and others the opportunity to supply the facts and reasons in support of the variance requests.

9. Mr. Olson reviewed the variance record and found that the testimony provided did not support a favorable decision for either parcel. Mr. Olson was unable to develop a modified subsurface system for either parcel that he believed could reasonably function in a satisfactory manner without creating a public health hazard. He was also unable to find that the Department's rule relating to drainfield placements within areas encumbered by easement to be unreasonable or impractical

10. Mr. Olson notified Mr. Campbell by letter that his variance requests were denied.

11. Mr. Campbell's attorney filed for appeal of the decision by letter dated July 31, 1979.

Director's Recommendation

Based upon the findings in the summation, it is recommended that the Commission adopt the findings of the variance officer as the Commission's findings and uphold the decision to deny the variances.

Bill

William H. Young

Sherman O. Olson/T. Jack Osborne:l
XL4052
229-644
September 5, 1979
Attachments

ATTACHMENT "A"

1. Administrative rules governing subsurface sewage disposal are provided for by Statute: ORS 454.625.

2. The Environmental Quality Commission has been given statutory authority to grant variances from the particular requirements of any rule or standard pertaining to subsurface sewage disposal systems if after hearing, it finds that strict compliance with the rule or standard is inappropriate for cause or because special physical conditions render strict compliance unreasonable, burdensome or impractical: ORS 454.657.

3. The Commission has been given statutory authority to delegate the power to grant variances to special variance officers appointed by the Director of the Department of Environmental Quality: ORS 454.660.

4. Decisions of the variance officers to grant variances may be appealed to the Commission: ORS 454.660.

5. Mr. Olson was appointed as a variance officer pursuant to the Oregon Administrative Rules: OAR 340-75-030.

X4046.A

ATTACHMENT "B"

Department of Environmental Quality

522 SOUTHWEST 5TH AVE. PORTLAND, OREGON

MAILING ADDRESS: P.O. BOX 1760, PORTLAND, OREGON 97207

Victor Atiyeh
Governor

CERTIFIED MAIL

Mr. Edwin Campbell
2260 South Molalla Avenue
Oregon City, OR 97045

Re: South P.O. T.L. 102; Sec. 1;
T. 3 S.; R. 2 E., W.M.;
Clackamas County

Dear Mr. Campbell:

This correspondence will serve to verify that your requested variance hearing, as provided for in Oregon Administrative Rules, Chapter 340, Section 75-045 was held within a conference room of the Clackamas County Department of Environmental Services on May 24, 1979, beginning at 1:55 pm .

You have requested variance from the Oregon Administrative Rules, Chapter 340: 71-020(1)(k) and 71-020(3)(2). In addition, I have considered variance from the following Oregon Administrative Rules, Chapter 340: 71-030(1)(b), 71-030(1)(d), and 71-030(4)(f)(F).

Prior to the public information gathering hearing I visited the proposed site to gather soils and topographical information relevant to your variance proposal. The test pits provided within the Bonneville Power Administration (BPA) easement area were found to meet the Department of Environmental Quality's minimum requirements except for being within an area encumbered by easement.

Four (4) additional pits located outside of the BPA easement area were also examined. The two (2) pits located near the west property line are in an area designated by Richard L. Polson as soil Map Unit A, which meets the Departments minimum requirements for soil depth and slope. The remaining area (designated as soil Map Unit B by Mr. Polson) examined (two (2) pits and three (3) soil borings) exhibited mottling at depths ranging from seventeen (17) to twenty four (24) inches from the ground surface, and a restrictive soil horizon varying from twenty (20) to thirty (30) inches.

Given the shallow soil depths to indications of the seasonal water level (mottling), and the shallow soil depths to the restrictive soil horizon, I am not convinced that a modified sewage disposal system would function property if installed and put into service in the area I examined within soil Map Unit B. Even with the installation of shallow disposal trenches, I feel that it is likely that the seasonal water table will come into contact with the disposal trenches and may immerse them for short periods each winter. This may cause the drainfield to become anaerobic, leading to premature clogging. Once clogged, the system would begin to fail by allowing sewage effluent to seep at the ground surface, thus creating a public health hazard.

You have proposed that a drainfield of standard construction be installed within the BPA easement area, and in soils that do comply with the Department's minimum requirements. The Department does however require (OAR 340-71-020(1)(k)) that "before approval of any lot or parcel for subsurface sewage disposal is granted, it must be determined that the proposed drainfield site and the replacement site are free of encumbrances that might in the future prevent that site from being used for disposal or encumbrances that might in the future cause physical damage to occur to the system."

The BPA has indicated by a letter addressed to you (dated May 11, 1978) that they have no objection to the use of their easement area for construction use, and maintenance of a drainfield, with future rights for an auxiliary drainfield, subject to the condition that if your proposed use should become a hazard to the BPA's present or future facilities, or should such use interfere with the inspection, maintenance or repair of same, or with the access along such easement, the hazard or interference would be required to be removed. The BPA further indicates that their consent is not assignable or transferable to other parties without their prior written consent. The BPA references this authorization to a drawing which has not been shown to accurately represent the proper installation of the drainfield and auxiliary, given the natural topographical features present at the site.

The letter of February 28, 1979, addressed to Mr. Terry D. Morgan from the BPA, appears to be reasonably accurate in terms of the type of damage a subsurface system might incur through normal powerline operation and maintenance. Vehicles traveling over a drainfield while the soils are moist may very likely cause the soils to become compacted, may cause the erosion of soils on sloping locations because of water movement down gradient during periods of precipitation and may cause physical damage to the drain lines and/or other portions of the system. If the soils are relatively dry, compaction may still occur (but to a lesser degree), and physical damage to the system is still a possibility.

Variance from particular requirements of the rules or standards pertaining to subsurface sewage disposal systems may be granted if it is found that the proposed subsurface sewage disposal system will function in a satisfactory manner so as not to create a public health hazard or to cause pollution of public waters, and special physical conditions exist which render strict compliance unreasonable, burdensome, or impractical.

If the drainfield and auxiliary areas are undisturbed, it is unlikely that the subsurface system will function improperly. But because of the potential for damage to an installed system or to the replacement area exists, and also the possibility that removal of part or all of the system could be required by the BPA, I am unable to find that special physical conditions exist which render strict compliance with the rules to be unreasonable or impractical. Your variance request is regretfully denied.

Pursuant to OAR 340-75-050, my decision to deny your variance request may be appealed to the Environmental Quality Commission. Requests for appeal must be made by letter, stating the grounds for appeal, and addressed to the Environmental Quality Commissions, in care of Mr. William H. Young, Director, Department of Environmental Quality, Box 1760, Portland, Oregon, 97207, within twenty (20) days of the date of the certified mailing of this letter.

Please feel free to contact me at 229-6443 if you have any questions regarding this decision.

Sincerely,

Sherman O. Olson, Jr.
Sanitarian
Subsurface and Alternative
Sewage Systems Section
Water Quality Division

SOO:cdd
cc: Richard L. Polson
Terry D. Morgan
Northwest Regional Office, DEQ

ATTACHMENT "C"

Department of Environmental Quality

522 SOUTHWEST 5TH AVE. PORTLAND, OREGON

MAILING ADDRESS: P.O. BOX 1760, PORTLAND, OREGON 97207

Victor Atiyeh
Governor

CERTIFIED MAIL

Mr. Edwin Campbell
2260 South Molalla Avenue
Oregon City, OR 97045

Re: WQ-SSS-Variance Denial
T.L. 4601; Sec. 1;
T. 3 S.; R. 2 E., W.M.;
Clackamas County

Dear Mr. Campbell:

This correspondence will serve to verify that your requested variance hearing, as provided for in Oregon Administrative Rules, Chapter 340, Section 75-045 was held within a conference room of the Clackamas County Department of Environmental Services on May 24, 1979, beginning at 1:55 p.m.

You have requested variance from the Oregon Administrative Rules, Chapter 340: 71-020(1)(k) and 71-020(3)(a). In addition, I have considered variance from the following Oregon Administrative Rules, Chapter 340: 71-030(1)(b), 71-030(1)(d), and 71-030(4)(E)(F).

Prior to the public information gathering hearing I visited the proposed site to gather soils and topographical information relevant to yor variance proposal. The test pits provided within the Bonneville Power Administration (BPA) easement area were found to meet the Department of Environmental Quality's minimum requirements except for being within an area encumbered by easement.

Four (4) pits were provided immediately south of Henrici Road generally along the toe of the roadfill and appeared to be on or just inside of the property line adjacent to Henrici Road. The pits were not located in an area that could reasonably be used to place a subsurface sewage disposal system because of the irregular topographical features present. The ground slope was found to vary from sixteen (16) to twenty-three (23) percent in the immediate vicinity of the four (4) pits. A soil punch tube was used to examine the soils upslope from what appeared to be an old road and downslope from the two (2) middle pits. The soil was mottled at fourteen (14) inches from the ground surface, and the beginning of a restrictive horizon was found at eighteen (18) inches. Due to the shallow depths encountered I would not expect a subsurface sewage disposal system to function properly during the winter and spring months when the

precipitation and seasonal water table would be highest. Even with the installation of shallow disposal trenches, I feel that is likely that the seasonal water table will come into contact with the disposal trenches and may imerse them for short periods each winter. This may cause the drainfield to become anaerobic, leading to premature clogging. Once clogged, the system would begin to fail by allowing sewage effluent to seep at the ground surface, thus creating a public health hazard.

You have proposed that a drainfield of standard construction be installed within the BPA easement area, and in soils that do comply with the Departments minimum requirements. The Department does however require (OAR 340-71-020(1)(k)) that "before approval of any lot or parcel for subsurface sewage disposal is granted, it must be determined that the proposed drainfield site and the replacement site are free of encumbrances that might in the future prevent that site from being used for disposal or encumbrances that might in the future cause physical damage to occur to the system."

The BPA has indicated by a letter addressed to you (dated May 11, 1978) that they have no objection to the use of their easement area for construction use, and maintenance of a drainfield, with future rights for an auxiliary drainfield, subject to the condition that if your proposed use whould become a hazard to the BPA's present or future facilities, or should such use interfere with the inspection, maintenance or repair of same, or with access along wuch easement, the hazard or interference would be required to be removed. The BPA futher indicated that their consent is not assignable or transferable to other parties without their prior written concent. The BPA references this authorization to a drawing which has not been shown to accurately represent the proper installation of the drainfield and auxiliary, given the natural topographical features present at the site.

The letter of February 28, 1979, addressed to Mr. Terry D. Morgan from the BPA, appears to be reasonably accurate in terms of the type of damage a subsurface system might incur through normal powerline operation and maintenance. Vehicles traveling over a drainfield while the soils are moist may very likely cause the soils to become compacted, may cause the erosion of soils on sloping locations because of water movement down gradient during periods of precipitation, and may cause physical damage to the drainlines and/or portions of the system. If the soils are relatively dry, compaction may still occur (but to a lesser degree), and physical damage to the system is still a possibility.

Variance from particular requirements of the rules or standards pertaining to subsurface sewage disposal systems may be granted if it is found that the posposed subsurface sewage disposal system will function in a satisfactory manner so as not to create a public health hazard or to cause pollution of public waters, and special physical conditions exist which render strict compliance unreasonable, burdensome, or impratical.

If the drainfield and auxiliary areas are undisturbed, it is unlikely that the subsurface system will function improperly. But because of the potential for damage to an installed system or to the replacement area exist, and also the possibility that removal of part or all of the system could be required by the BPA, I am unable to find that special physical conditions exist which render strict compliance with the rules to be unreasonable or impractical. Your variance request is regretfully denied.

Pursuant to OAR 340-75-050, my decision to deny your variance request may be appealed to the Environmental Quality Commission. Requests for appeal must be made by letter, stating the grounds for appeal, and addressed to the Environmental Quality Commission, in care of Mr. William H. Young, Director, Department of Environmental Quality, Box 1760, Portland, Oregon, 97207, within twenty (20) days of the date of the certified mailing of this letter.

Please feel free to contact me at 229-6443 if you have any questions regarding this decision.

Sincerely,

Sherman O. Olson, Jr.
Sanitarian
Subsurface and Alternative
Sewage Systems Section
Water Quality Division

SOO:cdw

cc: Richard L. Polson
Terry D. Morgan
Northwest Region, DEQ

ATTACHMENT "D"

MORGAN & SHONKWILER
ATTORNEYS AT LAW
2111 N. E. 43RD AVENUE
PORTLAND, OREGON 97213

TERRY D. MORGAN
JOHN W. SHONKWILER

TELEPHONE
(503) 287-6676

July 31, 1979

Environmental Quality Commission
c/o Mr. William H. Young
Director
Department of Environmental Quality
Box 1760
Portland, Oregon 97207

Re: Variance Application Denial
Edwin Campbell
Request for Appeal

Dear Commissioners:

Mr. Edwin Campbell hereby appeals the decision of the Variance Officer, Mr. Sherman Olson, by letter received July 27, 1979 to deny the variance applications on the following described real property:

(1) T.L. 4601, Section 1 T. 3 S.; R. 2 E., W.M.; Clackamas County, and

(2) T.L. 102, Section 12, T. 3 S.; R. 2 E., W.M.; Clackamas County.

As indicated in Mr. Olson's opinion letter, Mr. Campbell requested variance from OAR, Ch. 340: Section 71-020(1)(k). Additional test pits were constructed at the request of the Variance Officer for consideration of variances from Rules Section 71-030(1)(b), 71-030(1)(d), and 71-030(4)(f)(F). The Hearings Officer concludes that subsurface sewage disposal systems could not function during winter and spring months on the test site locations under variances from the provisions of Rules, Section 71-030 et seq. (It should be pointed out that Campbell did not request variance from Rules, Section 71-020(3)(a). This provision was mentioned for the first time in the Variance Officer's letter of May 15, 1979. Apparently, it is his interpretation that Mr. Campbell's request for variance from Section 71-020(1)(k) entails as well an application for a variance of this provision.

Campbell appeals the Variance Officer's refusal to allow a variance to Section 71-020(1)(k) and those portions of Section 71-020(3)(a) which are necessarily involved should Campbell's request for a variance from the preceding Section be granted.

GROUNDS FOR APPEAL

The applicant submits his letter of May 5, 1979, together with attachments and exhibits as grounds for granting the variance application. As indicated in those materials, the DEQ's interpretation of the Rule, as exemplified in the Variance Officer's opinion, prevents the installation of all drainfields or replacement fields in utility rights-of-way. As argued in Exhibits A-10 and B-10 accompanying the letter of May 5, 1979, such an interpretation of the rule exceeds the statutory authority vested in the DEQ and amounts to a taking of Mr. Campbell's property. As you are aware, the application of a rule adopted by the Commission is an appropriate instance to question the validity of the rule under statutory and constitutional provisions. International Council of Shopping Centers vs Oregon Environmental Quality Commission, 27 Or App 321, 327 (1976).

Please schedule Mr. Campbell for the August meeting of the Commission if at all possible.

Thank you for your consideration of this matter.

Sincerely,

MORGAN & SHONKWILER

Terry D. Morgan

Terry D. Morgan
TDM:np

cc: Mr. Edwin Campbell

Enclosure

MORGAN & SHONKWILER
ATTORNEYS AT LAW
2111 N.E. 43RD AVENUE
PORTLAND, OREGON 97213

TERRY D. MORGAN
JOHN W. SHONKWILER

TELEPHONE
(503) 287-6676

August 7, 1979

Environmental Quality Commission
c/o Sherm Olson, Variance Officer
Department of Environmental Quality
Box 1760
Portland, Oregon 97207

Re: Variance Application Denial
Edwin Campbell
Request for Appeal

Dear Mr. Olson:

Please find enclosed the following documents, which should be appended to the letter of July 31, 1979 appealing the variance denial of the application of Edwin Campbell. The designations in parenthesis refer to the exhibit numbers accompanying the variance application dated April 2, 1979.

1. BPA permits authorizing installation of drain fields in rights-of-way (Exhibits A-2, B-2).

2. Letter from BPA Operations and Maintenance Manager, Portland Region, (Exhibits A-6, B-6).

3. Description letter from acting head of BPA's Title and Land Management Section (Exhibits A-7, B-7).

4. Memorandum in support of variance application (Exhibits A-10, B-10).

Please contact me if you have any further questions about the variance appeal.

Sincerely,

Terry D. Morgan

Terry D. Morgan
TDM:np
Enclosures

cc: Mr. Edwin Campbell

EX. A-6
EX. B-6

RECEIVED
MAR 2 1979
By

Department of Energy
Bonneville Power Administration
Portland Area Office
P.O. Box 3621
Portland, Oregon 97208

In reply refer to: OPT

February 28, 1979

RECEIVED
AUG 10 1979
Water Quality Division
Dept. of Environmental Quality

Mr. Terry D. Morgan
Attorney-at-Law
Morgan and Shonkwiler
2111 NE. 43rd Avenue
Portland, Oregon 97213

Dear Mr. Morgan:

Your letter of February 12, 1979, asks for information concerning the probability of damage to septic disposal facilities installed on land encumbered by a powerline easement. Although both septic tanks and drainfields were mentioned, we will limit our comments to drainfields since the Administration would be reluctant to grant a permit for a septic tank on a powerline right-of-way. Also, we will omit discussion of possible damage due to powerline construction or reconstruction.

Drainfield damage during normal powerline operation and maintenance could be caused by heavy trucks during wet weather, and in some soils a degree of compaction or siltation could be caused by ordinary vehicles in any weather. Experience indicates that localized ground damage of the first kind (deep rutting) might occur somewhere on our system once per year on land that could be used for drainfields. Our powerline right-of-way system includes about 10,000 acres of such land, and assuming an average drainfield occupies one-tenth acre, the probability of damage to any particular drainfield would be 1:100,000 each year.

Damage of the second kind (compaction or siltation) would be of a cumulative nature and would depend on traffic density and local soil conditions. Traffic due to powerline operation and maintenance will average only about two vehicles per year. This seems hardly significant compared to livestock grazing or other activities regularly allowed on drainfields.

Regarding your question about additional powerline facilities near the property of your client, Mr. Edwin Campbell, the answer is that none are presently planned so far as we know.

Letter to Terry D. Morgan, Attorney, from A. C. May; Subj: Septic Disposal Facilities Installed on Land Encumbered by a Powerline Easement

From a strictly self-serving point of view, it would be nice to have all our rights-of-way free of permits of any kind. But this would not be in the best public interest, so we try to assist and encourage landowners to utilize the land under our powerlines in some productive, compatible way. Sanitary system drainfields could be one such usage. At last count, we had issued over 30 permits for drainfields and no problems have been reported.

Sincerely,

A. C. May
Portland Area O&M Manager

EX. A-7
EX. B-7

RECEIVED
MAR 5 1979
By

Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

In reply refer to: ELMC

MAR 2 1979

Your reference:
Campbell
Contracts EW-78-Z-81-0108
and 0109

Mr. Terry D. Morgan
Morgan & Shonkwiler
Attorneys at Law
2111 N. E. 43rd Avenue
Portland, Oregon 97213

Dear Mr. Morgan:

This is in response to your letter of February 28, 1979, with regard to septic tank drain fields within Bonneville Power Administration (BPA) rights-of-way.

The conditions with regard to the depth of burial, marking of locations, and the Administration's liability, are standard in all permits of this type.

Within the last year, we have had only two other requests for use of BPA rights-of-way for drain field purposes within Clackamas County, one by an individual and one by a developer. However, we have had a rather large number of requests for use of the rights-of-way for this purpose within other areas that are rapidly being developed.

Upon sale of the property, BPA will issue a permit to the new owner that will contain the same conditions as the original permit, if it still does not interfere with the Administration's operation and maintenance.

We believe that the above information, together with that furnished you by Mr. Albert C. May, Portland Area O&M Manager, in his letter of February 28, 1979, should pretty well answer all your questions regarding this matter.

Sincerely,

Dorothy L. Monroe

Dorothy L. Monroe, Acting Head
Title & Land Management Section
Branch of Land

EX. A-10

EX. B-10

BEFORE THE DEPARTMENT OF
ENVIRONMENTAL QUALITY

Re: Variance Application of Edwin Campbell

The following testimony is submitted in support of the application of Edwin Campbell for variances from subsurface sewage regulations, viz., OAR 340-71-020(1)(k), for the following parcels: Tax Lot 4600, Section 1, T3S, R2E; and Tax Lot 102, Section 12A, T3S, R2E. Mr. Campbell seeks to place drain fields in the BPA utility easements through the above described parcels. His applications for subsurface sewage disposal approvals were denied by Clackamas County on the basis of the above cited DEQ provisions. The applications otherwise meet the specifications under the rules.

Facts

Early in 1979, Edwin Campbell requested a soil investigation by the Clackamas County soil scientist for the above described property. The report for Tax Lot 4600 was issued by way of letter of February 22, 1978, accompanied by a map and soil test results indicating areas utilizable for the installation of drain fields (Ex. B-1). The majority of "Unit A" soil for this parcel lies within the power line easements maintained by the Bonneville Power Administration. The report indicates the necessity for obtaining BPA approval.

The report for Tax Lot 102 was issued by way of letter dated March 22, 1978, accompanied by a map depicting suitable soil locations for the installation of drain fields (Ex. A-1). Again, the majority of suitable soils lies within the BPA easement for this property. The letter was accompanied by a memorandum from Richard Polson, indicating the recently adopted DEQ rule concerning installation of drain fields in utility easements. [OAR 340-71-020(1)(k) was adopted February 24, 1978, at the meeting of the EQC, effective March 1, 1978.]

Following receipt of the soil reports, Mr. Campbell sought approval for the installation of drain fields in the BPA right-of-way. He was granted permits for the installation of two septic tank drain fields and three auxiliary drain fields on Tax Lot 4600 on May 11, 1978 (Ex. B-2). On the same date, he was granted permits for the construction and maintenance of two drain fields and two auxiliary drain fields on Tax Lot 102 (Ex. A-2). Each permit contained a standard condition that drain fields were subject to the right of the BPA to conduct maintenance procedures of its power facilities

on the subject property.

Clackamas County denied Campbell's applications for subsurface sewage disposal approvals for the two parcels by way of letter dated August 30, 1978 (Exs. A-3, B-3). The sole basis for denial stated in the letter is that the BPA permits were conditioned on the inspection, maintenance or repair of the BPA facilities.

In April, 1978, Campbell applied for minor partitions of Tax Lots 4600 and 102. In May, 1978, the minor partitions were denied by the staff on the basis of violation of the agricultural lands goal. These objections were retracted, and the partitions were approved by letters of August 11 and August 8 (Exs. B-4, A-4), subject to approval of subsurface sewage disposal for the properties.

Campbell requested BPA clarification of its permits from the agency in February, 1979. By letter of February 23, 1979, the Portland area manager of Operations and Maintenance described normal maintenance procedures for the power line right-of-way. He estimated that the probability of damage to any particular drain field would be: $100,000 in any given year. He also indicated that there were no plans for additional power line facilities in the vicinity of Mr. Campbell's property (Exs. A-6, B-6).

By letter of March 2, 1979, the head of the Title and Land Management section of the BPA indicated that the condition attached to Mr. Campbell's permits was the standard condition and that the agency had experienced a large number of requests for the use of the easement for the installation of drain fields (Exs. A-7, B-7).

Campbell requested an informal review of the Clackamas County denial to the Northwest Region Administrator by letter of March 1, 1979 (Exs. A-8, B-8). The department subsequently affirmed the county's interpretation of OAR 340-71-020(1)(k) (Exs. A-9, B-9).

Variance Requirements

Pursuant to ORS 454.657 and OAR 340-75-015 - 020, a variance may be granted from a DEQ rule pertaining to subsurface sewage disposal if the following conditions are met:

1. The subject parcel does not contain an area suitable for installation of a subsurface system that would comply with the rule;

2. The system will function so as not to result in a public health hazard or cause pollution of public water; and

3. Special physical conditions exist which render strict compliance unreasonable, burdensome, or impractical.

As indicated previously, soil conditions on the subject properties do not permit installation of a drain field that complies with the regulations other than through location in the BPA right-of-way. OAR 340-71-020(1)(k), as interpreted by Clackamas County and as affirmed by the DEQ, does not permit the installation of drain fields without unconditional assurances that the site and replacement site are "free of encumbrances that might in the future prevent that site from being used for disposal" by the BPA. BPA is unable to issue unconditional permits because of the necessity of maintaining and potentially repairing its facilities. Hence, the conditions of OAR 340-75-020 are complied with under this application.

Soil conditions on the subject properties constitute "special physical conditions" which have led to the invocation of the rule on encumbrances by the county and the DEQ. The same soil conditions which are necessary for suitable subsurface sewage disposal are also desirable for the placement of power facilities. It is no accident that the BPA easements often include the best soils for subsurface sewage disposal.

Because of the location of the property in rural Clackamas County, there is no immediately foreseeable possibility that sewers will be available to the subject property. Hence, there remain no alternatives to subsurface sewage disposal for servicing residential units on the subject properties.

Strict compliance with Section 020(1)(k) works an economic hardship on Mr. Campbell. Mr. Campbell has committed himself to an investment of approximately 1/100,000 on the subject properties. The parcels lie in an area southwest of the community of Redland which is characterized by parcelization into half-acre and one-acre lots. The area has been irretrievably committed to rural residential use, as reflected in the partition approvals (Exs. A-4, B-4) by the Clackamas County Planning Department.

Those portions of the parcels which have formerly been cultivated have in recent years produced only marginal hay crops. Mr. Campbell was unable to obtain any return on this crop in the year 1978. Without conversion to residential use, Campbell's property is without economic value.

Granting the application for a variance on the subject properties will not pose a health hazard or cause pollution of public waters for a variety of reasons. The first is the improbability of a disturbance which would prevent the drain field from functioning in the future. As the letter from Mr. May indicates (Exs. A-6, B-6), the likelihood of damage

to a drain field site resulting from normal maintenance or repair procedures is slight. The conditions attached to the permits issued by BPA provide further assurances that the standard maintenance procedures/repairs would not result in damage to drain fields (Exs. A-2, B-2). In the event of conflicting uses between BPA's use of the right-of-way and the permit holders, BPA under the permit shall prevail. Presumably this provision of the permit would be invoked upon permanent or chronic interruption in the functioning of the drain field as a result of BPA activities. Additionally, the permits--which are assignable upon consent of the agency--place the burden of repairing drain fields on the permit holder.

In addition to private restraints upon the use of damaged systems, the DEQ has ample authority under ORS 454.635 and 454.645 to enjoin continued use of systems which have been damaged as a result of BPA activities in the utility easement. This authority is available whenever malfunctioning or damaged systems present a health hazard or pose threats to water quality contrary to rules and regulations governing subsurface sewage disposal. In view of the limited possibility of damage to drain fields from BPA maintenance and repair procedures, it is not unreasonable for the Department to rely upon this authority to assure water quality and avoidance of public health hazards.

Legality of Rule

The variance proceeding is an appropriate time to question whether Section 020(1)(k) is a valid exercise of the EQC's enabling authority under ORS ch. 454 (and in particular ORS 454.625) and whether the rule on its face and as applied to Mr. Campbell's property is constitutionally permissible.

The EQC's rule-making powers for subsurface sewage disposal systems and facilities under ORS 454.615 and 454.625 must be directed towards the prevention of water quality degradation and the preservation of health and safety. Section 020(1)(k) conditions approval of drain field sites upon the absence of certain property rights ("encumbrances") which "might" be inconsistent with continued drain field use in the future. This language sweeps too broadly. As interpreted by Clackamas County (Exs. A-3, B-3), and as affirmed by the DEQ (Exs. A-9, B-9), the rule in effect commands the abandonment of property rights which authorize potentially conflicting uses of the site prior to approval of the drain field system.

It is highly improbable that the holders of property rights would be willing to extinguish such rights in order to comply with the DEQ rule. In the case of public utilities, it is doubtful that the utility even has the power to grant an unconditional permit consistent with the rule. The effect

of the rule is thus to preclude all sites within utility rights-of-way for use as drain fields.

ORS 454.615 confers authority on the EQC to prescribe standards for the "design and construction" of subsurface sewage disposal systems; for the "operation and maintenance" of such systems; and for the "pumping out or cleaning" of such systems. Nothing in this statutory provision authorizes the promulgation of rules governing the siting of drain fields.

ORS 454.635 and 454.645 govern the procedures to be followed where a violation of a subsurface sewage disposal regulation has occurred, or when a health hazard presently exists. Under such circumstances, DEQ's authority is directed toward the cessation and correction of malfunctioning systems. Nothing in these sections authorizes the promulgation of a rule aimed at potential future impairment of subsurface sewage disposal systems.

ORS 454.685 permits the DEQ to declare a moratorium on construction of subsurface sewage disposal systems upon notice to affected parties and upon finding specific conditions affecting the subject area. These conditions are listed in subsection (2). The express standards relate to population density, existing improvements and public facilities, topography, climatic conditions and soil conditions inherent to the area. Nothing in ORS 454.685 permits the EQC to promulgate a rule prohibiting construction on the basis of unspecified criteria which derive ultimately from legal relations between potentially competing users of the subject property.

It is acknowledged that the EQC has inherent regulatory powers over site-specific conditions which affect water quality. This is the basis for regulations governing the construction of disposal trenches under OAR 340-71-030. It is likewise presumed that the adoption of Section 020(1)(k) was for a valid statutory purpose. It is submitted that the means used to achieve that purpose is in excess of the statutory powers vested in the EQC governing subsurface sewage disposal.

Constitutional Implications

Mr. Campbell submits that Section 020(1)(k) is arbitrary and capricious on its face and as applied, for reasons expressed in the preceding section, in violation of the Fifth Amendment of the United States Constitution as applied to the Fourteenth Amendment.

As indicated in the section on variance criteria, application of the regulation to Campbell's property leaves Campbell without economic use to his property. Article I, Section 18 of the Oregon Constitution and the Fifth Amendment of the United States

Constitution prohibits the taking of private property for public use without just compensation. Campbell's inability to use the property for residential use and the unsuitability of the property for agricultural or forestry production leaves him without any reasonable remaining use. Application of Section 020(1)(k) to Campbell's property thus constitutes an impermissible taking, entitling Campbell to invalidation of the regulation as applied, or to compensation as prescribed by the constititutional provisions.

These statutory and constitutional considerations provide a necessary backdrop for the granting of the variance requested by Campbell. As additional relief, the EQC should take steps to repeal Section 020(1)(k) pursuant to its rule-making power.

MORGAN & SHONKWILER

By _____
Terry Morgan
Of Attorneys for Edwin Campbell

EX. A-2

Department of Energy
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

In reply refer to:
ELMC
Contract No. EW-78-Z-81-0109
Tract Nos. S-OC-79, and
S-OC-79XW

MAY 11 1978

Lines: Big Eddy-Oregon City and Big Eddy-Keeler (operated as Big Eddy-Chemawa No. 1 and Big Eddy-McLoughlin No. 1)

Mr. and Mrs. Edwin H. Campbell
2260 S. Mollala Avenue
Oregon City, Oregon 97045

Dear Mr. and Mrs. Campbell:

Subject: Use of Bonneville Power Administration easement area for the construction, use, and maintenance of 2 drain fields, with future rights for 2 auxiliary drain fields, if required; for a 25-foot wide road; and a buried 1-inch plastic water line over and across the rights-of-way; all being between towers identified as BIGE-CHEM 77/4 and 78/1, and BIGE-MCLO 77/4 and 78/2, in the NE¼NE¼ of Section 12, Township 3 South, Range 2 East, Willamette Meridian, Clackamas County, Oregon, as shown on the attached drawing

The above-described use of this easement area has been determined not to be a hazard to nor an interference with the Bonneville Power Administration's present use of this easement for electric transmission line purposes. Accordingly, there is no objection to such use, subject to the condition, however, that if such use should at any time become a hazard to the presently installed electrical facilities of the Administration, or any facilities added or constructed in the future, or should such use interfere with the inspection, maintenance or repair of the same, or with the access along such easement, you will be required to remove such hazard or interference.

You, of course, will have to assume all risk of loss, damage or injury which may result from your use of the easement area, except for such loss, damage or injury as the Administration may be responsible for under the provisions of the Federal Tort Claims Act, 62 Stat. 982, as amended. It is understood that any damage to the Administration's property caused by or resulting from your use of the easement area may be repaired by the Administration and the actual cost of such repair shall be charged against and be paid by you.

Permit to Mr. and Mrs. Edwin H. Campbell, Oregon City, dated MAY 11 1978; Subj.: Two Drain Fields with Future Rights for Two Auxiliary Drain Fields

The following conditions also must be complied with:

1. A minimum cover of 24-inches shall be maintained over the drain fields.

2. Permanent type markers shall be installed showing the location of the drain fields within the rights-of-way and where all pipes or other facilities enter and/or leave the rights-of-way.

3. It is understood that in each case the area indicated on the attached drawing as an auxiliary drain field will be utilized only during the period of repair of the main drain field.

4. The Administration shall not be liable for any damage to the drain fields and other facilities within the rights-of-way which might occur during maintenance or reconstruction of its facilities.

It is understood that the rights granted you hereunder by the Bonneville Power Administration are limited to the rights acquired by the Administration, which are easement rights only, subject to existing rights of other parties, and that you will acquire the necessary rights from the owner of the underlying fee.

This permit is given with the express understanding that it is not assignable or transferable to other parties, without the prior written consent of the Administration.

This permit will become effective upon your returning this letter with your approving signature to the Bonneville Power Administration, P.O. Box 3621, Portland, Oregon 97208. The copy is for you to retain as your record.

Sincerely,

/S/ DOROTHY L. MONROE
Dorothy L. Monroe, Acting Head
Title & Land Management Section
Branch of Land

The above permit is accepted and its terms agreed to on this 26th day of May, 1978.

Edwin H. Campbell

Jessica R. Campbell

EX. B-2

Department of Energy
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

In reply refer to:

ELMC
Contract No. EW-78-Z-81-0108
Tract No. JD-K-266

MAY 11 1978

Line: John Day-Keeler
(operated as Ostrander-
Oregon City No. 1) and
Ostrander-McLoughlin No. 1

Mr. and Mrs. Edwin H. Campbell
2260 South Molalla Avenue
Oregon City, Oregon 97045

Dear Mr. and Mrs. Campbell:

Subject: Use of Bonneville Power Administration easement area for the construction, use, and maintenance of two septic tank drain fields and three auxiliary drain fields in the SE¼SE¼ of Section 1, Township 3 South, Range 2 East, Willamette Meridian, Clackamas County, Oregon, between structures identified as OSTD-OREC 1-6-3 and 1-7-1 and OSTD-MCLO 1-6-4 and 1-7-1, as shown on your drawing, as corrected, attached hereto.

The above-described use of this easement area has been determined not to be a hazard to nor an interference with the Bonneville Power Administration's present use of this easement for electric transmission line purposes. Accordingly, there is no objection to such use, subject to the condition, however, that if such use should at any time become a hazard to the presently installed electrical facilities of the Administration, or any facilities added or constructed in the future, or should such use interfere with the inspection, maintenance or repair of the same, or with the access along such easement, you will be required to remove such hazard or interference.

You, of course, will have to assume all risk of loss, damage or injury which may result from your use of the easement area, except for such loss, damage or injury as the Administration may be responsible for under the provisions of the Federal Tort Claims Act, 62 Stat. 982, as amended. It is understood that any damage to the Administration's property caused by or resulting from your use of the easement area may be repaired by the Administration and the actual cost of such repair shall be charged against and be paid by you.

Permit to Mr. and Mrs. Edwin H. Campbell, Oregon City, OR, dated MAY 11 1978; Subj.: Two Septic Tank Drain Fields and Three Auxiliary Drain Fields

The following conditions also must be complied with:

1. A minimum cover of 24-inches shall be maintained over all drain fields and pipes.

2. All pipes and drain fields shall be located a minimum distance of 50 feet from any tower leg, and drain fields near towers shall be placed so as to drain away from towers.

3. Permanent type markers shall be installed where pipes and drain fields enter and leave the rights-of-way, and at all angle points within the rights-of-way.

4. It is understood that in each case the area indicated on the attached drawing as an auxiliary drain field will be utilized only during the period of repair of the main drain field.

5. The Administration shall not be liable for any damage to your facilities located within the rights-of-way which might occur during maintenance or reconstruction of its facilities.

It is understood that the rights granted you hereunder by the Bonneville Power Administration are limited to the rights acquired by the Administration, which are easement rights only, subject to existing rights of other parties, and that you will acquire the necessary rights from the owner of the underlying fee.

This permit is given with the express understanding that it is not assignable or transferable to other parties, without the prior written consent of the Administration.

Victor Atiyeh
Governor

Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. L, September 21, 1979, EQC Meeting

Log Handling - Consideration of Adoption of Additional Guidelines for Log Storage in Coos Bay

Background

In October, 1975, the Environmental Quality Commission adopted a policy on log handling practices in public waters (see Attachment A). This policy dealt in large part with log handling practices that resulted in loose bark and other wood debris entering public waters. Included were requirements designed to minimize the amount of bark generated, and controlling the remaining bark. These requirements are now being implemented, through Log Handling Facilities Permits issued to each log handling operation. Inspections in the last 6 months have shown most of the companies in compliance with their permits.

Intertidal log storage (where logs alternately float and rest on tideflats during tide changes) was included in the policy as an item of management concern. Little or no research had been done on the biological effects from intertidal log storage, and the only specific requirement was to prohibit new tideland storage areas. The paragraph dealing with intertidal storage states:

4. "Establishment of new log storage areas where logs go aground on tidal changes or low flow cycles will not be approved by the Department without specific authorization of the Environmental Quality Commission. Where there is evidence that such areas result in more than nominal damages to aquatic life and/or water quality, the existing log storage areas where logs go aground shall be phased out in accordance with an approved schedule unless specific authorization for continuance is granted by the Commission in consideration of environmental trade-offs. Any phase-out program taking more than five years shall be subject to approval by the EQC."

Based on the biological importance of the areas being affected and the possibility of damage from intertidal log storage, the Department conducted a biological study in Coos Bay. The study lasted from November, 1976, to September, 1978, and covered 4 different sites in the estuary. This study (see Attachment B) showed a decrease of bottom dwelling (benthic) invertebrates ranging from 88% to 95% as a result of logs grounding on the tideflats during low tides. These small animals form a large percentage of the food supply for small fish, including juvenile salmonids present in the estuary.

In mid-December, 1978, copies of the study findings were sent to representatives of local industries, statewide industry associations, local government, other natural resource management agencies - state and federal, conservation groups, and interested publics.

An informational meeting was held in Coos Bay in January, 1979, to discuss the study results and proposed staff recommendations. Testimony was also received from many of the approximately 75 people attending the meeting. A summary of the major points raised, and staff's response are included in Attachment C.

Subsequent to the public meeting of January 1979, the Department staff held other meetings with industry and participated in field examinations to gather additional information on log storage practices, possible alternatives to current log storage practices, and related cost data.

In addition, several meetings have been held with various resource agencies and local biologists. Their assessments of the impact of log storage on the estuary, and ways of minimizing the damage, were discussed. Several agencies have submitted letters to the Department regarding intertidal log storage. These letters are included in Attachment D.

As a result of the study and the meetings and discussions to date, the issues to be resolved are:

1. Is the damage to aquatic life caused by grounding of logs in the presently used intertidal storage areas "more than nominal" -- such that deliberate phase-out schedules should be established and pursued pursuant to the present policy statement?

2. Are there reasonable alternatives available to continued use of storage areas where logs go aground on tide changes?

Discussion of Issues

1. Is damage to aquatic life "more than nominal"?

   The Department's study demonstrated 88 to 95% reductions of invertibrate population in study areas impacted by grounding logs. These findings have been generally accepted by Fishery agencies and Industry representatives.

There is disagreement, however, as to the significance of the documented damage relative to the entire estuary and the Policy Statement.

State and federal fishery agency staff consider the habitat and aquatic life losses as major items. The Tidelands are major contributors to the food chain of the estuary which serves a vital function as a nursery for commercially and recreationally important fish species such as salmon, steelhead, and striped bass. They are deeply concerned by the encroachment of man on these valuable tidelands. About 40% of the historic tidelands in Coos Bay have been removed from production by diking, filling, or dredging. Commercial development pressures will continue to place pressures on the tidelands. Thus, they strongly support the protection of existing tideland production areas and the restoration of tidelands to aquatic production wherever possible.

Industry representatives generally view the impact of reduced biological productivity on the 150 acres of Tidelands presently used for log storage as essentially insignificant compared to the total of 4,600 acres of tidelands in Coos Bay (see Attachment E). (The Coos Bay estuary covers 11,000 acres at high tide and is Oregon's largest estuary.) They further believe it is significant that approximately 529 acres of Tideland areas have been eliminated from use for log storage over the last several years (see Attachment F). Industry also generally believes that further reductions in Tideland storage are not practicable within the constraints of navigation maintenance, public safety and economic stability of the timber industry in the Coos Bay area.

The opposing views on the significance of 150 acres of Tidelands (out of 4,600 total) will remain as a professional difference of opinion. Thus the policy statement, as presently worded, does not provide clear guidance. Modification or further elaboration appears necessary.

2. Are alternatives to Tideland log storage presently available?

The location of presently used log storage sites has been influenced by mill proximity, economics, maintenance of navigation channels, bridge protection, and protection of log rafts from breakup and loss by current, wind and wave action.

The staff has attempted to identify the possible alternatives available to replace Tideland storage. Industry has provided information and assistance in this effort. Discussion of alternatives follows:

Dry Land Storage

The two companies having land available adjacent to their operations have investigated the cost of establishing log storage yards. The cost estimates were from $4 to $6 million each. Other dryland sites were not investigated in detail but would likely cost more and, in addition, have undesirable environmental trade-offs (dust, noise, increased truck traffic over inadequate roads, increased energy consumption). This alternative could eliminate all tideland log storage. In the staff's opinion, dryland storage is not a reasonable alternative at this time because of the high cost and other adverse environmental impacts.

Elimination of Loose Log Storage

Most log handling and storage in Coos Bay occurs in compact rafts. However, some loose log storage is still practiced over tidelands, i.e. loose logs are corralled inside a large ring of boom logs. Loose log storage areas are generally used under two sets of circumstances: (1) when there is a seasonal surge in log numbers coming from the woods that cannot be immediately accommodated in customary rafts and (2) when there may be no immediate market for certain log types. It is not unusual that many logs in loose storage are culls with no certain future usage schedule.

Since the loose logs are free to shift inside the enclosure, and since damage to benthic life occurs rapidly, a relatively small volume of logs can soon damage the biological productivity in the total loose log storage area.

Currently, approximately 75 acres of tidelands are used on a regular basis for loose log storage. Some of these areas are in side pouches of Isthmus Slough, while the other lands are located down farther in the main bay. From a biological productivity point of view, the down-bay lands are deemed to have greater importance than those in the slough. This is not in the least to imply that there is no biological value or productivity on those lands in the slough, merely to indicate that it is the lesser of the two areas.

Converting loose log storage to compact rafts or confining the logs to the smallest possible area potentially could reduce the presently impacted area by 50 percent. This could incur certain added costs for additional "boom sticks" necessary in raft building or confining the logs.

Bundling Logs

Binding logs into bundles, inside rafts, could reduce the area of presently impacted tidelands by about 50 percent. Due to buyer demand, one company currently bundles logs for export. Export logs now occupy an esimated 20 acres of tidelands. The company reports a capital investment of slightly under $100,000 for bundling equipment.

The staff has not extensively explored the bundling option with industry. Bundling appears to carry with it several disadvantages aside from capital investments. There are worker safety problems associated with releasing steel bands. In addition, certain areas of present transport channels and non-grounding storage areas may not have enough depth to float bundles.

Deep Water Storage Sites (where logs will not go aground)

The staff estimates that a minimum of 70 to 80 acres of deep water storage sites are available in the Coos Bay system during winter, and 110 to 125 acres in summer. High flows and storm forces limit the areas for secure winter use. Some up-river storage is not used in winter to prevent possible bridge damage by rafts that may be torn loose in flood periods.

It is probable that some added deep water storage area might be created by shifting presently used tie-up pilings from adjacent tideland sites to deeper water. It is estimated that about 20 acres could be moved to the better depth, at a cost of $175,000 to $300,000 for new piling. It should be noted that the down-bay tidelands now affected by grounding logs are in the general migration path for most of the juvenile salmonid fishes coming out of the Coos River system.

Industry personnel believe they are currently utilizing all of the deep water storage sites which neither impair navigation nor are subject to excessive raft loss due to winds, floods, and other rough water events.

Limiting Storage Time

The normal residency period for a commercial log in Coos Bay is between three and eight weeks; that is from first entry through processing at the mill. This norm, however, may be upset by fluctuating market demands for specific log types. There have been instances when certain log types remained in water storage for several years while awaiting economically satisfactory markets to develop. It is usually the "chip" logs for the pulp market or logs for other specialty uses that remain in longer storage.

Item 7 of the Environmental Quality Commission's existing Log Handling Policy reads, "The inventory of logs in public waters for any purpose shall be kept to the lowest practicable number for the shortest practicable time considering market conditions and the quality of water at the storage site." The original staff proposal for this item of the policy contained a time limit of 12 months for in-water log storage. Industry opposed the specific limit and the Commission subsequently deleted a specific time limit in favor of the above policy language.

If the log storage period could be limited to a shorter period, fewer estuarine storage acres would be needed. For instance, the staff estimates that a maximum storage period of 12 months in the Coos Bay estuary would reduce the needed tideland storage sites by 60 acres.

General Comment

The staff believes that some incremented combination of the above alternatives could be implemented in a relatively short period of time to achieve some reduction in present tideland storage. The staff does not believe it would be practicable to eliminate all tideland storage in the near future.

More detailed site specific evaluations will be necessary in most cases to base decisions on.

Formulation & Discussion of Alternative Management Strategies

Recognizing that damage to aquatic life is occurring on tidelands where logs go aground, that some practicable alternatives may exist to reduce but probably not eliminate tideland storage in the near future, and that conditions could conceivably change in the future to make it practicable to eliminate most if not all tideland storage of logs, the staff believes the Commission should clearly declare as a matter of policy that the Department should seek to protect and enhance estuary aquatic productivity. Thus, management strategies should deal with the timing for increments of progress.

Following are three possible management strategies:

1. Require industries to conduct detailed site specific evaluations and submit to the Department within 6 months detailed programs and timetables for reducing tideland storage to an absolute minimum within 3 years.

   This alternative would require immediate investment by industries in development and implementation of programs. EQC approval of programs and timetable would probably be required to assure appropriate balance between social, economic, and environmental factors.

2. Require industries to achieve some reduction in tideland storage on a short range basis and establish a process for further reductions over the long term. Short term reductions would be achieved by minimizing loose log storage and limiting the duration of storage.

   For longer term reductions, prior to DEQ signoff on each application to the Corps of Engineers and/or the Division of State Lands for permits to place or replace piling, the applicant would be required to provide evidence to DEQ that tideland log storage will be minimized and deep water storage maximized. No approval for replacement of piling in areas where logs go aground would be granted without substantial evidence that no other alternative exists.

   This alternative would achieve some immediate reductions. It would also allow the industry and the agency to phase in a tidelands storage reduction program over a period of 15 to 20 years in harmony with normal replacement schedules on tie-up piling. Thus, there would be minimal additional costs for piling above that normally anticipated. Existing permit application procedures would provide notification and some of the information needed for review. Additional information would have to be provided to DEQ in most cases however, before approval would be given.

3. Require industries to reduce or phase out tideland storage as opportunity arises.

   This alternative would establish no clear schedule or evaluation procedure.

Any strategy selected could either be set forth as a guideline attached to the existing log handling policy adopted October, 1975, or incorporated into the policy by amendment.

Summation

1. In October, 1975, the EQC adopted a statement of policy regarding log handling in Oregon's public waters. Section 4 of this policy statement required phase-out of tideland log storage (where logs go aground on tide change) if more than nominal damage to aquatic life and/or water quality result. Section 7 required that storage times in water be minimized but established no firm time limit.

2. The Department completed a study in Coos Bay in December, 1978, which demonstrated significant damage to aquatic life in the areas where stored logs aground. Fishery agencies support a conclusion of significant damage to aquatic life.

3. Industry views the damage as insignificant when compared to the productivity of unaffected tidelands in the Coos Bay Estuary.

4. The Department has investigated apparent alternatives to tideland storage and believes that options are available to reduce but not eliminate tideland storage in the near future. However, further site specific evaluation is necessary to develop the details and determine the practicability of alternatives.

5. The Department has identified three alternative management strategies for Commission consideration based on the desirabe long-range goal of protecting and enhancing estuary aquatic productivity. (See previous section.)

Director's Recommendation

Based on the Summation, the Director recommends that Sections 4 and 7 of the Statement of General Policy of the October, 1975, EQC adopted program and Policy on Log Handling in Oregon's Public Waters be amended to read as follows to establish a systematic long-range approach for minimizing tideland storage of logs in public waters:

4. Establishment of new log storage areas where logs go aground on tidal changes or low flow cycles will not be approved by the Department without specific authorization of the Environmental Quality Commission. ~~[Where there is evidence that such areas result in more than nominal damages to aquatic life and/or water quality, phased out in accordance with an approved schedule unless specific authorization for continuance is granted by the Commission in consideration of environmental trade-offs. Any phase-out program taking more than five years shall be subject to approval by the EQC.]~~
In order to protect and enhance aquatic productivity, existing storage areas where logs go aground on tidal changes or low flow cycles shall be minimized in an orderly fashion as follows: (a) within 120 days affected industries shall submit to the Department for approval a proposed program and timetable for minimizing the tideland areas impacted by loose log storage. Any program taking longer than 2 years to implement shall be approved by the EQC. (b) Prior to DEQ signoff on each application to the Corps of Engineers and/or Division of State Lands for a permit to place or replace piling for log raft mooring, the applicant shall provide evidence to DEQ that storage where logs go aground will be minimized. No approval for replacement of piling in areas where logs go aground will be granted without substantial evidence that no other alternative exists. Any adverse decision of the Department may be appealed to the Commission.

7. The inventory of logs in public waters for any purpose shall be kept to the lowest practicable number for the shortest practicable time considering market conditions and the quality of the water at the storage site. Storage for longer than 12 months shall be approved by the Department. Prior to Department approval, the applicant must submit information demonstrating the need for such storage, the location and anticipated duration of storage, the alternatives investigated to minimize tideland storage, and the demonstration that no other practicable alternative is available.

In addition to the above proposed amendments to the policy, it is recommended that the staff work with industry to determine the economic and physical feasibility and environmental benefits of further reductions in tideland storage through bundling of logs. A report shall be submitted to the EQC within one year.

Bill

William H. Young

Attachments:
October 1975 Log Handling in Oregon's Public Waters - Attachment A
August 1979 DEQ Report "The Effects of Log Raft Grounding - Attachment B
January 11, 1979 Public Meeting Testimony - Attachment C
Letters Regarding Log Storage in Coos Bay - Attachment D
February 1979 Weyerhaeuser Company Report - Attachment E
February 1979 Abandoned Boom Areas-Coos Bay - Attachment F

Harold L. Sawyer:em
229-5324
August 15, 1979

LOG HANDLING IN OREGON'S PUBLIC WATERS

An Implementation Program & Policy

Adopted by

THE OREGON ENVIRONMENTAL QUALITY COMMISSION

October 24, 1975

GENERAL SUMMARY OF PROBLEMS

Based on the Department's field evaluations, experience and review of pertinent literature, the following general conclusions about the effects of logs in public waters are drawn:

1. There is ample and conclusive evidence that the bark, debris and leachate releases resulting from dumping, storage and millside handling of logs in public waters can have an adverse effect on water quality. The magnitude of the effect varies with the size and characteristic of the waterway and the nature and magnitude of the log handling operation.

2. Free fall log dumping causes the major release of bark and other log debris.

3. Bark and log debris are the major waste products resulting from logs in water. These materials range in size from microscopic particles to whole logs. Some float but most will sink in a short time. Numerous particles may travel submerged a considerable distance before dropping to the bottom. Bottom deposits of these substances may blanket the benthic aquatic life and fish spawning areas. During submerged decomposition stages the wood products rob overlying waters of dissolved oxygen and often give off toxic decay products.

4. Leachates from logs in water can be a significant source of biochemical oxygen demand and dark color. These generally have minimal impact in larger flowing streams but their effect may be compounded in quiet waters.

5. Where logs go aground during tidal changes or flow fluctu-

ations, they can be a detriment to bottom dwelling aquatic life and can be the cause of increased turbidity.

6. Even though significant improvements have been made at certain log handling areas, further improvements are needed and can be accomplished on a short-term basis by improved log dumping, handling and storage practices at operations that still adversely impact aquatic life and water quality.

7. Because alternatives to the storage and handling of logs in public waters can result in undesirable as well as desirable environmental trade-offs, it is imperative that each operation be carefully evaluated on its own merits.

IMPLEMENTATION PROGRAM

Based on the statement of general policy which follows and case by case water quality assessments, a proposed state permit will be developed for each log handling operation in public waters where problems exist or are likely to occur that will:

1. State specific objectives designed to bring that operation into acceptable compliance with water quality standards.

2. Require the permittee to evaluate alternatives and submit a program and time schedule for meeting specific objectives.

3. Require implementation of a control program as approved by the Department, giving consideration to the impact of alternative methods on the environment.

In accordance with existing permit issuance regulations, each proposed permit would then be subject to review and comment by both the permittee and the public prior to issuance.

STATEMENT OF GENERAL POLICY

The following statement of general policy is set forth to guide both the staff of the DEQ and timber industry representatives in matters pertaining to log handling in public waters:

1. The Environmental Quality Commission and the Department of Environmental Quality acknowledge that transportation and

storage of logs is one of the appropriate uses of public waters of the state so long as such operations are controlled to adequately protect environmental quality, natural resources, public health and safety and the economy of the state.

2. The construction of new wood processing plants which must receive logs directly from public waters will not be approved by the Department without specific authorization of the Environmental Quality Commission. In general, new operations will not be permitted where water quality standards or other beneficial uses would be jeopardized.

3. Existing log dumping, storage and handling shall be adequately controlled, or if necessary phased out, to insure that violations of water quality standards are not caused by such activities. Any control program requiring more than five years to implement shall be subject to approval by the Environmental Quality Commission.

4. Establishment of new log storage areas where logs go aground on tidal changes or low flow cycles will not be approved by the Department without specific authorization of the Environmental Quality Commission. Where there is evidence that such areas result in more than nominal damages to aquatic life and/or water quality, the existing log storage areas where logs go aground shall be phased out in accordance with an approved schedule unless specific authorization for continuance is granted by the Commission in consideration of environmental trade-offs. Any phase-out program taking more than five years shall be subject to approval by the EQC.

5. New free-fall log dumps shall not be permitted. Existing free-fall dumps shall either be phased out as soon as practicable by the installation of DEQ approved easy-let-down devices or controlled in a manner equivalent to the installation of easy-let-down facilities. Any requests for special consideration shall be subject to approval by the EQC.

6. Best practicable bark and wood debris controls, collection and disposal methods, as approved by the Department, shall

be employed at all log dumps, raft building areas and millside handling sites in accordance with specifically approved programs.

7. The inventory of logs in public waters for any purpose shall be kept to the lowest practicable number for the shortest practicable time considering market conditions and the quality of the water at the storage site.

8. Upon specific request, the industry shall provide information to the Department relative to log volumes and usage site locations in public waters.

9. All dry land log storage, wood chip, and hog fuel handling and storage facilities located adjacent to waterways shall be designed, constructed and operated to control leachates and prevent the loss of bark, chips, sawdust and other wood debris into the public waters. Plans and specifications must be approved by the Department prior to construction of new or modified facilities. (Additional approvals may be required relative to air quality and noise impacts).

10. Subsequent to adoption of this policy each industry shall be responsible for cleanup and removal of sunken logs, piling, docks, floats and other structures from its log dumping, handling, and storage sites in public waters when use thereof is to be permanently terminated. Discontinuance for a period of five years is prima facie evidence of the permanence of the termination.

ATTACHMENT B

THE EFFECTS of LOG RAFT GROUNDING ON THE BENTHIC INVERTEBRATES OF THE COOS ESTUARY

PAUL ZEGERS

December, 1978

REVISED AUGUST 1979

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY
Southwest Regional Office
1937 W. Harvard Boulevard
Roseburg, Oregon 97470

INTRODUCTION

The water surface area of the Coos Bay Estuary at high tide is 10,973 acres (Percy, et al, 1974). There are 4,569 acres of Tidelands (Gaumer, et al, 1973). It is the largest of Oregon's estuaries, representing 27% of the total coastal estuarian resources of Oregon.

Although estuaries comprise less than 5% (Hargis, 1975) of the earths surface they are vital in the maintenance of the productivity of the Oceans. Estuaries are among the most productive land in the world. They provide protection for fish and shellfish at various stages of their life cycle. These areas support a great variety and abundance of organisms. Most importantly, estuaries serve as nurseries for a great many fish and marine animals including many commercially important species which spend most of their adult lives offshore.

Depending on geographic region, from 65 to 90% of fish landings are comprised of estuarine-dependent species (Stroud, 1971). Ten million American anglers catch nearly 1-1/2 billion pounds of fish in coastal waters a year, 57% of this catch taken directly from estuaries (Clark, 1975). The 1973 total U.S. landing of all seafood items totaled 4.7 billion pounds valued at over $900 million (Broadhead, 1975). In 1971 the commercial harvest of food fish delivered at Coos Bay was 8,809,929 pounds for an estimated value of over $1.9 million (Percy, 1974).

Man's activities have historically altered natural estuarine systems. Filling and draining for development, dumping and dredging have been major impacts which remove habitat from productivity.

Estuaries are unique environments, comprising a small area of the globe, yet are not only important economically but also crucial to the productivity of the oceans. It is important to carefully examine man's influence on this environment to insure future protection of this valuable resource.

In Coos Bay the estuary has historically been important to the timber-based economy for the handling, transportation and storage of logs. Log handling,

transportation and storage in water has been shown to adversely affect the environment in several ways. Leachates from stored logs and from accumulated wood debris degrade water quality. (Schuytema & Shankland, 1976) Floating wood debris is not aesthetically pleasing. Floating debris can be a navigational hazard to small boats. With time, floating debris sinks and becomes accumulated on the bottom.

The presence of log rafts stored over mudflat areas may also affect the biological productivity of these areas. During low tides, rafts may go aground and rest on these areas, physically disturbing the benthic environment. The cycle of grounding and floating associated with tidal fluctuations continually kneads and destroys the structure of the mudflats.

The purpose of this study was to determine if the grounding of log rafts on the mudflats affected the kinds and numbers of organisms that dwell in the mud and if any effect found was detrimental to the biological productivity of the areas.

The project was undertaken because the practice was suspected of causing a problem. Under Environmental Quality Commission log handling policy, documentation of the problem is required before requiring remedial action.

METHODS

During the spring of 1977 the Coos Bay estuary system was surveyed for suitable sampling locations. The criteria for a suitable site follows:

1) readily accessible by boat
2) exposed mud flat at low tide
3) provision for a suitable log raft grounding and control area within a very short horizontal distance and within the same tidal zone
4) physical characteristics which prevent storage of logs to insure control areas would remain free from log rafts throughout the study
5) Similar substrate in grounded and control areas
6) Geomorphic difference from other sites selected, i.e., different areas within the estuarian system.

By choosing control and grounded sites physically close together, in the same tidal zone, and in the same type of substrate, all obvious variables except for the presence or absence of logs were eliminated.

Examination of the bay yielded very few sites which met all these requirements. Those selected are shown on Figure A. The sites chosen are specifically described below:

Lillian Creek (see Figure 1)

This site was primarily chosen because it did not require a boat for accessibility. It, therefore, could be sampled during bad weather conditions or when time was limited. It is the site of an abandoned log dump at the confluence of Lillian Creek with the Coos River. Physical barriers preventing log storage in the control area are lacking. However, since the area is abandoned with very little movement of log rafts, an assumption was made that the control area would remain free from log rafts. The site provides for control and grounded samples to be taken within 50 feet horizontally from one another (see Figure 1). Substrate is a thick loosely compacted deep mud with a considerable amount of small bark chips. Location was within a tidally influenced fresh water stream so Salinities would be low.

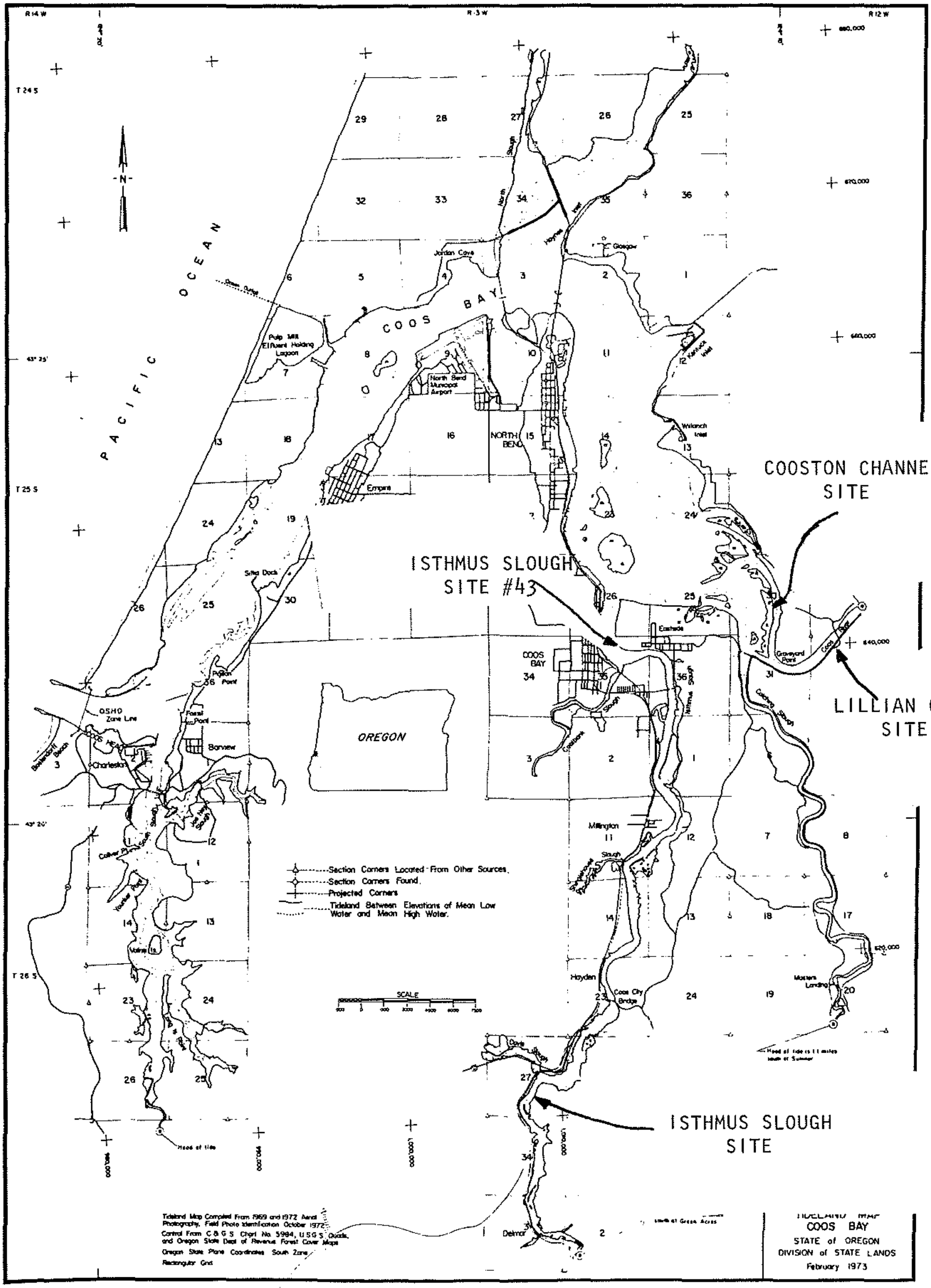
Cooston Channel Site (see Figure 2)

Cooston Channel is located in the upper reaches of the bay northeast from Catching Slough. The location of pilings and a bend in the channel limit storage of logs resulting in a large control area within a zone of very heavy log storage. The area is specifically located immediately across from pilings marked "3" and"4" in Cooston Channel. Horizontal distances between log storage areas and control areas varied between 80 and 400 feet depending on the location of stored logs. The substrate throughout the area is composed of a fine silt mud with an anearobic layer beginning at 5 cm (Bolinger, et al, 1970). The channel is 12-13 feet deep with a wide range of salinities depending on season and tidal level.

Isthmus Slough Area (see Figure 3)

The Isthmus Slough sampling area was located about one mile south of Davis Slough on the east bank. A series of old pilings and the remains of two ship

FIGURE A



PACIFIC OCEAN
COOS BAY
OREGON
COOSTON CHANNEL SITE
ISTHMUS SLOUGH SITE #43
LILLIAN CREEK SITE
ISTHMUS SLOUGH SITE
North Bend Municipal Airport
NORTH BEND
Empire
COOS BAY
Eastside
Charleston
Barview
Millington
Hayden
Delmar
Section Corners Located From Other Sources.
Section Corners Found.
Projected Corners
Tideland Between Elevations of Mean Low Water and Mean High Water.
SCALE
COOS BAY
STATE of OREGON
DIVISION of STATE LANDS
February 1973

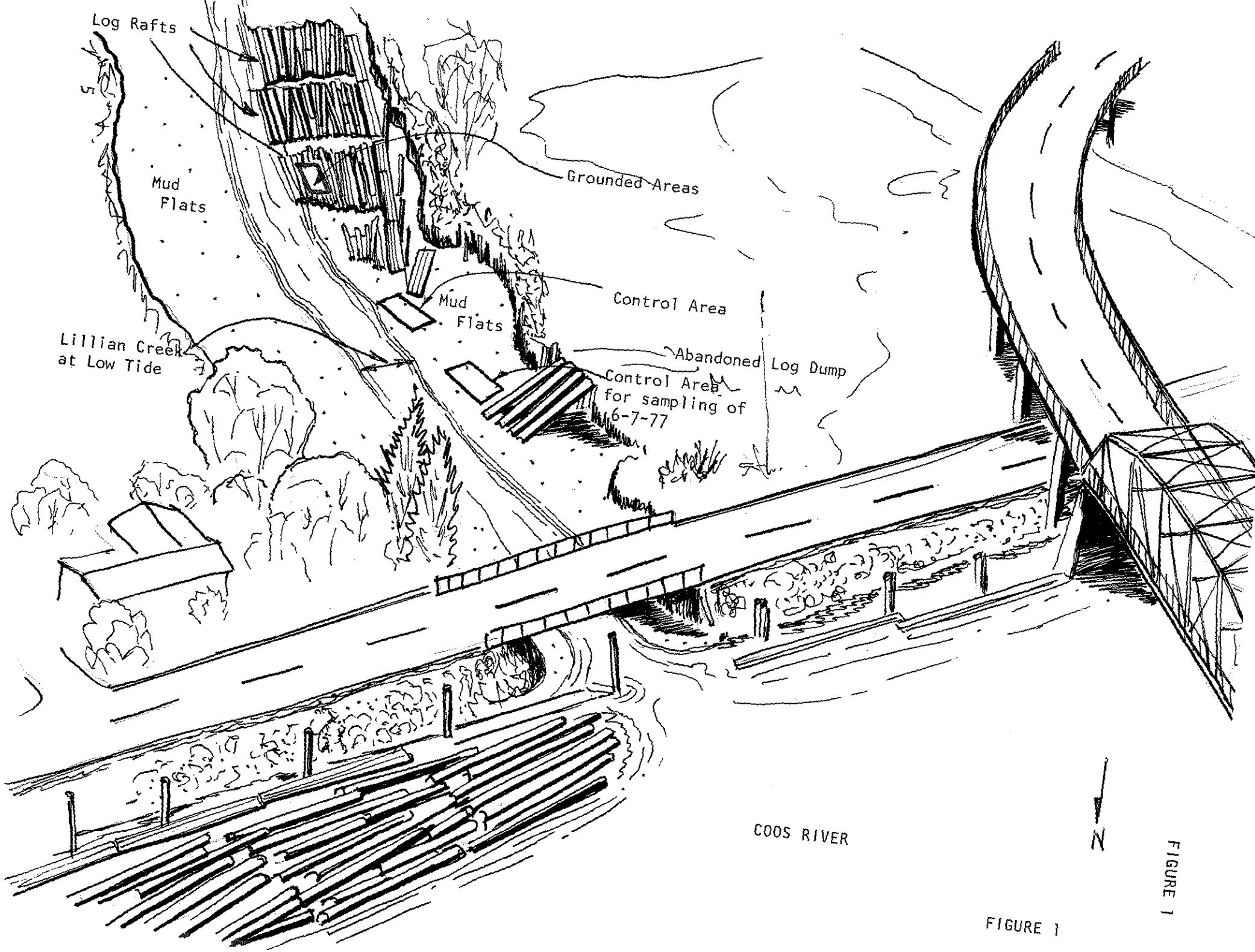
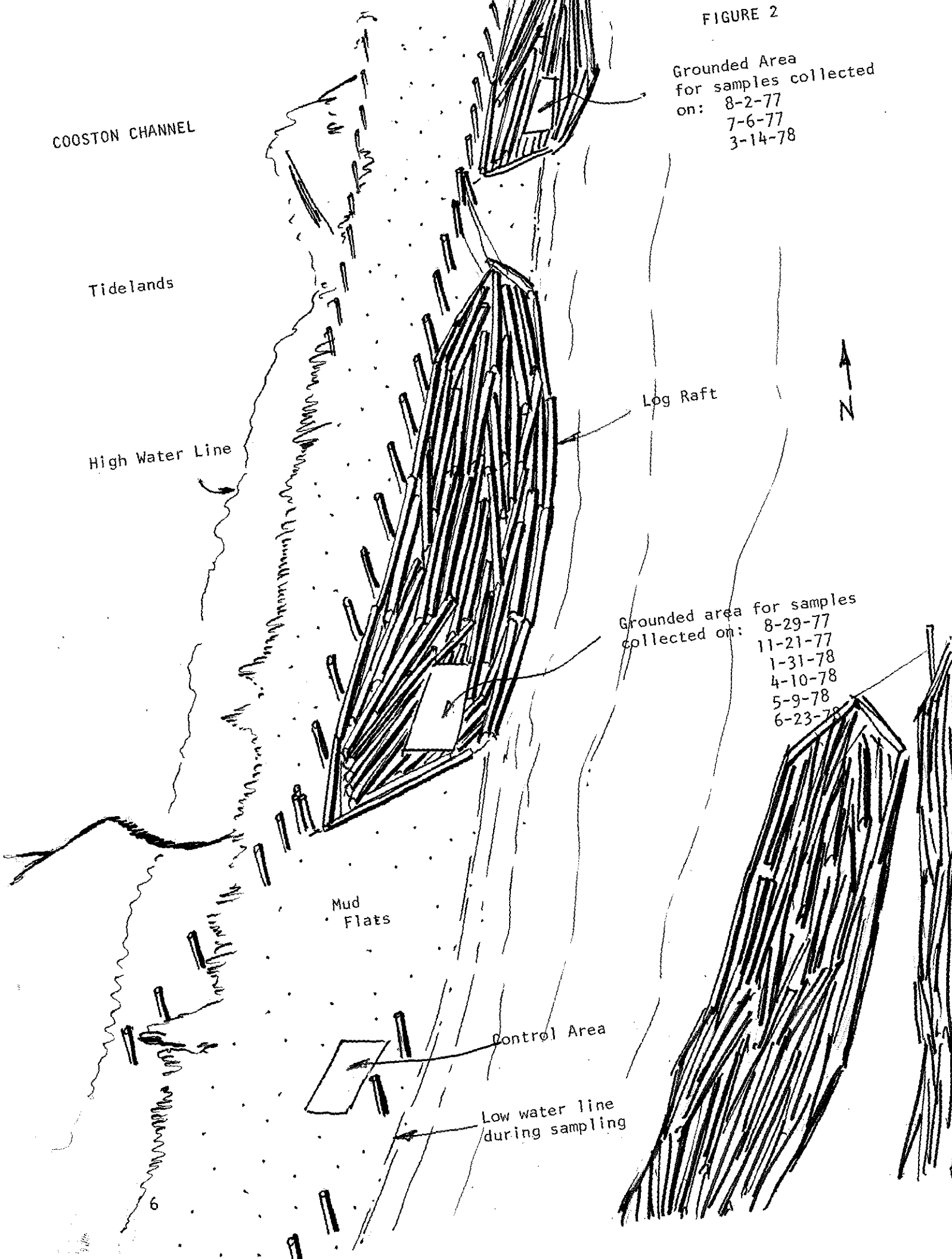


FIGURE 1

FIGURE 1

FIGURE 2


Grounded Area
for samples collected
on: 8-2-77
7-6-77
3-14-78
COOSTON CHANNEL
Tidelands
Log Raft
N
High Water Line
Grounded area for samples
collected on: 8-29-77
11-21-77
1-31-78
4-10-78
5-9-78
6-23-78
Mud
Flats
Control Area
Low water line
during sampling

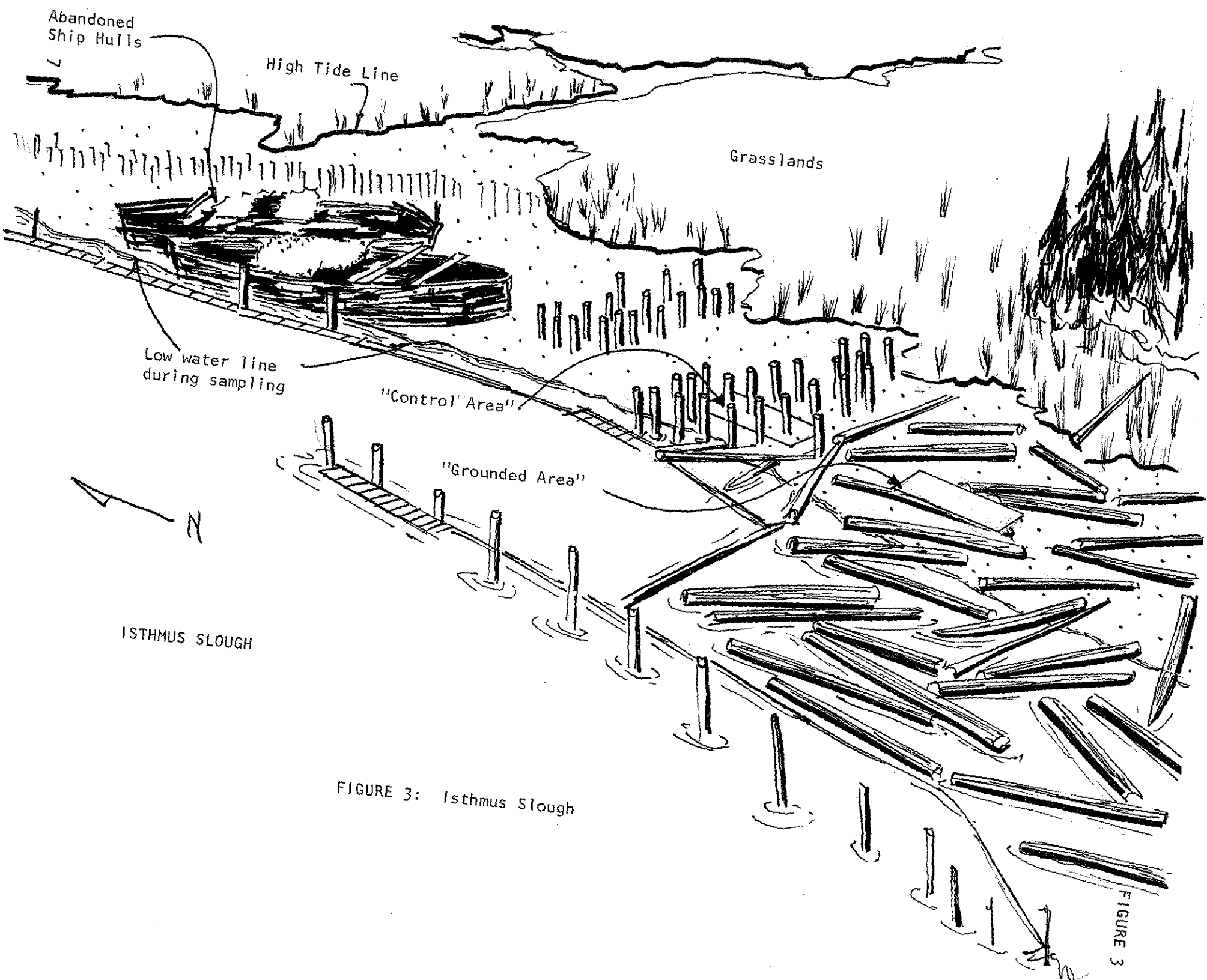


FIGURE 3: Isthmus Slough

FIGURE 3

hulls provide a control area adjacent to a pen of loosely packed old logs. The two sampling locations were within 15 feet of one another. This site was one of the only areas in Isthmus Slough where a suitable control site could be found adjacent to a grounded raft. The substrate consisted of 10-15 cm deep silt and coarse sand/clay with a layer of bark chips and wood debris underneath.

Isthmus Slough Site #43 (see Figure 4)

A limited amount of data was collected from a sampling site referred to as "Site 43". This area was located on the east bank of the bay directly across from the City of Coos Bay and adjacent to a navigational aid labled "43". The site was first identified as being suitable in November, 1977 and unfortunately was removed by dredging after March, 1978. Prior to its removal only 3 biological surveys were conducted. A sharp bend in the channel provided a mud spit that served as the control area. The control and grounded sites were within 40 feet of each other.

The substrate consisted of coarse mud with less than 1" to the anaerobic layer (Fitchko & Smolen, 1970). There are no fresh water inlets to the area.

At each area, sampling sites were chosen to allow core samples in grounded and adjacent control (non-grounded) areas. These sites were also chosen to be similar in appearance and also within the same tidal zone. Reference points were selected at each area to insure sampling within the same tidal zone from survey to survey. It was arbitrarily designated that a tidal zone be a band of no greater width than eight feet. This was done for consistency and to insure organisms sampled from control and ground sites were from the same tidal zone. Twelve core samples were taken during each survey, six from the control area and six in the grounded area. The depth of these cores were generally 15 cm. During the first several surveys this depth of the sample varied between 10 to 20 cm due to substrate conditions. For example, originally depths of 10 cm were taken in Isthmus Slough because of bark accumulations at that level. Later, for consistency, 15 cm. cores were sampled. The 20 cm deep cores were abandoned for the following reasons:

1) 15 cm. of substrate saved time to process during sieving.
2) Smith (1977) reported that 97% of benthic organisms in Snohomish River Estuary in Washington occurred in top 8 cm. of the mud flats.

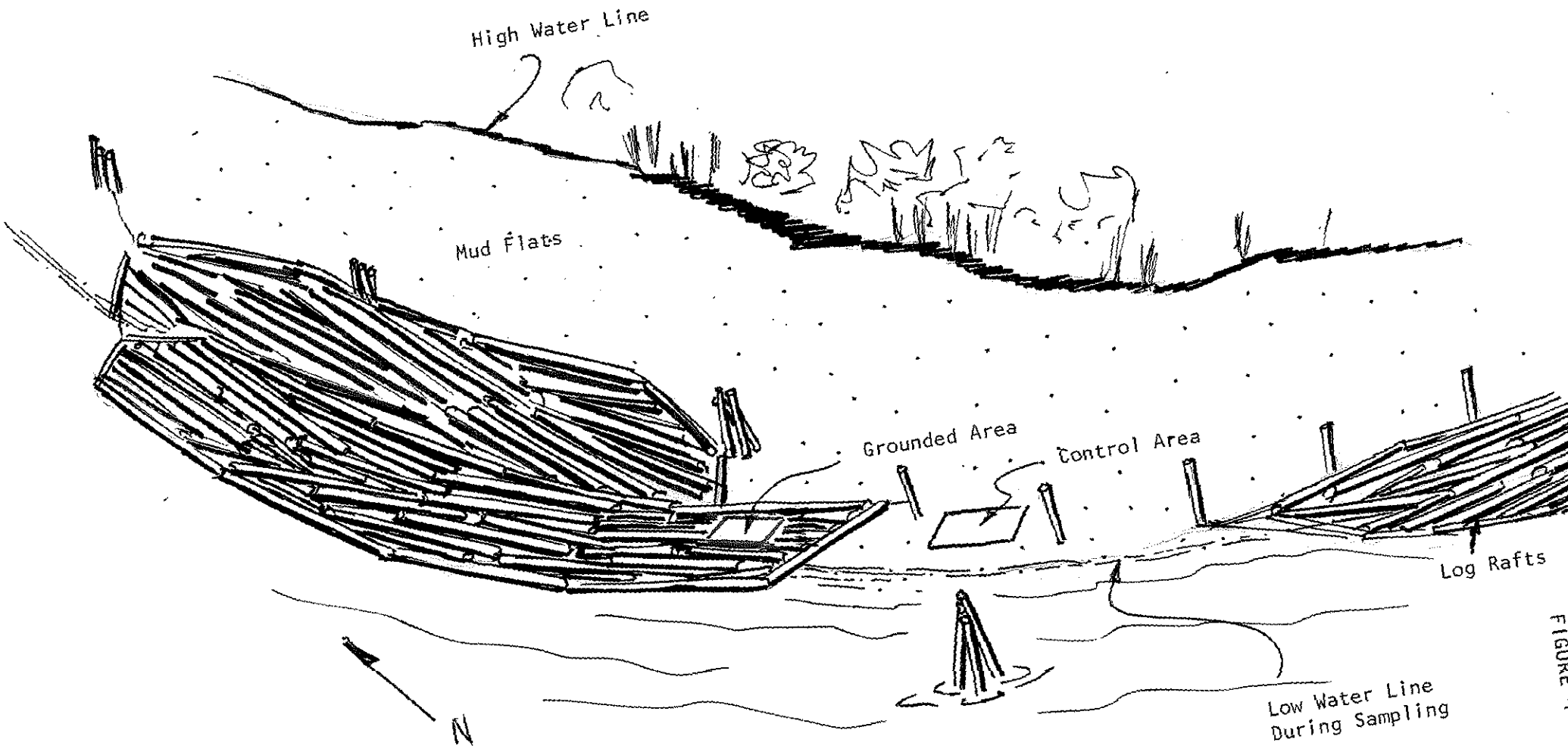


FIGURE 4: Isthmus Slough
Site #43

3) Literature has shown that the majority of species dwell in the top 10 cm. layer of mud flats (see Discussion Section).

A core diameter of 10.2 cm. was chosen for convenience. This diameter was assumed to be suitable for sampling most mud dwelling invertebrates since, 1) it was larger than those used in a similar study (Smith, 1977) and, 2) preliminary study showed that the core size was large enough to give statistical difference between cores from control and grounded areas.

Samples were sieved within 48 hours after collection. The smallest diameter sieve retained all material greater than or equal to 0.9 mm. Upon sieving organisms were 1) either immediately sorted from debris and preserved in 10% formalin or, 2) all material retained by the smallest sieve diameter was preserved in 10% formalin and organisms were separated from debris at a later time for identification and tabulation.

An attempt was made to identify all organisms to species level. Organisms which were not identifiable, either from lack of taxonomic information or due to mutilation or loss of features used for identification, were counted and labeled "unidentified".

Temperature and salinity data of water adjacent to sampling areas were taken in the field and recorded. Other information recorded in the field was: time, tidal level, weather and general observations

and approximate distances: from control to grounded plots
samples to water
between control cores (maximum & minimum)
between grounded cores (maximum & minimum)

RESULTS

Data was reduced and tabulated by individual specie (actual organism) (or best identification possible) and also grouped by Phylum (worms, crustacean, mollusc, etc). Comparisons of total number of organisms from control and grounded sites were also made. The arithmetic mean number of individuals and the 95% confidence interval for all comparisons made are summarized in Tables 1-4.

Figures 5-8 graphically depict comparisons of grounded and control populations for phylum and total organisms data for each of the experimental

sites. Data was reduced to average number of organisms per core plus or minus the confidence interval at the 95% level. This information was plotted versus time on tables by Phylum. The confidence interval was plotted as a band. Therefore, the true mean can be assumed to fall within this band with 95% confidence. When the control and experimental bands overlap it cannot be assumed that a difference in means occurs between the two populations. It also does not necessarily imply that the populations are the same as more sophisticated statistical analysis may show differences.

Data for cumacea and copepodes were not added into total Arthropode calculations, but were handled separately. This was because the species in these groups that were encountered were free swimming and not dwelling in the mud flats. Also, some individuals were smaller than the minimum sieve opening size and, therefore, results were suspect. Therefore, in order to prevent biasing the arthropode data the cumacean and copepode data is reported but not added into the total.

Cooston Channel (Fig. 5)

Cores taken during sampling on 7-6-77 were 20 cm. deep; all others were 15 cm. Therefore, caution should be taken when direct comparisons of data are undertaken.

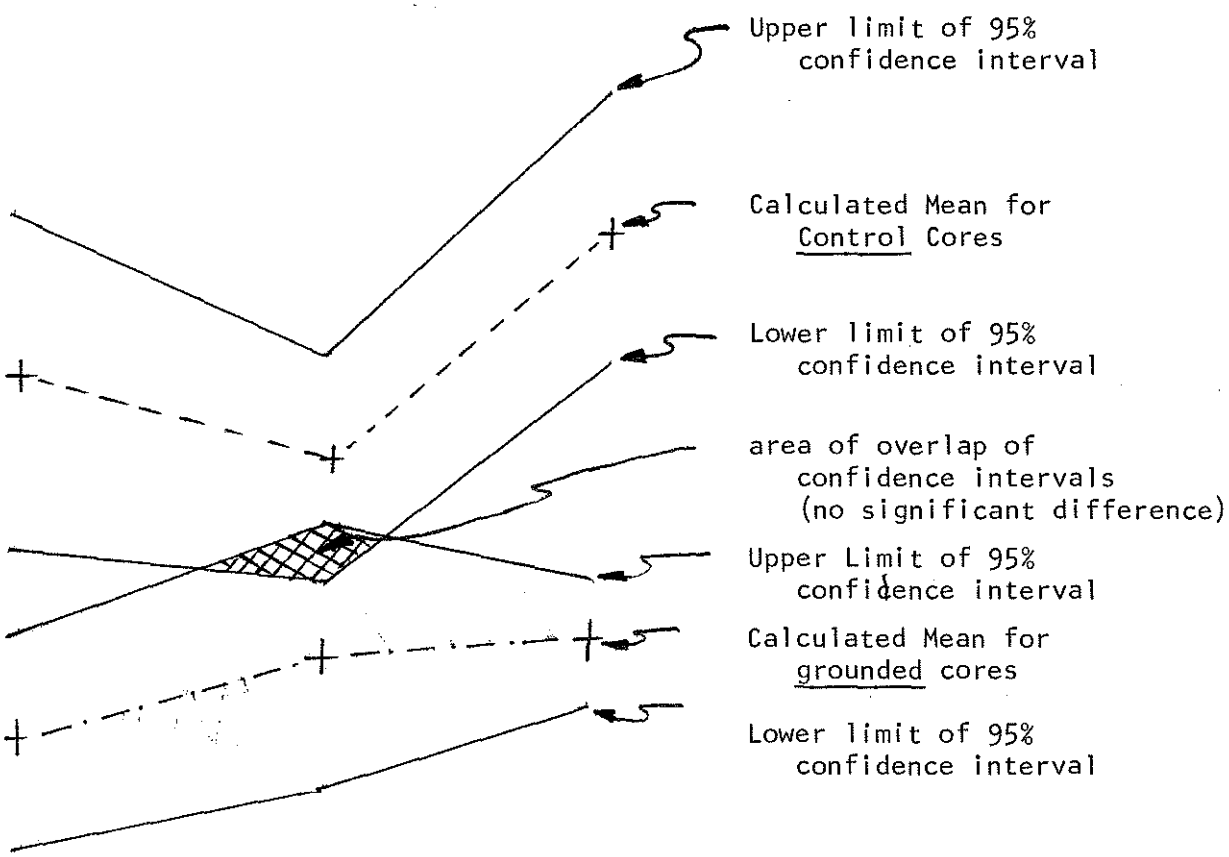
Annelides (Fig. 5a), as a group, showed a significantly greater number of individuals in the control plot than in the grounded plot throughout the entire sampling period. The average number of annelides decreased during the winter months and organisms in the control area remained statistically more numerous than those in the grounded area.

A similar pattern was observed for total number of organisms per core (see Fig. 5d).

Molluscs remained fairly uniform in number throughout the study with the control showing significantly higher average numbers than the grounded with the exception of three sampling periods in the late spring where no statistical difference between population could be shown.

Arthropodes (Fig. 5b) also showed decreased average numbers of individuals for

KEY TO FIGURES:



The 95% confidence intervals (C.I.) were generated mathematically and plotted as a solid line for both the upper and lower level of the interval. From the recorded data it can be stated with 95% certainty that the true mean falls within this upper and lower limit. If the bands for the control and grounded do not overlap, the means can be considered statistically different. If the bands overlap (represented by cross hatching) the means cannot be assumed to be from different populations (not statistically different with the test used). However, this overlap does not necessarily imply that the sample groups come from the same population. More sophisticated testing or further data collection may (or may not) prove them to be significantly different.

FIGURE 5a Average No. of annelids per core at Cooston Channel plotted against time

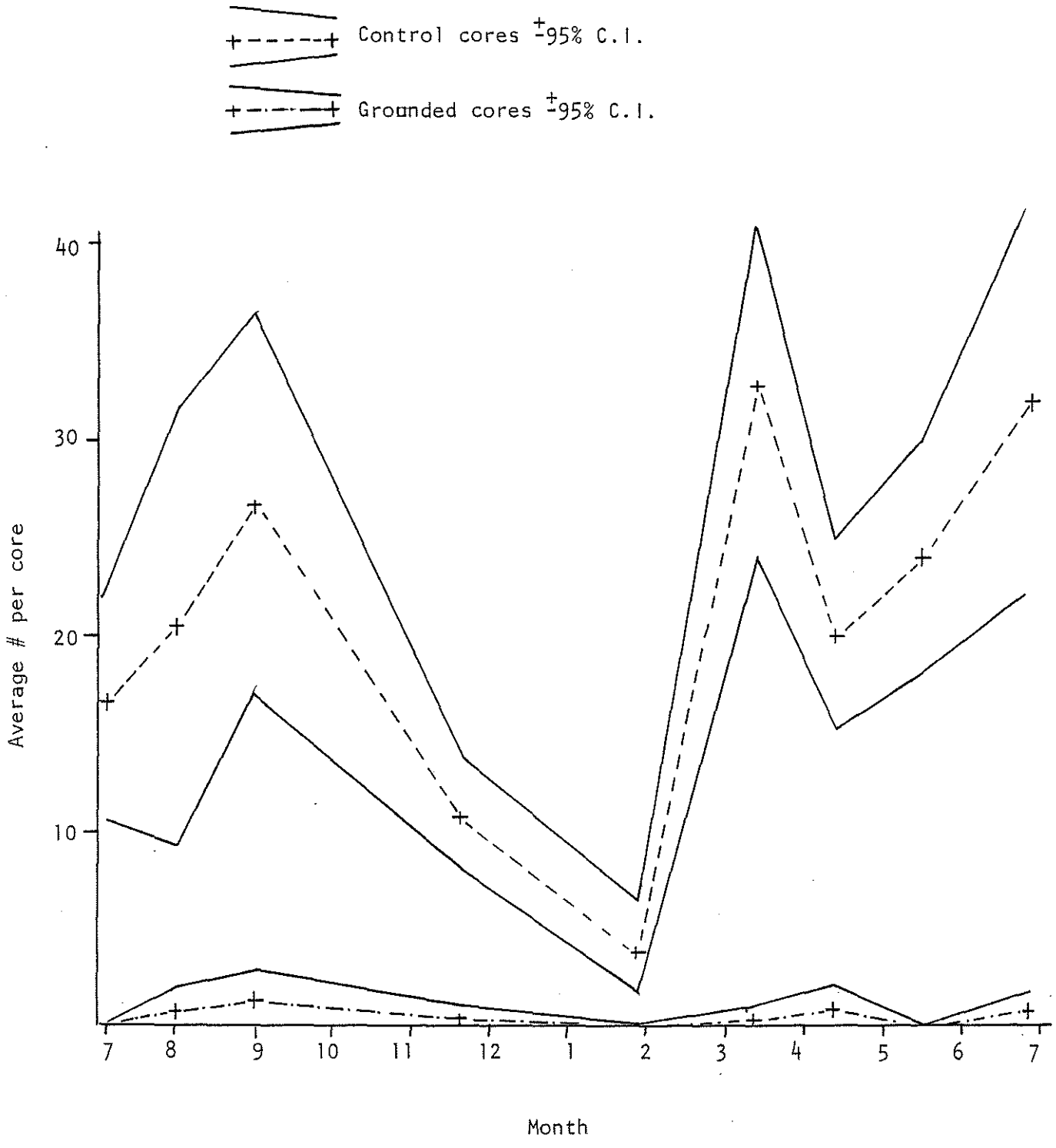


FIGURE 5b The average No. of arthropods per core at Cooston Channel plotted against time.

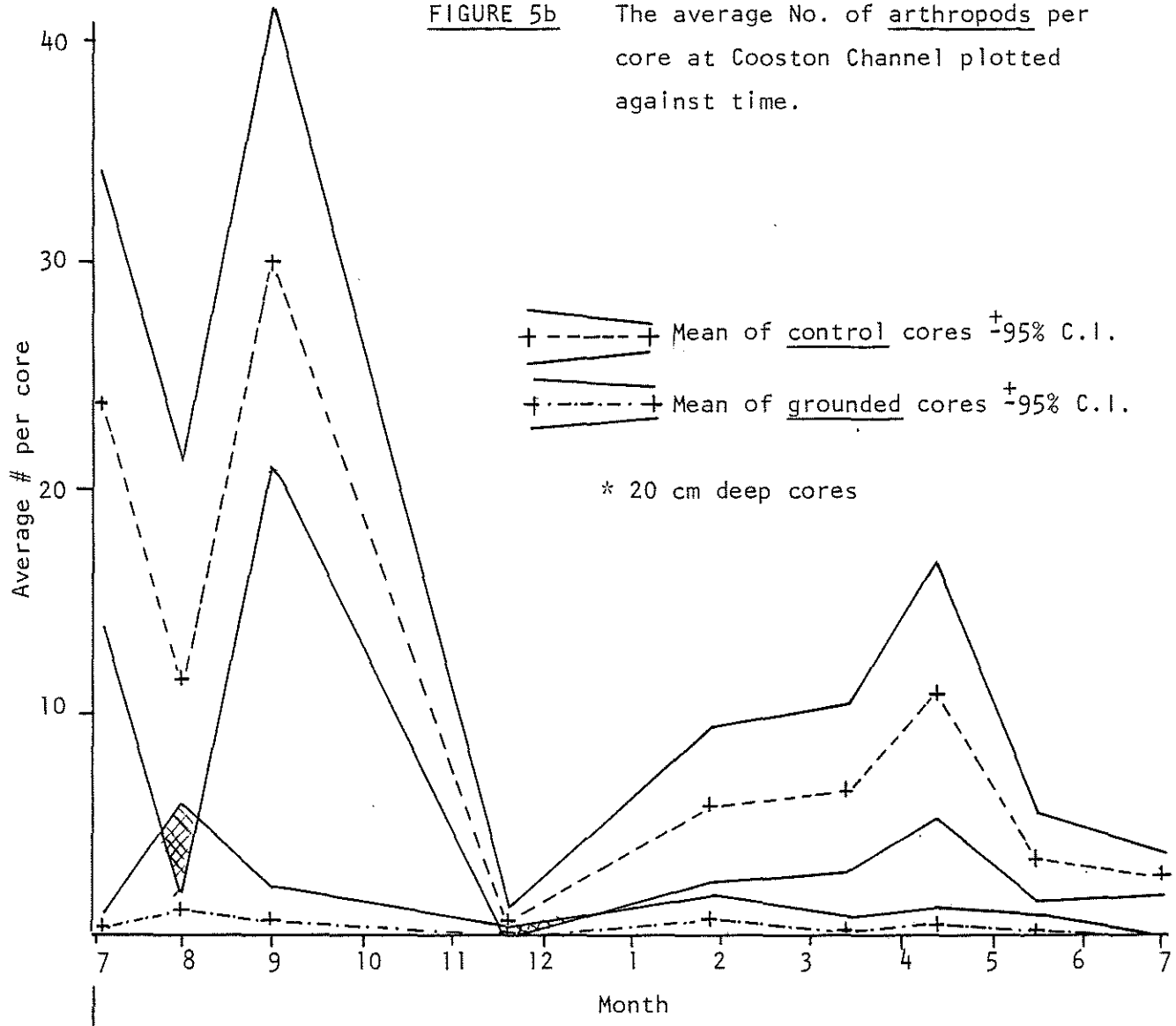


FIGURE 5c The average No. of Molluscs per core at Cooston Channel plotted against time.

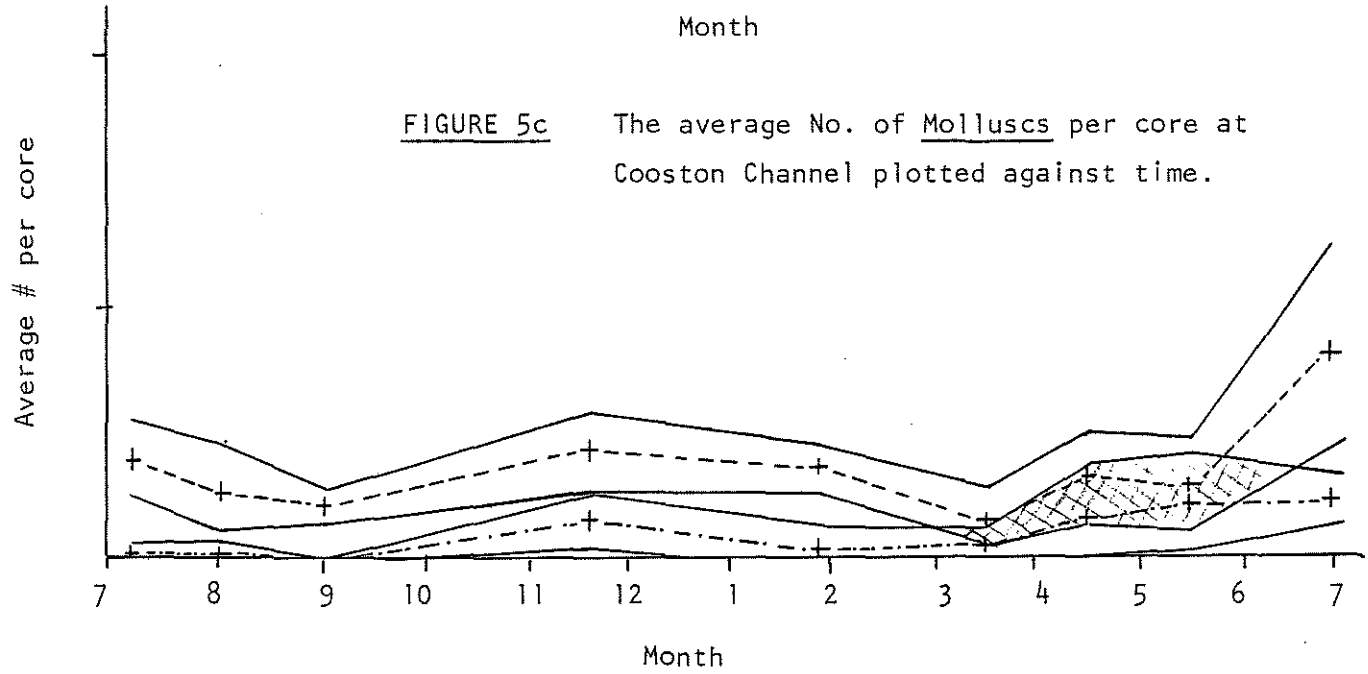


FIGURE 5d The average number of all organisms per core v.s. month for Cooston Channel site.

* 20 cm deep cores

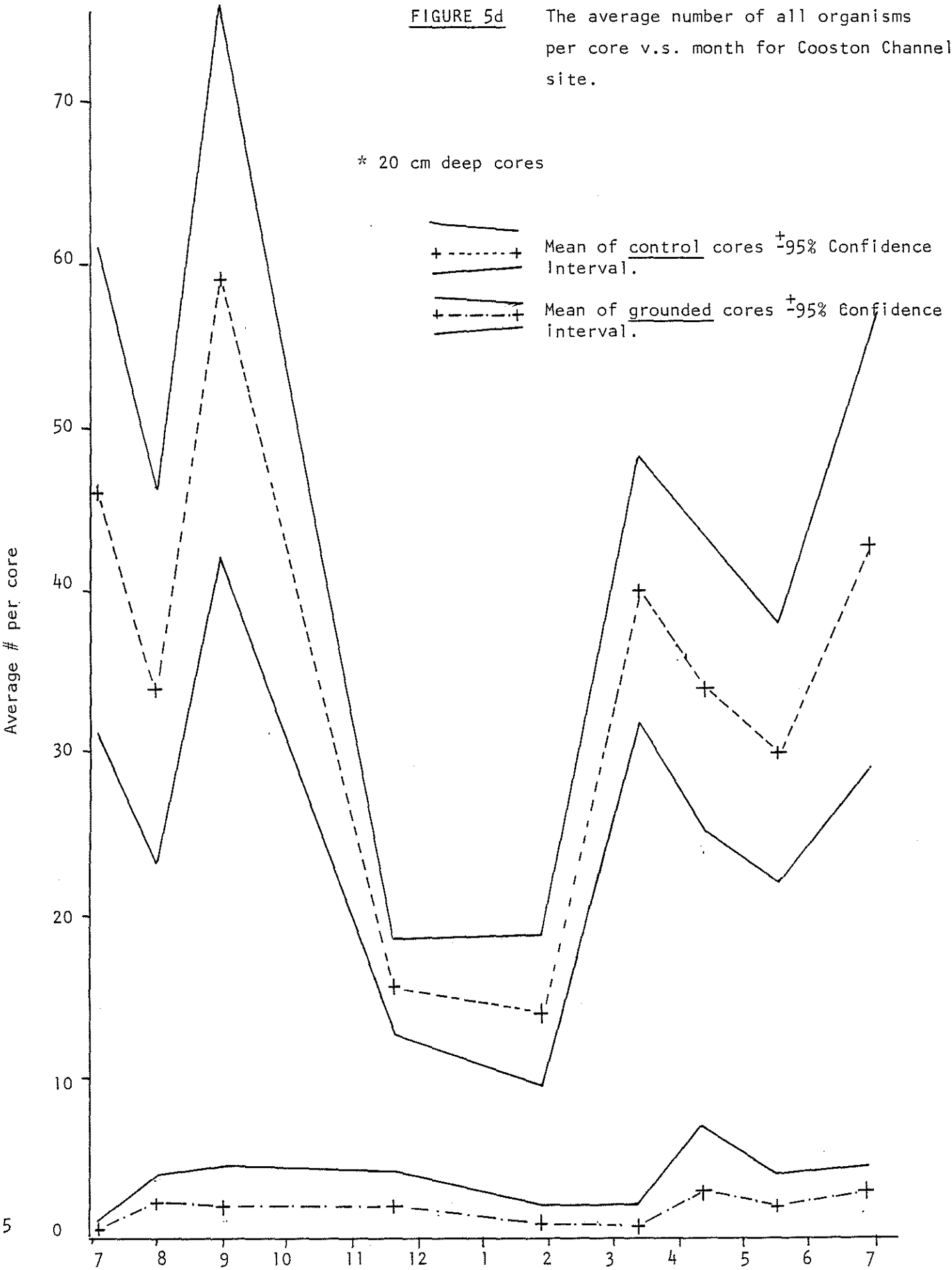


TABLE 1 Average No. of organisms per core ±95% confidence interval for Cooston Channel

COOSTON CHANNEL		7-6-77	8-2-77	8-29-77	11-21-77	1-31-78	3-14-78	4-10-78	5-9-78	6-23-78
ANNELIDA	control	16.66 ± 6.1	20.5 ± 11.2	26.8 ± 9.6	10.83 ± 2.76	3.83 ± 2.4	32.83 ± 8.45	20.0 ± 4.87	24.0 ± 6.61	3.2 ± 10.03
	grounded	0 ± 0	0.66 ± 1.39	1.17 ± 1.53	0.33 ± 0.59	0.0 ± 0.0	0.17 ± 0.47	0.83 ± 1.13	0.0 ± 0.0	0.83 ± 0.86
Amphicteus mucronata	control	1.0 ± 1.45	0.33 ± 0.94	2.17 ± 1.34	3.17 ± 1.34	0.83 ± 0.47	1.67 ± 1.87	1.67 ± 0.93	2.5 ± 1.2	3.83 ± 1.98
	grounded	0 ± 0	0.5 ± 0.96	0.67 ± 1.12	0.17 ± .97	0 ± 0	0 ± 0	0.5 ± 0.63	0 ± 0	0.83 ± 0.86
Heteromastus filiformis	control	7.67 ± 3.89	11.5 ± 8.7	12.17 ± 4.78	2.17 ± 1.52	1.67 ± 1.57	14.83 ± 4.07	9.33 ± 3.45	10.33 ± 4.90	21.83 ± 5.20
	grounded	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0.17 ± 0.47	0 ± 0	0 ± 0	0 ± 0
Nereis sp.	control	1.83 ± 0.86	2.5 ± 2.79	4.5 ± 1.88	4.67 ± 1.57		0.33 ± 0.67	1.0 ± 0.73	1.17 ± 0.86	2 ± 1.45
	grounded	0 ± 0	0.17 ± 0.47	0.50 ± 0.96	0.17 ± 0.47		0 ± 0	0.33 ± 0.67	0 ± 0	0 ± 0
Capitella capitata	control	1.0 ± 1.92	6.17 ± 5.69	8 ± 4.59	0.83 ± 1.13	1.33 ± 1.39	16.0 ± 3.8	8 ± 1.62	9.17 ± 3.20	5.33 ± 3/45
	grounded	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0
unid. annelides	control	5.17 ± 2.76							0.83 ± 0.86	
	grounded	0 ± 0							0 ± 0	
ARTHROPODA	control	23.8 ± 10.8	11.5 ± 9.9	30.0 ± 14.3	0.5 ± 0.62	5.83 ± 3.66	6.50 ± 3.68	10.83 ± 5.78	3.5 ± 2.15	2.67 ± 0.94
	grounded	0.33 ± 0.59	1.33 ± 4.77	0.17 ± 0.47	0.17 ± 0.47	0.83 ± 1.13	0.17 ± 0.47	0.5 ± 0.63	0.17 ± 0.47	0 ± 0
Corophium sp.	control	23.8 ± 10.8	11.33 ± 10.07	29.33 ± 12.79	0.17 ± 0.47	5.83 ± 3.66	6.50 ± 3.68	10.83 ± 5.78	3.5 ± 2.15	2.67 ± 0.94
	grounded	0.33 ± 0.59	0.33 ± 2.14	0.17 ± 0.47	0.17 ± 0.47	0.83 ± 1.13	0.17 ± 0.47	0.5 ± 0.63	0.17 ± 0.47	0 ± 0
unid. isopode	control		0.17 ± 0.47							
	grounded		0 ± 0							
unid. cumacean	control	1.5 ± 1.58	0.33 ± 0.94	0.67 ± 1.12	0.67 ± 0.59	0.17 ± 0.47	0 ± 0	0.83 ± 1.13	0.17 ± 0.47	0.5 ± 0.90
	grounded	3.5 ± 3.6	2.33 ± 0.94	1.67 ± 1.73	0.5 ± 0.63	0 ± 0	0.67 ± 0.93	1 ± 1.03	0.66 ± 1.39	0 ± 0
unid. amphipodes	control			0.67 ± 1.87						
	grounded			0 ± 0						
unid. copepode	control			0 ± 0	0.33 ± 0.67					
	grounded			0.5 ± 0.63	0 ± 0					
MOLLUSCA	control	4.0 ± 1.45	2.67 ± 1.73	2.17 ± 0.47	4.33 ± 1.87	3.5 ± 0.96	1.5 ± 1.31	3.17 ± 1.69	2.83 ± 1.70	8.17 ± 4.20
	grounded	0.17 ± 0.47	0.17 ± 0.47	0 ± 0	1.5 ± 1.2	0.33 ± 0.94	0.5 ± 0.63	1.5 ± 2.15	2.0 ± 1.92	2.33 ± 1.18
Macoma sp.	control	1.17 ± 11.86	1.17 ± 1.13	0.83 ± 0.86	2.33 ± 1.73	2.33 ± 0.94	1.17 ± 1.34	2.17 ± 8.4	0.83 ± 1.13	3.67 ± 1.21
	grounded	0 ± 0	0 ± 0	0 ± 0	0.83 ± 0.47	0.17 ± 0.47	0.5 ± 0.63	1.17 ± 1.13	0.33 ± 0.67	1.33 ± 1.18
Tellina sp.	control	2.83 ± 2.21	1.5 ± 1.73	1.33 ± 0.59	2.0 ± 1.26	1.17 ± 0.86	0.17 ± 0.47	1 ± 1.45	2.0 ± 1.62	4.67 ± 2.68
	grounded	0.17 ± 0.47	-.17 ± 0.73	0 ± 0	0.67 ± 0.93	0.17 ± 0.47	0 ± 0	0.33 ± 0.67	1.67 ± 2.00	1.0 ± 0.27
TOTAL ORGANISMS	control	46 ±15.08	34.67 ±11.56	59.0 ±16.8	15.67 ± 2.9	14 ± 4.6	40.67 ± 8.27	34 ± 9.15	30.33 ± 8.04	42.83 ±13.95
	grounded	0.5 ± 0.96	2.17 ± 2.56	1.5 ± 2.27	2.0 ± 2.05	1.17 ± 0.86	0.83 ± 1.34	2.83 ± 4.42	2.17 ± 1.97	3.17 ± 1.53

TABLE 2 Average No. of organisms per core ±95% confidence interval for Isthmus Slough

* Too numerous to count

ISTHMUS SLOUGH		7-18-77	9-14-77	9-27-77	12-21-77	4-26-78	9-21-78
ANNELIDA	control	66 ± 21.18	32.33 ± 4.8	28.6 ± 10.04	10.5 ± 2.15	11.5 ± 2.79	33 ± 5.8
	grounded	1.83± 1.70	1.0 ± 1.03	0.5 ± 0.63	0.5 ± 0.63	0.67± 0.93	17.67±4.3
Amphicteus mucronata	control	36.33± 15.48	12.67 ± 3.08	11.8 ± 4.95	1.67± 0.94	2.83± 2.17	15.33±3.38
	grounded	0.67± 0.93	0.33 ± 0.67	0.17 ± 0.47	0± 0	0.5 ± 0.67	9.33±2.99
Heteromastus filliformis	control					3.17± 1.98	
	grounded					0± 0	
Nereis sp.	control	19.33± 10.75	19.33 ± 2.87	16.4 ± 7.70	8.83± 1.98	5.5 ± 1.74	17.67±3.30
	grounded	0.5 ± 0.63	0.33 ± 0.93	0 ± 0	0.5 ± 0.63	0 ± 0	8.33±4.57
unid. annelide #1	control	3.83± 4.26	0.33 ± 0.67	0.4 ± 0.76		0 ± 0	
	grounded	0.17± 0.47	0.33 ± 0.67	0.33± 0.67		0.17± 0.47	
unid. annelide #2	control	6.5 ± 4.52					
	grounded	0.5 ± 0.96					
ARTHROPODA	control	8.5 ± 12.75	8.5 ± 3.75	9.8 ± 4.42	3.17± 1.84	3.17± 2.23	4.67±1.57
	grounded	0.33± 0.94	0.33 ± 0.67	0.17± 0.47	1.0 ± 1.45	0.33± 0.94	2.0 ±2.05
Corophium sp.	control	8.5 ± 12.75	8.5 ± 3.75	8.17± 4.95	3.17± 1.81	3.17± 2.23	4.67±1.57
	grounded	0.33± 0.94	0.33 ± 0.67	0.17± 0.47	1 ± 0.47	0.33± 0.94	3.0 ±2.05
unid. copepode	control	0.83± 1.53	*	*			
	grounded	1.00± 1.45	*	*			
unid. cumacean	control	2 ± 2.41	0.83 ± 0.86	2.6 ± 2.85		0.33± 0.67	
	grounded	0.67± 0.93	0.50 ± 0.63	1.00± 1.26		0± 0	
NEMERTEA (unid.)	control	2.67± 4.80					
	grounded	0± 0					
TOTAL ORGANISMS	control	77.17± 32.30	40.83 ± 6.67	38.4 ± 7.48	13.67± 2.48	14.67± 4.39	37.67±6.52
	grounded	2.17± 1.69	1.33 ± 0.59	0.67± 0.59	1.5 ± 1.74	1 ± 1.45	19.67±5.2

TABLE 2

Table 3 Average No. of organisms per core ±95% confidence interval for Lillian Creek

LILLIAN CREEK		6-7-77	10-11-77	12-6-77	2-15-78	5-24-78	7-6-78
ANNELIDA	control	60.0 ± 22.75	17.00 ± 4.36	9 ± 2.41	9.67 ± 0.94	6.67 ± 1.43	22.67 ± 2.37
	grounded	10.8 ± 7.04	3.33 ± 0.60	0.17 ± 0.47	1.33 ± 0.61	1.50 ± 0.96	2.17 ± 2.89
Amphicteus mucronata	control	8.00 ± 4.56	6.33 ± 2.01	5.17 ± 2.34	5.33 ± 1.39	4.33 ± 1.73	17.00 ± 3.52
	grounded	2.33 ± 3.01	1.33 ± 1.38	0 ± 0	0 ± 0	0.83 ± 0.86	0.67 ± 0.93
Heteromastus *filliformis*	control	0.6 ± 0.76	1.33 ± 1.18	0.33 ± 0.67	0.50 ± 0.96		0 ± 0
	grounded	0 ± 0	0 ± 0	1.17 ± 1.97	0.33 ± 0.67		0.83 ± 1.34
Nereis sp.	control	0 ± 0	3.83 ± 1.53	2.83 ± 0.86	3.00 ± 1.62	2.00 ± 1.02	5.67 ± 2.78
	grounded	0.4 ± 0.76	0.33 ± 0.67	0 ± 0	1.00 ± 1.45	0.67 ± 0.59	0.67 ± 0.99
unid. annelides	control	49.8 ± 21.93	5.5 ± 2.15	0.67 ± 1.12	0.83 ± 0.86	0.33 ± 0.67	
	grounded	7.6 ± 4.23	1.67 ± 1.87	0 ± 0	0 ± 0	0 ± 0	
ARTHROPODA	control	5.20 ± 7.17	3.67 ± 1.87	1.17 ± 1.34	1.67 ± 1.18	1.33 ± 1.18	0.0 ± 0.0
	grounded	0 ± 0	0 ± 0	0 ± 0	0.33 ± 0.59	0 ± 0	0.0 ± 0.0
Corophium sp.	control	5.00 ± 6.94	3.67 ± 1.87	1.17 ± 1.34	1.67 ± 1.18	1.33 ± 1.18	
	grounded	0.0 ± 0.0	0 ± 0	0 ± 0	0.33 ± 0.59	0 ± 0	
unid. Amphipode	control	0.20 ± 0.62					
	grounded	0.0 ± 0.0					
unid. Copepode	control	1.4 ± 1.86					
	grounded	2.2 ± 2.67					
MOLLUSCA	control	6.2 ± 3.85	0.5 ± 0.63	1.50 ± 1.20	2.17 ± 0.86	1.67 ± 0.94	9.83 ± 3.73
	grounded	2.0 ± 1.70	0 ± 0	0.17 ± 0.97	0 ± 0	0.5 ± 0.63	1.83 ± 1.53
Macoma sp.	control	5.2 ± 3.01	0.17 ± 0.47	0.83 ± 0.86	2.17 ± 0.86	1 ± 1.03	4.17 ± 1.29
	grounded	1.8 ± 1.81	0 ± 0	0 ± 0	0 ± 0	0.33 ± 0.67	1.33 ± 0.94
Tellina sp.	control	1.0 ± 2.4	0.17 ± 0.47	0.67 ± 0.59		0.67 ± 0.59	5.67 ± 2.78
	grounded	0.2 ± 0.62	0 ± 0	0.17 ± 0.47		0.17 ± 0.47	0.5 ± 0.90
NEMERTEA							
Paranamertes peregrina	control	0 ± 0					
	grounded	0.2 ± 0.62					
TOTAL ORGANISMS	control	71.4 ± 26.84	21.17 ± 4.84	11.67 ± 2.70	13.50 ± 1.20	9.5 ± 2.60	32.5 ± 4.85
	grounded	13.2 ± 6.00	3.33 ± 0.60	0.33 ± 0.94	1.67 ± 1.18	2.0 ± 1.25	2.83 ± 2.23

TABLE 4 Average No. of organisms per core ±95% confidence interval for Isthmus Slough Site #43.

SITE #43		11-7-77	1-19-78	3-28-78
ANNELIDA	control	35.17 ± 6.10	15.17 ± 4.67	16.83 ± 3.8
	grounded	0.33 ± 1.84	1.17 ± 1.69	0.33 ± 0.67
Amphicteus mucronata	control		2.0 ± 1.45	3.0 ± 1.03
	grounded		0 ± 0	0 ± 0
Heteromastus filliformis	control	22.33 ± 7.53	9.33 ± 2.01	11.0 ± 3.08
	grounded	0.33 ± 0.93	0 ± 0	0.17 ± 0.47
Nereis sp.	control	6.0 ± 1.62	2.17 ± 2.23	2.83 ± 1.13
	grounded	0.50 ± 0.96	0.5 ± 0.96	0.17 ± 0.47
Capitella capitata	control	6.5 ± 4.52	1.67 ± 0.60	
	grounded	0 ± 0	0.67 ± 0.93	
unid. annedlides	control	0.33 ± 0.67		
	grounded	0 ± 0		
ANTHROPODA	control	2.67 ± 2.48	1.17 ± 2.34	0.67 ± 0.94
	grounded	0.33 ± 0.67	0 ± 0	0 ± 0
Corophium sp.	control	2.67 ± 2.48	1.17 ± 2.34	0.67 ± 0.94
	grounded	0.33 ± 0.67	0 ± 0	0 ± 0
unid. cumacean	control	0.17 ± 0.48		3.83 ± 1.34
	grounded	0.33 ± 0.67		0 ± 0
MOLLUSCA	control	1.5 ± 1.58	2.67 ± 1.57	3.67 ± 1.87
	grounded	0 ± 0	0 ± 0	0.5 ± 0.96
Macoma	control	0.5 ± 0.67	2 ± 1.03	3.67 ± 1.87
	grounded	0.0 ± 0.0	0 ± 0	0.50 ± 0.96
MOLLUSCA (con't.)				
Tellina	Control	1.0 ± 1.25	0.67 ± 0.9	
	grounded	0.0 ± 0.0	0 ± 0	
TOTAL ORGANISMS	control	39.33 ± 6.56	19.0 ± 2.99	21.77 ± 3.66
	grounded	2.33 ± 1.70	1.17 ± 1.69	0.83 ± 1.13

the control area during winter months. Two sampling points did not show statistical differences between control and grounded populations. These were in early August and again during late November. Also, the number of arthropodes in the control area remained low during July of 1978 compared with July of 1977. Salinity and Temperature data are reported in the Appendix.

Site 43

The average number of annelides per control core was significantly greater than those for grounded cores for each sampling period.

Data for Molluscs showed significantly greater average numbers for control samples in January and March but no difference between populations could be shown in November.

No statistically significant difference in populations of Arthropodes was observed between control and grounded areas. Temperature and salinity data is presented in the Appendix.

Lillian Creek

Care must be taken in evaluation of Figure 6 since cores taken during sampling of 6-7-77 were 20 cms. deep, while those of all other sampling dates were 15 cms. deep. Also, on 6-7-77 a slightly different location for control area was used for sampling (see Figure 1). (The control area was changed to allow better accessability and make it closer to the grounded area.) The total average number of organisms per control core decreased dramatically during winter months and increased somewhat during the following summer.

A similar trend occurred for annelide data. Both total organisms and total annelide showed significantly (at the 95% confidence interval) greater numbers of organisms in control areas than in grounded areas.

Both arthropodes and molluscs were generally found in low numbers. Although mean values were generally greater for cores in control areas, statistics used were not powerful enough to detect differences (in most cases) between control and ground populations. Arthropodes were found with great enough number and uniformity to detect statistical differences between areas during

FIGURE 6a Average No. of Annelids per core at Lillian Creek plotted against time.

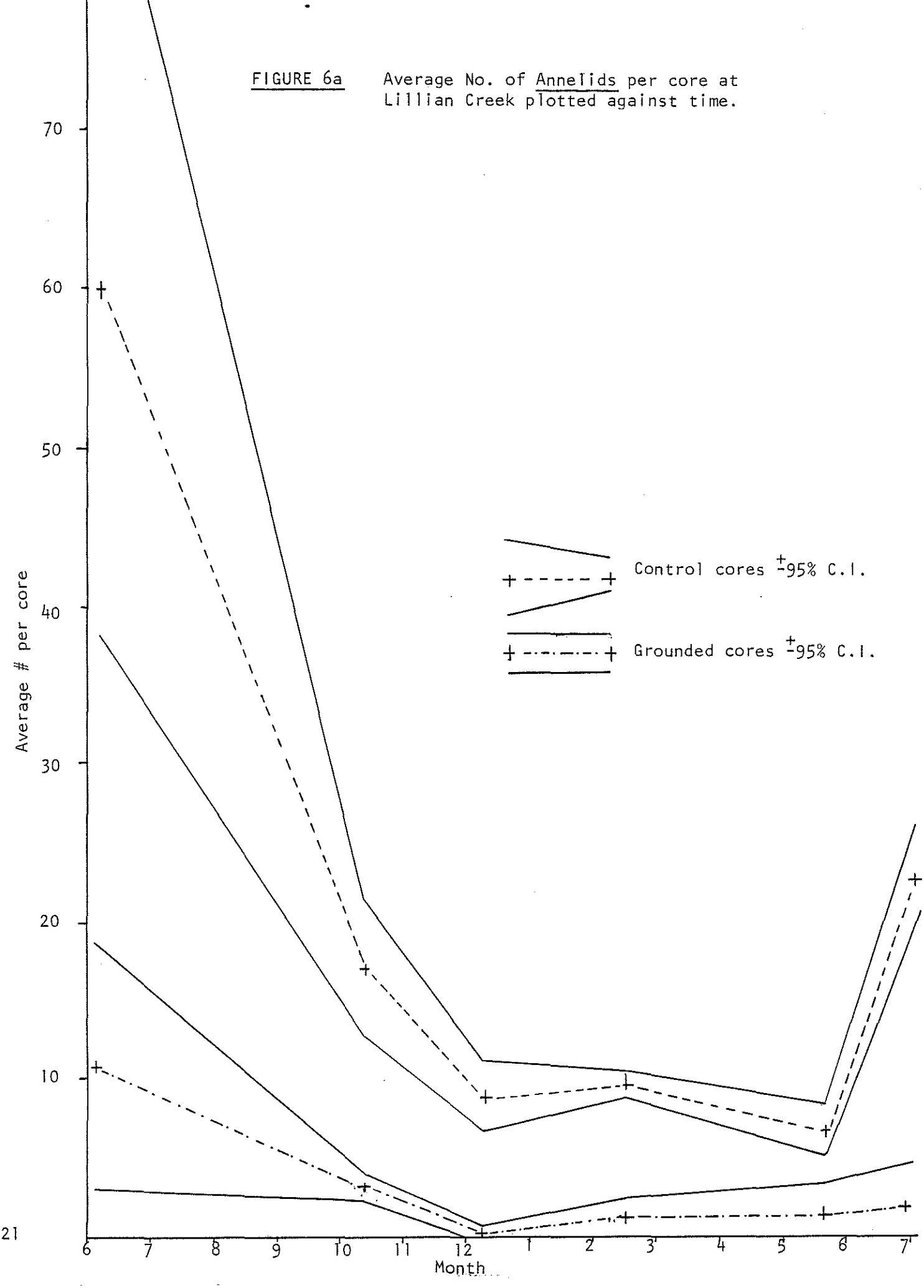


FIGURE 6b Average No. of Arthropods per core at Lillian Creek plotted against time

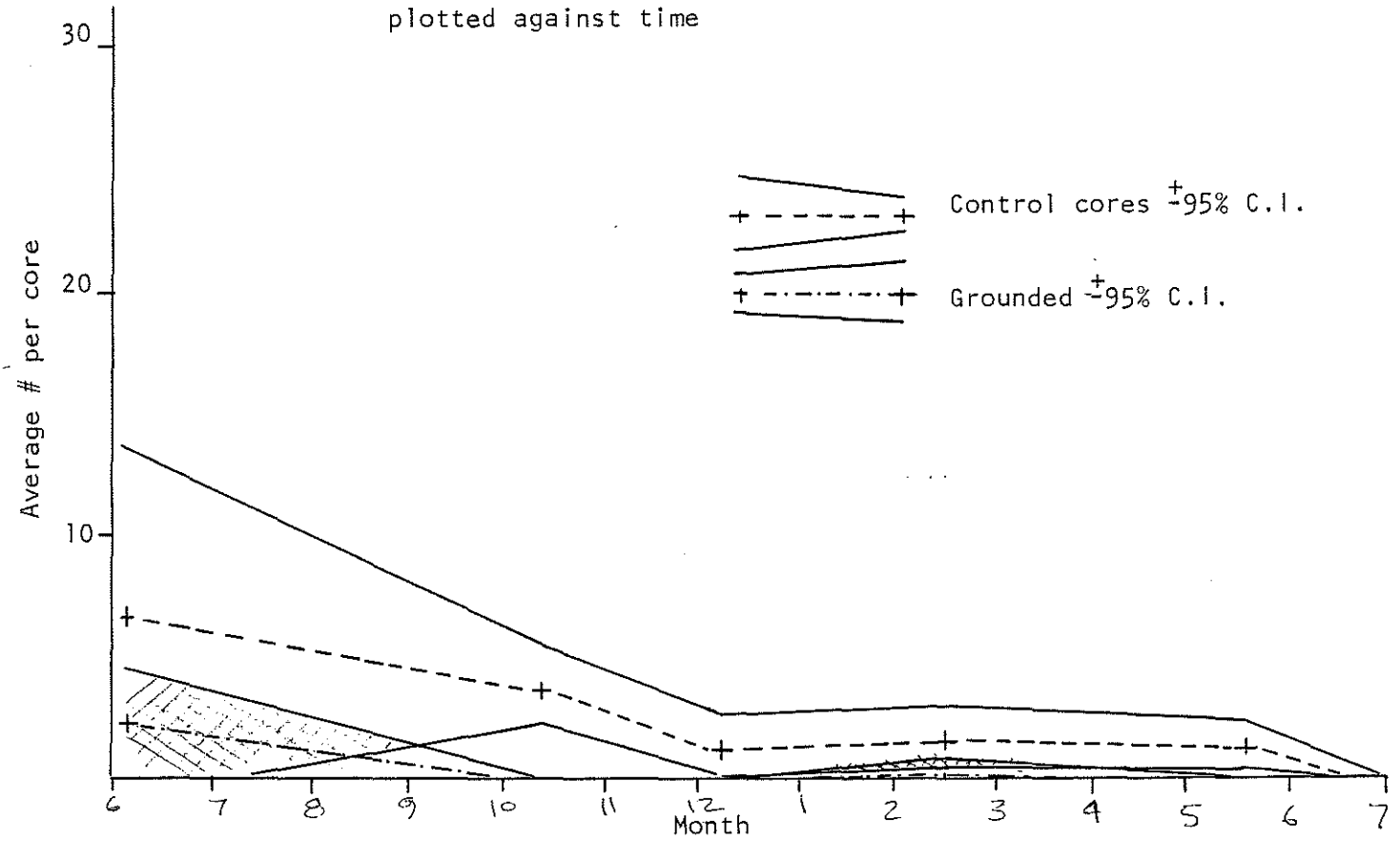


FIGURE 6c Average No. of Molluscs per core plotted against time

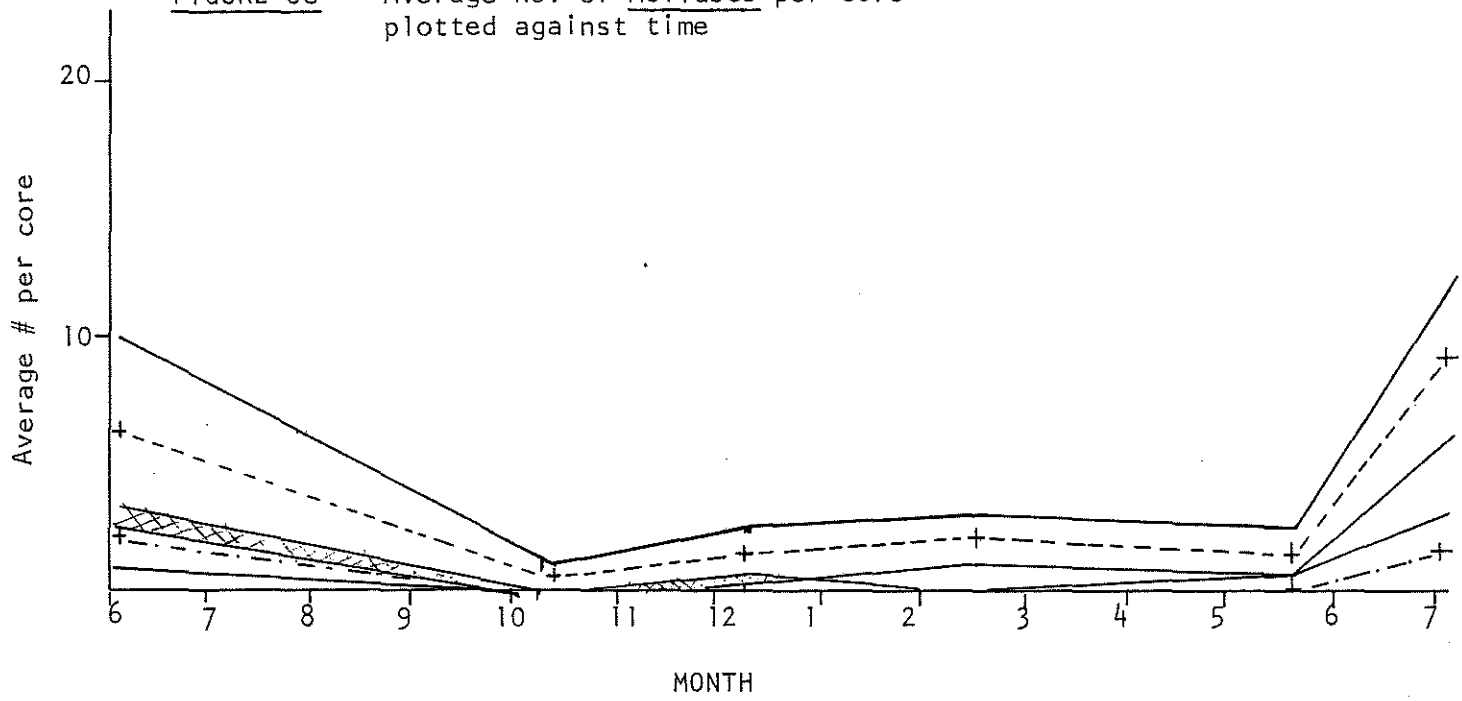
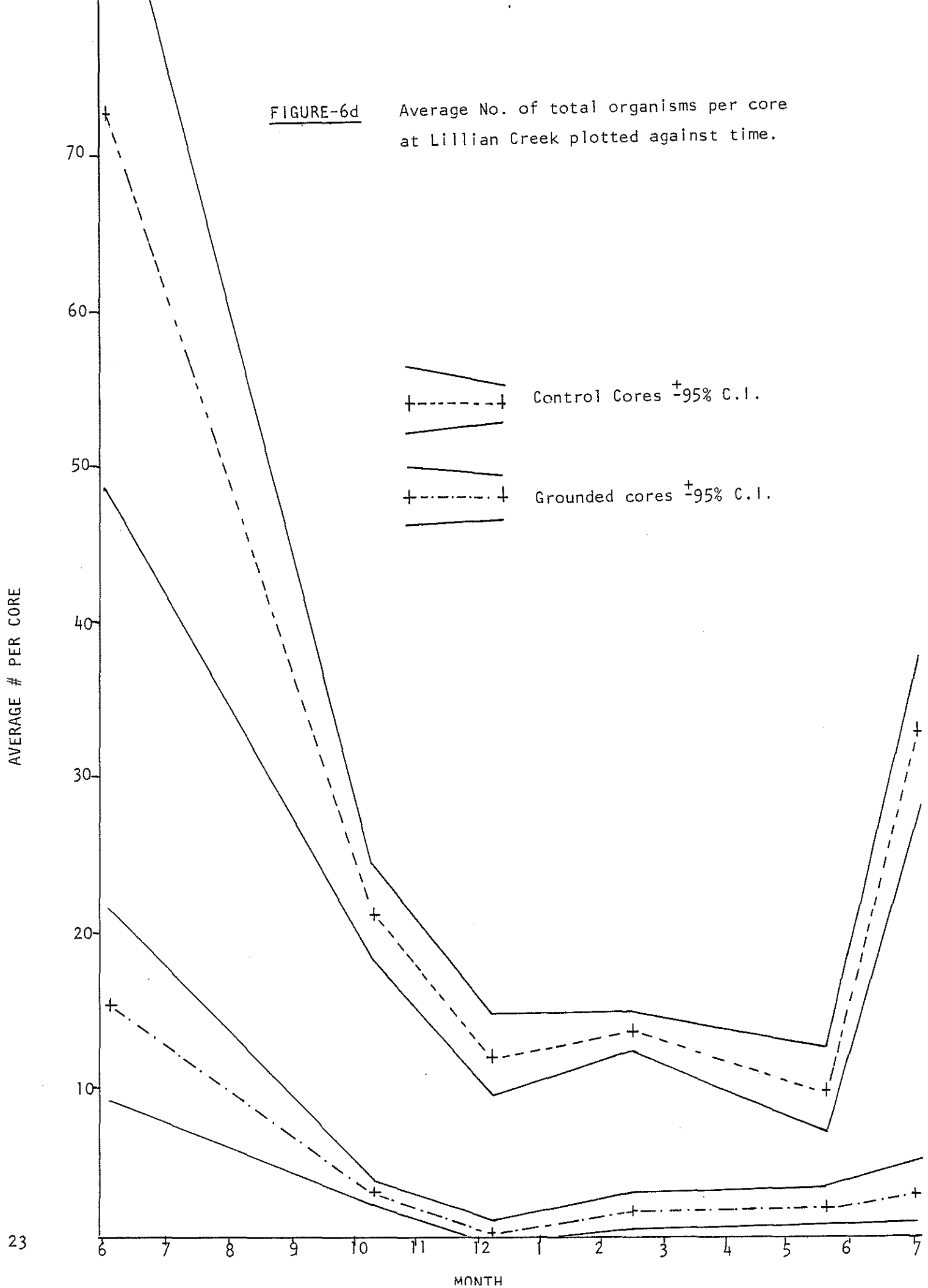


FIGURE-6d Average No. of total organisms per core at Lillian Creek plotted against time.



10-77 and 5-78. Likewise, differences were detected during 2-78 and 7-78 in Mollusc populations. Salinity and temperature are reported in the Appendix.

Isthmus Slough

Sometime between September and December, 1977 logs were removed from the grounded sampling area in Isthmus Slough. The area remained free of logs throughout the remainder of the study.

Figure 7 summarizes data collected. The core depth of sampling for 7-18-77 was 10 cm. and the core depth for all other sampling dates was 15 cm. Samples collected at Isthmus Slough followed similar trends as those from the three other sites; showing depressed population levels for control populations during winter months for Annelides and total organisms collected. There was always a significantly greater number of organisms in control cores than in grounded cores throughout the study.

The mean number of arthropodes found per core was always greater in control cores than in grounded cores. However, variability in data causing wide confidence intervals resulted only in the detection of significant differences on 9-14-77 and 9-27-77.

Molluscs were not found within this tidal interval of Isthmus Slough throughout the study.

Also of interest is that during the Fall of 1978 following the removal of logs, the average number of organisms in the previously grounded area increased to levels almost 10 times what they were the previous fall. However, this increased level was still significantly lower than average numbers from control cores, and apparently the recovery was incomplete. Temperature and salinity data are reported in the Appendix.

Data for individual species from the various sites are summarized in Tables 1-4. Further explanation of this data will not be covered here, but will be described for the more important members in the Discussion.

FIGURE 7a Average No. of Annelids per core at Isthmus Slough plotted against time.

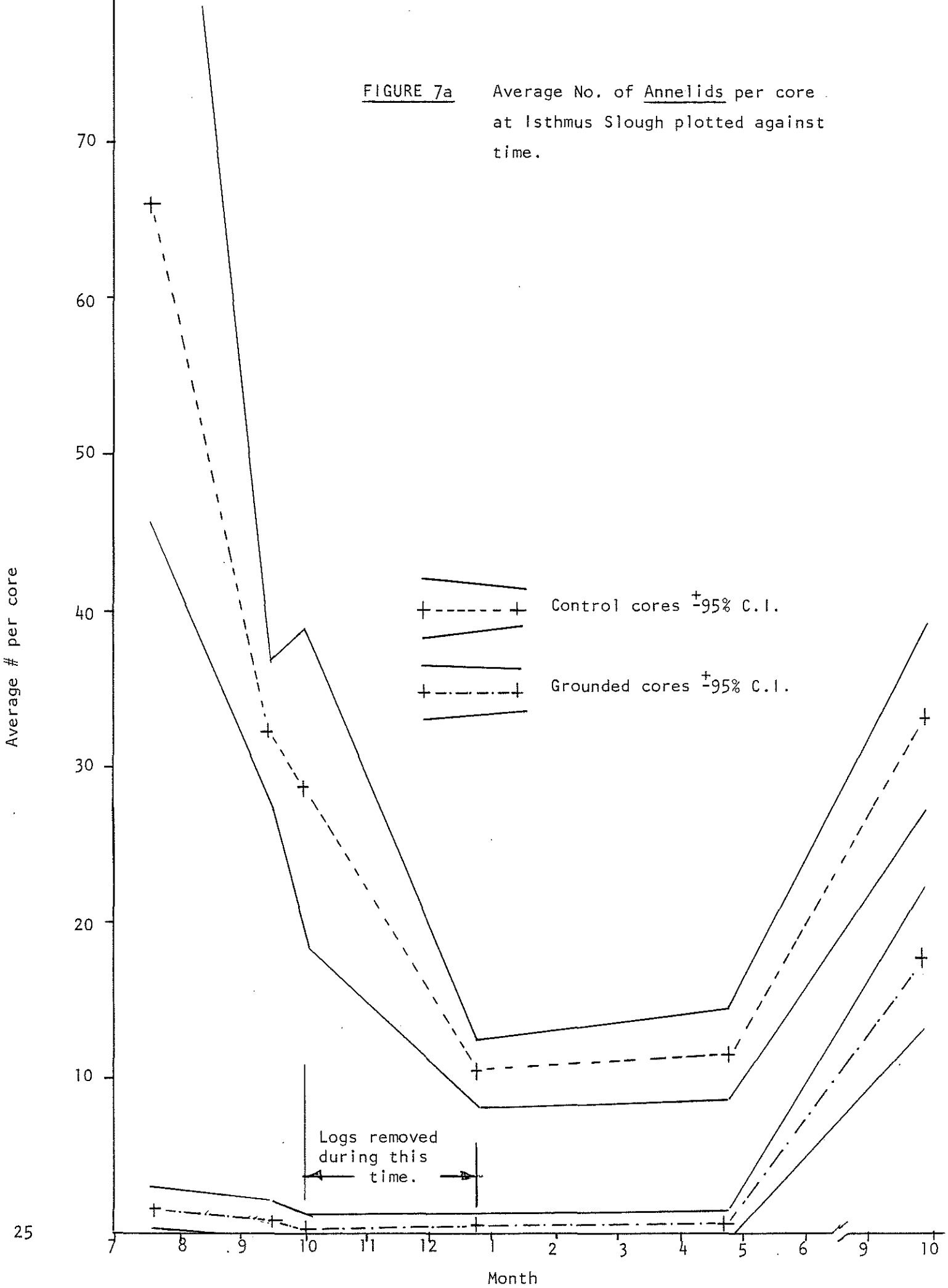


FIGURE 7b Average No. of Arthropods per core at Isthmus Slough plotted against time.

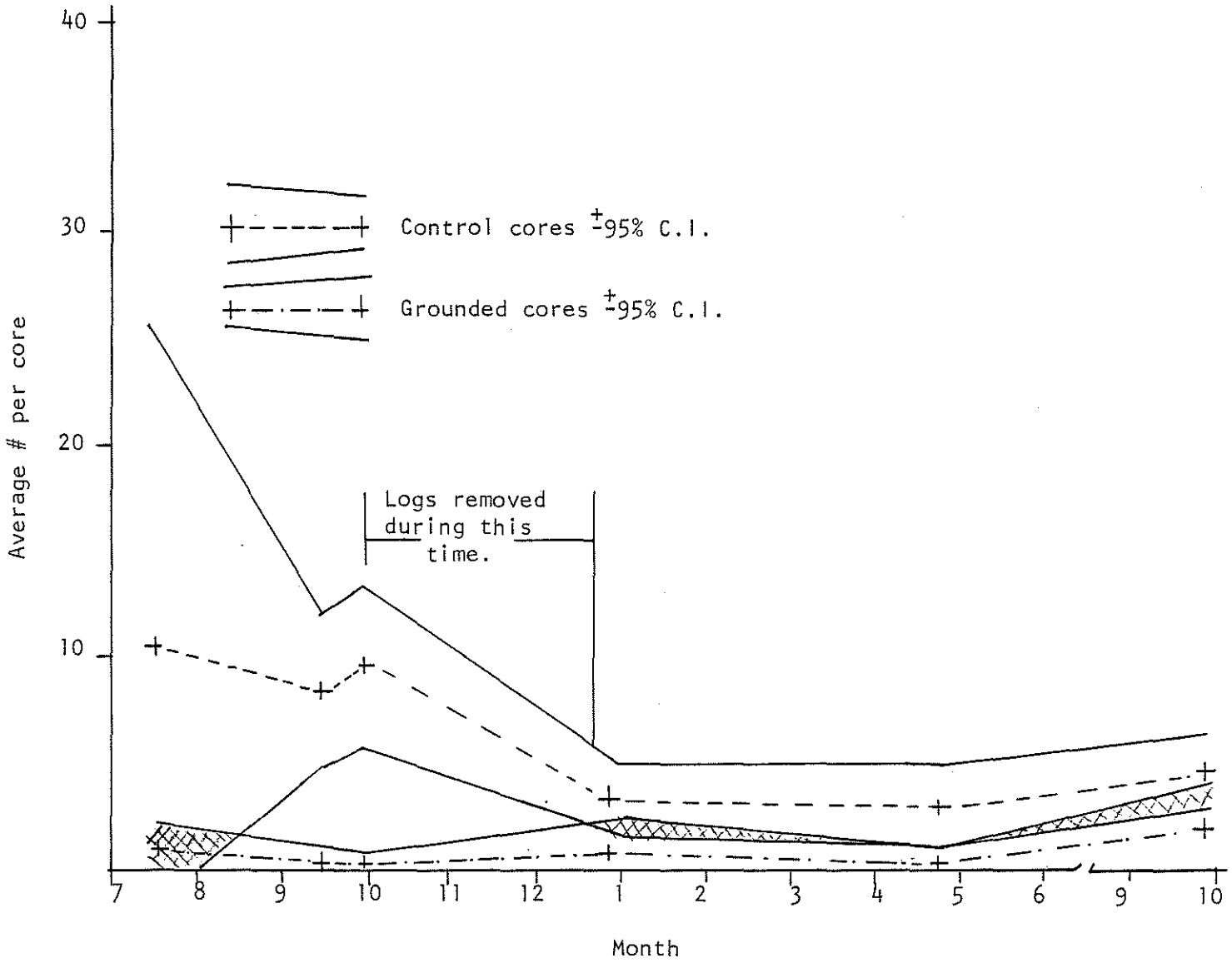


FIGURE 7c Average No. of total organisms per core at Isthmus Slough plotted against time.

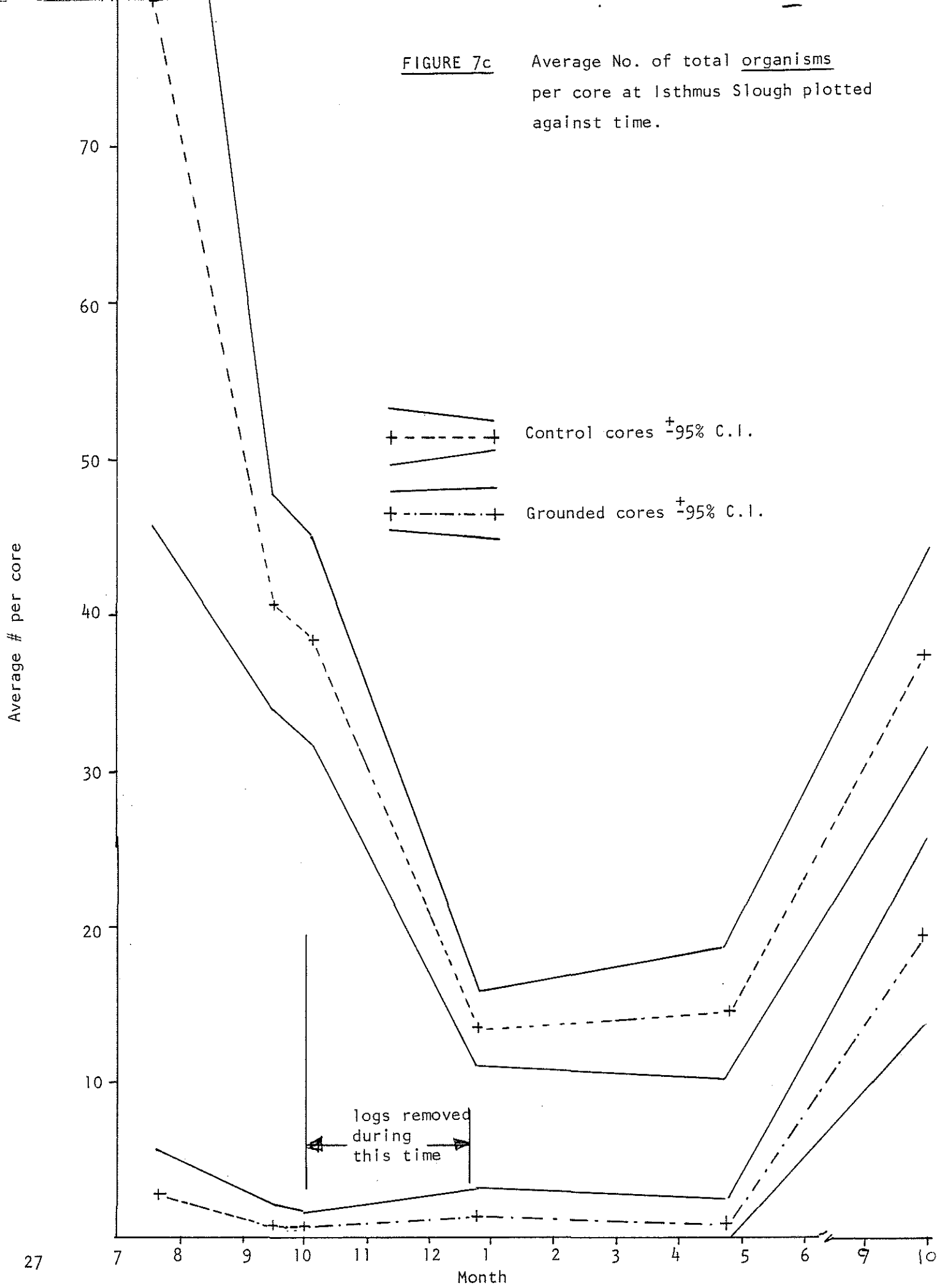


FIGURE 8a

Average No. of Annelids per core at Isthmus Slough Site #43.

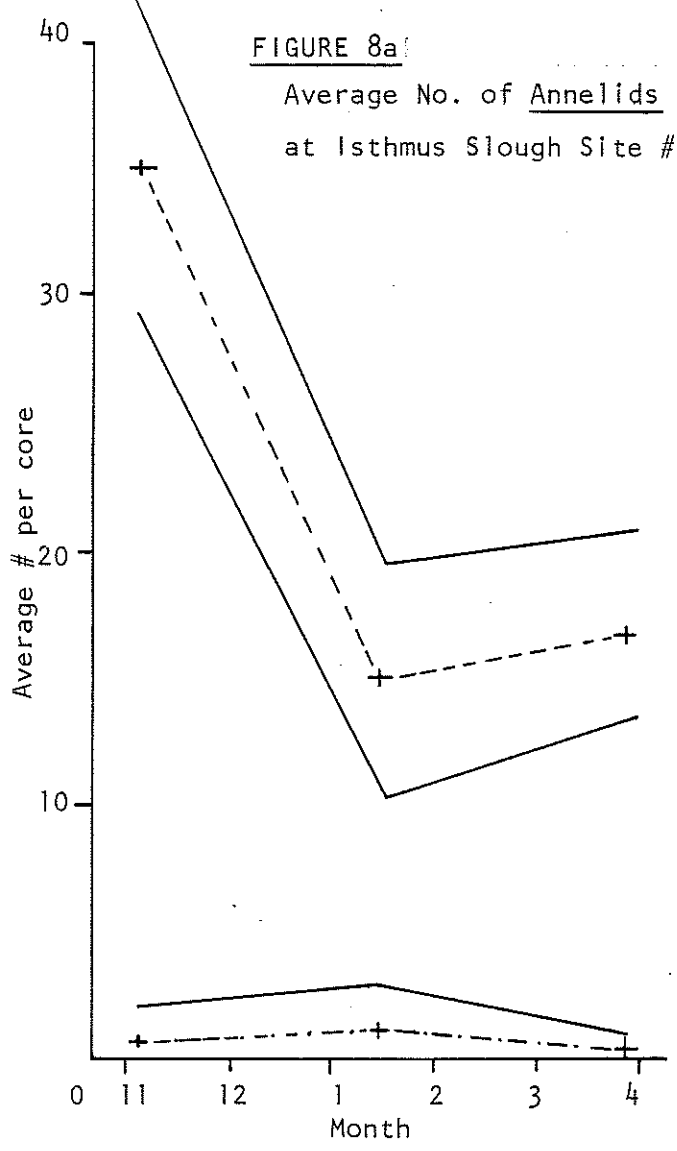


FIGURE 8b

Average No. of Arthropods per core at Isthmus Slough Site #43.

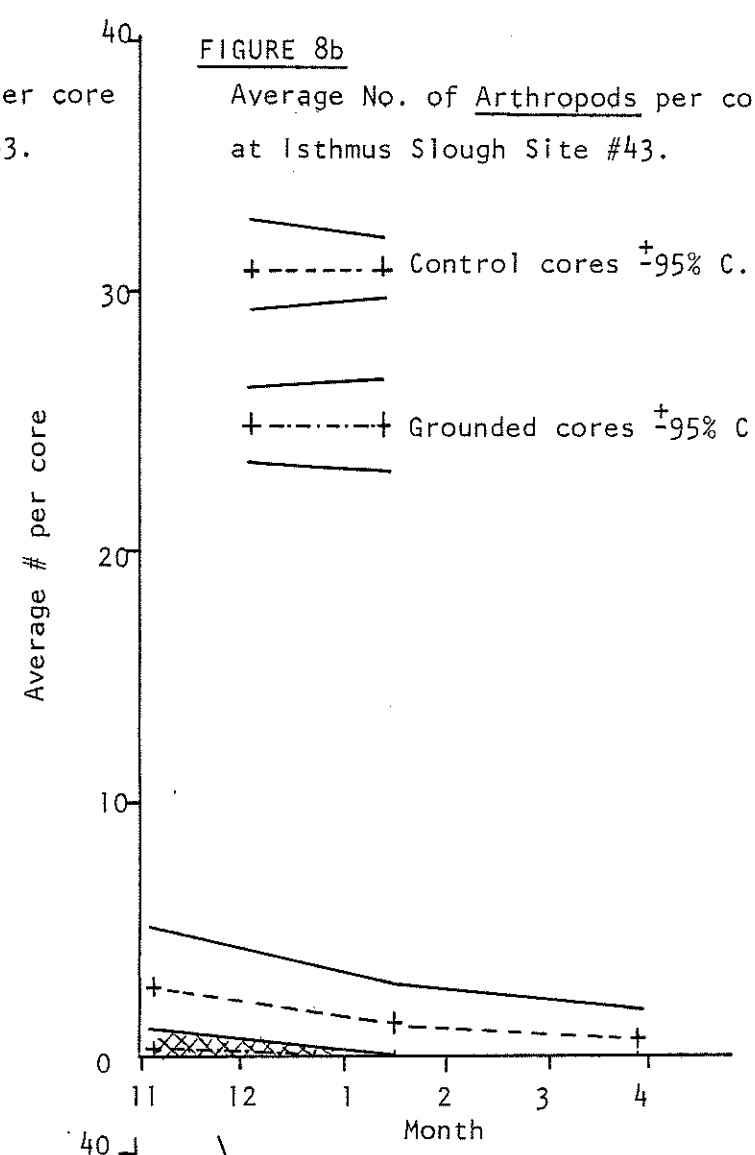


FIGURE 8c

Average No. of Molluscs per core at Isthmus Slough Site #43.

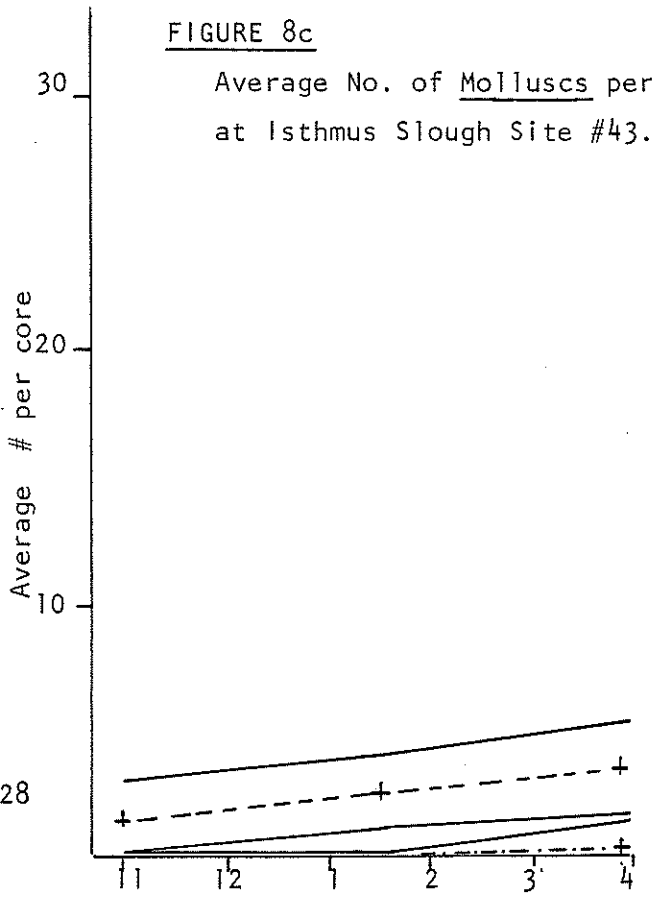
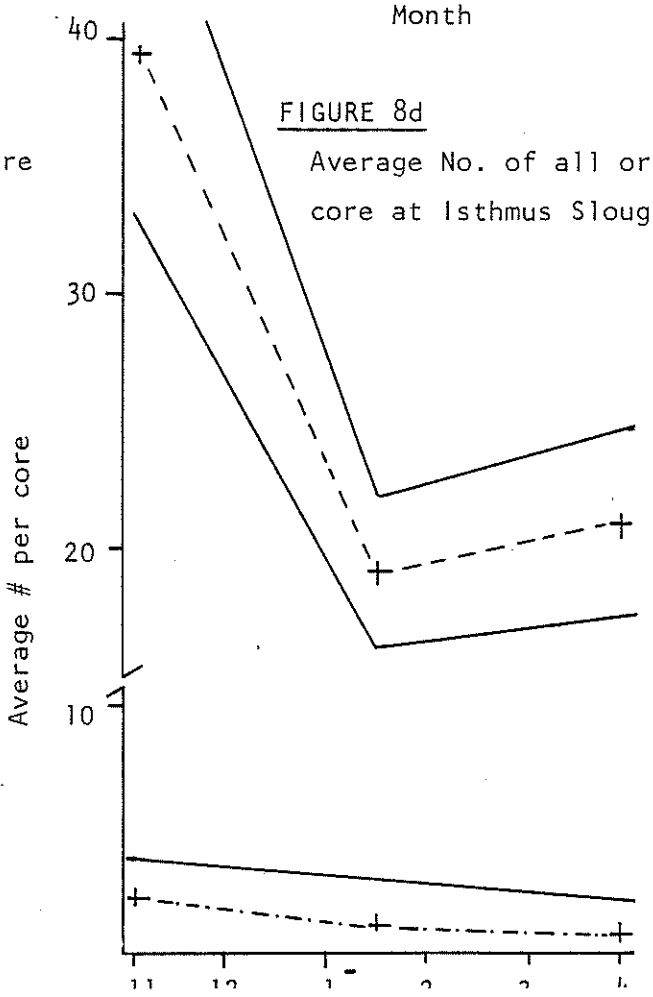


FIGURE 8d

Average No. of all organisms per core at Isthmus Slough Site #43



DISCUSSION

Initial examination of Tables 1-4 show some comparisons between control and grounded areas which are not statistically significant at the 95% confidence level. This does not imply that there is no difference between the populations in question. The failure to show differences between some of these comparisons could be accounted for by:

1. No difference actually occurred.
2. Limits in sampling procedures and techniques. Certain species were collected in numbers too few for analysis with the applied statistical test.

    a) The sample size was not large enough to generate enough data in some cases.

    b) The natural decrease in numbers of organisms during winter months caused the numbers collected to drop below levels needed for statistical comparisons.

While more powerful statistics may be able to increase the number of comparisons which demonstrate differences between control and grounded populations, some species were found in large enough numbers to consistently show decreased numbers within the mudflats of raft storage areas.

Also, when species were grouped by Phylum, dramatic population reductions in raft storage areas were generally shown. Some species, which were fairly abundant in undisturbed mudflats were almost entirely eliminated in the log storage area (see Table 1, Cooston Channel; Heteromastus sp. Capitella capitata and Amphicteus mucronata). This reduction in numbers of benthic invertebrates associated with log rafting practices is consistent with work done on the Snohomish River Delta in Washington (Smith, 1977).

The reasons for this reduction in numbers that were considered are:

1. Build up of toxic organic accumulations of wood debris. Bark accumulations in the substrate degrade water quality. One aspect of this degradation is that bark accumulations exert an oxygen demand on the water, thus lowering the disolved oxygen (DO). During summer

months the Oregon Department of Environmental Quality (DEQ) has recorded DO levels below 2.5 mg/l in Isthmus Slough. These levels are below approved water quality standards. Since bark accumulations were encountered in both control and grounded sites the toxic leachates do not appear to be the cause for the reduced numbers in the grounded areas. Several other factors support this conclusion.

The control and grounded areas were close together and the accumulations of bark debris in the substrate would not be expected to be radically different. The control area at Lillian Creek was the site of an abandoned log dump ramp and accumulated bark would be expected to be greater there than at the adjacent grounded site, yet it was the grounded site that had reduced abundance of organisms. At the Isthmus Slough both control and grounded sites contained such an accumulation of bark that it was difficult to locate adequate sites where the core would penetrate deeper than 10 cm. Also, some of the organisms such as, Neries, Heteromastus and Capitella, are pollution indicators and can tolerate unfavorable conditions (Olsen & Burgess, 1967). Therefore, it does not seem likely that bark accumulations and the toxic leachate associated with it are responsible for the decrease in numbers found in the grounded areas.

2. Organisms migrate out of the affected area by burrowing deeper or pioneering new areas.

When habitat and ecological considerations are evaluated, certain aspects can be eliminated. First, adjacent undisturbed areas will with time reach an equilibrium state where organism population reaches an upper limit imposed by the environment. These environmental limits, such as food or space, restrict the number of organisms which can reside in a particular area. In effect, there is no unoccupied area for organisms to migrate to. New areas would have to be produced if aquatic productivity is to be increased.

Since the habitat of certain of the organisms are specialized, burrowing deeper to escape destruction by grounded log rafts does not seem to be

an available alternative. For example, Corophium sp., constructs a u-shaped burrow less than 9 cm. deep. When in its burrow the organism creates a current of water which flows through the burrow. This current serves to draw aerated water for respiratory purposes and carries food particles into the burrow. Deeper burrows would require a greater volume of water to be moved through the tubes and the organism would not be able to physically create the current that is required for respiration and feeding. The annelide, Amphicteus mucronata, resides in a shallow burrow and extends its tentacles above the surface for feeding. Other burrowing organisms are limited in the depth of their burrows since oxygen required for respiration only penetrates the mud a very short distance, and the organisms depend on their burrows to oxygenate their environment. Depths to the anearobic layer has been reported to be less than 1" at Site #43 (Fitchko & Smolen, 1970) and 5 cm. (Bolinger, et al, 1970) in Cooston Channel.

Clams with long siphons, by their normally deeper habitats, may be able to survive the grounding of log rafts. The scope of this study did not allow for a sampling regime which would encounter the larger, deeper dwelling clams. The work required to adequately sample these deeper dwelling clams does not justify the need to make a determination regarding the effects of log rafts on these populations, particularly when certain annelides and arthropodes are more important to the food chain (to be discussed later).

3. Another possible cause for the reduced numbers of organisms found in rafted areas is the physical alteration of the substrate. In Alaska, Pease (1974) reported that the physical weight of log rafts compacted the mud to the consistency of sandstone. Casual observations at the various sites examined during this study suggest the opposite to be occurring at least at the surface. The weight of the logs appears to have kneaded the mud and has changed it from the normally firm consistency to a watery soup. The watery consistency of the mud makes construction of burrows and shelters impossible and this loss of habitat seems the most likely cause of reduced numbers of organisms in the log raft areas. The organisms cannot physically burrow in this watery soup since the firm consistency required to support the tunnels is lacking. The area is thus rendered uninhabitable to the burrow constructing organisms.

This change of consistency may also cause erosion problems. When logs were removed from the Isthmus Slough site observations showed this loosely compacted mud was eroded by stormy weather and high tides, exposing a gravel substrate in places. This loss of mud layer may account for the slow recolonization of the previously rafted area which was observed (to be discussed below).

Isthmus Slough

Examination of data reveals that Molluscs were lacking at this area and tidal zone in Isthmus Slough. A number of physical or chemical factors could account for this. It is possible that the thick accumulation of large bark chips encountered in the area at 10 cm. limit the deep burrowing clams.

The most numerous organisms encountered at this site were the Annelides, Amphicteus mucronata and Nereis sp., and the Arthropode Corophium sp. The annelides were significantly reduced in abundance in areas of log rafts during the entire study. Corophium sp. was found to be significantly reduced in raft areas on 9-14-77 and 9-27-77. These differences were shown during periods when abundance of Corophium was high. During other sampling dates when abundance was low or variability high, no statistical difference was observed between control and rafted sites. Since Corpphium sp. construct u-shaped tubes for respiration and feeding, it seems likely that Corophium would not be able to survive in an environment that is repeatedly altered by grounded logs. Larger sample sizes could possibly demonstrate differences between control and grounded samples during periods when abundance is low.

During the Fall of 1977 logs were removed from the grounded areas and the area remained clear of logs throughout the remainder of the study. This afforded an excellent opportunity to examine the length of recovery time for the grounded area. The average total number of organisms did not increase for the grounded area until the sampling on 9-21-78. Although there was almost a 10 fold increase in numbers in the grounded area, this represented only partial recovery, since there was still a significantly greater number of organisms in the control area. Smith (1977) estimated recolonization rates from several days to up to 8 weeks. The recolonization of Isthmus Slough was much slower in comparison which may be the result of erosion problems described earlier.

Isthmus Slough Site #43

During the limited sampling of this area the most abundant annelide was Heteromastus filliformis followed by Neries sp., Capitella capitata and Amphicteus mucronata. All showed significant decreases in abundance in log grounded areas. Macoma sp. was the most abundant mollusc and showed significantly decreased abundance during January and March. Means were higher for Corophium sp. in control area but were not found in numbers sufficient to demonstrate statistical differences.

Lillian Creek

For Lillian Creek average abundance of organisms was higher in control areas than in grounded areas. Abundance for most species was not great enough to detect statistical differences with repeatability. However, the annelid Amphicteus mucronata consistently showed a significant decline in abundance in rafted areas. Neries sp also showed significant reduction in numbers in rafted areas during October, December and July.

Cooston Channel

Annelids were abundant in the control area and Heteromastus filliformis, neries sp. and Capitella capitata were statistically more abundant in the control than in the grounded area. The arthropod, Corophium sp. were also numerous in unrafted areas, but numbers generally declined drastically in rafted areas. The Molluscs Macoma sp. and Tellina sp. had mean numbers greater in the control than in the rafted areas but were not found in sufficient numbers to consistently yeild statistically significant numbers. Also, since core samples were limited to 15 cm. deep and these organisms could burrow deeper it is difficult to make determinations regarding Molluscs from this data.

The only instance where organisms were found in statistically greater numbers in the rafted areas were for the cumacean data on 8-2-77. Although this cumacean was not identified, it was observed to be a rapidly free swimming organism. This organism may prefer the calm, shady water under the rafts and become caught in intertidal water in the mud during low tides. Smith, (1977) found that the arthropod, Arisogammaris were more numerous in the rafted areas.

Certain of the organisms encountered during the study are important members of the food web. The food web of an estuary is complex and feeding habits or organisms vary seasonally. The primary food source is from the photosynthetic activites of green plants. Although some organisms eat plants directly, others feed primarily on the detritus formed from the breakdown of the plant material. Also, bacteria which break down the detritus provide an important source of food for filter feeders and detritus feeders. The source of estuarine detritus is largely from the rooted plants Zostera, in the mudflat zones, and Spartina in salt marshes. It is possible that log grounding has a direct impact on primary production by affecting the Zostera production. Thompson, 1971, observed that grounded logs in Isthmus Slough were responsible for the elimination of Zostera beds.

Bacterial growth associated with the breakdown of the plant material represents a major source of protein for the microfauna. The microfauna of the mudflats, in turn, is eaten by predators, such as, Neries sp.. Neries sp. also consume Corophium sp and copepodes. The top predators, fish and birds, feed on Neries, Corophium, Tellina and Macoma (Green, 1968).

Corophium sp. has been shown to be one of the most abundant animals of the teal's (Anas Crecca) diet and is also found in the diet of the mallard (Anas platyrhynchos) (Green, 1968). Numerous shore birds and waders also utilize the mudflat invertebrates in their diets.

Juvenile Salmon use estuaries as a nursery and utilize the benthic invertebrates, particularly Corophium, in their diets (Smith, 1977). Thompson, 1971, reported that Corophium is important in the diet of the Shiner Perch (Cymatogaster aggregata) and the Starry Flounder (Platichthys stellatus).

Eltringham, 1971, lists Neries, Hydrobia and Corophium, because of their abundance, as the three most important members of the macrofauna, and that they are of economic significance since they are the major food items of fish, many of which are commercially exploited. A simplified food web diagram is presented in Figure 9.

Since the mudflats are economically significant to fishery production it is important to evaluate management practices which remove these areas from production.

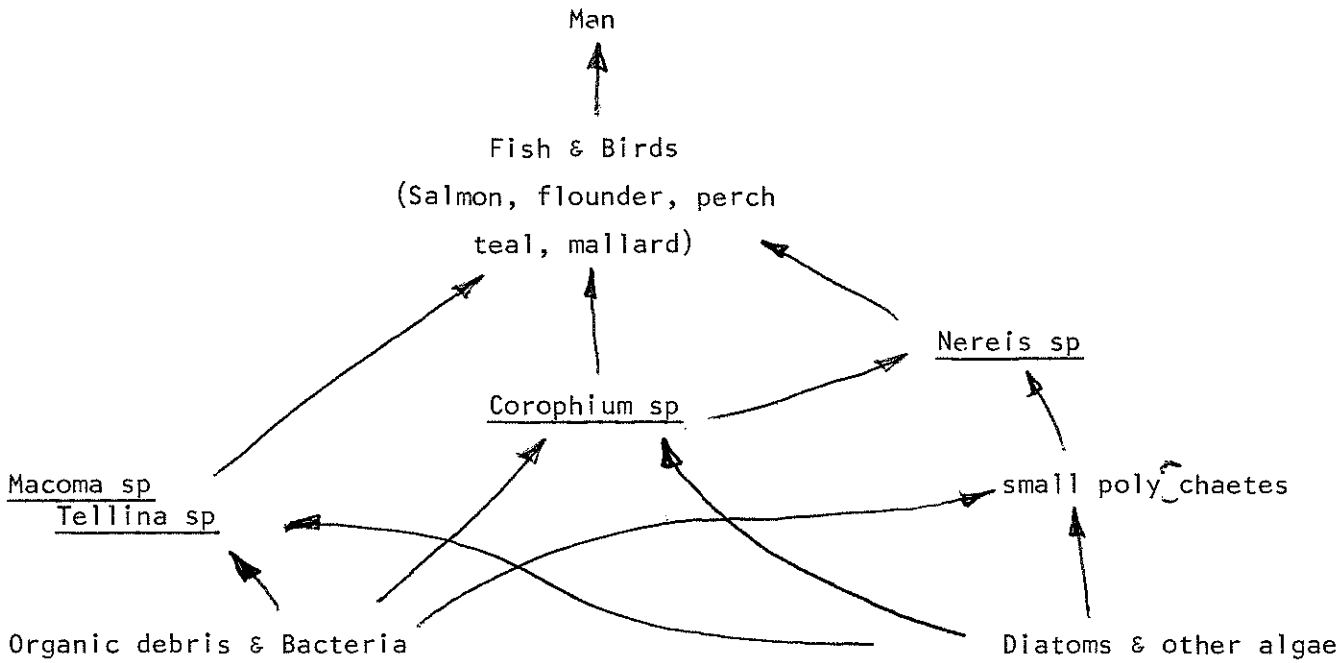


FIGURE 9 Simplified Food Web for Organisms Found in Coos Estuary

During the period 1920-1970, 1500 acres of tidelands have been lost to filling and 2000 acres diked (Percy, et al, 1974). Since over 40% of the tidelands have already been lost from biological production, it is very important to carefully examine all practices which remove additional tidelands from production. In relationship to this, it is of interest to estimate the percentof area affected by log storage. An accurate estimation of acreage being removed from productivity could be made utilizing further work with log raft inventories and aerial photography. It is possible, with present information, to make an estimate. There is an estimated storage of 150 acres of log storage area in Coos Bay and Isthmus Slough (this does not include Coos River storage and Isthmus Slough, south of Davis Slough) (Greenacres Consulting Corp., 1974). This compares to a total of 4,569 tideland acres in Coos Bay. Although an accurate determination would be useful to estimate the overall impact, it is, considering the value of every acre of productive tideland, important to consider that if viable alternatives exist to detrimental practices, they be identified and implemented.

CONCLUSIONS

1. Grounded logs adversely affect the benthic organism population in Coos Bay. There was an average reduction in total numbers in grounded areas as follows:

95%	Cooston Channel
89%	Isthmus Slough
95%	Isthmus Slough, Site 43
88%	Lillian Creek

2. Up to 3% of the tidelands are affected by logs going aground at low tide.

3. Other research has shown that some of the benthic invertebrates affected are of value in the food chain of known commercial fish species.

4. Present information does not allow one to estimate the adverse impact on productivity of the estuary.

5. Following the elimination of log storage, evidence exists that the tidelands will repopulate themselves.

6. Since tidelands are valuable in producing organisms important to the commercial fish food chain log storage should be minimized in areas where logs go aground.

ABSTRACT

A study was conducted from June, 1977 to September 1978 to determine if the practice of storing log rafts over tidelands in areas where they go aground during periods of low tides has adverse affects on the benthic invertebrates of the mudflats. Samples were taken from each of 4 sites within the Coos Estuary system on a somewhat alternating basis.

At each site, samples were compared from control areas (no logs stored) and from adjacent storage areas. These comparisons revealed significantly reduced numbers of benthic invertebrates in the mudflats under log rafts. The annelides were particularly affected by the storage practices. Certain of the species affected are important members of the estuarine food web.

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APPENDIX

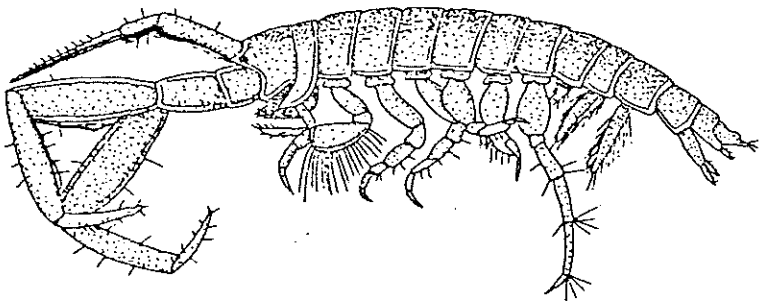
		Water Temperature °C	Salinity S°/00
Cooston Channel			
7/6/77	Control	20.0°	12.0
	Grounded	20.0°	13.0
8/2/77	Control	23.0°	20.5
	Grounded	24.0°	20.0
8/29/77	Control	18.5°	16.0
	Grounded	19.0°	15.0
11/21/77	Control	6.5°	2.5
	Grounded	6.5°	2.5
1/31/78	Control	9.5°	1.0
	Grounded	9.8°	1.0
3/14/78	Control	11.0°	2.0
	Grounded	11.0°	2.5
4/10/78	Control	12.5°	3.0
	Grounded	12.3°	3.0
5/9/78	Control	15.0°	3.0
	Grounded	14.8°	3.0
6/23/78	Control	19.0°	6.5
	Grounded	19.0°	6.4
Isthmus Slough			
7/18/78	Control	18.8°	15.0
	Grounded	18.8°	15.0
9/14/77	Control	18.0°	16.0
	Grounded	18.5°	16.0
9/27/77	Control	16.5°	15.5
	Grounded	16.5°	15.5
12/21/77	Control	8.7°	0.0
	Grounded	8.7°	0.0
4/26/78	Control	12.0°	0.0
	Grounded	11.8°	0.0
9/21/78	Control	20.0°	15.0
	Grounded	20.0°	15.0

Appendix, Continued

		Water Temperature °C	Salinity S°/00
Isthmus Slough "Site #43"			
11/7/77	Control	11.0°	10.5
	Grounded	11.5°	10.2
1/19/78	Control	10.5°	5.5
	Grounded	10.5°	5.5
3/28/78	Control	14.0°	10.0
	Grounded	14.0°	10.0
Lillian Creek			
6/7/77	Control	18.5°	2.0
	Grounded	18.5°	2.0
10/11/77	Control	17.0°	8.0
	Grounded	17.0°	8.0
12/6/77	Control	10.5°	0.05
	Grounded	10.0°	0.05
2/15/78	Control	10.2°	0.01
	Grounded	10.2°	0.0
5/24/78	Control	16.0°	0.05
	Grounded	15.5°	0.05
7/6/78	Control	20.0°	6.0
	Grounded	20.5°	6.2

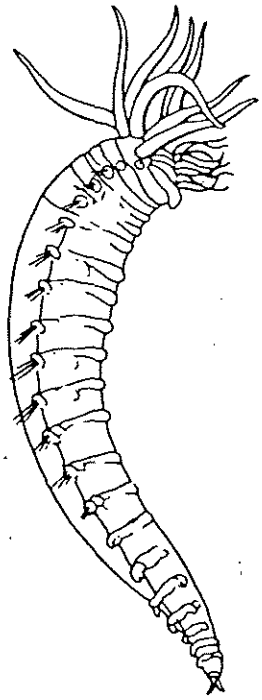
REPRESENTATIVE ORGANISMS

FOUND IN COOS ESTUARY



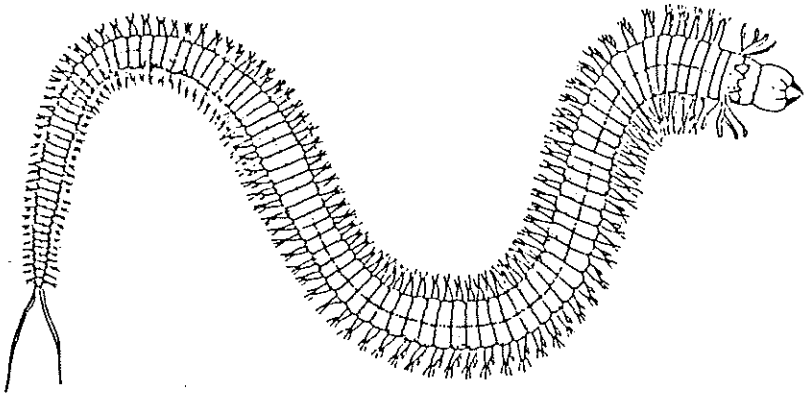
Chorophium sp.

Actual size approx. 7 mm.



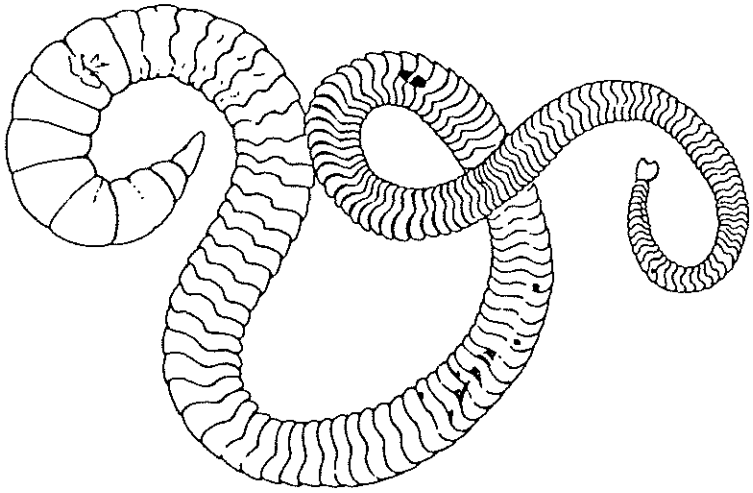
Amphicteus sp.

Actual size:
approx. 5 mm.



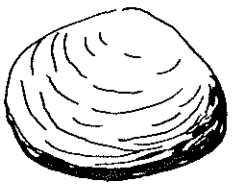
Nereis sp.

Actual size: 10 cm.



Capitella capitata

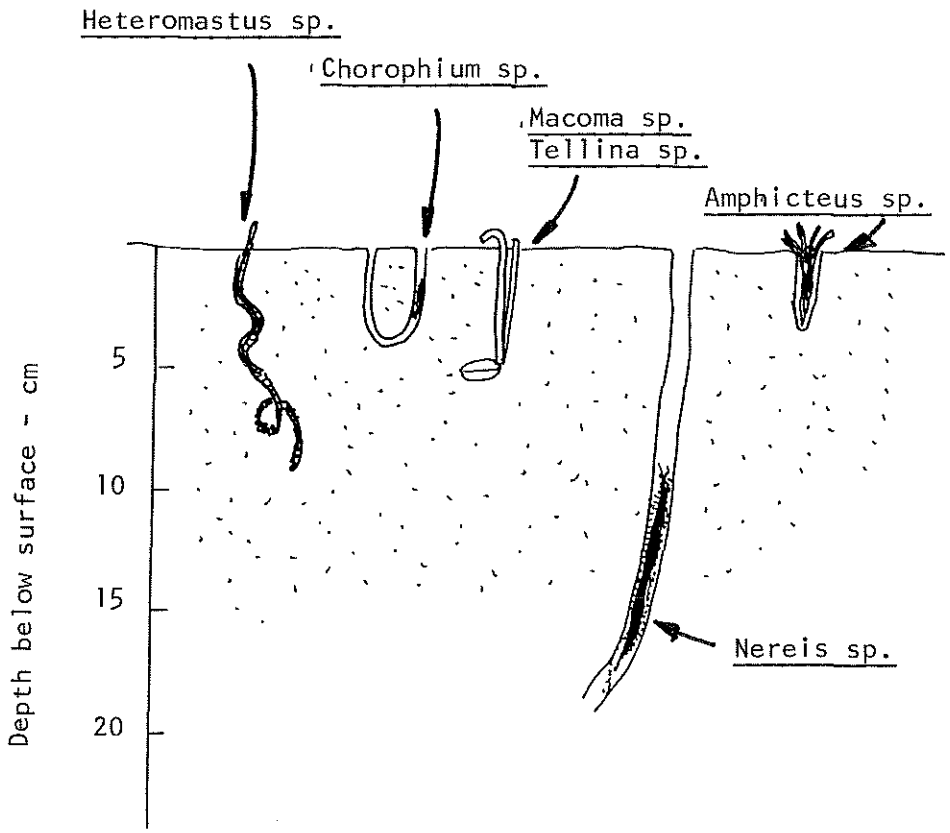
Actual size: approx. 4 cm.



Macoma sp.

Tellina sp.

Actual size: approx. 2 cm.



Adapted from Green, 1968

MAJOR POINTS RAISED DURING PUBLIC TESTIMONY

TIDELANDS STORAGE MEETING OF JANUARY 11, 1979

1. Did the study show more than nominal damage to aquatic life?

Under the EQC log handling policy of the 1975, DEQ is required to show "more than nominal damage(s) to aquatic life" before limiting tideland storage. Opinion was divided on this issue.

Many of the industry representatives, as well as the representatives of the Coos-Curry Council of Government, the Coos-Curry-Douglas Economic Improvement Association, and some members of the public, felt DEQ had not shown significant damage. Specific concerns were:

1) Impact on the fishery resource is the only valid criteria of significant biological damage. A diminished food supply for fish does not necessarily impact fish population. DEQ did not prove that the fishery resource is impacted.

2) By DEQ not being able to put a specific dollar amount on the damage to the fishery resource, no damage is necessarily occurring.

3) A small area of the tidelands is involved, so over the entire estuary less than nominal damage is occurring.

4) Because the tideflats show signs of re-populating, the tideland storage is of less concern. In other words, the fact that the damage is not permanent means we should not be as concerned.

5) More study is needed to prove fishery damage.

On the other hand, several resource staff members testified that they felt more than nominal damage was occurring. Dr. Paul Rudy, of the Oregon Marine Institute (University of Oregon) said the study supported his observations and show significant damage. He also stated that the logs interfering with plant life (eel grass, algae) may be even more significant than damage to the invertebrates. Dr. Rudy said he thought more than adequate research had been done to support the DEQ findings, and no further studies are justified. The local fisheries biologist with the Oregon Fish & Wildlife also testified in support of the study and findings. In his opinion, the study does show a negative impact on the fisheries resource. He feels the DEQ recommendations are reasonable and workable.

The Northwest Steelheaders also supported the study, calling it "an excellent piece of research which should be used to guide our policies for managing the Coos Bay Estuary."

Staff reponse

It is true that no research was done by DEQ to directly link a diminished food supply to a diminished fishery resource. Adequate information exists that the invertebrates affected are major food sources for many fish in the estuary. A reasonable person would have to believe a diminished food supply will adversely affect the fishery resource.

Many of the citizens testifying appeared disturbed that we could not put a specific dollar figure or pounds of fish number on the damage occurring. Lack of biomass data was mentioned several times.

A direct conversation of biomass of invertebrates into biomass of fish is of limited value for a number of reasons. These include:

1) Many of the fish feeding are in very young phases (fingerlings of salmon, for instance) - one pound of invertebrates could result in 1/4 pound of salmon today but 10 pounds of salmon in a few years.

2) A 5% drop in food supply would probably not result in 5% of the fish starving. More likely, a larger proportion would be hungry. The quantitative effect of malnutrition on disease and predator resistance is probably not known, but is probably present.

3) Information on regrowth of invertebrates may not be available. To be meaningful, we would need to know the biomass of the invertebrates over a period of time (such as a year).

4) Information on which fish species eat what percentage of which organisms would be hard to come by. Each fish species would presumably have a different invertebrate biomass coinversion rate, as well as different commercial values.

In response to the expressed concern that the area of tidelands affected is insignificant, the staff feels the acres of tidelands in Oregon are so scarce and extremely valuable, any damage is significant. Much of our fishery resource (both commercial and recreational) is dependent on healthy tidelands. Removing from productivity about 1.5 percent of all of Oregon's tidelands is not insignificant, any more than seriously damaging an entire river would be acceptable because it was only a small percentage of Oregon's total river system.

2. Is dry land storage a reasonable alternative to tideland storage?

The DEQ study lists as a recommendation that tideland storage be eliminated if practical. During the staff presentation prior to taking testimony it was brought out that DEQ now views land storage as not economically feasible. However, much of the testimony was directed towards the issue of land storage. Several people testifying cited the high costs, the likely environmental trade-offs, and the danger to the highways through increased truck traffic as their reasons. Also brought up was the lack of suitable land available for land storage.

The Northwest Steelheaders testified that the Greenacres Report should be examined for storage alternatives. Since the use of a large site in Eastside for dry land storage is mentioned in that report, the Steelheaders may have been referring to this.

The staff thinks that dry land storage is not now economically feasible.

3. Was proper weight given to economic consideration in the different alternatives to tidelands storage?

Most of the people testifying against the recommendations cited the cost as their major reason for being opposed. Many people felt DEQ did not consider the economic impact. Others felt that any cost was too high to pay considering the environmental damage that was occurring.

Staff response

To a large extent economics was taken into account in deciding on the recommendations. For example, both Weyerhaeuser and Georgia Pacific were requested, in the last two years, to make economic feasibility studies on dry land storage. Both companies came in with figures of $4-6 million each. Based on this information, the staff accepts that dry land storage is not economically feasible at this time.

As with all other environmental programs, DEQ continues to be open to information from companies on economic issues. It does not seem that the recommendations will result in any major expense. For example, confining loose logs to a small area would cost the time to round them up and additional boom sticks to confine them. Establishing new deep water storage areas would likely be the most expensive on the possible alternatives, with pilings for each acre of log storage costing $3500 - $6000. If this alternative is approved by the EQC, it is likely this cost would be spread over a period of time (possibly three years).

4. Is log storage over tidelands harmful or beneficial?

Two citizens testified they felt the logs were actually beneficial. They cited the growth of organisms on the logs (food for fish), the protection of fingerlings, and the protection of the mudflats from erosion during flods.

An opposite viewpoint was expressed by the head of the Oregon Marine

Institute, the Northwest Steelheaders, and the Oregon Fish and Wildlife representative. The staff feels significant damage is occurring.

5. Should a state agency be involved in a decision affecting Coos Bay?

Several of the citizens testifying objected to state government in general. They feel that Willamette Valley voters dictate decisions that are harmful to the coastal areas economically.

The state legislature has determined that protection of Oregon water resources is a concern of all state residents.

ATTACHMENT D

Department of Fish and Wildlife

OFFICE OF THE DIRECTOR

506 S.W. MILL STREET, P.O. BOX 3503, PORTLAND, OREGON 97208

Victor Atiyeh
Governor

May 1, 1979

Ms. Barbara Burton
Department of Environmental Quality
Southwest Region
1937 W. Harvard Boulevard
Roseburg, Oregon 97470

Dear Ms. Burton:

This letter is based on a number of studies, technical reports, inter-agency discussions and in-house memoranda regarding impact of intertidal log storage in Coos Bay.

The Department of Fish and Wildlife has long held that grounding of logs at rafting sites in estuaries causes severe loss to benthic populations. Studies show that tideflat benthic invertebrate populations at sites where grounding occurs are only 5 to 12% as great as in nearby control areas. This reduction of food organisms affects aquatic life that would otherwise benefit from normal food production. Invertebrate species affected are utilized by fishes of significant sport and commercial value.

In general, the growth rate and hence size of a given species of fish relate to the available food supply. It is well established that larger fish are able to escape predators, compete for food more successfully and produce more economic benefit to fisheries than smaller fish of the same age group.

Isthmus Slough was formerly productive of striped bass until water quality declined with an increase in point source pollution and log storage and handling. Elimination of slide dumps and reduction in log storage and point source pollution has resulted in gradual improvement in water quality and reestablishment of striped bass in the slough.

The Department generally favors the phaseout of tideland storage of logs where grounding occurs in Coos Bay and in other Oregon estuaries. We will welcome the opportunity to work with DEQ and the affected industries to select acceptable and economically viable alternatives so that a healthy fish resource can coexist with legitimate water storage and transport of logs.

Sincerely,

James B. Haas

James B. Haas, Chief
Environmental Management Section

JBH:ek

Department of Environmental Quality
SOUTHWEST REGION

1937 W. HARVARD BLVD., ROSEBURG, OREGON 97470 PHONE (503) 672-8204
Coos Bay Branch Office - 490 North Second, Coos Bay, OR 97420 - 269-2721

Richard P. Reiter
Regional Manager

February 28, 1979

Charles Walters
National Marine Fisheries Service
P. O. Box 4332
Portland, OR 97208

RE: WQ-Coos County
General - Log Handling

Dear Mr. Walters:

Enclosed is a copy of the Weyerhaeuser Co. rebuttal to our recently completed biological study on intertidal log storage. The specific questions I have regarding Mr. Herrmann's assumptions and conclusions are:

1. How important is the upper bay area? Mr. Herrmann is saying the upper bay is less important because there is less biomass (the lower salinity is the cause), and that importance of an area is strictly according to biomass. Couldn't a case be made that although there is less overall productivity, what there is, is crucial to many species (particularly the juveniles)?

2. With the number of fish species present in the upper bay as juveniles, wouldn't a better measure of productivity loss be numbers of fish rather than biomass of fish? I think it is very misleading to talk about biomass loss of fish when dealing with juvenile fish.

3. Mr. Herrmann made a verbal statement during our meeting that there is no absolute link between invertebrates and fish productivity, since the salmon or other juveniles could simply move on to an area where invertebrates are plentiful. Is that true? What effect does that have on the fish that are forced into more saline water before they are ready?

4. A crucial issue is how quickly the damage to the tidelands occurs from the logs. My guess is that the damage would occur within a week or so. Do you have any feel for this?

As we discussed February 28, 1979, we will be meeting the end of March to talk about the report. Any help you can lend on this issue will be very much appreciated. I can be reached at 269-2721 (Coos Bay), or 672-6204 (Roseburg) if you have any questions.

Sincerely,

Barbara A. Burton

Barbara A., Burton
Environmental Specialist

BAB:dp

Encl.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Environmental and Technical Services Division
P. O. Box 4332, Portland, Oregon 97208

April 17, 1979 FNW5:DRE

IW-Coos Log #.

Barbara A. Burton
Environmental Specialist
Oregon Department of
Environmental Quality
1937 W. Harvard Boulevard
Roseburg, Oregon 97470

Dear Ms. Burton:

Terry Durkin has responded to us regarding your February 28, 1979 letter to Charles Walters concerning your biological study on intertidal log storage. The following are his comments on your four questions in the order presented in your letter.

"1. An upper estuarine area can be very important. In summer, phytoplankton and zooplankton tend to accumulate there because of low river inflows. Primary and secondary trophic levels provide extensive grazing for smelt, anchovy and herring. Some fall chinook subyearling also utilize the zooplankters but probably concentrate on aquatic insects. Some insect larvae such as chironomids occur as benthic infauna while others are associated with submerged or emergent vegetation. If substrate texture, water velocities, water quality, and turbidity are satisfactory in an upper estuarine site large numbers of benthic amphipods can occur. We have a number of benthic samples taken east of Tongue Point in Cathlamet Bay that indicate densities of 45,000 to 60,000 Corophium salmonis per meter square. Other nearby sites may have densities of oligochaetes or diptera approaching or exceeding 10,000 m^2. Bivalves, such as Corbicula fluminea may occur in densities exceeding 700 m^2. Macoma balthica is even more common but found in a more marine habitat.

I should note that with poor substrate, water quality, and high turbidity, a low standing crop of invertebrates could occur in an upper estuarine site.

Obviously the study you cited by Zegers (1978) demonstrates a dramatic reduction in invertebrate densities and biomass at log grounding sites.

2. You certainly make a good point using fish numbers rather then fish biomass. Many species of estuarine fish and decapod shell fish are immature. It is apparent more information is needed to know what the composition of the fish community or assemblage consists of. However, you can easily convert the kilograms of fish to actual numbers with knowledge of the species involved. An 85 mm fall chinook subyearling

averages 5 gms or there are 200 per kg. Coho yearlings are 20 gms or 50 per kg. Shiner perch average 25 gms or 40 per kg, etc. I think it better to describe fish in terms of standing crop because productivity varies dramatically with season, life stage, temperature, energy flow and so on. A short life cycle of 21 to 20 days for some invertebrates may eliminate them from a monthly sampling cycle. Perhaps a better description of aquatic loss would be to rank caloric value of the food organism standing crop since some species eat benthic infauna while others consume benthic epifauna (mysids, crangon shrimp, etc.). By the way the grounding of log rafts should be physically and directly detrimental to the invertebrate epifauna, such as crabs, harpacticoid copepods, shrimp, etc.

3. If there is no link between invertebrates and fish why would they be consuming these invertebrates? We have found chinook, coho, smelt, sculpin, and flounder within the same seine haul consuming only the benthic amphipod Corophium salmonis. These amphipod may be packed into the stomach to a point of distending the intestine walls. Bivalves, diptera, and other amphipods are also extensively used by fish. I don't understand why Mr. Herrmann should make this comment since there is literature available that contradicts him. Forcing fish to move to other areas in search of food is no answer since many juvenile salmonids inhabit the upper 10'-15' of water. Reduction of intertidal and shallow subtidal acreage simply reduces the feeding area for subyearling chinook and chum. Paul Reimer's research team indicates estuarine rearing is essential for survival of fall chinook to adult stage and that available estuarine food may be a limiting factor.

4. The extent and duration of low tides, the depth of the water, the amount of wind or wave action of passing boats are all factors to be considered when predicting how fast and to what degree a benthic invertebrate community is reduced by log grounding. Egg carrying stages of the invertebrate and water temperature are other factors to be considered. It could happen in a day, a week, or as long as a month if there were high flows and the logs rarely grounded. I think it is also important to determine recovery time of all species. Some pioneer types may respond quickly but it would seem that others would be inhibited by the changed substrate texture.

Some additional comments:

The transient log rafting areas were mentioned and though they may not be extensive in area, could cause an extensive loss in invertebrate productive capability. There seems to be a disagreement on the log yard acreage in Coos Bay. Shouldn't it be possible to aerial photograph the bay at a set altitude on monthly or quarterly schedule for a year and establish the acreage accurately. I think county assessors do this now in Clatsop County but only at the end of the year.

A positive point you might offer would be to require all new rafting sites be placed where water depths exceed +8.0 above mlw. This should reduce grounding dramatically. A phased shift of other established rafting areas might be considered to also utilize greater depth and reduce storage impacts.

It would appear that Zeger's study indicated a reduction in biomass in the control areas near the rafts. This would suggest there is an additional impact. These lower numerical values appear to be used to reflect total biomass through the upper estuarine area and may not represent the biota 100 yards away. The study does establish how limited the biota is below log rafts.

Smith's work in the Snohomish River estuary has been mentioned regarding log rafts effects on biota. His work includes many statistical approaches, however, it essentially is dependent upon 5.07 cm^2 core samples. These cores are about <u>one</u> inch in diameter, and in my opinion of limited value. My experience is that substrate consists of homogenous population areas and also areas of numerical patchiness. If small physical samples are obtained this will lower the numbers of invertebrates and lend itself to statistical application. But it may in fact not represent the true status of an area. A single grab with our .05 m^2 sampler (Ponar dredge) represents over 80 of Smith's 5.07 cm^2 samples. O.S.U. uses a 0.1 m^2 Smith McIntyre dredge which would equal over 160 of Smith's cores. Smith's study has many good points but I would suggest its findings should be qualified where the sampling 5.07 cm^2 core method was used."

Terry also noted that his research group at Hammond has analyzed over 700 grab samples taken in the Columbia River estuary over the past three years and they fully realize they still have much to learn.

Sincerely,

Dale R. Evans
Division Chief

cc: Terry Durkin

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION X
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

REPLY TO ATTN OF: Mail Stop 521

MAY 3 0 1979

Barbara A. Burton
Department of Environmental Quality
Southwest Region
1937 W. Harvard Blvd.
Roseburg, Oregon 97470

Dear Ms. Burton:

We have reviewed the study entitled "The Effects of Log Raft Grounding on the Benthic Invertebrates of the Coos Estuary", which was recently completed by your agency. This study as well as others referenced in text (e.g., Smith, 1977) clearly show that intertidal log storage adversely impacts benthic communities.

The Environmental Protection Agency is entirely supportive of your efforts to phase out free-fall log dumps, institute debris control and removal measures in log handling areas, and reduce or eliminate intertidal log storage areas. We believe there is ample and conclusive evidence that generally supports the implementation of these types of controls on log handling and storage throughout the Pacific Northwest.

In the Coos Bay estuary, we believe the main issues associated with intertidal log storage are that industry has not (1) clearly demonstrated their needs for such areas, and (2) fully explored and evaluated alternative storage techniques, schedules or areas which may be available and reasonable. We further believe the gain in benthic production which would be realized from removing logs from intertidal storage areas is significant and worthy of a serious alternative evaluation.

If we can be of further assistance, please feel free to call me or Duane Karna of my staff at (206) 442-1352.

Sincerely,

Harold E. Geren

Harold E. Geren, Chief
Permits Branch

Suggested Headings: *Title, Objective, Conclusions and Recommendations*

ATTACHMENT E

TITLE: INTERTIDAL LOG RAFT STORAGE IMPACTS IN COOS BAY, OREGON

OBJECTIVES

The purpose of this report is threefold. First, to briefly review the Oregon Department of Environmental Quality (DEQ) report from the standpoint of technical approach, study findings and conclusions, and to relate the findings to those of other pertinent log raft impact research. Second, to assess the biological implications of the DEQ study to fish production. Third, to summarize our and other's log storage practices in Coos Bay. This latter objective is not an in-depth assessment; however, we now have a better idea of the current acreage used for company log storage.

SUMMARY

1. Intertidal benthic organisms are largely eliminated by log storage on the tideflats, principally through direct destruction (crushing, etc.) of these organisms and by physical alteration of the bottom (extreme softening through kneading and/or extreme compaction). Significant organic material increases in the substrate from bark or other losses from stored logs also depress the benthic infauna; however, direct destruction of the fauna and physical substrate alteration were found to be most important in the DEQ study

2. If logs were removed from intertidal storage areas, the estimated benthic biomass in summer of the areas would amount to 2050 kg (dry weight), compared to minimum biomass estimates of 64 370 kg and 257 000 kg for the benthos on the upper bays's and entire bay's tideflats. The 2050 kg would produce about 1370 kg (live weight) of fish tissue, about 0.6% of the minimum estimated fish production of the whole bay's tideflats.

3. The DEQ study estimate for the maximum bay intertidal area affected by log grounding of 114 ha (6% of the bay intertidal area) is excessive. The current Company intertidal log storage in the bay is about 20 ha, about 1% of the total intertidal area of the bay.

DISTRIBUTION (Summary Page only. Complete Report available on request from R&D Technical Information Center.

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1	Technical Information Center	T1C

Author's Signature	Date
Robert R. Herrmann	2/26/79
Author's Name (typed)	
Approved By (signature)	Date

FORM 2960-1 12/78

Suggested Headings: *Background, Approach, Experimental Results, References, Index Terms and Attachments*

TECHNICAL REVIEW OF THE DEQ REPORT

Four intertidal log storage locations in Coos Bay were investigated: two in Isthmus Slough, another in Cooston Channel (a Weyerhaeuser storage area), and one at Lillian Creek, off the Coos River above the highway bridge. Invertebrate densities were determined from counts of animals present in substrate core samples taken from the log raft storage areas and from control areas adjacent to the storage areas. Sampling was from June 1977 to July 1978. During the study, one study location at the mouth of Isthmus Slough was destroyed by channel dredging; at the other location in the slough, the logs were removed midway through the study, allowing the area to recolonize.

The study was well designed in most respects and paralleled Smith's (1977) log raft research studies on the Snohomish tideflats. No attempt was made to quantitate the substrate chemical and physical character where the samples were taken, however. The qualitative observations made during the sampling indicate bark and other wood debris were present at both the treatment (rafted) and control areas. Water quality testing was for salinity and temperature. Neither dissolved oxygen (DO) nor hydrogen sulfide (H_2S) were measured; these parameters are often affected by log storage (Shaumberg, 1973) and benthic wood deposits (Bella, 1975).

The invertebrate density data from the control and treatment area sampling were compared statistically. There were significantly greater densities in the control areas in almost all instances, indicating intertidal raft storage affected the benthos. Invertebrate biomass estimates were not developed during the study. Most of the samples subsequently have been destroyed, precluding developing such useful information.

I have no qualms about accepting the study results as accurate. Scientifically, the findings that intertidal log storage created temporary biological deserts at the four studied locations is unassailable. Similar findings resulted from the in-depth 1977 study in the Snohomish estuary. However, Smith found that Anisogammarus, a crustacean amphipod and an important fish food, was not harmed by rafting. Indeed, this animal lives on bark on the bottom and on the logs. Anisogammarus apparently was not found in the DEQ study, however.

I concur with Zegers' (DEQ) conclusion that physical alteration of the substrate (kneading - resulting in extreme wateriness) and direct benthos destruction by the logs were the principal causes of the differences in animal numbers between the control and treatment (rafted) sites. Smith also found this to be the case at Everett. Pease (1974) in Alaska found intertidal storage destroyed the benthos through extreme compaction of the sand-gravel substrates in the rafting areas. In studies of subtidal (deep water) log

Suggested Headings: *Background, Approach, Experimental Results, References, Index Terms and Attachments*

storage areas, several researchers have noted shifts in the benthic organism assemblage away from infauna (animals dwelling in the substrate) to epifauna (animals dwelling on the surface of the substrate or on debris on the bottom) (Pease, 1974; McDaniel, 1973; Conlan, 1977; Walker, 1974). While part of this shift seems attributable to debris accumulations covering infauna sites, the above authors and Bella (1975) also indicate anaerobic decomposition products, as H_2S from the wood material in the mud, depress the infauna.

The hypothesis that chronic toxicity of leachates from bark annd wood incorporated into the substrate and their breakdown products can contribute to the difference appears to have some validity.

The numbers of animals at Zegers' control sites, immediately adjacent to the raft site, where the substrates were also affected by bark and other organic material, were substantially less than at nearby locations in Coos Bay or similar estuary regions of the Snohomish and Grays Harbor (Tables 1, 2). As an example, the average number of Coprophium (a small, crustacean amphipod which is very important in fish diets) ranged from about 300 to 800/m^2 in the summer months at the control sites in the DEQ study. These numbers calculate out to a biomass of 0.2 to 0.5 g (dry weight). In some recent work by the Institute of Marine Biology staff in the upper bay, average Corophium biomasses in different intertidal zones ranged from 0.6 to 3.5 g/m^2, with the average being 2.2 g/m^2 (McConnaughey, 1972). Further, at Everett, in Steamboat Slough near our pulp mill outfall, we found Corophium biomasses in summer ranging from 1.5 to 5.6 g/m^2 (average 3.2 g/m^2). Smith reports Corophium densities which calculate to 27 g/m^2!

Further supporting the hypothesis that excessive substrate organics depress benthic productivity, in Grays Harbor and Willapa Bay we found clam densities (Mya, Macoma) and species distributions were correlated with mud organic content (Smith, Herrmann, 1972). Very high organic contents depressed clam densities. Unfortunately, Zegers did not analyze for chemical oxygen demand (COD) or total volatile solids (TVS) in the mud, so I have no way of comparing the organic levels he was dealing with to what we have found in our studies. In sampling tideflat chemical and physical character in Grays Harbor, we found a 0.96% carbon content at nonrafting locations and 1.56% at raft sites (Herrmann, 1971). Smith (1977) reports TVS levels of 6.9% and 9.9% in rafted areas compared to a mean of 6.3% for the surrounding areas.

Another explanation of the paucity of animals at the DEQ control sites and their small size (P. Zegers, personal communication) relates to the brackish (low salinity) environment where most of the log storage occurs. Remane and Schlieper (1971) in their treatise, "Biology of Brackish Water" point out that both the numbers of species and the animal size within species are diminished in the brackish water zone, compared to the variety and size of animals in areas at higher salinity.

Suggested Headings: *Background, Approach, Experimental Results, References, Index Terms and Attachments*

During the DEQ study, the rafts were removed from one of the Isthmus Slough study sites. Following removal, benthic fauna began to repopulate the site in much the same manner as occurred in Smith's Snohomish study. Whether the infauna would ever reach the high densities present in areas unaffected by rafting is open to conjecture, however. Studies in subtidal rafting areas where debris accumulations were severe and persistent seem to indicate a permanent shift toward epifauna (Pease, 1974; McDaniel, 1973; Conlan, 1977; Walker, 1978).

In the discussion section of the DEQ report, one point which will need revision is that dealing with the acreage of stored logs. Their acreage estimate is dated (1972), besides being inaccurately transcribed from the original source (the Greenacres report). The log storage acreage question is considered in some detail below.

STUDY FINDINGS IMPLICATIONS TO FISH PRODUCTION

Conley (1977), in a fish and feeding habits study at Snohomish rafting sites, concluded that fish - flounder, sculpins, salmonids, perch, etc. - showed no avoidance of raft storage areas. Water quality in the Snohomish area was good. Overall, water quality in Coos Bay approaches the Snohomish situation. In Isthmus Slough in summer, a low flushing rate combined with elevated BOD in the water column and benthic SOD may result in minimum DO levels which may cause fish to be stressed, however. Not unexpectedly, some of the more sensitive forms may be excluded from this area (Table 3). Thompson (1971) found mainly hardy forms of fish inhabiting Isthmus Slough in the summer - shiner perch, stickelback, sculpins and flounder. Salmonids and striped bass were uncommon. Most of these fish are forage for birds or larger fish, as striped bass. In the upper part of the bay proper, McConnaughey (1972) reports the dominant forms of fish are juvenile sole and flounder, smelt, tom cod, shiner perch and sculpins. Juvenile crab are also abundant. Because conditions are more optimum for fish life, this region is more of a rearing area than Isthmus Slough.

From this literature review, I conclude that fish will be found in proximity to the raft storage areas. Juvenile salmonids will be present in spring and summer as outmigrants, foraging for food. Many of the other forms, as shiner perch and the sculpins, will be present year-round and provide food for birds and such important fish as striped bass. The juvenile flounders, sole and crabs rearing in the area will also provide forage, but will also grow and migrate out of the area, into the outer bay and/or ocean, to contribute to fisheries in those areas.

Personnel at the Institute of Marine Biology have studied fish feeding habits in Coos Bay; fish feeding habits are also available for other Northwest estuaries. Basically these studies show that the juvenile salmonids (coho, chinook) in estuarial areas feed mainly on amphipods - Corophium and

Suggested Headings: *Background, Approach, Experimental Results, References, Index Terms and Attachments*

Anisogammarus - followed by shrimp, insects, larval fish and polychaete worms (Tokar, Tollifson, Dennison, 1970; Herrmann, 1971; Conley, 1977). Perch, sculpins and the juvenile sole/flounder assemblage are less specific in food habits and utilize shrimp, crabs, amphipods, clams, worms and fish (Radosh and Fenney, 1970; Thompson, 1971; McConnaughey, 1972; Conley, 1977).

What is the effect of the lost benthic production in the log storage areas on the bay food resource for fish? Corophium, for example, is found intertidally throughout Coos Bay (C of E, 1975) and is very important to juvenile salmonids as well as juvenile forage fish and sole/flounder. Using McConnaughey's average Corophium biomass figure of 2.2 g/m^2 for the standing crop of Corophium for upper Coos Bay in the summer, we arrive 40,700 kg (dry weight) for the entire bay intertidal area (185×10^5 $m^2 \times 2.2$ g/m^2). The estimated 57 to 114 ha of tidelands taken out of production by log storage (DEQ figures) theoretically would reduce the Corophium standing crop by 1250 to 2500 kg. However, the Corophium estimates for the control sites adjacent to the storage sites actually were much below that reported by McConnaughey, amounting to only 0.33 g/m^2. Using this lower value to calculate the Corophium biomass on recolonized log raft sites, we arrive at a biomass value between 188 kg and 377 kg. Using an average value of 280 kg (dry weight) and assuming the entire biomass was consumed at a 6:1 conversion efficiency for food to fish flesh (Perkins, 1974), 47 kg (dry weight) or 185 kg live weight of fish tissue would be produced. If the fish tissue were of forage fish - sculpins, perch - which are the most aboundant forms in the upper bay, rather than food fish, another 75% or more loss would occur when the forage fish was consumed by, say, a striped bass.

Although the benthic amphipods were indicated in the literature as a very important fish food, the Annelids and Molluscs - worms andd clams - which actually dwell in the tideflat substrate (infauna) are secondary food sources. These food resources are more utilized by the bottom-dwelling flounders, sole and sculpins. To derive an estimate of the maximum biomass available from the rafted areas, the mean total biomass figure calculated from the summer density data at control sites in the DEQ study, 2.4 g/m^2 (Table 1), can be multiplied by the theoretical area impacted, 57 to 114 ha. The resultant biomass estimates, 1370 kg to 2740 kg, apply just to the summer period, when maximum numbers occur. These estimates can be compared to a figure of 64 370 kg for benthic biomass in the upper bay calculated for a biomass density of 14.5 g/m^2 (biomass estimate including larger clams, shrimp, worms is 31 g/m^2) in the study by McConnaughey and others (1971) for the 444 ha in the upper bay. Again, using a 6:1 conversionn efficiency and the mean total biomass figure in the raft storage areas, 2050 kg dry wt. would be converted to 1370 kg (live wt.) of fish tissue, mainly perch and sculpins. The 2050 kg figure amounts to 3% of the benthos estimate for the upper bay; however, the log rafted intertidal areas amount to about 20% of the upper bay area.

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Applying the same conversion to McConnaughey's biomass figure for the upper bay proper, the live weight of fish tissue produced would be about 43 000 kg; for the whole bay's tideflats the fish flesh figure is 215 000 kg. The estimated gain in fish production of the intertidal log rafted areas, if the rafts were removed, would amount to 0.6% of the figure for the entire bay intertidal areas.

The key point here is that the intertidal areas where logs are stored are not nearly as productive as the rest of the tideflats and would not produce as much benthic biomass per unit area as other areas of the bay proper. The data from the control sites compared to that from other non-raft storage areas show this. Also, for Isthmus Slough, the single major raft storage area, studies have shown depressed water quality in summer and important food fish apparently are uncommon in the area. Increased benthos in this area would only indirectly benefit recreational and food fish through producing more sculpins and shiner perch.

Trends in Log Storage in Coos Bay

Over the period from 1967 to 1978, the Company has stored logs at 23 locations; not all 23 were in use during any year, however, (Table 4). Three of these sites - at the mill, and the Dellwood and Alleganey tie-ups - are not considered in the following discussion because rafts at these locations are really in transit rather than in storage. Of the 20 storage locations, 5 are/were in the Coos River and are not directly relatable to biological conditions on the tideflats in the estuary. In the bay, 5 (about 33 ha) of the 15 storage sites were used for loose log storage, rather than for unbroken rafts. The 8-bay raft storage sites have an approximate area of 40 ha.

The total Company acreage used for storage has been reduced over the decade. Particularly, loose log storage has been largely eliminated in favor of additional deep water raft storage. The loose log storage occurs almost wholly on the tideflats.

	1972	1974	1976	1978
River & Bay	72 ha	63 ha	67 ha	65 ha
Bay only	59 ha	52 ha	53 ha	52 ha

The 8 ha reduction in bay storage is a decrease of 15%. The no longer used acreage was wholly intertidal, loose log storage.

Company personnel in past years estimated that about half of their log storage was intertidal, subject to grounding on the tideflats. Half of the Company bay storage acreage for the 1972-1976 period amounts to 26 ha. The best current estimate of the Company's bay intertidal storage is 20 ha, 38% of the

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total, and a reduction of 6 ha. Actual inspection of the storage areas would be necessary, and is recommended, to determine accurately the acreage affected by grounding. This should be done next summer, when minimum tides prevail.

In the DEQ report, the estimate for total log storage in the bay was 231 ha; apparently this is in error, for the date source, the 1974 Greenacres report (text) gives 191 ha for maximum log storage in the bay. The Greenacres report estimates Company maximum bay log storage in 1972 at 61 ha, about the same as the 60 ha I report for 1972. Since our current bay storage is estimated at 52 ha, the DEQ figure certainly seems erroneously high. Further, at this time neither Menasha nor Cape Arago stores logs in the water and the DEQ figure needs to be corrected downward for these acreage reductions. No doubt there have been other log storage reductions I am not aware of. Thus, the DEQ maximum estimate of 7.5% for the tideflat area affected by raft grounding seems much too high - 4% or less seems more reasonable, based on our current state of knowledge.

To conclude, I don't think the study established an economic benefit -significantly more fish - to be gained by ending all intertidal storage. Balanced against the economics of water storage, the benthos loss does not seem significant.

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Weyerhaeuser Company
Research and Development

Suggested Headings: *Background, Approach, Experimental Results, References, Index Terms and Attachments*

Table 1 Benthic Invertebrate Abudance And Biomass Near Three Coos Bay Log Raft Storage Sites (Based on DEQ Data, 1977-1978)

	Avg wt (mg)	Cooston Channel		Lillian Creek		Isthmus Slough	
Annelids		No/m²	G/m²	No/m²	G/m²	No/m²	G/m²
Manayukia Pseudoamphicteis Aphicteis Oligochaeta	0.01[1]	202	Tr	556	Tr	1189	Tr
Capitella Heteromastis	0.3[2]	1151	0.3	60	Tr	-0-	-
Neanthes Nereis	0.3[2]	193	0.1	296	0.1	1134	0.3
Crustaceans							
Corophium Anisogammarus	0.67[1]	797	0.5	270	0.2	465	0.3
Molluscs							
Macoma Tellina	7.5[1]	268	2.0	450	3.4	-0-	-
TOTAL BIOMASS			2.9		3.7		0.6

[1]From Firth and Hermann, 1976.
[2]Estimated weight; based on P. Zegers personal communication.

Table 2 Benthic Invertbrate Abudance and Estimated Biomass From Everett Grays Harbor and Coos Bay Estaurine Areas

	Avg wt (mg)	Everett Estuary - Steamboat Slough				Grays Harbor-So.Channel		Coos Bay-Upper Bay
		Smith 1977 (8/75 data)		Firth, Hermann 1976 (6/76 data)		Weyerhaeuser unpublished (April, 1977 data)		McConnaughey, 1972 (summer, 1971 data)
		No/m²	G/m²	No/m²	G/m²	No/m²	G/m²	G/m²[1]
Annelids								
Manayunkia Pseudoamphicteis Amphicteis	0.01	233 899	2.3	6 842	0.07	169 368	1.7	
Oligachaeta Capitella Heteromastis	0.3[3]	1 503	0.4	-0-	-	-0-	-	7.2*
Neanthes Nereis	0.3[3]	877	0.3	-0-	-	-0-	-	
Crustaceans								
Corophium	0.67[2]	40 355	27.0	4 839	3.2	3 473	2.3	2.2
Anisogammarus		7 357	nd	474	nd	-0-	-	0.1
Molluscs								
Macoma Tellina	7.5[2]	2 191	16.4	716	5.4	2 714	20.4	5.0
TOTAL BIOMASS			46.4		8.7		24.4	14.5

[1]Biomass data from cited report; larger invertebrates: crabs, mud shrimp, Mya clams, etc. omitted.
[2]From Firth and Hermann, 1976.
[3]Estimated weight.
*Includes additional species and genera, mostly larger forms.

Table 3 Important Estuarine Fishes Of Upper Coos Bay And Their Benthic Food Preferences

	Abundance Ranking*		Food Ranking:** Primary (Prim); Secondary (Sec)											
	Isthmus Slough	Upper Bay	Shrimp/Crabs		Amphipods		Clams		Worms		Insects		Fish	
			Prim	Sec	Prim	Sec	Prim	Sec	Prim	Sec	Prim	Sec	Prim	Sec
Shiner Perch A&J	1	1		2,3	1,3	2	1,2			2		3		2
Staghorn Sculpin A&J	3	2	1,2,4	3	1,3	1		1,2,4		1,2,3		3,4	4	3
Starry Flounder J	5	4	1,2	3	1,3			1,2		1,2				1,3
Stickelback A&J	2	present			3							3		
English Sole J	absent	3	1	2	1	2	2	1		1				1
Smelt A&J	4	5	1		1			1						1
Tomcod A&J	absent	6	1		1									
Striped Bass J	present	present	3										3	
Coho Salmon J	present	present	4,6		4,6						6	4		6
Chinook Salmon J	present	present	6	4,5	4,5,6					5	4,5,6		4	5,6

*Based on McConnaughey, 1972; Thompson, 1971; Radosh and Fenney, 1970.

**Based on many studies; referenced in table by study number:

1 McConnaughey, 1971
2 Radosh and Fenney, 1970
3 Thompson, 1971
4 Conley, 1977
5 Hermann, 1971
6 Tokar, Tollifson and Dennison, 1970

Table 4 Weyerhaeuser Log Storage Areas And Acreages In Coos Bay And River, 1967-1978

	Log Storage Areas	Hectares: Deep Water	Hectares: Inter-tidal	Total	Loose or Rafts	1967	1972	1974	1976	1978
1.	Mill Tie-up	1.5	0	1.5	Rafts	+	+	+	+	+
2.	North Bend/Irwin Olsen	5.3		5.3	Rafts	+	+	+	+	+
3.	North Port	0	11.3	11.3	Loose	+	+	+	+	-**
4.	North Port	0.7	0	0.7	Rafts					+
5.	Waterford	0	11.5	11.5	Loose	+	+	+	+	+
6.	Waterford	2.7	1.8	4.5	Rafts		+	+	+	+
7.	Willanch	0	3.6	3.6	Loose	+	+	-**		
8.	Lillianthal	2.3	1.1	3.4	Rafts	+	+	+	+	+
9.	Bull Island (inner)	1.5		1.5	Rafts				+	+
10.	Christianson	7.9	1.1	9.0	Rafts	+	+	+	+	+
11.	Franz Bull Island		2.1	2.1	Rafts		+	+	+	+
12.	McCarthy	1.2	1.3	2.5	Loose	+	+	-**		
13.	Evans			8.7	Rafts					+
14.	Gunnell			1.2	Loose	+	+	-**		
15.	Coos Bulkhead			2.9	Rafts		+	+	+	+
16.	Graveyard Point*			5.6	Loose	+	+	+	+	+
17.	Graveyard Point			3.1	Rafts	+	+	+	+	+
18.	Franz	0.9	1.0	1.9	Rafts		+	+	+	+
19.	Morins	2.3	0	2.3	Rafts	+	+	+	+	+
20.	Forks		1.2	1.2	Loose	+	+	-**		
21.	Forks	1.8	0.4	2.2	Rafts				+	+
22.	Dellwood	1.2	0	1.2	Rafts	+	+	+	+	+
23.	Alleganey	1.6	0	1.6	Rafts	+	+	+	+	+
				Bay Acreage		47.8	59.4	52.1	53.7	51.8
				River Acreage		12.5	12.5	11.3	13.4	13.4
				Total Acreage		60.3	71.9	63.4	67.1	65.2

*Referenced use through 1972; status unknown in 1978, perhaps phased into raft storage.
**Use of this area ceased.

R. B. HERRMANN 2/22/79 TR070 029 2C PROPRIETARY

ABANDONED BOOM AREAS - COOS BAY
February 8, 1979

		ACRES		
		MUD FLATS	SUBMERGED	TOTAL
1.	Coos Head Timber Co., Empire	61	29	90
2.	Moore Mill, Cape Arago	4	4	8
3.	Weyco Boom (Pierce Point)	16	1	17
4.	Menasha Boom (Pierce Point)	84	8	92
5.	Waterford Boom	29	10	39
6.	Port Boom	191	5	196
7.	Evans Boom	63	11	74
8.	Evans Tie-up (Coalbank Slough)	-	8	8
9.	Catching Slough 1.	11	4	15
	2.	3	3	6
	3.	5	3	8
	4.	3	3	6
10.	South Slough Area			
	Long Island Point Area	23	19	42
	Southern-most area near school	6	9	15
11.	Davis Slough	30	20	50
	GRAND TOTAL - Approximate acres	529	137	666

MEMO:

OTHER AREAS NOT INCLUDED IN ABOVE - COOS BAY & TRIBUTARIES

North Slough - Large log dump

Haynes & Larson Slough - Log dump and sawmill

Old Town Mill at North Bend

Menasha Plant at North Bend

Henryville Log Dump & Boom - Isthmus Slough

Delmar Log Dump - Isthmus Slough

Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. M, September 21, 1979, EQC Meeting

Proposed Adoption of Revisions to Oregon's Water Quality Standards (OAR Chapter 340, Division 4)

Background and Problem Statement

ORS 468.735 provides that the Commission by rule may establish standards of quality and purity for waters of the state. Present Water Quality Standards (contained in Subdivision 41 of OAR Chapter 340) were adopted by the Commission in December 1976.

The U.S. Environmental Protection Agency has disapproved and requested revision of some of the standards adopted in December 1976.

By letter to the Governor dated July 18, 1977, EPA requested changes in three areas to permit their full approval of Oregon's Standards: (1) anti-degradation policy expansion and clarification, (2) clarification of procedures for granting variances to temperature and turbidity standards to accommodate essential instream construction (or elimination of such variances) and (3) relaxation of Total Dissolved Gas Standard to be consistent with adjacent states.

EPA also, by separate communications, urged the Department to consider more specific standards relative to Toxics and consider substitution of Fecal Coliform standards for the present coliform standards. EPA can promulgate federal standards for Oregon waters if state standards are not, in their judgment, sufficient for approval.

In June 1978, the Department circulated issue papers for public comment relative to alternative potential changes in standards for Temperature, Turbidity, Fecal Coliforms, Total Dissolved Gases, Antidegradation Policy and Toxic Substances (see Attachment II) Numerous comments were received. The Department summarized and evaluated the comments and prepared proposed standards revisions (see Attachment III).

On January 26, 1979, the EQC authorized the Department to conduct public hearings on the potential amendments to Oregon's Water Quality Standards (OAR Chapter 340, Division 4). In April, 1979, the Department circulated 1500 copies of proposed standards revisions in preparation of public hearings scheduled in Portland, Roseburg, Bend and Pendleton between June 4 and 7. The record of the public hearing was left open until June 18, and the last letter of testimony which requested modification of an earlier letter was received on July 9. All of the hearings except for the one in Portland were held in the evening. Overall, the meetings were not well attended. One written testimony was read into the record in Portland and four oral testimonies were presented in Roseburg.

The public participation process for the proposed revisions to the standards elicited 33 written testimonies from the first set of issue papers circulated in June, 1978, and 12 from the second set of draft proposals in June, 1979. A summary and evaluation of the June, 1979, public hearing testimony is presented in full in Attachment IV.

Summary of Alternatives, Testimony, Evaluation, and Staff Recommendation

Attachment I contains a summary of the alternatives considered, testimony received through the public participation and hearing process, staff evaluation, and the staff recommendation for each of the following standards (page numbers are noted for easy reference):

Due to length, this is not resummarized into this report but is instead included by reference.

Summation

1. For EPA approval of Oregon's Standards revisions are necessary for six Water Quality Standards as follows:

   a. Antidegradation policy expansion and clarification.

   b. Clarification of procedures for granting variances for the:
      (1) Temperature Standard
      (2) Turbidity Standard

c. Relaxation of the total dissolved gas standard to be consistent with adjacent states.

d. Substitution of a Fecal Coliform Standard for the Total Coliform Standard.

e. Consideration of more specific standards for Toxic substances.

2. The Department employed the following public participation process in revising the standards:

a. Issue papers and possible alternatives were developed and circulated to governmental agencies and the public for review.

b. Comments received were evaluated and further revisions to the standards were proposed.

c. The second set of draft proposals was circulated for review and comments in April, 1979. Also included in this mailing was a public notice announcing the scheduled public hearings in June, 1979.

d. Four public hearings were held in Portland, Roseburg, Bend, and Pendleton between June 4 and 7, 1979 and the record was left open through June 18 to receive additional testimony.

e. Evaluation of hearing testimony and development of recommended standards revisions are consistent with input from the interested public and governmental agencies.

Director's Recommendation

Based upon the summation, it is recommended that the Commission approve the revisions as proposed under the Recommended Action for each of the six Water Quality Standards shown in Attachment I.

William H. Young

Attachments:
I. Summary of Alternatives, Testimony, Evaluation, and Staff Recommendations (Revised 9/12/79 per advise from Legal Counsel)
* II. June 1978, Issue Papers for Proposed Water Quality Standards Revisions
* III. January 1979, Revised Proposed Water Quality Standards
IV. June 1979, Public Hearing Evaluation of Testimony and Recommendations

Edison L. Quan:em
229-6978
August 10, 1979

* Attachments II and III previously circulated

ATTACHMENT I
(Revised 9/12/79)

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY PROGRAM

Summary of Alternatives, Testimony, July 25, 1979 Evaluation and Staff Recommendations

The process for developing alternatives and evaluating public testimony for revising each of the six water quality standards is as follows:

A. Turbidity--the existing standard is as follows:

> No more than a 10 percent cumulative increase in natural stream turbidities shall be allowed except for certain specifically limited duration activities which may be specifically authorized by DEQ under such conditions as it may prescribe and which are necessary to accommodate essential dredging, construction, or other legitimate uses or activities where turbidities in excess of this standard are unavoidable .

EPA objects to the variance clause, which is underscored, in the standard. Their interpretation is that the variance clause is open-ended and that DEQ can vary or remove the criteria for a waterway at its own discretion without changing the beneficial uses assigned to it.

Alternatives

The following alternatives to the turbidity standard variance clause and their probable consequences were presented to the public in the review process:

1. Leave the turbidity standard as is with the variance clause included:

   a. EPA would not approve such a standard.

   b. From an administrative standpoint, the Department, the public and the private sector have not encountered any problems with the variance clause.

2. Clarify the variance clause as follows:

   . . . . except for specifically limited duration activities which may be specifically authorized by DEQ under such conditions as [it] DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate essential dredging, construction, or other legitimate uses or activities where strict compliance with this standard is technically unavoidable.

a. Such a modification to the current variance clause may or may not be acceptable to EPA.

b. The additional language inserted, which gives the Department of Fish and Wildlife an opportunity to prescribe conditions or precautions, is the standard procedure DEQ currently follows.

3. Add the following language to the variance clause, "all practicable turbidity preventive techniques have been applied."

4. Add the following language to the standard, "In no event, however, may a variance be granted which in all probability will adversely affect any other beneficial use disproportionately".

Testimony

1. Respondents wanted a variance clause retained in the standards.

2. Concern was expressed that the inclusion of the Department of Fish and Wildlife in the variance clause would cause duplication in the review of applications for permits administered by the Corps of Engineers and Division of State Lands and thus would create unnecessary delays.

3. Requests were made to tighten up the variance clause, including a better definition of "natural stream turbidity," a public involvement process, and monitoring requirements for instream activities.

Evaluation

1. Additional language in the turbidity standard is needed to clarify the measurement of background levels compared to the turbidity causing activity.

2. Reference permits for instream activities granted by the Corps of Engineers and Division of State Lands. These agencies are responsible for submitting public notices and for holding public hearings. All governmental review agencies and the public have opportunity for review and comment on projects proposed and variances requested.

3. Reference projects requiring only an emergency type permit administered by the State Lands Division. Activities necessary to respond to emergencies are reviewed primarily by DEQ and Department of Fish and Wildlife. In these situations time does not permit notices to be circulated, broad agency and public review or public hearings.

Recommended Action

In view of the above evaluations, the Department proposes to modify the turbidity variance language. It is proposed to replace the existing language of the standard with the following:

Turbidity (Jackson Turbidity Units JTU):

No more than a 10 percent cumulative increase in natural stream turbidities shall be allowed, as measured relative to a control point immediately upstream of the turbidity causing activity. However, limited duration activities necessary to address an emergency or to accommodate essential dredging, construction or other legitimate activities and which cause the standard to be exceeded may be authorized provided all practicable turbidity control techniques have been applied and one of the following has been granted:

(1) Emergency Activities: Approval coordinated by DEQ with the Department of Fish and Wildlife under conditions they may prescribe to accomodate response to emergencies or to protect public health and welfare.

(2) Dredging, Construction or Other Legitimate Activities: Permit or certification authorized under terms of Section 401 or 404 (Permits and Licenses, Federal Water Pollution Control Act) or OAR 141-85-100 et seq. (Removal and Fill Permits, Division of State Lands), with limitations and conditions governing the activity set forth in the permit or certificate.

The above language is proposed to replace existing language in the following sections:

OAR 340-41-205(2)(c)
" " 245(2)(c)
" " 285(2)(c)(A)
" " 325(2)(c)
" " 365(2)(c)
" " 445(2)(c)
" " 485(2)(c)
" " 525(2)(c)
" " 565(2)(c)
" " 605(2)(c)
" " 645(2)(c)
" " 685(2)(b)
" " 725(2)(c)
" " 765(2)(c)
" " 805(2)(c)
" " 845(2)(c)
" " 885(2)(c)
" " 925(2)(c)
" " 965(2)(c)

B. Temperature: - The existing standard is as follows:

> No measurable increases shall be allowed when stream temperatures are ___°F. or greater; or more than 0.5°F. increase due to a single source discharge when receiving water temperatures are ___°F. or less or more than 2°F. increase due to all sources combined when stream temperatures are ___°F. or less, except for specifically limited duration activities which may be specifically authorized by DEQ under such conditions as it may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable.

EPA objects to the variance clause in the standard, which has been underscored. It is their interpretation that the variance clause is open-ended and that DEQ can vary or remove the criteria for a waterway at its own discretion without changing the beneficial uses assigned to it.

Alternatives

The following alternatives to the temperature standard variance clause and their probable consequences were presented to the public in the review process:

1. Leave the temperature standard as is with the variance clause included.

   a. This would probably be unacceptable to EPA.

   b. The variance clause currently serves little or no usefulness.

2. Delete the variance clause from each of the 19 basin's temperature standard.

   This would be acceptable to both EPA and DEQ.

3. Add the following language to the variance clause:

   a. " ... DEQ and the Department of Fish and Wildlife" may prescribe.

   b. In no event, however, may a variance be granted which in all probability will adversely affect any other beneficial use disproportionately.

4. Exclude discharges of hydroelectric and flow regulating projects from the temperature standard when requested by the Department of Fish and Wildlife for the enhancement of fish life.

Testimony

1. Many respondents wanted the variance clause retained.

2. The Corps of Engineers requested that Item 4 above be removed because reservoirs serve multipurposes and do not need a special variance.

3. Other issues that need to be addressed include:

   a. Define the time in "limited duration."

   b. Define measurement technique for temperature increases in the standard.

   c. Add the following language to the end of the variance clause, "and all practicable temperature reduction techniques have been applied."

   d. Use a public notice procedure request for waiver requests.

Evaluation

1. Additional language is needed to clarify the measurement tec ique of the standard.

2. Honor the request of the Corps to delete the previously proposed clause which excluded hydroelectric and other flow regulating projects.

3. Delete clause 3b under alternatives because an increase in temperature would benefit body contact recreation but could adversely affect aquatic life.

4. Add language requiring the Director to hold a public hearing if a planned activity or discharge will increase the temperature significantly to adversely affect the beneficial uses.

Recommended Action

Based upon the review and evaluation of comments from the respondents, the Department proposes to modify the variance language of the temperature standard. Since the numerical limits of this standard differ among the 19 river basins, these limits have been left blank to avoid confusion. The existing language proposed to be deleted is enclosed in brackets and the new language proposed is underscored:

No measurable increases shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream from a discharge when stream temperatures are __°F. or greater; or more than 0.5°F. increase due to a single source discharge when receiving water temperatures are __°F. or less; or more than 2°F. increase due to all sources combined when stream temperatures are __°F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as [it] DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accomodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

The above amended language is proposed to be incorporated into the following sections with the present temperature values included where the blanks occur:

OAR 340-41-205 (205(2)(b)(A) and (B)
" " 245(2)(b)(A)
" " 285(2)(b)(A)
" " 325(2)(b)(A)
" " 365(2)(b)(A)
" " 445(2)(b)(A) and (B) and (C)(i) and (C)(ii) and (D)
" " 485(2)(b)(A) and (B)
" " 525(2)(b)(A) and (B)
" " 565(2)(b)(A) and (B)
" " 605(2)(b)
" " 645(2)(b)
" " 685(2)(b)
" " 725(2)(b)
" " 765(2)(b)(A) and (B)
" " 805(2)(b)
" " 845(2)(b)
" " 885(2)(b)
" " 925(2)(b)(B)
" " 965(2)(b)(A) and (B)

C. Coliform Bacteria --The existing standards read as follows:

Organisms of the coliform group where associated with fecal sources (MPN or equivalent MF using a representative number of samples): (Note: MPN = Most Probable Number, MF = Membrane Filter)

1. Streams and Rivers

   Average concentrations of coliform organisms shall not exceed ____ per 100 milliliters, with 20% of the samples not to exceed ____ per 100 ml.

2. Marine waters and estuarine shellfish growing waters:

   Median concentrations shall not exceed 70 per 100 ml.

3. Estuarine waters other than shellfish growing waters:

   Average concentrations shall not exceed 240 per 100 milliliters or exceed this value in more than 20% of the samples.

EPA recommended the following bacterial standards for Oregon's Waters:

1. For fresh waters and estuarine waters other than shellfish growing waters--a log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

2. For marine and estuarine shellfish growing waters--a fecal coliform median concentration of 14 MPN per 100 milliliters, with not more than 10 percent of the samples exceeding 43 organisms per 100 ml.

Alternatives

The following alternatives to the coliform standard and their probable consequences were presented to the public in the review process:

1. Leave the coliform standard as is.

   a. This would probably be unacceptable to EPA.

   b. The existing standard may cause confusion because it is impossible to differentiate between coliforms from fecal and nonfecal sources without conducting additional tests.

2. Adopt as recommended by EPA, both the standard for fresh waters and estuarine waters other than shellfish growing waters and the standard for marine and estuarine shellfish growing waters.

a. Problems arising from sampling frequency may result from adoption of the EPA recommended standard for fresh waters and estuarine waters other than shellfish growing waters which reads: a log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

As a practical matter, it is not possible to meet the minimum sampling frequency of 5 samples per month, except on special studies type surveys. Thus, an upper limit for a fecal coliform density is an essential part of the coliform standard because the DEQ and others often sample waterways on a once per month basis.

b. EPA has also proposed to use a log mean value in the standard. The reason for this is because bacterial populations are often characterized by many more extremely high counts relative to the median than extremely low counts, forming a positively skewed (asymmetric) distribution. For both practical and theoretical reasons, it is preferable to work with a normal or symmetrical distribution. The counts are therefore transformed into logarithms to obtain a calculated log mean value. However, if the original data have a log-normal distribution, the central tendency of such data can also be estimated by the geometric mean. The geometric mean of the original data is equal to the antilog of the arithmetic mean of the logarithms. It is of interest that the population geometric mean is equal to the population median (FWQA, 1971). Thus, in the case of bacterial data forming a skewed distribution, the median value from a large number of samples should be sufficient for estimating the central tendency of the fecal coliforms. This procedure would be similar to the one adopted by the National Shellfish Program and recommended by EPA for adoption.

3. Revise the EPA recommended fecal coliform standard wording for fresh waters and estuarine waters other than shellfish growing areas to be consistent with that proposed for marine and estuarine shellfish growing waters. In addition, add an upper limit for fecal coliform density for a single sample.

> "For fresh waters and estuarine waters other than shellfish growing waters:
>
> (1) Fecal coliform concentration should not exceed 800 per 100 milliliters at any time.

(2) A fecal coliform median of 200 per 100 milliliters, with not more than 10 percent of the samples exceeding 400 organisms per 100 ml."

a. Under Item (1) above, the fecal coliform density of 800 per 100 ml. was arbitrarily selected because it is twice the 400 organisms per 100 ml. in Item (2). Also, review of fecal coliform data collected by DEQ in 1976, indicate that 800 organisms/100 ml. is generally the upper limit encountered (OR DEQ, June 1978, Review of Water Quality Standards with Local Governments and Interested Citizens)

b. Changing the wording of the EPA recommended standard from log mean value to a median value is technically sound and less cumbersome to derive.

Testimony

1. The public favored the use of fecal coliform as the index to contamination caused by warm-blooded animal wastes.

2. Respondents were generally opposed to the following:

   a. Establishing an upper limit for fecal doliform densities to not exceed 800 per 100 milliliters at any time.

   b. Changing the log mean value to a median value in the standard.

3. Other comments include the following:

   a. A third coliform standard is needed for marine waters that are not and do not have the potential to be prime shellfish growing waters.

   b. Variance language should be added to the standard allowing some prescribed incremental increase in effluents discharged relative to background levels during wet weather.

   c. Language should be added to the standard to distinguish between fecal coliforms originating from warm-blooded animals from those organisms (Klebsiella) associated with pulp mill wastes which test positive in the fecal coliform test.

   d. Consider a seasonal coliform criterion as a measure of bather health in the next revision of standards.

Evaluation

1. The distribution of bacterial sample results (MPNs) is logarithmically normal, thus the log mean should be used.

2. Adoption of the standards as proposed by EPA means that the Department's normal stream monitoring frequencies will not generate enough data to determine standards compliance. Special studies will be required to do that. Normal monitoring data would serve as an indicator of where special studies should be undertaken.

3. The limited data available at the mouth of estuaries indicate that total coliform densities are generally low with some exceeding 1,000 organisms per 100 ml. during wet weather. Currently, only five industries and two municipalities discharge directly to the ocean. Under these conditions, the Department does not believe that another standard for marine waters is necessary at this time.

4. Since Klebsiella is a potential pathogen, the Department must adopt a conservative approach and view fecal coliform results, whether or not derived from warm-blooded animals, as an indicator of stream cleanness.

5. In the next round of standards revisions, the Department proposes to establish a seasonal fecal coliform standard for recreation based upon water temperature.

Recommended Action

Based upon the review and evaluation of comments from the respondents and the literature, the Department proposes to replace the existing coliform standard with the language as shown below as appropriate:

For fresh waters and estuarine waters other than shellfish growing waters --

1. A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

For marine and estuarine shellfish growing waters --

2. A fecal coliform median concentration of 14 organisms per 100 milliliters, with not more than 10 percent of the samples exceeding 43 organisms per 100 ml.

The following indicate the appropriate substitution of paragraphs 1 and 2 above for existing language:

OAR 340-41-205(2)(e)	(A)	Replace language after heading with No. 1
"	(B)	Replace language after heading with No. 2
"	(C)	Replace language after heading with No. 1
OAR 340-41-245(2)(e)	(A)	Replace language after heading with No. 2
"	(B)	Replace language after heading with No. 1
OAR 340-41-285(2)(e)	(A)	Replace language after heading with No. 1
"	(B)	Replace language after heading with No. 2
"	(C)	Replace language after heading with No. 1
"	(D)	Replace language after heading with No. 1
OAR 340-41-325(2)(e)	(A)	Replace language after heading with No. 2
"	(B)	Replace language after heading with No. 1
OAR 340-41-365(2)(e)	(A)	Replace language after heading with No. 1
"	(B)	Replace language after heading with No. 2
"	(C)	Replace language after heading with No. 1
"	(D)	Replace language after heading with No. 1
OAR 340-41-445(2)(e)	(A)	Replace language after heading with No. 1
"	(B)	Replace language after heading with No. 1
"	(C)((i)	Replace language after heading with No. 1
"	(C)(ii)	Replace language after heading with No. 1
OAR 340-41-485(2)(e)		Replace language after heading with No. 1
OAR 340-41-525(2)(e)		Replace language after heading with No. 1
OAR 340-41-565(2)(e)	(A)	Replace language after heading with No. 1
"	(B)	Replace language after heading with No. 1
OAR 340-41-605(2)(e)		Replace language after heading with No. 1
OAR 340-41-645(2)(e)		Replace language after heading with No. 1
OAR 340-41-685(2)(d)		Replace language after heading with No. 1
OAR 340-41-725(2)(e)		Replace language after heading with No. 1
OAR 340-41-805(2)(e)		Replace language after heading with No. 1
OAR 340-41-845(2)(e)		Replace language after heading with No. 1
OAR 340-41-925(2)(e)		Replace language after heading with No. 1

D. Total Dissolved Gas--The current standard is as follows:

> The concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection shall not exceed one hundred and five percent (105%) of saturation, except when stream flow exceeds the 10-year average flood.

Both Washington and Idaho have a Total Dissolved Gas Standard of 110% of saturation as opposed to Oregon's 105% standard. Thus, EPA recommends that Oregon revise its standard to be compatible with these two states, since the problem occurs mainly in the Columbia and lower Snake Rivers.

Alternatives

The following alternatives to the total dissolved gas standard and their probable consequences were presented to the public in the review process:

1. Leave the standard as is at 105%.

   a. This is an assured safe level for fishes and other aquatic life.

   b. EPA may again choose to promulgate a standard of 110% as they attempted to do several years ago.

2. Revise the standard to 110%.

   a. In light of research within recent years, the damaging affects and mortality to fishes, especially salmonids in the Columbia and Snake Rivers, probably would be very minimal if at all.

   b. This would satisfy EPA.

3. Fresh Waters: The concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection shall not exceed one hundred and [five] ten percent [(105%)] (110%) of saturation, except when stream flow exceeds the 10-year, 7-day average flood.

4. Hatchery Receiving Waters and Waters of less than 2 feet in depth: The concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection shall not exceed one hundred and five percent (105%) of saturation.

Testimony

1. In the June 1978 issue paper, alternatives 1 and 2 were presented for review. The respondents were generally divided in each alternative.

2. In the January 1979 issue paper, the available literature suggested that two total dissolved gas standards are needed in Oregon. Alternatives 3 and 4 were presented for review. No opposition to these last two alternatives was presented.

Evaluation

1. In streams deeper than two feet, such as the Columbia and Snake Rivers where the supersaturated dissolved gas problems occur, fishes are able to compensate for the high gas levels by sounding to deeper waters. Thus, it is technically justified to relax the current instream total dissolved gas standard from 105% to 110% of saturation.

2. An additional restrictive standard is necessary to protect fishes in shallow water environments of less than two feet depths. Such environments include shallow streams and fish hatcheries where fishes cannot sound to compensate for total dissolved gases greater than 105% of saturation.

Recommended Action

Based upon the above, the Department proposes the Total Dissolved Gas Standard shown below. The new language proposed is underscored and the existing language proposed for deletion is enclosed in brackets.

> The concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection shall not exceed one hundred and [five] ten percent [(105%)] (110%) of saturation, except when stream flow exceeds the 10-year, 7-day average flood. However, for Hatchery receiving waters and waters of less than 2 feet in depth, the concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection shall not exceed one hundred and five percent (105%) of saturation.

The above amended language is proposed to be incorporated into the following sections:

OAR 340-41-205(2)(n)
" " 245(2)(n)
" " 285(2)(n)
" " 325(2)(n)
" " 365(2)(n)
" " 445(2)(n)
" " 485(2)(n)
" " 525(2)(n)
" " 565(2)(n)
" " 605(2)(n)
" " 645(2)(n)
" " 685(2)(m)
" " 725(2)(n)
" " 765(2)(n)
" " 805(2)(n)
" " 845(2)(n)
" " 885(2)(m)
" " 925(2)(n)
" " 965(2)(n)

E. Antidegradation Policy

Currently the Department views the first two statements under "Policies and Guidelines Generally Applicable to All Basins," in Oregon Administrative Rules, Chapter 340, as the Antidegradation Policy. These two statements read as follows:

1. In order to maintain the quality of waters in the state of Oregon, it is the policy of the EQC to require that growth and development be accommodated by increased efficiency and effectiveness of waste treatment and control such that measurable future discharged waste loads from existing sources do not exceed presently allowed discharged loads unless otherwise specifically approved by the EQC.

2. For any new waste sources, alternatives which utilize reuse or disposal with no discharge to public waters shall be given highest priority for use wherever practicable. New source discharges may be approved by the Department if no measurable adverse impact on water quality or beneficial uses will occur. Significant or large new sources must be approved by the Environmental Quality Commission.

EPA does not agree that the above Antidegradation Policy statements fully comply with federal regulations. They indicated, however, that these statements satisfy federal requirements by actually describing the implementation of an antidegradation policy.

Alternatives

Since OAR Chapter 340 does not contain an approvable antidegradation policy, the Department formulated the following two policies for public review and comment:

1. Existing high quality waters which exceed those levels necessary to support propagation of fish, shellfish and wildlife and recreation in and on the water shall be maintained and protected unless, the Environmental Quality Commission chooses, after full satisfaction of the intergovernment coordination and public participation provisions of the continuing planning process to allow lower water quality as a result of necessary and justifiable economic or social development. In no event, however, may degradation of water quality interfere with or become injurious to the beneficial uses of water.

   Additionally, no further waste discharges shall be allowed in the following designated water:

   a. Klamath Basin
      Crater Lake

   b. Rogue River Basin
      Rogue River from Mouth of Applegate River downstream to Lobster Creek Bridge

2. Existing high quality waters which exceed those levels necessary to support propagation of fish, shellfish and wildlife and recreation in and on the water shall be maintained and protected unless the Environmental Quality Commission chooses, after full satisfaction of the intergovernmental coordination and public participation provisions of the continuing planning process, to allow lower water quality for necessary and justifiable economic or social development. In no event, however, may degradation of water interfere with or become injurious to the beneficial uses of water. Additionally, no further point source waste discharges shall be allowed within surface waters of the following areas:

   a. National Parks

   b. National Wild and Scenic Rivers

   c. National Wildlife Refuges.

Testimony

1. Respondents requested that state parks be included in areas where further discharge should not be allowed.

2. EPA presented two comments as follows:

   a. The application of the proposed policy to nonpoint source discharges in national parks, national wild and scenic rivers, and national wildlife refuges need clarification.

   b. The federal regulations do not require a "no discharge" restriction even to national resource waters.

3. A respondent suggested language be added to allow limited degradation so that short-term activities allowable under the turbidity standard are not precluded.

4. Concern was expressed that the antidegradation policy will affect a municipality currently discharging to waterways that in the future could be designated as scenic waterways. The concern is that the policy will totally limit any further discharge from such a municipality.

Evaluation

In order to resolve the issues raised by the public, the following changes to proposed Policy Statement number 2 above are deemed necessary:

1. Delete the "no discharge" restriction.

2. Add state parks to the listing of areas allowed no further degradation.

3. Add language pointing out the implementation policies and guidelines of best available treatment for point source discharges and of study program and best management practices for nonpoint source wastes.

4. Add language to allow limited degradation to respond to emergencies or to protect public health and welfare.

Recommended Action

Based on the above, a proposed new paragraph should be added to OAR 340-41-026 to read as follows and existing paragraphs (1) through (8) should be renumbered (2) through (9).

(1) Existing high quality waters which exceed those levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water shall be maintained and protected unless the Environmental Quality Commission chooses, after full satisfaction of the intergovernmental coordination and public participation provisions of the continuing planning process, to lower water quality for necessary and justifiable economic or social development. The Director or his designee may allow lower water quality on a short-term basis in order to respond to emergencies or to otherwise protect public health and welfare. In no event, however, may degradation of water quality interfere with or become injurious to the beneficial uses of water within surface waters of the following areas:

1. National Parks

2. National Wild and Scenic Rivers

3. National Wildlife Refuges

4. State Parks

Point source discharges shall follow policies and guidelines (2), (3), and (4), and nonpoint source activities shall follow guidelines (5), (6), (7), (8), and (9).

F. Toxic Substances

The current toxic substances standards are indicated below. One standard is descriptive and is common for each of Oregon's 19 river basins. The dissolved chemical guide concentrations for selected chemical constituents appear in basins bordered by interstate waters and for selected intrastate waterways. These standards generally read as follows:

> No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the _____ Basin.
>
> The creation of tastes or odors or toxic or other conditions that are deleterious to fish or other aquatic life or affect the potability of drinking water or the palatability of fish or shall fish shall not be allowed.
>
> Dissolved Chemical Substances: Guide concentrations listed below shall not be exceeded unless otherwise specifically authorized by DEQ upon such conditions as it may deem necessary to carry out the general intent of this plan and to protect the beneficial uses set forth in Section 340-41 _____ :

	mg/l
Arsenic (As)	0.01
Barium (Ba)	1.0
Boron (Bo)	0.5
Cadmium (Cd)	0.003
Chromium (Cr)	0.02
Copper (Cu)	0.005
Cyanide (Cn)	0.005
Fluoride (F)	1.0
Iron (Fe)	0.1
Lead (Pb)	0.05
Manganese (Mn)	0.05
Phenols (total)	0.001
Total dissolved solids	100.0 (variable in various basins)
Zinc	0.01

> Where the natural quality parameters of waters of the _____ Basin are outside the numerical limits of the above assigned water quality standards, the natural water quality shall be the standard.

EPA is encouraging the states to expand their coverage of numerical standards for additional toxic substances. At a minimum, they recommend that Oregon adopt numerical standards for DDT, Aldrin/dieldrin, endrin, toxaphene, and PCB. All of the above, except for PCB, are pesticides.

Alternatives

The following alternatives for modifying this standard and their probable consequences were presented to the public in the review process:

1. Leave the standards in their present form.

   a. This probably would be unacceptable to EPA.

   b. EPA may choose to promulgate certain standards of toxic substances for Oregon.

2. Add new language to the Water Quality Standards Section referencing EPA's "Quality Criteria for Water, 1976," such as the following:

   "Guide concentrations for Pesticides and other toxicants shall not exceed those contained in the most recent edition of the EPA Publication, "Quality Criteria for Water, " unless supporting data conclusively show otherwise.

   a. This approach is probably acceptable to EPA.

   b. This allows one to conclusively demonstrate with scientific data that a less restrictive standard than that suggested in the above publication is acceptable.

3. Standards for Pesticides and other organic Toxicants shall not exceed those criteria contained in the most recent edition of the EPA Publication, "Quality Criteria for Water." These standards shall apply unless supporting data show conclusively that beneficial uses will not be adversely affected by exceeding the standard by a specific amount or that a more stringent standard is warranted to protect beneficial uses.

Testimony

1. The proposed standard (3) above is ambiguous because the exact edition of the EPA Water Quality Criteria is not stated.

2. Some respondents suggested that only the 6 toxic substances recommended by EPA be adopted.

3. A respondent recommended that additional language be added to control the discharge and use of toxic substances not listed in EPA's publication.

4. A respondent noted that in some areas background levels of copper and zinc naturally exceed the limits already established.

5. A respondent inquired what purpose a DDT standard would serve now since it is no longer used and any found in rivers is due to environmental contamination and is not controllable.

6. Other comments indicated the following:

   a. The Department could find implementation of the standards difficult or impractical if technologies to meet the standards were not available.

   b. The toxic substance standards are unrealistically low and the proposal to adopt EPA criteria as issued without further discussion, is an abdication of state responsibility.

   c. The adoption of standards without testing is useless so a very complicated and expensive analytical program will have to be set up in order to detect the very low level.

Evaluation

1. Descriptive language currently exists in the Water Quality Standards prohibiting the discharge of toxic substances whether or not such substances are listed under OAR Chapter 340, "Dissolved Chemical Substances," or in the EPA "Quality Criteria for Water, 1976." For proposed new discharges of toxic substances or materials having the potential for impacting water quality or beneficial uses, the Department must defer such decisions to the EQC as outlined under OAR 340-41-026,(2).

2. If present technology is unavailable to treat toxic substances to non-toxic levels before discharge, then such substances must be stored or disposed of so that they do not reach either surface or groundwaters.

3. The Department is aware that localized areas in Oregon contain heavy metals ore deposits. Leachates from these deposits may cause levels of these metals to exceed the established standards. Language exists in the Water Quality Standards which states that where the natural quality parameters of water are outside the numerical limit of an assigned water quality standard, the natural water quality shall be the standard.

4. DDT has been banned from use nationally since 1972. It is known to persist in the environment for a long period. Because it does not break down readily to innocuous products, adoption of a DDT standard provides a basis for judging the potential hazard such a substance poses when it is found. If it is not present in the environment, it can be deleted in future revisions of the standards.

5. The Department believes that it is just as costly to adopt standards before testing for low level organics as it is to do so after testing. In either process some initial screening of those substances known and suspected to be widely used should be tested. The advantage of having standards adopted before broad testing is started, is that the public knows the scope of the Department's focus in this area of concern. In general, the public's concern and fear of toxic substances in the environment results from our overall ignorance on whether or not such problems exist.

6. The criteria established for toxic substances in the 1976 EPA publication resulted from scientific data and broad input from various publics across the nation. Before a state adopts EPA suggested criteria, however, it may adjust the values consistent with local conditions if they have sufficient data justifying such an adjustment. Language in the proposed standard allows adjustment either upwards or downwards from listed values in the EPA publication if data show that beneficial uses will not be adversely affected.

7. The 1976 EPA Quality Criteria for Water lists the following pesticides and other organics:

Pesticides:

Aldrin-Dieldrin
Chlordane
Chlorophenoxy Herbicides
DDT
Demeton
Endosulfan
Endrin
Guthion
Heptachlor
Lindane
Malathion
Methoxychlor
Mirex
Parathion
Toxaphene

Other Organics:

Phthalate Esters
Polychlorinated Biphenyls

Recommended Action

Adopt new language which expands coverage of the water quality standards for Toxics as follows:

> Pesticides and other Organic Toxic Substances shall not exceed those criteria contained in the 1976 edition of the EPA Publication "Quality Criteria for Water." These criteria shall apply unless supporting data show conclusively that beneficial uses will not be adversely affected by exceeding a criterion be a specific amount or that a more stringent criterion is warrented to protect beneficial uses.

The above new language is proposed to be added as a new paragraph in the following sections:

OAR 340-41-205(2)(p)
" " 245(2)(p)
" " 285(2)(p)
" " 325(2)(p)
" " 365(2)(p)
" " 445(2)(p)
" " 485(2)(p)
" " 525(2)(p)
" " 565(2)(p)
" " 605(2)(p)
" " 645(2)(p)
" " 685(2)(p)
" " 725(2)(p)
" " 765(2)(p)
" " 805(2)(p)
" " 845(2)(p)
" " 885(2)(o)
" " 925(2)(p)
" " 965(2)(p)

ENVIRONMENTAL QUALITY COMMISSION

Breakfast Agenda

September 21, 1979

1. Subsurface sewage disposal status report for the LaPine area of Deschutes and Klamath Counties - Nichols

2. Report on potential use of Pollution Control Bond Fund to finance planning and construction of sewage treatment facilities - Lee

3. Status report on Murphy Veneer compliance schedule - Bolton

4. Proposed reply to Governor Atiyeh's memo on 1979 Amendment to Administrative Procedures Act - Zucker

5. Status report on Martin Marietta compliance with Stipulated Consent Order - Nichols

EQC Breakfast 9-21-79

Department of Environmental Quality

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5891

STATE POLLUTION CONTROL BOND FUND

A Report On Its Use To Supplement Federal Fund Grant Assistance On Eligible Local Government Sewerage System Construction Projects,

For the EQC Breakfast Meeting: 21 September 1979

STATE POLLUTION CONTROL BOND FUNDS AVAILABLE

The beginning balance in the Fund as of 1 July 1979:	$23,817,142
Projected sale of additional General Obligation Bonds during the 1979-1981 biennium:	+ 60,000,000
Estimated aid to local governments during the 1979-1981 biennium:	- 20,377,000
TOTAL Available for Additional Assistance:	$63,440,142

FUNDS NEEDED TO SUPPLEMENT FEDERAL GRANTS

Federal Fiscal Year	Estimated 75% Federal Grant Assistance on eligible sewerage works projects	Estimated Oregon Share	Projected Shortfall
1980	$60,038,000	$32,190,000*	$27,848,000
1981	112,505,000	If we get $32 million	108,353,000
1982	67,711,000		
1983	12,633,000		
1984	4,372,000		
TOTAL	$257,259,000		

*The $32,190,000 represents the amount of Federal Funds available for general sewerage works construction projects out of the estimated $43.5 million share of the national pot of $3.4 billion.

MSD SUGGESTED USE OF THE STATE POLLUTION CONTROL BOND FUND

The Metropolitan Service District (MSD) at the August 3rd priority list criteria public hearing suggested funding "to 30 percent grants (the statutory maximum amount)". That suggestion was reinforced in a letter from Rick Gustafson to members of the EQC on August 9, 1979, in advance of the Commission meeting of August 31, 1979.

GRANTS AND LOANS FROM THE STATE FUND

ORS 468.220 permits 30% grants with prior Ways and Means or Emergency Board approval and the acquisition of 70% General Obligation Bonds or other obligations.

BACKGROUND ON GRANTS FROM THE STATE FUND

. From the DEQ Budget Report by the Joint Committee on Ways and Means, 59th Legislative Assembly dated May 20, 1977, Subcommittee No. 5, Representative Rick Gustafson, Chairman:

Debt Service

The Debt Service budget requires the agency to manage the Pollution Control Bond Sinking Fund in a manner which allocates responsibility to the state and local governments on a current basis.

HB 5028
page 5

Before that Subcommittee, the agency asked for $4.7 million in General Funds at a time when the analysts' practice was to recommend using all Sinking Fund monies first and then asking for General Funds. We urged them to begin paying as we go to cover the cost of their grants and not mortgaging an uncertain future.

Pollution Control Bond Fund

The Subcommittee approved the expenditure of $22,453,153 as recommended by the Governor to provide loan funds to local governments for the construction of sewage treatment facilities. The Subcommittee discussed the issues surrounding the use of the Pollution Control Bond Fund for hardship construction grants and adopted an amendment to abolish use of the Fund for the hardship grant program. If a hardship situation arises a direct General Fund appropriation is contemplated.

The Subcommittee approved expenditures totaling $1,325,000 for construction of the following Solid Waste projects during the biennium:

Clatsop/Tillamook	$ 500,000
Deschutes County	150,000
Klamath County	150,000
Sherman County	25,000
Small and/or supplemental projects under $50,000	500,000
Total	$1,325,000

The Subcommittee deleted $24,735,000 included in the Governor's recommended budget for additional Solid Waste projects beyond those approved as supporting information was not complete. Authority to allocate funds for additional projects beyond those specifically approved in this budget must be obtained from the legislative review agency.

The Subcommittee adopted an amendment to ORS 468.220 to require that grants made for planning of solid waste projects shall be included as part of the total project cost when the project is implemented. This provision does not apply to grants issued prior to January 1, 1974 or to grants where the agency required repayment by contractual agreement.

HB 5028
page 6

Senate Amendments

HB 5028 was amended in committee prior to its referral to the Senate. The amendments clarify the committee's intention regarding the abolition of the so-called hardship grant provision allowing the agency to make these grants from the Pollution Control Bond Fund. Attention is directed to page 6, 1st paragraph which was modified to reflect the change.

HB 5028
page 8

- From the DEQ Budget Report by the Joint Committee on Ways and Means, 60th Legislative Assembly dated June 12, 1979, Subcommittee No. 5, Senator Fred Heard, Chairperson:

POLLUTION CONTROL BOND FUND

The Subcommittee appropriated $4,623,000 to the Emergency Board to be released to local governments for waste water treatment hardship grants and solid waste grants in lieu of Pollution Control Bond Fund revenues. The result of this action is to forestall future General Fund liability for Debt Service requirements of the Pollution Control Bond Fund when the availability of General Fund revenues may be more constrained.

The Subcommittee reviewed the potential shortfall of Federal Funds to local governments for waste water treatment facilities construction. To alleviate the immediate problem, the Subcommittee authorized the Department to sell Pollution Control Bonds up to the $160 million statutory limit. Recognizing the possibility of continuing shortfalls in Federal Funds construction grants and the constraints upon the state's financial resources, the Department should inform local governments of the need to develop other alternatives. The Subcommittee also instructed the Department to solicit the advice of the committee formed by the League of Oregon Cities representing a cross section of cities, to assure an equitable distribution of the impact of the federal funding shortfall.

1977-79 BIENNIUM

Pollution Control Bond Fund

The Subcommittee approved the agency's request to fund City of Hood River and Crook and Curry counties' solid waste projects amounting to $236,369. Rather than financing these projects from bond revenues, the Subcommittee approved a General Fund appropriation consistent with its desire to forestall future debt service requirements when the limits on the General Fund may be more severe.

SUMMATION AND EVALUATIONS

- The Pollution Control Bond Fund can be applied to 30 percent grants and 70 percent loans. (ORS 468.220).
- An estimated $63 million could be made available during the current 1979-1981 biennium to assist local projects to levels not contemplated in our current budget.
- The first year supplement needed if the State gets to use the rumored $32,190,000 in Federal Funds is $27.8 million. If 1981 brings the same Federal share or less, the supplement needed will be $108.4 million or more.
- The Legislature over the last several sessions has clearly moved toward eliminating all grants out of the fund.
- Ways and Means has shown they mean to pay current obligations out of current revenues and not burden future legislatures with future problems created today.
- The question of increasing the loan portion from our current 25% to up to the permissible 70% level has not been addressed head-on by any of the past Ways and Means Subcommittees.
- Increasing the loan percentage increases the State's exposure to local government problems which may arise from their growing debt burden.
- The introduction of legislation to increase the statutory $160,000,000 limit on the Pollution Control bond debt principal that can be outstanding at any one time could have no effect until well into the State 1981-1983 biennium. It would take that long to go through the next legislature, market the State General Obligation Bonds and have the funds available for use.
- The Constitution of Oregon limits issuance of State Pollution Control Bonds to 1% of the True Case Value of all taxable property in the State. Based on figures certified by the Secretary of State in 1978, that 1% is $466 million.

Increasing the statutory amount of debt principal we can have outstanding may not bring us cheaper money. If the probability of repayment decreases, investors will undoubtedly demand higher returns. In this 12 months from July, 1979 to July, 1980 the State will market $1,024.2 million in General Obligation Bonds plus $99.6 million in Revenue Bonds. The General Obligation Bonds alone represent almost 2.2% of the $46.6 billion True Cash Value of the taxable property of the State. That is an immense amount of Oregon paper hitting the streets this year.

. Available approaches to the problem of supplementing Federal Grant Funds include:

- Using the available Pollution Control Fund money to the extent currently possible for loans.
- Follow the priority list developed through the approved ranking criteria.
- Urge the development of other alternatives for acquiring and financing public capital projects by local jurisdictions.

EQC Breakfast
9-21-79

VICTOR ATIYEH
GOVERNOR

Department of Environmental Quality

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5365

September 20, 1979

Mr. Kevin Murphy
The Murphy Co.
Myrtle Point Division
06370 Hwy. 126
Florence, OR 97439

Re: NP - Murphy Co., Myrtle Point
CBBO - Coos Co.

Dear Mr. Murphy:

We are writing this letter to confirm the results of our September 18, 1979 meeting to discuss your compliance program. In attendance with you were Glen O'Dell and Tom Arnold from S J & O Consultants and Fred Bolton, Larry Schurr and myself from DEQ.

During our meeting we came to agreement on the compliance program and dates listed in the following table:

Murphy Co., Myrtle Point Compliance Program

Noise Reduction Measure	Engineering Plans to be Submitted by	Construction to be Completed by
Place muffler on air pressure release line, enclosure for lily pad chipper	October 1, 1979	December 1, 1979
Enclosure for bark hog	October 15, 1979	January 15, 1980
Enclosure for debarker building	November 1, 1979	March 1, 1980
Lining for outside conveyors	November 1, 1979	March 1, 1980

A compliance program for the two diesel log loaders was not agreed upon.

Your consultants stated that they had obtained new information that made the retrofit modifications to the two diesel log loaders, mentioned in your July 16, 1979 letter to Bill Young, no longer feasible. Your consultant stated that the proposed modifications, which would include engine enclosure and cooling system modifications,

would render the diesel units unusable during much of the hot weather (90°+) that occurs in Myrtle Point during the summer. We request that you or your consultant submit a copy of this information and your design goals to the Department by September 27, 1979.

Pursuant to this new information, we agreed that you would need to seek out additional opinions on compliance measures for the diesel loaders from other consultants, manufacturers or equipment dealers. To obtain this information, you and your consultant committed to let bids on new diesel log loading equipment, by no later than November 1, 1979. These bids will specify equipment that allows Murphy Co. to operate within allowable DEQ nighttime noise pollution standards. You agreed that this bid process and engineering study would be completed and that Murphy Co. would submit the results of this study to the Department by no later than April 1, 1980. During this time period, our Noise Control staff will also study the feasibility of quieting mobile diesel equipment.

During the study period, Murphy Co. agrees to implement the following interim controls on diesel log loader operation:

1. Diesel powered log yard equipment shall operate within restricted areas of the log yard between 6 am and 8 am and 8 pm to 12:30 am. From 8 am to 8 pm the log loaders will operate on any part of the Murphy Co. log yard.
2. The restricted area shall be the middle and west side of the Murphy Co. property. The diesel loaders may not operate near (or a specified distance from) noise sensitive property on the north and east sides of the Murphy Co. outside of the 8 am to 8 pm hours.
3. Any other administrative or operational controls that will minimize noise impact from the diesel equipment will be implemented voluntarily during this interim period by Murphy Co.

Finally, the Department expressed its concern over the time taken to achieve noise reduction on the diesel log loaders since they presently cause a violation of the daytime noise standards. You stated that because you believe the noise reduction kits on the existing diesel equipment would not be feasible, the Murphy Co. will request another variance from the noise pollution limits. The Department can prepare a variance request for the October 19, 1979 EQC meeting only if a written request for a variance is submitted according to OAR Chapter 340, Section 35-100 and only if detailed information on the feasibility, economic and other pertinent factors is included in the justification for such a variance request. This request and supporting information for the October 1979 EQC variance hearing is due to us on September 27, 1979, along with the other requested information to allow the Department adequate time to prepare a staff report.

The Department understands and concurs that your variance request will ask for a variance from the daytime statistical noise standards for the diesel log loading equipment until July 1, 1980. The variance would require that feasibility or economic report would be made to the EQC at their April, 1980 meeting to inform them whether an extension of the variance beyond July 1, 1980 would be justified or a recommendation would be made to replace the old diesel equipment for those of a new and quieter design. In researching this issue, we reviewed the tapes of the Murphy Co. noise variance hearing at the August 31 EQC meeting; a copy of this tape was obtained by S J & O at their request. Mr. Glen O'Dell questioned the EQC that perhaps there was a need to incorporate the diesel equipment into the variance after some discussion about the diesel equipment being out of compliance with the daytime standards.

The Department believes you should be aware Commission Chairman Joe Richards responded that the variance as stated involves the whole source. He further said, "If other [diesel] equipment is out of compliance and requires enclosing the engines or something to otherwise comply, I don't intend to make a special exclusion for that equipment."

It is because of this statement and concurring remarks by other commissioners that we want to impress upon you the importance of getting timely, detailed new information if the variance request is to be justified.

If I can help you, please contact me at the above number.

Sincerely,

Gerald T. Wilson

Gerald T. Wilson
Noise Program Operation Specialist
Noise Pollution Control

GTW:pw

cc: Environmental Quality Commission
William H. Young
Seton, Johnson & O'Dell w/ enclosure: TC-1 DEQ Tax Credit Request Form
Regional Operations
Southwest Region
Coos Bay Branch Office

STATE OF OREGON

EQC Breakfast
9-21-79

INTEROFFICE MEMO

TO: All Agency Heads

DATE: September 5, 1979

FROM: Victor Atiyeh, Governor

SUBJECT: 1979 Amendments to the Administrative Procedures Act

I attach a copy of Sections 36 and 36(b) of House Bill 2497 (Chapter 593 Oregon Laws 1979) ORS 183.464, which has the effect of delegating to hearings officers final decision-making authority. There is further provision for exemption by executive order of the Governor.

During the hearings on House Bill 2497, I indicated to the legislature that I had grave reservations about the concept of delegating to hearings officers final decision-making authority. It has always been my view that the responsibility for making these decisions should be that of the governing body of the agency. I acceded to these provisions in the bill upon the condition that the legislature authorize me to exempt agencies and particular types of cases from these provisions. I further advised the legislature that I might very well issue an executive order which exempts all agencies from this provision.

I recognized, however, that there are some agencies where, because of the quality and quantity of their caseload delegation may be desirable. I am therefore asking at this time that each agency submit to me by no later than October 15 a report indicating whether or not they desire to be able to make such delegation to their hearings officers and further stating their reasons therefor. I also would like to have the report embody the procedures the agency intends to adopt, particularly to insure that parties have some right of appeal to the governing body of the agency from any decision by a hearings officer. I would suggest you contact your Assistant Attorney General before preparing your report.

Your attention to this matter is appreciated.

VA:sb
Attachments

SECTION 36. (1) Except as otherwise provided in this section, unless a hearings officer is authorized or required by law or agency rule to issue a final order, the hearings officer shall prepare and serve on the agency and all parties to a contested case hearing a proposed order, including recommended findings of fact and conclusions of law. The proposed order shall become final after the 30th day following the date of service of the proposed order, unless the agency within that period issues an amended order.

(2) An agency may by rule specify a period of time after which a proposed order will become final that is different from that specified in subsection (1) of this section.

(3) If an agency determines that additional time will be necessary to allow the agency adequately to review a proposed order in a contested case, the agency may extend the time after which the proposed order will become final by a specified period of time. The agency shall notify the parties to the hearing of the period of extension.

(4) This section does not apply to the Public Utility Commissioner or the Energy Facility Siting Council.

SECTION 36a. Section 36 of this 1979 Act takes effect July 1, 1980.

SECTION 36b. (1) The Governor may exempt any agency or any class of contested case hearings before an agency from the requirements in whole or part of section 36 of this 1979 Act by executive order. The executive order shall contain a statement of the reasons for the exemption.

(2) The Governor shall report to the Sixty-first Legislative Assembly identifying those agencies and classes of contested cases that have received exemptions under this section and stating the reasons for granting those exemptions.

340-11-132 Appeal of Hearing Officer's Final Order.

(1) Hearing Officer's Final Order

In a contested case if a majority of the members of the Commission have not heard the case or considered the record, the Hearing Officer shall prepare a written Hearing Officer's Final Order including findings of fact and conclusions of law. The original of the Hearing Officer's Final Order shall be filed with the Commission, and copies shall be served upon the parties in accordance with section 340-11-097 (regarding service of written notice).

(2) Commencement of Appeal to the Commission

(a) The Hearing Officer's Final Order shall be the final order of the Commission unless within 30 days from the date of mailing, or if not mailed then from the date of personal service, any of the parties or a member of the Commission files with the Commission and serves upon each party a Notice of Appeal. A proof of service thereof shall also be filed, but failure to file a proof of service shall not be a ground for dismissal of the Notice of Appeal.

(b) The timely filing and service of a Notice of Appeal is a jurisdictional requirement for the commencement of an appeal to the Commission and cannot be waived; a Notice of Appeal which is filed or served late shall not be considered and shall not affect the validity of the Hearing Officer's Final Order which shall remain in full force and effect.

(c) The timely filing and service of a sufficient Notice of Appeal to the Commission shall automatically stay the effect of the Hearing Officer's Final Order.

(3) Contents of Notice of Appeal. A Notice of Appeal shall be in writing and need only state the party's or a Commissioner's intent that the Commission review the Hearing Officer's Final Order.

(4) Procedures on Appeal

(a) Appellant's Exceptions and Brief - Within 30 days from the date of service or filing of his Notice of Appeal, whichever is later, the Appellant (appealing party) shall file with the Commission and serve upon each other party written exceptions, brief and proof of service. Such exceptions shall specify those findings and conclusions objected to and reasoning, and shall include proposed alternative findings of fact, conclusions of law, and order with specific references to those portions of the record upon which the party relies. Matters not raised before the Hearing Officer shall not be considered except when necessary to prevent manifest injustice. In any case where opposing parties timely serve and file Notices of Appeal, the first to file shall be considered to be the appellant and the opposing party the cross appellant.

(b) Appellee's Brief - Each party so served with exceptions and brief shall then have 30 days from the date of service or filing, whichever is later, in which to file with the Commission and serve upon each other party an answering brief and proof of service.

(c) Reply Brief - Except as provided in (4)(d) below, each party served with an answering brief shall have 20 days from the date of service or filing, whichever is later, in which to file with the Commission and serve upon each other party a reply brief and proof of service.

(d) Cross Appeals - Should any party entitled to file an answering brief so elect, he may also cross appeal to the Commission the Hearing Officer's Final Order by filing with the Commission and serving upon each other party in addition to an answering brief a Notice of Cross Appeal, exceptions (described above at (4)(a)), a brief on cross appeal and proof of service, all within the same time allowed for an answering brief. The appellant-cross appellee shall then have 30 days in which to serve and file his reply brief, cross answering brief and proof of service. There shall be no cross reply brief without leave of the Chairman or the Hearing Officer.

(e) Briefing on Commission Invoked Review - Where one or more members of the Commission commence an appeal to the Commission pursuant to subsection (2)(a) above, and where no party to the case has timely served and filed a Notice of Appeal, the Chairman shall promptly notify the parties of the issue that the Commission desires the parties to brief and the schedule for filing and serving briefs. The parties shall limit their briefs to those issues. Where one or more members of the Commission have commenced an appeal to the Commission and a party has also timely commenced such a proceeding, briefing shall follow the schedule set forth in subparagraphs (a), (b), (c), (d), and (f) of this subsection (4).

(f) Extensions - The Chairman or a Hearing Officer, upon request, may extend any of the time limits contained in this subsection (4). Each extension shall be made in writing and be served upon each party. Any request for an extension may be granted or denied in whole or in part.

(g) Failure to Prosecute - The Commission may dismiss any appeal or cross appeal if the appellant or cross appellant fails to timely file and serve any exceptions or brief required by these rules.

(h) Oral Argument - Following the expiration of the time allowed the parties to present exceptions and briefs, the Chairman may at his discretion schedule the appeal for oral argument before the Commission.

(i) Scope of Review - In an appeal to the Commission of a Hearing Officer's Final Order, the Commission may substitute its judgment for that of the Hearing Officer in making any particular finding of fact, conclusion of law, or order. As to any finding of fact made by the Hearing Officer the Commission may make an identical finding without any further consideration of the record.

(j) Additional Evidence - In an appeal to the Commission of a Hearing Officer's Final Order, the Commission may take additional evidence. Requests to present additional evidence shall be submitted by motion and shall be supported by a statement specifying the reason for the failure to present it at the hearing before the Hearing Officer. If the Commission grants the motion, or so decides of its own motion it may hear the additional evidence itself or remand to a Hearing Officer upon such conditions as it deems just.

To: Mike Downs

EQC Breakfast 9-21-79

ROBERT W. STRAUB
GOVERNOR

Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Sunrise Village, Bend Area, Deschutes County
Formation of Sanitary District

Due to the legal notice difficulties in the local newspaper, the formation of the Sanitary District has been continued by Deschutes County to September 26, 1979.

Bill

WILLIAM H. YOUNG

Fred Bolton
229-5373
9/14/79
Attachments

IN THE BOARD OF COUNTY COMMISSIONERS

OF THE STATE OF OREGON

FOR THE COUNTY OF DESCHUTES

In the Matter of Setting Final Hearing on the Establishment of SUNRISE VILLAGE SANITARY DISTRICT	)	NOTICE OF FINAL HEARING

IT IS HEREBY ORDERED that a Final Hearing shall be held at 10:00 a.m. September 26, 1979, in the Deschutes County Courthouse Annex, Commissioners' Conference Room, Bend, Oregon concerning the matter of the formation of a sanitary district to be known as SUNRISE VILLAGE SANITARY DISTRICT.

The purpose shall be for the formation of a sanitary district within the boundaries of land within Deschutes County in "Exhibit A", attached hereto and incorporated herein by reference.

All interested persons may appear and be heard at said time and place.

Said Notice of Final Hearing supercedes previous notice dated August 22, 1979.

DATED this 11th day of September, 1979.

BOARD OF COUNTY COMMISSIONERS

CLAY C. SHEPARD, CHAIRMAN

ALBERT A. YOUNG, COMMISSIONER

ROBERT C. PAULSON, JR., COMMISSIONER

Distribution:

Robert Lovlien, Esq.
Ron Marceau, Esq.
DEQ
County Commissioners

To be published:

September 12, 1979
September 20, 1979

Item F Rec'd 9/21/79
CS

BEFORE THE CITY/COUNTY AIR QUALITY LIAISON COMMITTEE
COUNTY OF JACKSON, STATE OF OREGON

IN THE MATTER OF THE ROGUE)
VALLEY MALL INDIRECT SOURCE) R E S O L U T I O N
PERMIT APPLICATION)

WHEREAS, the Rogue Valley Mall has applied for an indirect source permit from the Department of Environmental Quality; and,

WHEREAS, the Department of Environmental Quality has recognized the committee's concern for meeting air quality goals, by asking the committee for input on this matter; and,

WHEREAS, the committee has the responsibility of developing an air quality plan which demonstrates attainment with transportation related air pollutants, no later than January 1, 1987; and,

WHEREAS, the applicants have demonstrated the geographical area in question as being in nonattainment with ambient air standards for carbon monoxide beyond January 1, 1987; and,

WHEREAS, the applicants have also demonstrated the geographical area will remain in a nonattainment status beyond January 1, 1987, without the Rogue Valley Mall; and,

WHEREAS, the committee recognizes that approval of this indirect source permit will necessarily result in more stringent, or broader application of control measures in order to meet ambient air quality attainment date deadlines; and,

WHEREAS, the applicants have indicated a willingness to contribute funding to the City of Medford for transportation planning purposes, and the Rogue Valley Transportation District for expansion of public transit; therefore,

BE IT RESOLVED, that the Jackson County City/County Air Quality Liaison Committee, acting as a committee, finds the indirect source permit application should be considered for approval, after one of the two following conditions is met:

1) It is demonstrated that an adequate air quality increment for increased concentration of carbon monoxide emissions can be accommodated without jeopardizing carbon monoxide attainment plans; or,

2) The applicants meet the requirements of OAR 340-20-110 (16) (k), in that they secure written agreements with the City of Medford as to their stated intent to contribute substantially to the transportation study, currently being undertaken by the City of Medford; and, be further required to seek written agreements with the Rogue Valley Transportation District, specifying the amounts and type of service to be provided by the district and the financial contributions by the developer to the district as indicated on page 10, of the original application.

Passed by a unanimous verbal vote of approval at a special meeting, held on September 19, 1979.

CITY/COUNTY AIR QUALITY LIAISON COMMITTEE

Lou Hannum

By: Lou Hannum, Chairman

ATTEST

Bruce J Shaw

By: Bruce Shaw, Secretary

Item I Rcd 9-21-79
OS

OREGON ENVIRONMENTAL COUNCIL

2637 S.W. WATER AVENUE, PORTLAND, OREGON 97201 / PHONE: 503/222-1963

TESTIMONY BEFORE

THE ENVIRONMENTAL QUALITY COMMISSION

RE: Field Burning
Rule amendments

Sept. 22, 1979

Chairman ~~Richards~~ DENSMORE (VICE-), Commissioners:

My name is Jack Kondrasuk and I am a volunteer working on air quality issues with the Oregon Environmental Council, 2637 SW Water Ave.

As you know the Council has been involved in the efforts to control the effects of field burning for several years. Therefore we have watched all rule-making procedures with much interest.

There are just two main points we would like to make today:

1) We are disappointed that agricultural field burning acreage limits were not reduced further, and;

2) We are concerned that the proposed regulations may tend to switch areas of pollution rather than reduce it--Those locales with the greater political influence can have the pollution reduced in their areas while those with less political influence have no reduction or bear the brunt of the change by having pollution increased in their areas.

Specifically, regarding proposed rule revisions to 26-015 prohibiting burning with a 50/65 percentage relative humidity rule:

The lower required reading of 50 percent humidity when winds blow toward Eugene presumably means that there is significant harm when it rises above 50 percent. Why allow up to 65 percent if it blows away from the Eugene area? It would seem to be harmful to those people in the path of the smoke --regardless of direction. It would appear to be better to limit it to 50 percent in all directions, not just for those areas with greater political influence.

Thus, a general comment--It is preferred that restrictions should be the same throughout the valley--whether smoke-

polluted air is breathed in larger and more vocal communities (like Eugene) or people in smaller communities (like Sweet Home).

Such rules should not be based entirely on political influence.

If you are going to base the amount of allowable pollution on the number of people affected, then there should be an agreed upon and explicit formula based on number of people affected. It appears that the squeaky wheel gets the grease; it may be more effective in the long run to use preventive maintenance on all the wheels.

Thankyou for the opportunity to present our views before you today.

PUBLIC COMMENT

Regarding the

PROPOSED AMENDMENTS TO LOG HANDLING GUIDELINES

The attached letters were received prior to the Environmental Quality Commission's September 21, 1979 meeting.

AFFILIATED WITH NATIONAL AFL-CIO

AFFILIATED WITH OREGON STATE AFL-CIO

Southwestern Oregon Central Labor Trades Council

PHONE 267-4418 P. O. BOX 922

COOS BAY, OREGON

September 11, 1979

Mr. Bill Young
Director D. E. Q.
Coos Bay, Oregon

Dear Sir:

This is to introduce Mr. Douglas Kime, who has been authorized to represent the Southwestern Oregon Central Labor Council as our spokesman oppossing the ban of log storage on the Tide Lands.

This Council represents twenty two (22) Local Unions. The 4170 members represented are from Industrail, Craft and Service Unions. A loss of jobs in the Lumber Industry affects everyone of these members.

Any courtesies you may extend to Douglas Kime will be greatly appreciated by the Central Labor Council.

Sincerely,
Gerald Lantto
Gerald Lantto, President
Dorotha Richardson
Dorotha Richardson, Secretary

Weyerhaeuser Company

Southwest Oregon Region
North Bend, Oregon 97459
(503) 756-5121

September 4, 1979

Mr. Harold L. Sawyer
Administrator-Water Quality Division
Department of Environmental Quality
P. O. Box 1760
Portland, Oregon 97207

Dear Mr. Sawyer:

We received a copy of your letter of August 24 and the draft report "Log Handling-Consideration of Adoption of Additional Guidelines for Log Storage in Coos Bay."

We have reviewed the report and we find the third management strategy to be preferable. It would also be the most practical to implement. The Department has selected the second management strategy for the director's recommendation. We make the following comments on the changes proposed in the director's recommendation:

1. Regarding policy 4(a), minimizing loose log storage, we interpret the wording to not require outright elimination, but to minimize loose log storage. Our prior experience with the DEQ is that the agency has recognized legitimate concerns of industry. However, this attitude has changed and it appears that the intent is to eliminate loose log storage. We cannot support this amendment.

2. Regarding policy 4(b), minimizing storage where logs go aground by requiring DEQ approval to replace pilings used for log raft mooring, Weyco and the other local company representatives already have submitted extensive information clearly showing the substantial reduction in tideland storage that has occurred in recent years, and showing that further reductions in log inventory are not possible. The moving of current grounding log storage to deep water is totally not feasible because incremental safe deep water sites do not exist. The risks of the proposed incremental deep water sites have been very clearly demonstrated. We strongly object to the inclusion of this requirement in the policy because all available evidence has already been provided by industry, showing that grounded log storage has already been reduced to

absolute minimum, if essential operating flexibility is to be retained by industry. We seriously question the justification of adding another layer of required governmental agency approval over what now exists. We have another major concern in reading the proposed recommendations. The draft report indicates that the intent of the department is to reduce or minimize tideland inventory when it is practical to do so. This is in conflict with "...as pilings and tidelands wear out, they could not be replaced," and "...eventually bring about the phase-out of log storage in Oregon's estuaries..." found in the attached article from the local newspaper, quoting Barbara Burton.

3. Regarding policy 7, limiting log storage to 12 months, we interpret this to not require the complete elimination of storage for more than 12 months, but to eliminate long term storage where other practical alternatives do not exist. Again, if the DEQ continues to not be cognizant of legitimate concerns and limitations, we cannot accept this change.

4. Regarding a study of the economic and physical feasibility of reducing tideland storage through bundling of logs, we have already submitted considerable information to the agency. While there are some economic advantages in bundled logs, we cannot transport rafts of bundled logs from our Dellwood site because of the depth of water required for towing. Bundling of logs from our Allegany site would have to take place on the water, at very high cost. We completely fail to understand the rationale for undertaking a study which will only result in information that has already been submitted to the agency.

Thank you for the opportunity to review the draft report before sending it to the EQC. If you want additional information or clarification on any of these comments, please call me or any of your other regular Weyerhaeuser contacts.

Yours truly,

Robert S. Howry

R. S. Howry
Raw Materials Manager

RSH/k

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Log storage rules sent out for a final review

By LINDA MEIERJURGEN
Staff Writer

Rules which would eventually bring about the phase-out of log storage in Oregon's estuaries went out for a final review by industry and local government Friday, according to Barbara Burton, a staff member of the Department of Environmental Quality.

The Environmental Quality Commission will consider adoption of the final draft of the rules at its regular September meeting in Portland, she said. That session, including a formal public hearing, will be held on Sept. 21 but a time and place have not as yet been set. The commission will probably not actualy adopt the proposed rules that day, but will allow yet further comments. The deadline for written comments prior to the meeting is Sept. 7, Burton said.

The final draft went out to firms like Weyerhaeuser Co., Georgia-Pacific Corp. Al Peirce and Coos Head timber companies on Friday, Burton said, and also went to local governments and the Coos Curry Council of Governments.

The agency has found environmental damage on tideflats, where logs are stored due to "bumping" with the rising and falling tides and a compaction this causes, which limits benthic (bottom-dwelling) creatures underneath.

The proposed rules would limit the length of time logs could stay in the water over the tideflats with the idea of moving the storage into deeper waters and of compacting or reducing the size of the rafts so they cover a smaller amount of tideflat, Burton said.

One proposed rule would affect Al Peirce and Coos Head more than the larger firms, Burton said, adding it would prevent the storage of "loose" logs. The idea is to prevent the practice of having a big log corral in which only a few loose logs are contained. These slosh about as the tides go in and out and could cause more damage than a more stable raft, Burton said.

In addition, the agency proposes that companies "bundle" export logs so the size of the area in contact with tideflats would be reduced. This requirement would affect Weyerhaeuser somewhat, Burton said. This proposal would not establish a rule, Burton said, but would set forth the agency's plan to "work with industry to see if bundling is feasible."

Finally, in a rule with long-term ramifications, the agency proposes a requirement that, as pilings in tideflats wear out, they could not be replaced. Pilings would have to go in deep water and that would move the stored logs off tideflats, too, into deeper waters to tie-up, Burton said. This would allow for a "gradual phasing out of tideland storage," she said.

The agency spent a year and a half studyng the impacts of log storage on tideflats prior to drawing up the draft proposals and these proposals have been out for eight months, with several informational hearings held to give companies a chance to comment locally.

Weyerhaeuser Company

Southwest Oregon Region
North Bend, Oregon 97459
(503) 756-5121

September 4, 1979

Mr. Harold L. Sawyer
Administrator-Water Quality Division
Department of Environmental Quality
P. O. Box 1760
Portland, Oregon 97207

Dear Mr. Sawyer:

We request the Coos Bay log handling issue be removed from the agenda for the EQC meeting on September 21.

We are extremely disappointed in the timing of this matter. The schedule as set forth in your cover letter does not allow sufficient time for proper evaluation.

Your letter arrived on Monday, August 27. To assure our comments reach you before noon on September 7, they must be mailed by September 5. With the Labor Day weekend in that period, we had only six working days to prepare comments on a document that required months of work by your department.

Rescheduling this issue for the October EQC meeting should allow enough time to properly review the recommendations.

Very truly yours,

Paul Halvor

Paul Halvor
Region Environmental Coordinator

PH/k

cc: Jerry Bollen
Bill Young

Georgia-Pacific Corporation

P.O. Box 869
Coos Bay, Oregon 97420
Telephone (503) 269-1171

September 6, 1979

Harold Sawyer
Department of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

RE: Proposed Log Handling Policy Changes

Dear Hal;

We appreciate the opportunity to make a review of the Proposed Log Handling Policy Changes contained in the draft copy which you sent to our office on August 24, 1979.

We have reviewed the draft and concluded that adoption of the proposed changes in section 4 and 7 would create major impediments to the orderly management of wood product firms raw materials in the Coos Bay Estuary, and would decrease measurably the flexibility in manufacturing that still allows us to be competitive in world markets.

You can understand our concern that exterior regulation may impact our operations to the point that we might be forced to make additional work-force reductions, i.e. the phasing-out of our plywood plant in Coos Bay which resulted in reduction of 200 jobs on August 1st.

At this point, we believe that it would be prudent for the Department of Environmental Quality to establish a six-month moratorium on its proposed policy changes and allow the wood products industry to evaluate the potential impact of the changes on operations in not only Coos Bay, but the remainder of Oregon waters where Log Hauling and Transportation are legitimate operating procedures. Such a moratorium could be useful in determining whether a local problem justifies changing state wide policy without first examining the affects on the entire system.

Thank you for allowing us to make some pertinent comments about this matter. If you wish to contact us regarding log handling and transportation, you may call (503) 269-1171 in Coos Bay

Sincerely,

Ambrose Caudle

Ambrose A. Caudle
General Manager

AAC/cc

KNUTSON TOWBOAT COMPANY

400 N. FRONT — P. O. BOX 908

COOS BAY, OREGON 97420

September 5, 1979

Harold L. Sawyer
Administrator
Water Quality Division
Dept. of Environmental Quality
Portland, Oregon 97207

Re: Comments on DEQ staff report of 8/24/79

Gentlemen:

In reviewing the staff report, I find the policy alterations disturbing and unreasonable.

Amendment to item #4: DEQ has no business or expertise to justify the assumption that any further reduction in tide land log raft tie up's or log storage areas are feasible with regard to the effect such a policy would have on the continuity of production activities for the various timber products firms on the Bay. DEQ has been given the statistical facts on the amount of tide land storage and tie up reduction that the industry has done on its own. 700 plus acres of tide land storage and tie up area have been abandoned over the years. Currently the timber companies are keeping as low an inventory of logs in the water as necessary to provide an even flow of raw material to their production facilities. Essentially your policy recommendation #4 assumes falsely that (1) the various timber companies on the Bay are carrying a larger inventory of logs in the water than necessary to operate their mills efficiently; (2) or that there is sufficient deep water storage and tie up area to offset the amount of tide land storage and tie up area which you propose to phase out. DEQ's recommendation for further regulation on piling placement and replacement assumes that (1) piling failures will occur at times when it is convenient for industry to go through the task of justifing the piling replacement; or (2) that when one or two piling in a string of 20 fall over that it will be feasible to move the said 1 or 2 piling out of alignment with the other 18 or 19 piling to satisfy DEQ requirements. Finally, the DEQ has disregarded the industries contention that the tide land tie up's and storage is necessary because of logistics, safety with regard to weather, tide, as well as freshet situations. Also the DEQ will not accept the fact that all deep water sites are currently being utilized where such sites are feasible from location and safe from weather conditions and freshets. Due to the indication that the DEQ has obviously not accepted the prior factual evidence industry compiled on the issues of tide land, deep water storage, and raft tie up, I find that your policy requiring "substantial evidence" ridiculous. What is "substantial?"

Amendment #7: Industry has gone over this issue more times than I wish to remember. Timber companies are no different than any other company, they can not afford to allow their inventory of raw materials to build up excessively or keep raw material for long periods of time unless market conditions dictate such practice from an economical stand point. Logs cost money, money costs interest, interest cuts profit, the longer logs are held the more interest accumulates and less net profit results. Also the older a log becomes, the more it deteriorates, thus providing less net product recovery.

It is my opinion that DEQ is trying to go to far in regulating our industries business activities. However, if we must have a EQC policy change DEQ's management strategy #3 is the only one which our company will accept, any more than this will be a regulation over kill on the part of the DEQ.

Sincerely,

John Knutson
Operations Manager

JLK:lk

KNUTSON TOWBOAT COMPANY

400 N. FRONT — P. O. BOX 908

COOS BAY, OREGON 97420

September 5, 1979

Governor Victor Atiyeh
State Capitol
Salem, Oregon 97310

Re: DEQ 8/24/79 Issuance of log handling
Consideration of adoption of additional
guidelines for log storage in Coos Bay

Dear Mr. Atiyeh:

I believe Jim Bedingfield has informed you of the concerns that the timber industry in Coos Bay has with regard to the most recent DEQ staff recommendation, sited above.

Our company as well as the other timber oriented companies on the Bay have met numerous times with the DEQ over a two year period, on the issue of tide land storage of logs and log rafts. Industry has made a concerted effort and spent large amounts of time and great expense trying to resolve this issue with DEQ staff and department heads. The DEQ has continued to push for more restrictions on our business activities through regulation recommendations predecated on inconclusive evidence regarding aquatic damage from log groundings. The DEQ has also discounted the effects further regulation would have on our industry and have disregarded the timber industries need for the log tie up grounds which the DEQ intends to regulate us out of.

Governor, we don't need further regulations to control our business practices. The DEQ already has all the effected companies under various permits that currently regulate the storage and handling of logs.

I've enclosed my response to this most recent DEQ staff report addressed to Harold L. Sawyer as you may care to peruse it.

Best regards,

John Knutson
Operations Manager

JLK:lk
Enclosure

COOS HEAD TIMBER COMPANY lumber / plywood
P. O. BOX 750 • COOS BAY, OREGON 97420 • PHONE 503-267-2193

August 30, 1979

Department of Environmental Quality
P. O. Box 1760
Portland, Oregon 97207

Attention: Mr. Harold L. Sawyer, Administrator
Water Quality Division

Gentlemen:

We were surprised as well as disappointed to receive your letter of August 24, 1979 with which you enclosed many pages of material known as "Log Handling - Consideration of Adoption of Additional Guidelines for Log Storage in Coos Bay."

After reviewing this lengthy material which you sent to us, it appears that we are now right back where we started some two years ago in dealing with this subject of logs in the waters in the Port of Coos Bay. You state that a meeting has been scheduled before the EQC in Portland on September 21, 1979 and it appears that we must take the time and expense to be represented at this meeting in an effort to protect the economy and employment in the Coos Bay area.

Your Guidelines deal with the subject of logs stored in a boom. Our company has only one boom in which loose logs are stored and this is known as the "Kennedy Farm Boom". For many years, Willis Kennedy operated this piece of land as a highly developed pasture on which a herd of Black Angus cattle grazed. It was only after Willis Kennedy's death that the old dikes protecting these grazing lands were breached by high tides and storms and there was nobody that took the interest to repair the dikes; hence, this pasture became inundated with tide water. Our company owns these lands and have logs stored thereon, which is very desirable and essential to our operation.

Your study shows that there is a reduction in the invertebrate population, or mud worms, under logs on tide flats. The DEQ did not carry their study to any meaningful finding, or conclusion, that the reduction in invertebrate population resulted in damage to fish, or other aquatic life, from a shortage of food to sustain them. Hence, your study has no real validity or arrives at any conclusion that has any meaning.

(Next page, please)

Your Guidelines and recommendations make reference to trade-offs, which we assume is some form of mitigation. Our company has already abandoned boom areas, which many times exceed the areas we are presently using for log storage, and a few of the more important booms that have been abandoned are as follows:

(1)	Coos Head Timber Company log booms in the Empire area	90 Acres
(2)	The Evans boom on the Coos River channel, which we used for many years	74 "
(3)	Miscellaneous booms used by C.H.T.Co. in the Catching Slough area	35 "
(4)	South Slough area	57 "
	Total	256 Acres

The forest products industry as a whole in the Port of Coos Bay and its tributaries, has abandoned the use over the years -- from recent to 30 years back -- of over 700 acres of log boom storage area and log raft tie-up. We believe it is conservative to say that there is only one-tenth of the log volume stored in the Port of Coos Bay and its tributaries as were stored back over the last thirty years. When there were ten times as many logs stored in the waters of Coos Bay, we had more salmon, striped bass and other fish than we do now. We know that many factors affect fish population, but following the premise used by the DEQ, one could correctly reach the conclusion that more logs in the waters of Coos Bay mean more fish rather than less. We are well aware that fishing pressure, both commercial and sports, and many other factors affect fish populations, but it is impossible for us to reach any valid conclusion that the number of fish has anything to do with log storage.

In accepting the DEQ figures, the Port of Coos Bay has some 4,600 acres of tide flats and some 11,000 acres of total area at stage of high tide. Is it unreasonable to ask that the handling and storage of logs occupy some 1 to 3% of these tide flats and only 1%, or less, of the total area in the Port of Coos Bay? After all, the forest products industry is the principal source of employment here. Logs in the water do make up the source of the food chain for many people living in the Port of Coos Bay and employed in various phases of the forest products industries.

(Next page, please)

Over the past thirty years, and right up to the present time, there has been a large and continuous reduction in the volume of logs stored and handled in the waters of Coos Bay. The acres of tidelands which have been abandoned as log storage areas is referred to above and also the fact that there are only about 10% of the volume of logs in the waters of Coos Bay and its tributaries now as have been stored at many times over the past thirty years. The removal of these logs has not resulted in the increase in the numbers of fish, or other aquatic life, but rather there has been a decrease. Based on this historical record and past experience, it is reasonable to assume that there will be a further reduction in log storage over the next five to ten years. Removal of these logs will in no conceivable or rational manner, based on past experience, increase or enhance the fish or other aquatic life in this area, but it will have a very adverse effect upon the environment of the Port of Coos Bay.

The present actions being taken by the DEQ are now bordering on harassment and a waste of our time. This subject has been hashed over for some two years now and it is time that this was put to rest. Let us all spend our time and energy on the much more important and pressing problems facing the forest products industry.

Yours very truly,

COOS HEAD TIMBER COMPANY

C. Wylie Smith
Vice President

CWS:ej

PUBLIC TESTIMONY

PROPOSED AMENDMENTS TO LOG HANDLING GUIDELINES

Before the

OREGON ENVIRONMENTAL QUALITY COMMISSION

September 21, 1979

Following is a list of persons who testified at the Environmental Quality Commission meeting September 21, 1979 regarding proposed amendments to the log handling guidelines. The written statements of those who submitted them are attached.

Ms. Merrie Buel, Oregon Environmental Council (statement)
The Association of Northwest Steelheaders (statement)
Mr. Harold Hartman, Industrial Forestry Association (statement)
Mr. Michael C. Houck, Audubon Society of Portland (statement)
Mr. Al Mick, International Paper Company
Ms. Nancy Hoover, League of Women Voters (statement)
Mr. Howard B. Mellors, Crown Zellerbach (statement)
Oregon Department of Fish and Wildlife (statement)
Mr. George Grove, Port of Astoria
Mr. Don O. Corkill, Clatsop County Commissioner (statement)
Mr. John McGhehey, Georgia Pacific (statement)
Ms. Sandra Diedrich, Coos-Curry Council of Governments (statement)
Mr. R. B. Herrmann, Weyerhaeuser Company (statement)
Mr. John Knutson, Knutson Towboat Company (statement)
Mr. C. Wylie Smith, Coos Head Timber Company (statement)
Mr. Bob Howry, Weyerhaeuser Company (statement)
Mr. Douglas Keim, Southwestern Oregon Central Labor Council (statement)
Mr. John Foss, Al Peirce Lumber Company
Mr. Harold Walton, International Woodworkers of America (statement)
Mr. Jeff Kaspar, Port of Coos Bay (statement)
Mr. Milo Summerville, International Woodworkers of America
Mr. Greg Baker, Oregon Department of Economic Development (statement)
Mr. Jeff Campbell, Coos Bay Log Patrol

MARY BUEL - OEC

Rec'd 9-21-79
88

OREGON ENVIRONMENTAL COUNCIL

2637 S.W. WATER AVENUE, PORTLAND, OREGON 97201 / PHONE: 503/222-1963

Testimony Before

The Environmental Quality Commission

RE: Additional Guidelines for log storage in Coos Bay

Sept. 21, 1979

Vice Chairman ~~Richards~~ Densmore, Commission members:

My name is Merrie Buel and I am Governmental Affairs Coordinator for The Oregon Environmental Council, 2637 SW Water Avenue.

The OEC applauds the Commission and the DEQ for its Log Storage report and study. We think, however, that the conclusions of the report call for stronger medicine than DEQ recommends.

The conclusions of the study, though not unexpected, are startling. Storage of logs on intertidal areas of Coos Bay estuary diminishes populations of bottom dwelling invertebrates 88 percent to 95 percent depending upon bay location. Stored logs continue to impact 150 acres in the estuary. Industry representatives say the impact is insignificant. But state and federal agency fisheries experts, in whom we have more confidence, say the impact is major.

Industry faults the study for failure to disclose a direct link between loss of invertebrates and diminishment of food fish stocks. The link is so obvious and intuitive that we think the burden should fall upon the industry, the applicant for resource use, to disprove that link.

All of this should be put in a larger perspective. Oregon has few tideland acres. Less than 1/10 of 1 percent of Oregon is estuary land. We depend heavily on the estuaries for much of our quality of life. Salmon are disappearing so rapidly from the Columbia River system that several species may be declared endangered. The Carter Administration has placed high priority on replenishment of salmon stocks. The EQC cannot look lightly on a use which deprives young salmon of estuary food along their migration routes.

We would like to remind you as Commission members that estuaries and tidelands are subject to a commonlaw public trust. The EQC itself is trustee over estuaries with the Division of State Lands and other agencies, for all the people of this state. It is your responsibility to protect estuaries for public trust uses: navigation, fisheries and

(more)

waterborne commerce. Log transport is argueably a public trust use. Log storage clearly is not. The timber industry is impinging upon our public trust. It is the EQC's responsibility to minimize interference with public trust uses, such as fisheries.

We understand the economic burden which immediate elimination of water storage would impose upon the timber companies. But the cost of elimination of a damaging practice doesn't make it right or proper.

DEQ presents reasonable and responsible alternatives. We cannot understand why, in light of its study conclusions, DEQ's recommendation is so weak and noncommittal. We urge the EQC to express confidence in its own study and take stronger, responsible action:

1. The report states (page 4) that loose log storage is particularly damaging. Elimination of loose log storage would cut the impacted tideland acreage in half, from 75 acres to approximately 37 acres. We recommend that the EQC require elimination of loose log storage within one year.

2. The report says (page 5) that 70 to 80 acres of deep water storage areas are available. Again, use of these areas would cut tidelands impact in half. We endorse the recommendation of the National Marine Fisheries Service that the EQC limit all new rafting sites to water depths above +8.0 above Mean Low Water.

3. The report notes (page 5) that the down-bay (not Isthmus Slough) tidelands now affected by grounding logs are in the general migration route for most of the juvenile salmon emerging from the Coos River system. The EQC should give priority attention to these sites. Loose log storage on these sites should be eliminated within six months and rafts should be moved to deep water storage within one year.

4. Finally, Dr. Paul Rudy of the Oregon Institute of Marine Biology has said that damage to eelgrass and algae beds by log storage may be more significant than the loss of invertebrates. (Attachment C, page 1). Eelgrass beds have been declared by the State of Oregon as areas of critical concern under the Oregon Coastal Zone Management Program a approved by the U.S. Secretary of Commerce in May, 1977. The Estuarine Resources Goal of the Oregon Land Conservation and Development Commission (LCDC) requires preservation of major tracts of eelgrass and algae bed. The goal does not permit storage of logs on eelgrass or algae beds. Under ORS 197.180, the EQC and DEQ are bound to comply with the Estuarine Resources Goal. In order to comply, we urge the EQC to eliminate storage on eelgrass and algae beds within one year.

MARY BURC CEC

Rec'd 9-21-79
QS

To: Environmental Quality Commission

From: The Southwest Oregon Chapter
The Association of Northwest Steelheaders
P. O. Box 1266
Coos Bay, Oregon 97420

Subject: Log handling and log storage in the Coos Bay estuary.

After reading the DEQ staff report regarding tideland storage of logs in the Coos Bay area there are certainly a number of things evident.

1. By storing log on the tidelands considerable damage is done to the land physically. The logs cannot move over the ground without eroding much soil with them which later drops into the stream.

2. Considerable debris such as chips, bark and branches get into the channel and sink. Consequently dredging is necessary further damaging the estuary.

3. Where logs touch the ground at low water aquatic life is destroyed and not permitted to reproduce thus doing away with an important part of the food chain.

4. Loose log storage is much more damaging than rafted logs.

5. With the loss of the food chain the number of fish will decline.

6. There are logs stored in the estuary that have been there for years.

We fail to find any of the above items or points that have a beneficial tone. Certainly they need some very special attention, because you cannot keep on destroying anything and expect it to remain usable.

Industry seems to think that the damage done to the fisheries is offset by the fish they put in the ocean. The fish they put in the ocean have little or nothing to do with the number of fish in our estuary and the only one that benefits is the industry itself.

Log storage in the Coos Bay estuary.

The abuse of our estuaries has been going on for many years and it is time that industry must make some changes. The day of reckoning is here and the Environmental Quality Commission must recognize the problems of this estuary and see that improvements are made. This estuary and many like it are not just for sportsmen and not just for industry but it is for everyone to use and enjoy. No group or individual has the right to destroy them.

We feel that these guide lines are very liberal and industry is getting by very cheaply when you consider it has not cost them very much in the past. We should be looking forward to the time when log storage and log transportation on water be reduced to a minimum.

Sincerely,

Alf Nelson, Secretary
Southwestern Oregon Chapter
Association of Northwest Steelheaders
P. O. Box 1266
Coos Bay, Oregon 97420

From HAROLD HARTMAN

Rec'd 9/21/79 CS

MENASHA CORPORATION

MENASHA CORPORATION TESTIMONY BEFORE THE ENVIRONMENTAL QUALITY COMMISSION HEARING SEPTEMBER 21, 1979 ON THE RECOMMENDED MODIFICATION OF THE 1975 LOG HANDLING AND STORAGE POLICY - COOS BAY

COMMISSIONERS:

MENASHA CORPORATION IS A PRIVATELY OWNED FOREST PRODUCTS COMPANY THAT HAS OPERATED IN SOUTHWESTERN OREGON FOR WELL OVER 70 YEARS. WE HAVE HAD NUMEROUS MILLING FACILITIES ON COOS BAY THAT UTILIZED FEE OWNED LOG STORAGE, BOOMING AREAS AND TRANSPORTATION LANES FOR LARGE VOLUMES OF WOOD PRODUCTS. WE PRESENTLY OPERATE A 400 TON PER DAY NEUTRAL SULPHITE SEMI-CHEMICAL PAPERBOARD MILL ON COOS BAY AND SELL SOME TWENTY-FIVE TO THIRTY MILLION BOARD FEET OF TIMBER INTO THE OPEN MARKET.

MANY OF OUR MAJOR CUSTOMERS FOR THIS OPEN MARKET TIMBER HAVE SUBSTANTIAL MILL INVESTMENTS ON COOS BAY AND THE PROPOSED LOG HANDLING POLICY WOULD DEFINITELY HAVE ADVERSE EFFECTS ON THE OPERATION AND EMPLOYMENT OF THESE MILLS AND IN TURN WOULD IMPACT OUR COMPANY OPERATIONS IN COOS BAY SIGNIFICANTLY.

WE HAVE REVIEWED THE PROPOSED CHANGE AND BEING FULLY AWARE OF THE PRESENT LOG HANDLING AND STORAGE POLICY ADOPTED BY THE ENVIRONMENTAL QUALITY COMMISSION IN 1975, QUESTION THE NEED FOR THE PROPOSED MODIFICATION. WE BELIEVE THE PRESENT POLICY PROVIDES SUFFICIENT LATITUDE IN WHICH TO REGULATE EXISTING MILLS AND THEIR LOG STORAGE OPERATIONS.

SECONDLY WE HAVE BEEN VERY ACTIVE IN THE DEVELOPMENT OF THE COOS COUNTY COMPREHENSIVE PLAN AND QUESTION THE LACK OF COORDINATION BETWEEN YOUR STAFF AND THE STATE L.C.D.C. GOALS AND COUNTY PROGRAMS. IT APPEARS THAT YOUR STAFF IS ATTEMPTING TO USURP LOCAL CONTROL WITH THIS NEW POLICY.

(NEXT PAGE, PLEASE)

LAND AND TIMBER DIVISION BOX 588 • NORTH BEND, OREGON 97459 • PHONE 503-756-1193

IT IS OUR BELIEF THAT THE PROPOSED ADDITION TO ITEM NO. 7 ON PAGE 9 OF MR. YOUNG'S REPORT (8-24-79) IS A FURTHER EFFORT TO HAVE ALL LOOSE LOG STORAGE REMOVED FROM THE WATERS OF COOS BAY. THE PREAMBLE TO THIS RECOMMENDATION BY THE DIRECTOR SPELLS OUT TWO PARAMETERS UNDER WHICH THE FIBER LOG REMAINS IN STORAGE IN THE BAY FOR AN UNCERTAIN LENGTH OF TIME. IF THESE TWO FACTORS WERE USED TO JUDGE THE PRACTICABLE ALTERNATIVES, THEN ITEM NO. 7 OF THE POLICY IS WORKABLE. WE BELIEVE THAT SINCE THESE PARAMETERS ARE NOT DEFINED IN THE RECOMMENDATION BY THE DIRECTOR, THAT THE FIELD REPRESENTATIVES OF THE DEPARTMENT OF ENVIRONMENTAL QUALITY WILL BE GIVEN AN OPEN HANDED, UNCONTROLLED AVENUE TO DIRECT COMPANIES WHO MUST HAVE THIS LOOSE LOG STORAGE ACTIVITY TO CEASE THE ACTIVITY AND INDIRECTLY FORCE THEM OUT OF BUSINESS.

IN THIS SAME REGARD, WE BELIEVE THAT THE INTENT OF THE DIRECTOR IS HONORABLE BY HIS SUGGESTION IN ITEM NO. 4 OF HIS RECOMMENDATIONS, THAT HIS DEPARTMENT MUST APPROVE A ". . . TIMETABLE FOR MINIMIZING THE TIDELAND AREAS IMPACTED BY LOOSE LOG STORAGE." OUR EXPERIENCE TEACHES US THAT THE AMBIGUOUS CHARACTER OF SUBJECTIVE WORDS SUCH AS MINIMIZE, REASONABLE, PRACTICABLE, ALTHOUGH WELL INTENDED BY THE AUTHOR, ARE USED TO DISTORT AND TWIST THE ORIGINAL MEANINGS TO SUIT OVER-ZEALOUS FIELD REPRESENTATIVES. IN A MEETING WITH THE DIRECTOR, HE ASSURED US OF HIS INTENTION BUT SAID THERE COULD BE NO GUARANTEE OF CONTINUITY WITH SUCCEEDING STAFF PERSONNEL.

THE PRESENT WORDING OF THE 1975 LOG HANDLING AND STORAGE POLICY PROVIDES SUFFICIENT CONTROL TO ALLOW THE DEPARTMENT OF ENVIRONMENTAL QUALITY TO PROTECT THOSE NATURAL ASSETS IN THE ENVIRONMENT FOR WHICH IT HAS BEEN ASSIGNED.

FOR THE ABOVE AND OTHER REASONS PRESENTED TODAY WE REQUEST THAT THE PRESENT 1975 POLICY OF LOG HANDLING AND STORAGE IN COOS BAY REMAIN UNCHANGED.

SINCERELY YOURS,
MENASHA CORPORATION
Bill Lansing

MICHAEL HOUCK

Rec'd 9-21-79
OS

AUDUBON SOCIETY OF PORTLAND

A Branch of National Audubon Society

PHONE 292-6855 • 5151 NORTHWEST CORNELL ROAD • PORTLAND, OREGON 97210

September 21, 1979

Comment to Department of Environmental Quality
Re: Log raft storage in Coos Bay estuary

We were dismayed to learn recently that logs stored in areas of the Coos Bay estuary are resulting in destruction of tidelands. It appears that the Weyerhauser log rafts are causing much physical damage to vegetation in the estuary as a result to shifting of logs under the influence of changing tides.

The Portland Audubon Society strongly urges your department to place more stringent restrictions on the storage of log rafts in estuarine ecosystems. As you know, estuaries are one of the most heavily impacted ecosystems in the northwest, due to filling and related land development activities. It is clear that any additional impact on any estuary along the Oregon coast is totally unacceptable. This is especially true when the use is log storage which could be accommodated in other, less "valuable" habitats.

We recommend that Oregon Department of Environmental Quality not allow any storage of log rafts where they will have an impact on plants or animals in Oregon's estuaries. Logs should be stored on land when it is apparent that their storage will impact an estuary. We realize that issues such as this are often more complex than they might at first appear...owing to difficulty in finding suitable land-based storage, transportation difficulties and the like. However, we cannot accept the destruction of any additional estuarine habitat by Weyerhauser or any other corporation or group that has other options available which might cost more. We must be willing to accept the economic consequences of protecting natural resources at both the corporate and consumer levels.

Please advise us of your current policies regarding log storage in the Coos Bay area as well as your future plans for Oregon estuaries in general. We are deeply concerned about your agency's dedication to protecting a habitat which is rapidly disappearing in Oregon.

Sincerely,

Michael C Houck

Michael C. Houck, Board of Directors
Portland Audubon Society

Rec'd 9-21-79
Q8

THE LEAGUE OF WOMEN VOTERS OF OREGON
494 STATE STREET - SUITE 216
SALEM, OREGON 97301
581-5722

To: Environmental Quality Commission

Re: Log Handling - Coos Bay

September 21, 1979

My name is Nancy Hoover. I am speaking for the League of Women Voters of Oregon and the League of Women Voters of Coos Bay. We support the proposed amendents to the Log Handling Policy in Oregon public waters. The amendments are reasonable alternatives which should have a minimum negative impact on industry and a more positive impact on water quality.

Controlling loose logs and limiting storage time will provide short term reduction of tideland damage while gradual placement and replacement of piling in deeper water will produce a long range improvement in aquatic productivity..

In view of the DEQ study showing 88% to 95% reduction of invertibrate population in log grounding areas, these measures will cause a substantial reduction in impacted tideland acreage.

Although recent emphasis has been on the impact of grounding logs on tideland habitat, the League reminds the EQC that log storage studies since the late 1960's have shown water quality degradation from all log storage, including both floating and grounded logs. We cannot consider the loss of water quality and tideland habitat as insignificant, especially when added to the gradual loss of tideland through dredging and filling.

We urge the adoption of the proposed amendments.

Nancy Hoover, Chairman - Natural Resources
3725 N. W. 183rd Avenue
Portland, Oregon 97229

Norma Jean Germond, President - League of Women Voters of Oregon
224 Iron Mountain Blvd.
Lake Oswego, Oregon 97034

Alice Carlson, President - Coos County League of Women Voters
1023 Noble Street
Coos Bay, Oregon 97420

Statement of Crown Zellerbach to the
Oregon Environmental Quality Commission
September 21, 1979
Portland, Oregon

OCD 9-21-79
08

My name is Howard B. Mellors, and I represent Crown Zellerbach.

Because of the location of our timberlands, mills and distribution system, Crown Zellerbach is tied irrevocably to Northwest Oregon, including the coastal and tideland areas. We are particularly concerned with any change in planning policy or regulations which would further restrict timber harvesting, transportation and manufacturing facilities and activities in the coastal zone and related areas.

We are appearing today because we understand that the proposed additional guidelines for log storage in Coos Bay which you are considering would apply in other coastal areas as well. If this is the case, we are concerned that a local matter in Coos Bay, as indicated by the agenda item and title of the staff paper, should require a statewide policy amendment. Not all estuaries are the same in configuration, soil composition, hydraulics nor log handling practices. We believe they should not be treated as such, but that specific concerns should be handled on a case-by-case basis.

If these changes in guidelines are intended to be statewide, then inadequate notice has been given to concerned parties and jurisdictions. We first obtained a copy of the staff report and recommendations on September 11. We don't think that ten days is adequate to digest, research and prepare appropriate comments on the mass of technical material provided.

Because of our previous involvement in the development of your policy, "Log Handling in Oregons' Public Waters," which you adopted October 24, 1975, we had assumed that we would be involved at an early stage when changes to that policy were considered.

To the extent that we have had time to review the staff recommendations, we support the testimony of the Industrial Forestry Association and agree that there is insufficient evidence to show that "more than nominal damage" would occur to the marine environment from log handling activities. Lacking such uncontroverted proof, we believe a change in the statewide guidelines is inappropriate at this time.

Thank you.

Rec'd 9/21/79
Q8

Statement
of the
OREGON DEPARTMENT OF FISH AND WILDLIFE
before a meeting of the
ENVIRONMENTAL QUALITY COMMISSION
September 21, 1979

The Oregon Department of Fish and Wildlife recognizes log storage and log transportation as legitimate uses of Oregon's waters. Our purpose in testifying is not to speak against these legitimate water uses but to seek establishment of policy which minimizes impacts to fish and wildlife habitat. Our department has participated for a number of years with DEQ and the forest industry in the development of guidelines and criteria for the purpose of minimizing damage done to water quality and fish life from the transportation and storage of logs.

Oregon's estuaries are limited in size and number. Long-term protection of estuarine resources is an accepted state policy. The DEQ staff report supporting the proposed rules shows conclusively that grounding of logs in intertidal areas causes 88-95% reduction of the invertebrate biota in the concerned areas. The DFW has participated in the development of the staff report and believes its findings are valid.

Before you, today, are new policy guidelines proposed by the DEQ staff that in our opinion would reduce the storage of logs in intertidal areas where grounding occurs. These guidelines not only address current conditions but also the potential problem which could be created by increased log storage in tidelands. They are consistent with the long-term state policy of protecting the estuaries.

A sincere effort has been made to identify alternatives to current tideland log storage practices which would be the least costly to the forest industry. The most feasible alternate plans are:

1. eliminate loose log storage
2. increase deep water storage
3. limit storage time.

The Oregon Department of Fish and Wildlife believes these recommendations provide a reasonable solution and respectfully requests the Environmental Quality Commission to adopt the proposed rules to further reduce impacts of tideland log storage on aquatic life.

Rec'd 9-21-79
08

September 21, 1979

MR. CHAIRMAN:

MY NAME IS DON O. CORKILL, CLATSOP COUNTY COMMISSIONER. I AM APPEARING TODAY ON BEHALF OF THE OREGON COASTAL ZONE MANAGEMENT ASSOCIATION WHICH IS A VOLUNTARY ASSOCIATION OF OREGON'S SEVEN COASTAL COUNTIES, CITIES, SOIL AND WATER CONSERVATION DISTRICTS AND PORTS THAT HAVE JOINED TOGETHER TO REMAIN INFORMED ABOUT THE MANAGEMENT OF COASTAL RESOURCES AND TO PROMOTE INTER-GOVERNMENTAL COORDINATION OF OREGON'S COASTAL PLANNING AND MANAGEMENT ACTIVITIES.

I WAS INVITED TO MAKE THIS APPEARANCE ON BEHALF OF THE ASSOCIATION BY MY FELLOW COUNTY COMMISSIONER, ORVO NIKULA, WHO IS CONDUCTING A MEETING OF THE ASSOCIATION IN EUGENE TO VOICE CONCERN ABOUT AN ITEM ON THE ENVIRONMENTAL QUALITY COMMISSION AGENDA ENTITLED: "LOG HANDLING -- CONSIDERATION OF ADDITIONAL GUIDELINES FOR LOG STORAGE IN COOS BAY."

AFTER A REVIEW OF THE ABOVE-MENTIONED MATTER, OREGON COASTAL ZONE MANAGEMENT ASSOCIATION HAS CONCLUDED THAT IT SHOULD CONVEY THE CONCERNS OF ELECTED COASTAL OFFICIALS BY MAKING THE FOLLOWING RECOMMENDATIONS TO THE OREGON ENVIRONMENTAL QUALITY COMMISSION.

FIRST, THAT OREGON ENVIRONMENTAL QUALITY COMMISSION DELAY ACTION ON THE PROPOSED AMENDMENTS REGARDING LOG HANDLING;

SECONDLY, THAT OREGON COASTAL ZONE MANAGEMENT ASSOCIATION BE GIVEN AN OPPORTUNITY TO WORK WITH DEPARTMENT OF ENVIRONMENTAL QUALITY TOWARD RESOLUTION OF THE CONCERNS WITH THE PROPOSED AMENDMENTS;

THIRDLY, THAT THE ENVIRONMENTAL QUALITY COMMISSION GIVE ATTENTION TO THE RELATIONSHIP OF THE PROPOSED POLICY AMENDMENTS TO THE ONGOING COMPREHENSIVE PLANNING EFFORTS;

FOURTHLY, THAT AN OPPORTUNITY BE PROVIDED FOR AFFECTED PARTIES (EXCLUSIVE OF THE COOS BAY AREA) TO REVIEW AND PROVIDE INPUT ON THE PROPOSED POLICY AMENDMENTS;

AND LASTLY, THAT DEPARTMENT OF ENVIRONMENTAL QUALITY STAFF MEET WITH CREST TO DEVELOP COORDINATION OF THE OREGON LOG STORAGE POLICY AND CREST LOG STORAGE PROGRAM.

Rec'd 9-21-79

STATEMENT

before

OREGON ENVIRONMENTAL QUALITY COMMISSION

Regarding

PROPOSED CHANGES IN LOG HANDLING POLICY

by

Georgia-Pacific Corporation

Portland, Oregon

September 21, 1979

My name is John McGhehey and I work for Georgia-Pacific Corporation. I'm here today to comment on your agenda item entitled "Log Handling - Consideration of Adoption of Additional Guidelines for Log Storage in Coos Bay." We were concerned with the proposed additions even when we thought they applied only to Coos Bay but we became even more concerned when we learned recently they would apply statewide. As you may be aware, our company operates wood processing plants both in Coos Bay and Toledo that have historically been highly dependent upon the availability of public waters for log transportation, storage and handling.

Our concerns with the proposed additional guidelines are the potential resultant effects of them. They set the stage for three things to happen over time:

(1) elimination of all loose log storage in inter-tidal areas within two years;

(2) prohibiting the replacement of piling used for log raft mooring in inter-tidal areas and thereby phasing out log storage in such areas; and,

(3) limiting the storage of logs on public waters to twelve-month maximum duration.

Realization of these potential effects would depend almost entirely on the attitude of present and future Department staff toward log storage and the forest industry. This is an unacceptable risk when the associated

impacts are considered. For example, at our Toledo mill we currently store logs on approximately 112 acres of inter-tidal lands in Yaquina Bay and over 70 of these acres are used for loose log storage. The logs are stored for periods ranging from less than one month to well over twelve months. The log volume involved represents about half of the inventory necessary to keep our mill running.

Loose log storage is preferable because there is limited area available and we can concentrate more volume per unit of available area than with rafts. Also in Yaquina Bay, the water is extremely shallow at the upper end and rafts tend to get hung up during tidal fluctuations whereas loose logs can be freed or moved more readily. The inter-tidal areas are not selected for log storage by choice, but because there is nothing else available. The only deep water is that in the shipping lanes. Storage longer than twelve months is needed to handle fluctuations in log availability and market conditions; neither of which we have control over. For economic reasons we purposely keep our log inventories as low as possible.

The alternatives to water storage of logs both at Toledo and Coos Bay involve more truck traffic in already congested areas, increased energy consumption, and construction of expensive log yards in areas that are statutorily limited to water dependent-water related-type industrial uses by statewide planning goals and guidelines. These alternatives have been studied and re-studied by the Department staff in the past and always rejected. We see no benefits, either private or public, in having to continue such reviews and evaluations on a perennial basis in order to justify our existence.

Our concerns with the proposed new guidelines are further aggravated when we look at the presumed basis for their need. We actively participated in the development of the existing statewide guidelines or policies that were adopted for log handling in October of 1975. Since then we have made a

concerted effort to meet or exceed the standards set forth in those policies. Further, in our opinion, the existing policies adequately control our log handling activities to insure compliance with water quality standards. However, it appears that the new proposals have little to do with water quality but rather are designed to protect and enhance habitat for benthic organisms. We question the authority of the Environmental Quality Commission to set policy on matters pertaining to wildlife habitat not associated with water quality problems. We also question the validity of extrapolating the findings of one study done in Coos Bay to conclude that log storage in intertidal areas is causing more than nominal damage to aquatic productivity in Coos Bay let alone all of the estuaries in Oregon. We feel the Fish and Wildlife Commission would be the appropriate body to make such a determination and then it should be scientifically documented.

One last item of concern. The proposed new guidelines fail to recognize the land use planning efforts now underway in Oregon. For example, a comprehensive land use plan is currently being developed for the Yaquina estuary. The task force doing the work is looking at the estuary piece-by-piece and making specific recommendations on where specific activities such as log storage will or will not be allowed in the future. The proposal before you to control future log storage sites through a permit process undermines their efforts and that of other local governments going through similar processes for estuaries within their jurisdictions.

In conclusion, we recommend that the only action you take is to affirm the adequacy of the existing log handling policies established in 1975 and let the Fish and Wildlife Commission pursue the question of whether or not log storage is adversely affecting the total productivity of estuaries in Oregon.

Thank you for the opportunity to comment.

Wood 9-21-79

COOS-CURRY COUNCIL OF GOVERNMENTS

P. O. BOX 647
NORTH BEND, OREGON 97459

SANDRA DIEDRICH
DIRECTOR
PHONE 756-2563

September 20, 1979

Environmental Quality Commission
Portland, Oregon

RE: Testimony on proposed modifications to the Environmental Quality Commission's Log Storage Policy

Gentlemen:

My name is Sandra Diedrich and I am the Director of the Coos-Curry Council of Governments, an association of units of local governments in Coos and Curry Counties. The Coos-Curry Council of Governments has maintained an active role in the discussion of log storage, handling, and transport issues for at least six years. Thus, we are pleased to have this opportunity to further participate in the consideration of this important issue.

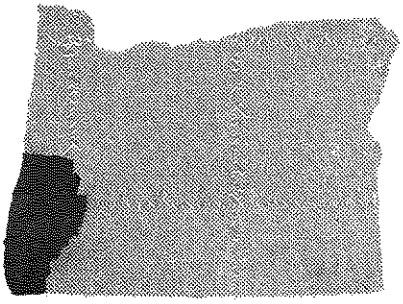
First I would like to make a few comments on the Director's report to the Commission.

Current policy: We have viewed the current policy as essentially a fair policy which provides an adequate basis for management.

Benthic Invertebrate Study: This study desribes a biologic impact from an activity but falls short in specifically evaluating what that impact means to the fisheries resource. It is one piece of work which either ought to be used in conjunction with other studies, or brought to a point of evaluating systematic impact, or set aside. It represents only a partial impact study. We have believed it to be the mandate of DEQ as well as the Environmental Quality Commission to balance all environmental considerations and to be more systems oriented.

Deep water sites: Several references are made to other available deep water sites which could be used instead of tideland areas. Yet, these sites are not identified textually or on a map. It does not seem appropriate to assume that there are such other sites unless these are specifically identified, inventoried, and evaluated.

Impact statistics: We would urge judicious use of statistics. While there may be concentrated impact on one area, the relationship of that area to the whole needs to be identified.



Department versus Industry: There are several references to disputes between the DEQ and the involved industries. Such references make it appear that these are the only actors in the discussion of the issues. Local governments in our area are vitally concerned with these issues and have not had adequate participation in the resolution of these resource and environmental quality management issues. This lack is one of our major concerns.

In keeping with the latter point, we are providing to the Commission copies of the conceptual work program and general flow chart of the Coos Bay Estuary Management Planning Process in which the DEQ is participating. Among the significant activities for this major planning process is the formation of functional task forces to address specific issues. Also provided for your inspection is a copy of the general work program for functional task forces. A functional task force on log handling and transport was formed by the Inter-Agency Task Force (composed of local officials, state resource agencies, and federal agencies) on September 19, 1979. This functional task force will have a specific work program following the guidelines of the general one. As you can see, through a comprehensive planning process which involves all key actors, the issue of log handling and transport is being addressed. We strongly urge that the Environmental Quality Commission hold furthur consideration of revisions to its policies until the issue has been properly addressed in the Coos Bay Estuary Man-Agement Planning Prpcess. By so doing, the Commission will assist in keeping focus on a comprehensive examination of the issue and will dramatically support the planning process described in SB100, SB570, the LCDC Goals, and the Oregon Coastal Zone Management Program.

Thank you for the opportunity to present these comments.

Sincerely,

Sandra Diedrich

Sandra Diedrich
Director

SD:sd

economy, there is good reason to believe that in the long run it will. Tideland storage of logs in the Coos Bay Estuary has declined significantly over the past 15 years and could be considered to be at a relative historical minimum. Down the road 20-25 years when new timber stands are ready to be harvested, there may be a need to expand tideland storage.

Although it is argued that the policy allows for such changes, I strongly question whether that flexibility will in fact be there. Assuming that it is not, dry land storage spots will have to be found. Yet this will pre-empt land from more valuable industrial or agricultural use. It will also be a more costly process for small mills.

Given that the Coos Bay log storage policy is being developed in a narrow forum, and given that the policy will have broad impacts on water and air quality, the local economy, transportation, and natural resources, the Coos-Curry Council of Governments respectfully recommends that the formulation of the policy on "log storage in the Coos Bay Estuary" be resolved through the Coos Bay Estuary planning process. This would insure that a consensus would be reached by all local jurisdictions and the Federal and State resource agencies.

Specifically, the issue of log storage on the Estuary would be studied by a functional task force. Through examining all the ramifications and alternatives of log storage, a more realistic approach would be taken. Areas for log storage in the Estuary would be designated and mapped only after carefully weighing the alternative uses of these areas and their relative impacts.

Sincerely,

Ross Brandis/tam

Ross Brandis
Assistant Director

RB/tam

COOS-CURRY COUNCIL OF GOVERNMENTS

P. O. BOX 647
NORTH BEND, OREGON 97459

SANDRA DIEDRICH
DIRECTOR
PHONE 756-2563

ROBERT PIERCE, Chairman
BILL TANKERSLEY, Vice-Chairman
C. W. HECKARD, Treasurer

September 20, 1979

Gentlemen:

The Coos-Curry Council of Governments is pleased to have the opportunity to review the proposed policy on log storage and to provide testimony. We have several serious concerns.

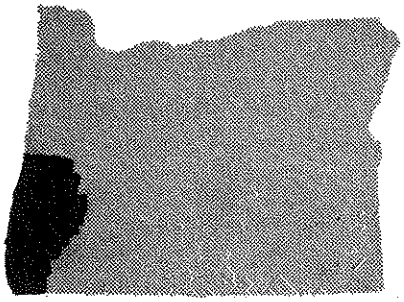
The Coos-Curry Council of Governments has been involved and has provided strong input on the Environmental Quality Commission's log storage policy since its origin in 1975.

One (concern) is the increasingly minimal coordination that is occuring with local units of government, with regard to the development of this policy. This was a concern we expressed at the January 11, 1979, Department of Environmental Quality hearing in Coos Bay. There is simply no excuse why others should have copies of the proposed policy mailed to them a month prior to the hearing, and for the Coos-Curry Council of Governments to have a copy postmarked to them a week before the hearing. Such procedures breed unnecessary distrust toward the Department of Environmental Quality by local officials.

Adequate coordination with local units of government is always a concern. However, it is especially critical that it be occuring at this particular point in time when counties and cities are completing their local comprehensive plans and at a time when the Coos Bay Estuary planning process is underway.

Thus, the second issue of concern is the integrity of the local planning process. Why is it that the Department of Environmental Quality has not addressed the issue of how this policy formulation relates to local comprehensive plans? Why is it that a more serious attempt is not made to insure that policies such as this, which potentially impact directly on numerous statewide planning goals (such as water and air quality, transportation, local economy, natural resources), aren't well coordinated with the local comprehensive planning process?

Although the Department of Environmental Quality has maintained that the proposed policy only seeks to minimize tideland areas for log storage and doesn't necessarily impact on transportation, dry land storage, and local



MEMBER AGENCIES

COOS COUNTY	PORT ORFORD	COOS BAY SCHOOL DISTRICT
CURRY COUNTY	POWERS	COQUILLE SCHOOL DISTRICT
BANDON	PORT OF BANDON	BANDON SCHOOL DISTRICT
BROOKINGS	PORT OF COOS BAY	BROOKINGS-HARBOR SCHOOL DISTRICT
COOS BAY	PORT OF BROOKINGS	GOLD BEACH HIGH SCHOOL DISTRICT
COQUILLE	PORT OF PORT ORFORD	GOLD BEACH SCHOOL DISTRICT 3C
EASTSIDE	PORT OF GOLD BEACH	MYRTLE POINT SCHOOL DISTRICT
GOLD BEACH	COOS BAY/NORTH BEND WATER BOARD	SOUTHWESTERN OREGON COMMUNITY COLLEGE
LAKESIDE	LAKESIDE WATER DISTRICT	NORTH BEND SCHOOL DISTRICT
MYRTLE POINT	LOWER BAY WATER DISTRICT	POWERS SCHOOL DISTRICT
NORTH BEND		

GENERAL WORK PROGRAM

FOR FUNCTIONAL TASKS FORCES

Purpose of Functional Task Force:

1. To involve a cross section of knowledgable community and resource persons in an examination of an issue pertinent to the Coos Bay Estuary Management Planning Process.

2. To gain efficiencies for the Interagency Task Force and the Coos Bay Estuary Management Planning Process by having a simultaneous in-depth examination of issues.

3. To provide the Coos Bay Estuary Management Planning Process with a concise description of the situation, the alternatives for, and the consequences of resolution of an issue.

Product:

A. "White paper" which includes"

   1. Description of the situation

      a. problem statement
      b. discussion of issues
      c. description of need
      d. assessment of demand
      e. identification of constraints or conflicts
      f. discussion of related issues or related considerations, e.g. water quality

   2. Identification of the full range of alternative strategies to resolve problem statement or remedy situation

   3. Identification of probable consequences of each alternative strategy or remedy

   4. Identification of sites pertinent to situation

   5. Bibliography

Process:

1. Names for the Functional Task Forces will be solicited from community groups, etc.

2. A functional task force of 9 to 15 members will be authorized by the Interagency Task Force.

3. Functional Task Forces will be provided with staff support for process management, materials preparation, research, TAT utilization, etc.

4. Meetings will be publicized and open to the public.

5. Meeting notes will be distributed to the Interagency Task Force and coordination list.

6. Opportunities for public review and comment will be made.

7. The "white paper" will be submitted to IATF and the record of proceedings will be available to the IATF.

COOS BAY ESTUARY MANAGEMENT PLAN
OUTLINE WORK PROGRAM

WORK PROGRAM GOAL

The goal of this work program is to prepare a revised Estuary Management Plan for Coos Bay. It is significant to note that this new plan will represent a revision to the existing Estuary Plan, prepared and adopted by the Coos County Board of Commissioners in 1975. The preparation of that Plan and subsequent efforts by the community to review its policies, represent a significant and concerted commitment of the Bay Area community to deal with the controversial and conflicting issues surrounding the estuary.

The achievement of the goal of this work program, therefore, will be based on a conscious consideration of these previous efforts in terms of the plans, commitments, expectations and consensus agreements reached by the historic and current planning efforts.

In addition, however, circumstances have changed, regulations at all levels of government have changed, and the needs of the community, the State and the Nation are creating new pressures on Coos Bay, all of which must be addressed in a revised plan. The revised plan, therefore, must also be based on an understanding of the deficiencies of the existing plan in meeting the current and future needs of the bay community, the State and the Federal government.

Finally, the goal of this work program will be to involve all those individuals, groups and agencies that have the legal responsibility for making decisions, and an interest in the natural and economic resources of the bay to obtain their knowledge, ideas, values and to gain their consensus on the management of the estuary to balance all of the demands that are being placed on it.

ESTUARY MANAGEMENT PLAN - A DEFINITION

An Estuary Management Plan is a tool to make decisions. It must aid the property owner in making decisions on how to use his land. It must aid City, County and Port officials in making land use decisions; decisions on the issuance of a building permit; decisions on the future need for and budgeting of public improvements. It must aid State and Federal agencies, charged by law to manage certain resources, in that management effort and in the granting or reviewing of permits to use those resources.

To be an effective decision making tool, an Estuary Management Plan must, therefore, anticipate the needs of the community and the resource base; have predictability in terms of its ability to be used to make decisions; be balanced in its achievement of the community's economic needs and the long term use of the natural resources; be specific enough to make decisions yet general enough to allow for flexibility in meeting specific needs and changing circumstances; and, it must be capable of being reviewed, refined and revised on a regular basis.

ESTUARY PLANNING/DECISION MAKING

Creating an estuary management plan can only truly be done by those people that have the legal responsibility and authority to establish and carry out public policy. The estuary planning/decision making process must provide the means for those individuals to make decisions and support the decision making process with reliable and relevant technical information, as well as an understanding and knowledge of community, State and Federal needs and priorities.

For the Coos Bay Estuary Planning Process, the planning/decision making structure will be an interagency Estuary Planning Task Force. The Task Force will be composed of elected officials from each of the Bay area cities, Coos County and the Port of Coos Bay and official representatives from each of the State and Federal regulatory agencies. The purpose of the Task Force will be to establish estuary management policies.

The primary means for the Task Force work will be a series of workshops scheduled throughout the entire planning process. The Task Force will make its decisions by consensus with the organization, support and responsibility for managing the Task Force deliberations and establishing the consensus held by a disinterested, neutral party--in this case, a consultant, acting as a facilitator.

While the Task Force will prepare the Estuary Management Plan through a consensus decision making process, the final adoption and implementation of the plan will be done by the individual cities, county, special districts and agencies using their own, existing, implementing ordinances, permits and regulations. The plan prepared by the Task Force will be its recommendation to each responsible jurisdiction or agency.

ESTUARY PLANNING/DECISION MAKING PROCESS -- SEQUENCE OF ACTIVITIES/ACTIONS/ DECISIONS

The following series of steps represents the general sequence of activities, actions and decisions that will be required to prepare a final Estuary Management Plan. The Estuary Planning Task Force is the primary means of dealing with each of these steps.

Step 1 - Organize and Schedule Work, Orient Participants and Establish General Procedures.

This step represents the actual "start-up" of the planning process. In addition to completing a refined work program, technical work not already completed or begun will be initiated, the various involvement structures will be initiated (see description in a later section), and the Estuary Planning Task Force will have its initial orientation workshop.

Step 2 - Review and Define Areas of Legal Jurisdiction within the Estuary.

In addition to City and District boundaries, other State and Federal legal boundaries and areas of jurisdiction will be reviewed. This will be a subject covered in the second Task Force workshop.

Step 3 - Analyze Existing Estuary Plan and Individual City, County and Port Plans.

The emphasis of this step will be to understand and evaluate existing plans. To understand the plans, the major policy organization will be identified along with key policy features and issues. Once understood, the plans will be evaluated to identify areas of agreement and prior commitments. Finally, areas of conflict, inconsistency and deficiency relative to State and Federal goals and regulations and local needs will be identified.

This is expected to be a primary subject of workshop number two.

Step 4 - Establish Study/Plan Boundaries.

This will either be accomplished in the second or third workshop.

Step 5 - Identify Key Estuary Issues.

From out of the plan evaluation process, key issues will be identified as a basis for developing priorities for Task Force deliberation and the initiation of special study efforts (see Specific Area Assessment Process). It is expected that key issues will be one of several types including critical general areas of the estuary, site specific proposals, policy gaps or critical policy needs, questions of resource or economic need.

As issues are identified, a work program will be agreed upon to deal with each issue. This issue is expected to be the primary subject of the third workshop.

Step 6 - Initiate Specific Area Assessments and Other Efforts to Deal with Key Issues (see also Citizen Involvement - Issue Task Forces).

Step 7 - Evaluate/Select Planning/Management Techniques to be used in the Revised Plan.

A series of alternative management techniques will be outlined for the Task Force to consider along with the advantages and disadvantages of each. Alternatives will include a consideration of the existing plan technique, techniques used in other estuary planning processes as well as other techniques which might be used in Coos Bay. Once selected, the technique will become the basis for the development of the revised plan.

Step 8 - Establish Broad Level Planning/Management Areas within the Estuary.

Regardless of the specific management techniques selected by the Task Force, any technique will require breaking the estuary down into smaller sub-units. It is not expected that these sub-units will be specific enough to be final management areas, but will serve to provide an organization of the estuary. This is the first major point where the estuary-wide, technical resource inventory will play an important role in the planning process (see description of Resource Inventory). Once these sub-units are established, the Task Force will be asked to describe their characteristics and establish general guidelines for their future use.

It is expected that this process will take two Task Force workshops--workshops four and five.

Step 9 - Establish Planning Principles to be used in making Area or Site Specific Management Decisions.

For a traditional land use plan, this step would involve making decisions on the land use categories that would be used on the plan (e.g. how many and what type of residential uses, or what types of commercial uses, etc.). For the estuary plan, this step will consider definitions for management classifications (urban, conservancy, etc.), permitted uses and activities, boundary definitions and other specific principles and techniques that will be required to make management decisions throughout the estuary.

This is expected to be the subject of workshop six.

Step 10 - Establish Specific Management Areas throughout the Estuary.

This step of the process represents the final decision making step. It is at this point that the management techniques, definitions, existing commitments, technical resource inventories, the results of Specific Area Assessments, the work of the Special Issue Task Forces, etc. will be brought into the process so that the Estuary Planning Task Force can make management decisions for all areas of the estuary.

It is believed that at least three Task Force workshops will be necessary to accomplish this task. The total effort, however, will be based on how easily and expeditiously the Task Force is able to reach consensus.

Step 11 - Prepare a Preliminary Draft of the Plan.

Once the Task Force has been able to reach consensus on each management area of the estuary, a draft plan will be prepared in complete form. In support of previous steps, it is expected that decisions reached during those steps will be documented in the form of working papers and other draft papers. The draft plan, therefore, will represent a compiling of those materials along with other agreements reached and the additional introductory, definitional and other plan content material that is required to represent a plan document.

Step 12 - Task Force Review of Preliminary Draft Plan.

Since the preliminary draft plan will be the first time that the Task Force will see the plan in total form, this first review step is designed primarily for the Task Force. It is intended that this step allow the Task Force to ratify or modify the document as representing their consensus agreements. The Task Force review process will focus on determining consistency with their agreements reached; to identify needs for clarifying definitions and agreements reached and to identify any remaining unresolved issues. The Task Force will be asked to make decisions on the areas and types of changes that will be necessary in the plan.

Step 13 - Redraft Plan - Prepare Public Draft Plan.

Based on the directed revisions from the Task Force, a redrafted plan will be prepared and published for public review.

Step 14 - Public Review and Task Force Hearings.

A public review process will be established during which time the Task Force as a whole and through its individual members, will discuss the plan features with the citizenry at large, special interest groups, their individual jurisdictions and agencies, and other groups (see also Citizen and Special Interest Group Involvement Process).

Step 15 - Plan Modifications and Preparation of Task Force Transmittal to Individual Jurisdictions and Agencies.

Based on public comments received through the review process. the Task Force will decide on specific changes it wishes to make in the plan prior to transmitting the plan to the individual cities, county, Port and State and Federal agencies for their own adoption or acceptance.

Step 16 - Adoption of Plan by Individual Jurisdictions and Agencies.

Using its own legal authority, each jurisdiction will conduct its own hearings on the plan or at least that portion of the plan that directly applies to its area of responsibility. It is presumed that each will adopt the applicable plan features into its own comprehensive plan.

Step 17 - State and Federal Agency Comment and Sign-Off and Department of Land Conservation and Development Acknowledgement.

It is presumed that the plan transmitted by the Task Force will have general concurrence by the participating State and Federal agencies by virtue of their direct role on the Task Force. Any modifications to the plan that occur in the adoption process by individual local jurisdictions will be subject to agency comment as those revised local plans go forward to the Department of Land Conservation and Development for compliance acknowledgement.

Workshop Support: The estuary planning/decision making process described above is based on the ability of the Estuary Planning Task Force to make the decisions outlined. The consultant, acting as a facilitator to the workshop and consensus decision process, will have the obligation to provide the necessary support to the process to enable the Task Force to understand the issues, the alternatives and the implications of the decisions. The specific support requirements will be a function of the needs of each step of the process. In general, however, the following procedures will be used:

1. Advance materials will be prepared for each workshop and sent to the Task Force members prior to the session. In addition to normal administrative instructions (time, place, agenda, etc), some advance materials will be specifically designed to provide guidance, knowledge, thoughts, etc., on the subjects to be covered in the workshop.

2. Materials will often be prepared as tools to be used in the actual workshops themselves to guide the discussions.

3. The procedings of each workshop will be documented to verify agreements and decisions reached. It is expected that notes will be taken and/or other transcriptions during workshop sessions.

4. A summary of the workshops will be prepared immediately following its conclusion and transmitted to each member for verification. Rather than just minutes, the summaries will be designed to document agreements reached, management decisions, definitions established, standards developed or other points that will be critical to the Task Force subsequent verification of the Preliminary Draft Plan content.

5. In addition, the information developed through the other involvement processes, the various technical studies, and Specific Area Assessments, the Special Issue Task Forces, will be brought into the Task Force procedings as appropriate to support their discussion of issues and management needs.

ESTUARY INVOLVEMENT PROCESS

While the primary means for creating the estuary plan and making estuary management decisions is the Estuary Planning Task Force, a very essential part of their ability to make those decisions is based on a full understanding of what the interests, concerns, values, knowledge, etc., of all individuals and groups that use or wish to use the estuary's natural and economic resources. While the only legal authority to make and/or carry out public policy decisions is held by elected officials and delegated agency representatives, those decisions are presumed to reflect an understanding of the "public's interest".

It is important, therefore, that all interested individuals, groups, agencies be involved in the total process. The Coos Bay Estuary Planning Program contains (in addition to the Estuary Planning Task Force) two additional major levels of involvement--the general citizenry of the bay community, and, groups that have some special interest in the estuary. One additional involvement process is included in the Coos Bay program, but is discussed as a part of the Technical Studies section (Technical Advisory Team).

Given the complex nature of the Coos Bay Estuary planning area, the number of jurisdictions having direct or implied authority, the number of competing interests, and the level of community planning or jurisdictional planning which has already occurred, the involvement portion of the estuary management planning process must incorporate several work efforts to bring the interests effectively into the process. Three separate but interrelated work efforts will be included. These are:

1. General Citizen Involvement
2. Special Interest Groups
3. General Interest Groups

As separate work efforts, each will have its own work program within which specific objectives will be accomplished. However, these individual work efforts will be inter-related with each other, will be relatively concurrent, and will be appropriately interfaced with Estuary Planning Task Force.

Citizen Involvement Component

Purpose: To ensure that citizens have an opportunity to participate in all phases of the Estuary Management Planning Process; to ensure that citizen input is incorporated into the planning process and responded to as a part of the planning process.

Scope: Given the regional, multi-jurisdictional character of the Estuary Management Planning Program, it is appropriate to establish a special, integrated citizen involvement process for the duration of the work program. The citizen involvement process for the Estuary Management Planning Program will recognize and incorporate key features of each jurisdiction's citizen involvement program in order to communicate with citizens and citizen groups and in order to assure coordination of effort. The key features to be included are:

1. Rosters of group membership and mailing lists
2. Organizational structures of CCI's or CAC's, e.g. meeting times, leadership, format
3. Feedback mechanisms
4. Methods of making planning materials available for public use

Function: The Citizen Involvement process will inform citizens of the process to accomplish the management program, the opportunities for input and involvement, the communication devices; will provide feedback mechanisms and evaluation procedures; will elicit and facilitate citizen influence on the outputs of the planning process. In addition, the citizen involvement process will provide opportunities for public education on the planning process, estuarine systems, and estuarine management issues. By so doing, the citizen involvement process will provide decision-makers with citizen response to issues, alternatives, and plan provisions in order to lay the basis for planning consensus.

Organization: The organization of the citizen involvement process will include five major features:

1. A regional citizen involvement program which will:
   a. Allow widespread citizen involvement
   b. Assure effective two-way communication between citizens and decision-makers
   c. Provide for citizen influence in the planning process
   d. Make technical, background, and other planning information available
   e. Provide for feedback to citizens from policy officials
   f. Have adequate financial support
2. Coordination with individual jurisdictions' citizen involvement programs
3. Public education opportunities
4. Participation in the planning process
5. Broad-based attitude assessment

Strategy:

1. Organize a steering committee to assist in the development, organization, management and monitoring of the citizen involvement program.
2. Develop a special citizen involvement program for the Estuary Management Planning Process in order to assure a regional, integrated approach to the planning process.

3. Make key participants available to meet with interested groups and organizations
4. Prepare and conduct a community attitude survey
5. Prepare and disseminate an estuary planning process information broadside
6. Utilize key features of individual jurisdiction Citizen Involvement Programs for coordination and communication.
7. Conduct public workshops on the planning process, estuarine systems, and management issues
8. Conduct townhall meetings on issues, alternatives, and management proposals
9. Maintain records of citizen involvement processes
10. Make the Coos-Curry Council of Governments' revised Citizen Involvement handbook available for Steering Committee
11. Consider leadership and meeting effectiveness training for the various group chairman and staff facilitators.
12. Make effective use of news media via releases, features, announcements, and interviews, etc.

Composition: The Estuary Citizen Involvement Committee will be composed of two individuals appointed by each the County, the City of Eastside, the City of North Bend, the City of Coos Bay, the Port of Coos Bay. The Chairman will be recommended by the lead agency with each participating local jurisdiction to ratify the selection of the Chairman.

The public workshops and townhall meetings will be open to all interested persons.

Technical Advisory Team members will be available to assist the Citizen Involvement Steering Committee develop the phases and materials for the process.

Major Tasks:

May - June

1. Use news media and meeting structures to advise community of work program and planning process.
2. Distribute and make available work program.
3. Organize Citizen Involvement Steering Committee.
4. Develop Draft Citizen Involvement Program.
5. Coordinate and communicate with existing Citizen Involvement groups.
6. Organize public workshop on planning process.

July - September

1. Complete development of Citizen Involvement Program.
2. Submit Citizen Involvement program to individual jurisdictions for authorization and to the Estuary Planning Task Force for review.
3. Develop community attitude survey and information broadsides.
4. Disseminate and tabulate results of attitude survey.
5. Organize public workshops on estuarine system.
6. Monitor and evaluate Citizen Involvement Program.

October - December

1. Continue implementing Citizen Involvement Program.
2. Disseminate results of community attitude survey.
3. Organize public workshops and management issues.
4. Monitor and evaluate Citizen Involvement Program.

January - March

1. Continue to implement Citizen Involvement Program.
2. Organize townhall meetings on alternatives.
3. Organize townhall meetings on issues.
4. Organize townhall meetings on management proposals.
5. Monitor and evaluate.

April - June

1. Continue to implement Citizen Involvement Program.
2. Organize townhall meetings on draft management plan.

Staff Support: The Citizen Involvement process will be supported by the Coos-Curry Council of Governments' staff with advice and support from the consulting firm. County, City, and Port staff will advise on Citizen Involvement program. Process management, organizational support, and activity support services will be provided primarily by Coos-Curry Council of Governments' staff.

Cost: $15,000.

Roles/Responsibilities: The Citizen Involvement Steering Committee will have key responsibility for assisting the process to have adequate and informed citizen participation. The Citizen Involvement Steering Committee will monitor all phases and sub-work programs of overall planning process to assume that citizen involvement standards are maintained. The Coos-Curry Council of Governments' staff will be responsible for the development and maintenance of the five major features.

Output and Products:

1. Citizen Involvement Program
2. Records of citizen involvement
3. Community attitude survey
4. Information broadside
5. Workshop and townhall proceedings
6. More informed citizen involvement
7. Public education in planning and natural resource systems
8. Support for management plan

Evaluation: The Citizen Involvement Program will be monitored and evaluated quarterly. An evaluation report will be prepared by the Citizen Involvement Steering Committee at the end of the process. This report will evaluate the Citizen Involvement program according to the standards established in the LCDC Goal #1 on Citizen Involvement and according to other standards developed by the Steering Committee.

Functional Task Force Component

Purpose: To address specific issues or planning problems of overall importance to the estuary management planning process by means of special task forces which will provide issue-oriented input into the Planning Task Force work program.

Scope: Certain issues or planning problems have special regional significance or estuary-wide impact. These issues or planning problems require focus but need a systematic perspective. It is anticipated that the following functional or special task forces will be organized:

1. Moorage
2. Mitigation and dredge spoils
3. Industrial areas and uses
4. Public access and recreation
5. Critical habitat areas
6. Log storage and rafting
7. Agricultural uses in the estuary-shorelands study area
8. Urbanization in the estuarine planning area

A separate functional task force for the Coquille Estuary will be organized. While geographically separate from the Coos Bay Estuary and while the estuarine management requirements are much simpler, a Coquille Estuary Task Force will enable application of the overall planning principles and processes to resolve key issues and to establish a similar management scheme.

Having similar processes, applying similar planning principles, and developing a similar management scheme will give the County a better opportunity to assure adequate plan implementation.

Function: To provide a mechanism for special focus group members, local, State and Federal agency staff, policy officials, and community members to examine special issues or planning problems; to provide the Estuary Planning Task Force with systematic, detailed assessment of special issues or planning problems for use in management plan formulation.

Composition: Each task force will include 7 to 15 members representing a broad cross-section of interests relating to the special issues or planning problems. Task Force membership will be developed by soliciting volunteers and recommended participants. Task force membership will be reviewed and approved by the Estuary Planning Task Force. Some task force membership may be drawn for the Technical Advisory Team and the Technical Advisory Team members will be employed as resource persons and advisors to the Special Task Forces.

Organization: Each task force will be organized with its own work program. The Coquille Estuary Task Force will involve residents of the Coquille and Bandon areas and will be associated with the City of Bandon and the Port of Bandon.

Strategy: As the Planning Task Force enters the identification of key issues phase, the functional task forces will be organized. The outputs of the task forces will be entered into the work of the Planning Task Force. By providing for functional task forces to evaluate alternatives and to recommend issue resolution, a broader cross-section of the interests will be involved in the planning process and the work load of the Planning Task Force will be more manageable.

Generalized Work Procedure

Since the estuary has been addressed in various planning processes and programs, there are fairly apparent issues which have surfaced over and over again. These issues are reasonably certain to be identified by the Estuary Planning Task Force as among the key issues. While identifying the subject focus of the functional task forces as a part of the overall work program is anticipatory of the findings of the Estuary Planning Task Force one one hand, it is also indicative of the level of issues identification which has already occurred through other planning processes and programs. If any of the eight Coos Bay Estuary related issues for functional task force work are determined to not warrent special examination as a result of the work of the Estuary Planning Task Force or if other key issues surface which warrent a functional task force approach, adjustments can be made as a part of the first quarter evaluation.

Each functional task force will generally proceed through the following steps:

1. Gain concurrence that the issue warrents examination by a functional task force.
2. Recruit members and organize groups
3. Assign staff facilitation
4. Develop special work program to define objectives, identify tasks, establish timeframes, specify nature of product, etc.
5. Hold a series of meetings to accomplish the following:
   a. Prepare problem statement and identify related issues.
   b. Review inventory materials and other pertinent information related to problem statement
   c. Interview or hear presentations from Technical Advisory Team members.
   d. Develop recommended priorities, strategies, etc., to resolve problem statement.
   e. Suggest areas or locations appropriate within the estuary planning areas which may be suitable for the use or activity implied by the problem statement.
   f. Develop a summary of proceedings and findings for Estuary Planning Task Force use.
6. Monitor progress of other task forces and evaluate work program accomplishments or deficiencies.

7. Participate in inter-task force coordination procedures.
8. Participate in coordination procedures with the Planning Task Force.

Each task force program will have sufficient flexibility so that there can be meetings among task force groups if appropriate to inter-relate various issues. In addition, each task force will be asked to assign two members to participate in two or three general functional task force coordinating sessions. These general coordinating sessions will be designed to give each task force perspective on the work of the others and to promote inter-group dynamics. These general coordinating sessions will be scheduled at logical points of work progress, e.g., a general coordinating session after work programs and problem statements are developed.

Standard meeting effectiveness procedures will be incorporated into the task forces' processes. These include but are not limited to:

1. Preparation of advance materials for member review prior to meeting.
2. Maintaining records of process
3. Holding open, well-publicized meetings
4. Processing information into useful, graphic tools for the activities
5. Providing for feedback of information
6. Develop group leadership
7. Structuring meetings to facilitate group processes

Staff Support: Each functional task force will be provided with staff support services by members of the Coos-Curry Council of Governments' staff. It is intended to distribute the functional task force work among several staff members to provide for better focus to each process management. As appropriate and feasible, Coos County planning staff and the City of Coos Bay planning staff may be recruited to staff certain task force processes.

Roles/Responsibilities: Functional task forces will be responsible for developing recommended alternatives, problem resolution, and management strategies for the consideration of the Planning Task Force. The area of responsibility will be for key issues which are estuarine-wide or systematic in scope.

Output:

1. Record of each task force's proceedings
2. Report on findings of each task force
3. Coquille Estuary Management Plan Framework

Evaluation: Each task force will evaluate its accomplishments according to the standards established in the individual work program.

Technical Advisory Team Component

Purpose: The Technical Advisory Team will provide resource, technical, community, professional capability and support to the planning process in an organized manner. The availability of the Technical Advisory Team will enhance significantly the proficiency of project staff, functional task force members, Planning Task Force members, and the consulting firm as well as provide information for citizen involvement, agency and special group coordination, and local intergovernmental coordination.

Scope: The Technical Advisory Team will identify information sources, assess information, and review and comment on general inventory, special studies, and task forces' material.

Function: The Technical Advisory Team will serve to assure that information, whether formally or informally recorded,will be available for the Estuary Management Plan Work Program.

Organization: The Technical Advisory Team will be organized as an ad hoc group around areas of identified information needs. Few formal sessions including the entire team are foreseen. A briefing-introductory meeting, quarterly monitoring meetings, and a summation/evaluation session are anticipated. On agreement of members of the Technical Advisory Team, a roster will be made available to all functional task forces, any special committee, or groups, as well as the Planning Task Force. Project staff will consult members ofthe Technical Advisory Team individually, within sub-group areas of specialty, or among a cross-section of the Technical Advisory Team. Technical Advisory Team members will be included on the master work program mailing list to receive all written materials produced by the planning process. Technical Advisory Team members will be encouraged to provide input as each individual deems proper. The Technical Advisory Team will not be a closed group, but will be able to accept new members at any point in the process.

Composition: Residents of the area with recognized skills, expertise, and interests; leaders of organized constituencies and special focus groups; local, State and Federal agency personnel; private sector professional will be included on the Technical Advisory Team. Technical Advisory Team members will be recommended to the Planning Task Force for review and approval.

Strategy:

May - June

1. Submit Technical Advisory Team sub-work program as part of the Estuary Management Plan Work Program.
2. Prepare general distribution information paper on purposes and role of Technical Advisory Team.
3. Identify contacts and solicit volunteers and recommendations, both through letters to contacts and general media dissemination.

July - September

1. Complete initial roster of Technical Advisory Team and submit to Management Task Force for review and approval.
2. Conduct orientation meeting with Technical Advisory Team to review Estuary Management Plan Work Program, discuss roles and responsibilities, and perform other organizational tasks.
3. Utilize Technical Advisory Team members at appropriate places in work activities.
4. Conduct monitoring meeting to assess operation of Technical Advisory Team and identify remedies for any structural or procedural deficiencies which are identified.

October - December

1. Utilize Technical Advisory Team members at appropriate places in work activities.
2. Conduct monitoring meeting to assess operation of Technical Advisory Team and identify remedies for any structural or procedural deficiencies which are identified.

January - March

1. Utilize Technical Advisory Team members at appropriate places in work activities.
2. Conduct monitoring meeting to assess operation of Technical Advisory Team and identify remedies for any structural or procedural deficiencies which are identified.

April - June

1. Utilize Technical Advisory Team members at appropriate places in work activities.
2. conduct summation/evaluation session for activities and involvement of Technical Advisory Team.
3. Organize formal recognition of efforts of Technical Advisory Team.

Major Tasks:

1. Make available formally and informally recorded information on matters of interest, issue, or data needs of the planning program.
2. Serve as ad hoc consultants to project staff and consultants.
3. Attend as appropriate and feasible functional task force meetings, public workshops, and other meetings on events associated with the planning process.
4. Review and comment on materials generated by process.
5. Assist in monitoring and evaluation of work program and planning process.

Staff Support: Primary staff support for the Technical Advisory Team component will be provided by the Coos-Curry Council of Governments. This includes process management, inter- and intra- group coordination, organizational activities and follow-up. However, all project staff and the consulting firm as well as other key participants will have free access to members of the Technical Advisory Team.

Roles/Responsibilities: The Technical Advisory Team will be advisory to the entire planning process and all components of the process. The Technical Advisory Team will be responsible for ensuring the information, data, resources, etc., are of high quality, credible and documentable

Output:

1. A record of the Technical Advisory Team's involvement will be maintained in order to assist in monitoring and evaluation of the Technical Advisory Team's role and impact.
2. Higher quality products of the estuary planning process as a result of having available an organized group of special advisors.

Evaluation: The Technical Advisory Team component will be evaluated on the following basis:

1. Quantitative opportunities for Technical Advisory Team members to participate in process and process participants opportunities to utilize the technical capability of Technical Advisory Team members.
2. Qualitative assessment of output.
3. Workability/utility of such an organized group.
4. Degree to which broader based involvement contribution to planning process, resolution of issues, and development of consensus.

TECHNICAL STUDIES

The completion of technical studies are necessary to directly support the planning/decision making process. As used in the Coos Bay program, the technical studies will be used to provide a broad base of reliable and relevant information about the estuary and to provide detailed information in support of decision making on key issues. Three types of technical studies are included within the Coos Bay program:

Broadly based Estuary-wide Resource Inventory

Specific Area Assessments to deal with key issues

A site identification, evaluation and selection process for dredged materials disposal and potential mitigation sites

Estuary-Wide Resource Inventory

The resource inventory is designed to provide a comprehensive base of information about the total bay area and estuary in terms of the natural systems present as well as the man-related systems. The purpose of the inventory is to provide a common base of information from which to make management decisions. Its purpose is not to compile everything known about those natural and man-related systems, but to provide information that is directly relevant to the management needs of the estuary. The information must be comprehensive in dealing with the subject matter of the natural and man-related systems, while at the same time usable and understandable to decision makers. A part of the resource inventory that will enable it to fully achieve these objectives, is the synthesis of basic estuarine and bay area data into interpretative maps and documents that describe the interaction of the natural and man-related systems. It is these synthesis maps, backed up with the basic data, that will have the greatest utility to the Estuary Planning Task Force in making management decisions.

In Coos Bay, perhaps more so than any other estuary on the Oregon Coast, a wealth of knowledge exists related to the natural and man-related systems. This existing base of information, coupled with current work by Coos County staff in compiling new information, makes the resource inventory work effort primarily one of compiling existing information at a common scale and in a common format. The work descriptions to follow reflect that emphasis plus recognizing the work accomplished by County staff through June 1979.

The general format for the resource inventory will be a series of maps and overlays at a scale of 1" = 3000', with technical working papers, organized by subject categories, as back-up description. In general, it is felt that inventory information at this scale is too general to be adequate to make management decisions. From the work already completed, it is apparent that the level of detail of existing studies is sufficiently inconsistent to imply a level of accuracy greater than 1" = 3000'. It is also felt that management decisions in much of the estuary are either already committed or agreed upon and, therefore, do not need more accurate data to substantiate agreed upon decisions. To deal with those issues that are unresolved, the Coos Bay program uses a combination of the broad level resource inventory

along with the Specific Area Assessment process to generate information at the scale and relevancy necessary to deal with those issues.

Technical papers are not designed to provide complete knowledge of all information, but to summarize the most important characteristics - those that will be most effected by or will more affect management decisions - within each subject category.

Estuary Size and Shape: Existing county work plus other previous studies have investigated and documented this relatively well. Within the resource inventory format, a formal description of the estuary and, in particular, the study area pertaining to the management plan will be completed. In general, the scope of the resource inventory will extend beyond the formal boundary definitions contained within specific coastal goals and concentrate on an area that would be considered an "estuary influence area". It is envisioned that area would include all of the North Spit on the coast as well as estuarine side, north to the National Dunes Recreation Area boundary. In the description of the estuary size, an emphasis will be placed on the "transition" zones (e.g. tidal, intertidal, subtidal, wetlands, etc.) that will be the focus for much of the management decisions.

Contours and Bathymetry: Best available data from the Corps of Engineers and National Oceanic and Atmospheric Administration geodetic surveys will be transcribed at the inventory scale.

A back-up technical paper will be prepared to describe the current situation and to the extent available, the historic changes that have occured due to natural evolution and man-related changes. It is expected the interviews with long standing citizens (river pilots) and old aerial photographs will be the primary data.

Topography/Surface Drainage: Topographic features of the study area will be mapped utilizing 15' United States Geologic Survey Quadrangle sheets or other better information if available. Surface drainage has been mapped but will be transcribed to the inventory scale as time permits. The back-up paper will focus on the description of the influence of the physical form of the study area on estuarine features. Surface drainage flow characteristics will be of principal concern.

Estuarine Hydraulics and Alterations by Land Use: Most of this information is already contained within Coos County background information and in other readily available materials. The primary need is to verify the existing information and add any additional data that may be present relative to current or historic conditions. The Technical Advisory Team will be the principal means to deal with this area.

Hydrologic Resources, Hazards and Floodplains: A relatively good description of existing resources and hazard potentials exist within the County background information. No mapping of resources or hazards has been undertaken. Such mapping is difficult when only poor topographic information exists. Based on the availability of topographic information, potential hazard areas will be mapped if the level of detailed information exists. Floodplain studies from Corps of Engineers flood profiles will be mapped. A working paper will be prepared to expand on the description of conditions and to define the scope and significance of the potential hazards.

Sedimentation: Sedimentation conditions, sources and historical trends will be discussed as data permit. Areas of known sedimentation accumulation, sedimentation loading and areas permanently altered by sedimentation will be mapped.

Substrate: Substrate conditions of the estuary have been recently mapped by the Oregon Department of Fish and Wildlife. This information is adequate to meet the needs of the plan with only its incorporation into the resource inventory in terms of format.

Erosion/Accretion/Dune Migration: Dune areas exist in North Spit and to some degree in North Bend. These areas will be mapped and classified using existing documentation and recent aerial photo interpretation.

Geologic Characteristics and Hazards: The geologic and soils conditions of the estuary related lands will be mapped for the purpose of depicting areas of potential hazards. Landslides, erosion, faulting, sloughing and compressible soils will be mapped where identified. A working paper will combine the general descriptions already completed within the County's background description with site-specific analysis as required.

- Biological Characteristics

Water Quality: Compilation of existing data will be necessary along with a synthesis used to develop a water quality map depicting seasonal ranges of DO, salinity, temperature, etc., for various areas of the bay and slough. Existing County maps of temperature and salinity, while limited by scale appear adequate. Computer data from STORET files will be examined to ascertain accuracy of existing information. Turbidity, BOD, pH, and coliform will be discussed in the working paper.

Aquatic Biologic Conditions: Further elaboration of existing planktonic conditions within the estuary will be undertaken. Additional analysis of the salt wedge characteristics will be discussed because of its significance and influence on estuarine dynamics.

Benthic Flora and Fauna: Estuarine benthos are well mapped in existing County background information. A supplemental discussion of the benthos will be undertaken to include documentation of data sources. Verification of data by the Technical Advisory Team will be accomplished.

Fisheries: A full documentation of existing mapped information will be the primary emphasis of the work.

Wildlife: Wildlife resources are currently being mapped. Additional work will be required to fully document that existing work.

Wetlands: Estuarine wetlands have been mapped by the Oregon Department of Fish and Wildlife. The Specific Area Assessments will identify wetlands in more detail to support site and area-specific issues.

Riparian Vegetation: Although a part of the Shorelands goal requirement, riparian vegetation exists within the estuary plan study area. Aerial photos and filed surveys will be undertaken to map these conditions. The working paper will discuss the extent and relative value of the riparian systems.

Significant Natural Areas-Critical Biological Areas: Significant natural areas have been mapped by the Oregon Natural Heritage Program. Data have been compiled but not fully described and mapped particularly with regard to critical biological areas.

Socio-Economic Characteristics

Land Use: Existing land use has been mapped in County background information. While more general than might be desired, it can be supplemented with more detailed descriptions in the working papers to describe the various uses with each category and uses of particular significance.

Land Ownership: Ownership mapping is being initiated although will need to be completed. Ownership depicting Federal, State and local governmental ownership categories as well as large corporate, other large private and small private holdings will be mapped. The significance of ownership characteristics will be the focus of the working paper.

Recreation Areas/Public Access: Existing parks and recreation areas are mapped and documented in existing County background information. Public access points, popular fishing and boating areas will be mapped and described, based on interviews and other local resources.

Transportation Systems, Public Facilities: More detail is required in the description of existing facilities, with particular emphasis on the shoreland areas and on facility deficiencies and constraints. The development of transportation facilities in relation to water-related uses needs to be more fully documented.

Geographic Features/Man-Made Alterations: This map will depict the existing shoreland and in-water man-made features found throughout the bay. Jetties, dolphins, riprapped areas, piers, dredge channels, marinas, outfalls, past fill areas, and all existing permit required facilities will be mapped. Permit records, aerial photos and field surveys will be undertaken. The working paper will concentrate on the significance of these facilities in terms of historic trends and alterations, permit actions and other related issues.

Historical/Archaeological Sites: Existing work is currently being completed and should be adequate with full documentation as allowed to ensure the protection of sensitive sites.

Economic Importance, Water-Dependent/Water-Related Uses: The issue of economic importance within the estuary has been extensively discussed within existing County background materials. Documentation of water-dependent and water-related uses will be expanded and fully mapped.

Resource Inventory Synthesis

The estuary-wide resource inventory is designed to provide comprehensive basic data on the natural and man-related systems. Its purpose is to provide a basis for making management decisions. Data alone, however, is too narrow in its perspective to be used directly in making those decisions. Since the estuary and bay area are a complex interaction of these systems, the data must be interpreted or synthesized in some form as an intermediate step between data and decision making. Essentially, synthesis is a way of trying to determine what the data means.

At the completion of the initial resource inventory work, a series of synthesis maps will be prepared, each trying to interpret data from a different viewpoint. Some synthesis considerations will include:

identification of areas of "commonality"

identify areas of transition

identify "critical" areas

identify areas based on certain activity biases such as:

- natural systems
- economic usage
- upland usage
- upland/shoreline interaction
- others

It is believed that these maps will be some of the primary input into Estuary Planning Task Force decision making process as they first attempt to establish broad planning management areas in the estuary and later as they work toward site and area-specific management decisions.

Dredged Materials Disposal and Mitigation Sites Plan

Coos Bay has an existing Dredged Materials Disposal Plan, which is rapidly becoming out-of-date as existing disposal sites are filled. While the Corps of Engineers is currently re-evaluating the costs and benefits (economic and environmental) of off-shore disposal practices in Coos Bay, the results of that study effort are not expected to be known for several years. In the interim, additional disposal sites must be found to handle disposal in the next year and perhaps longer depending on the results of the Corps' work.

In addition, under the Estuarine goal, the concept of mitigation for actions that may involve losses to the natural systems of the estuary is a part of the considerations that a local area must face. Unfortunately, the State goal specifies the use of the concept without providing more detailed guidance on how it is to be implemented. Although the concept has been applied to specific actions on the Oregon Coast and a Mitigation Task Force is currently attempting to establish criteria and procedures for its implementation, as yet no definite guidelines exist for a local area to deal effectively with the question. It is believed, however, that there are areas of sufficient agreement to be able to undertake a process of identifying potential mitigation sites in much the same way as potential dredged materials disposal sites are identified. The final plan will contain sites for dredged material disposal and potential mitigation sites without tying either site type to specific disposal, dredging, or other actions that would require the use of a site. It is only at such time that a disposal need exists or a need for a mitigation site is identified, that these predetermined sites would be considered.

The following work outline will result in the completion of a Dredged Materials Disposal and Mitigation Site Plan. The primary means of conducting initial site and criteria evaluations will be through one of the Special Issues Functional Task Forces with the support of the consultant and Council of Governments and County staff as required.

Work Outline - Dredged Materials Disposal Sites

1. Quantify the frequency and amounts of dredge disposal needs based on:

   a. Corps of Engineers maintenance dredging cycles by channel segments

   b. Dredging practices including over-dredging and dredge benching practices

   c. Proposed authorization (channel) changes

   d. Maintenance depths at existing private and public moorages

   e. Maintenance depths at existing commercial/ industrial loading sites

   f. Future projects that may require dredging

   g. Sedimentation/shoaling characteristics, historic, current, future

   h. Existing or potential technological improvements in dredging equipment and methods

   i. Effect of Jetty extension

2. An evaluation of the type of material to be dredged will be conducted (i.e. particular density, organic matter, chemical toxicity) as it might pertain to site compatibility, measures necessary to prevent negative effects of disposal and explore possible re-use of site and/or materials. This analysis will be coordinated with the on-going Corps of Engineers studies on dredging in Coos Bay.

3. An evaluation of the adequacy of existing disposal sites will be conducted in terms of:

   a. those approved
   b. those not fully approved
   c. constraints on existing sites

4. Based on an identification of current and projected disposal needs and an understanding of the adequacy of existing disposal sites to accommodate additional future disposal needs, a systematic field inventory will be conducted to identify all possible disposal sites. Through a process of evaluation, with the aid of the Disposal and Mitigation Functional Task Force, those sites will be screened on the basis of State and Federal agency criteria and matched against dredging needs within segments of the estuary and rivers.

5. Once a set of potential sites are identified and evaluated, the sites will be described in terms of:

   a. site capacity
   b. access and proximity to dredging operations
   c. ownership
   d. local land use and zoning controls
   e. impacts of disposal on the local estuarine ecosystem, adjacent land uses and potential natural hazards as well as on the site itself including unavoidable adverse environmental effects
   f. potential re-use/reclamation of the site after the completion of disposal use
   g. costs of necessary modification to the site to overcome problems in site and/or dredged materials characteristics
   h. engineering considerations for disposal, dewatering, outfalls, dikes
   i. feasibility of the use of the site for stockpiling for commercial resale
   j. other factors

Work Outline - Mitigation Sites

1. Establish definitions, criteria and objectives for: mitigation, restoration, enhancement, mitigation phasing, migitation banking

   a. review proceedings and status of LCDC mitigation task force
   b. interview persons presently involved in mitigation issues
   c. develop proposed definitions, criteria and objectives to be presented to Disposal and Mitigation Functional Task Force

2. Inventory estuary for potential mitigation areas

   a. criteria and parameters researched will include:

      1. mapping of each site at appropriate scale (1" = 200' or 1" = 400')
      2. Identify boundaries, determine natural vs. man-made boundaries
      3. Salinity regime (estimate)
      4. Elevation and contours (surveyed if identified as definite potential site)
      5. Tidal exposure (estimate)
      6. Substrate
      7. Vegetation - existing/projected

8. Current velocities and patterns (estimated)
9. Floral/Faunal values - existing/projected
10. Orientation to solar radiation
11. Existing use(s) and relative economic land value
12. Ownership
13. Historical use of site

3. Synoptic comparison of past and present tidelands in estuary

a. types and acreages of existing tidelands - from Resource Inventory
b. inventory of past tideland types and acreages
c. measureable historic losses to total tideland quantity and type (from Hoffnagle and Olson Study)
d. develop matrix and depict:
   1. tideland types and acreages originally vs. existing
   2. tideland types experiencing greatest depreciation in distribution and quantity
   3. amount of tideland capable of being returned, by type

4. Catalogue identified areas according to potential function

a. categories include: mitigation, restoration, enhancement, mitigation phasing, mitigation banking
b. method of action (where applicable)
   1. lead agency/private entity responsible for site
   2. land acquisition and mitigative action implementation
c. possible constraints
   1. engineering
   2. tidal dynamics/flush characteristics/other physical phenomena
   3. socio-political (jurisdictional/zoning/neighborhood,etc)
   4. biological
d. cost estimates
   1. property acquisition
   2. site design/engineering
   3. cost-value analysis

Specific Area Assessment Process

The Specific Area Assessment Process is a particularly important part of the total Coos Bay Estuary Planning Program. Because this estuary plan represents a revision to the existing plan, and because there are already areas of agreement and commitment in the estuary, it is possible to focus much of the attention of the decision making process on key issues. The resource inventory, while comprehensive and reliable and even if completed at a more detailed scale, would be insufficient to provide sufficient guidance and information on many of these key issues to make the management decisions. Generally, such issues require far greater site and area-specific or issue-specific information than would be contained in a broadly based resource inventory.

Given this circumstance, two choices are possible. One, the resource inventory must be substantially increased in scope to provide the type of in-depth information that must be brought to bear on these issues. Two, specific information is developed around each key issue that is tailored to the issue and the factors that will influence management decisions. This latter approach does not substitute for the resource inventory but rather supplements it with accurate, detailed, issue-specific information. It is this latter approach that is taken in the Coos Bay program.

The general format for the process falls out of the Estuary Planning Task Force evaluation of the existing plans, areas of agreement, prior commitments and deficiencies in the existing plans and policies in meeting State, Federal and local goals, regulations and needs. As the Task Force identifies key issues, it must decide how it wishes to deal with each. The Coos Bay program is set up to deal with these issues in three ways:

1. An issue could be identified that would be capable of being resolved within the normal planning/decision making process that the Task Force will undertake. The primary factual support for resolving those issues will come from the resource inventory and other normally available resources.

2. An issue could be identified that, while not requiring an intensive level of new information and analysis, does warrent a systematic analysis by knowledgeable people. These issues would be assigned by the Task Force to one of the Special Issue Functional Task Forces (see section on Functional Task Forces).

3. It is probable that the Task Force will identify some issues that are of sufficient importance and magnitude that any management decision must be based on substantially greater information and analysis than is available through the resource inventory or is possible to obtain through an analysis by Function Task Forces.

   While the Estuary Planning Task Force will make the ultimate determination of the issues that fit within this category, several possibilities are known at this point and have been used as a basis for developing a general work outline and establishing a level of effort work program. Issues such as the proposed North Spit Trawler Basin and related industrial area

and the Charleston Basin expansion including an analysis of back-up support facility carrying capacity, are the type of issues that would fall within this category. Areas such as Pierce Point, Empire, Pony Slough, Eastside Industrial area, may be other such issues.

General Work Outline - Specific Area Assessments

A precise definition of the work process and content will be a function of the issue involved. As a general guideline, however, the process is viewed somewhat comparable to a normal environmental assessment process which attempts to develop a level of understanding of the issue, the context of the issue, alternative considerations and their implications and other related information and analyses. Four principal work steps are envisioned:

1. Prepare issue related base map (unless the issue is a policy type issue)
2. Develop selected data
3. Analyze and synthesize data
4. Identify and evaluate alternative considerations and their implications

The product output of each Specific Area Assessment is envisioned to be a report organized as follows:

1. Description of issue
2. Relation of issue to estuary, plan, community, etc. (context)
3. Selected information, analysis and synthesis
4. Alternative considerations and probable effects
5. Comparison of alternatives and effects

ESTUARY PLANNING SUPPORT

The Coos Bay Estuary Management Planning Process is a complex conceptual program. However, it has been and can be described in component parts:

Overall planning/decision making: Accomplished by an inter-agency planning task force with key support provided by the consulting firm.

Resource Inventory: Accomplished through allocated staff time from among the Coos-Curry Council of Governments, the County Planning Department, the City of Coos Bay with the consulting firm managing the work.

Special Area Assessments: Accomplished through allocated staff time from among the Coos-Curry Council of Governments, the County Planning Department, the City of Coos Bay with the consulting firm managing the work.

Dredge Spoils Mitigation Plan: Technical work performed by consulting firm with input from a functional task force and review and approval from the Planning Task Force.

General Citizen Involvement: Accomplished with the staff support of the Coos-Curry Council of Governments using citizen group structures.

Functional Task Forces: Accomplished by special work program agreements with primary staffing from the Coos-Curry Council of Governments and at least one task force facilitator by each the Coos County Planning Department and the City of Coos Bay Planning staff.

Technical Advisory Team: With coordination and management provided by Coos-Curry Council of Governments' staff.

General Local Intergovernmental Coordination: Accomplished by the Coos-Curry Council of Governments' staff.

General Project and Grant Administrative Support: Provided by the Coos-Curry Council of Governments.

The components are intended to be in many cases concurrent not sequential activities. Thus, a reasonably sophisticated level of program support, program coordination, and project administration is required.

The Coos-Curry Council of Governments as the lead agency will be responsible for the program support functions, program coordination, and project administration. Included in this are the general intergovernmental coordination and the grant administration.

The planning support includes five functional areas:

1. Intergovernmental Coordination
2. General Agency Coordination
3. Program Support and Coordination of Program Components
4. Process Management
5. Grant Administration

Intergovernmental Coordination: The County, the City of Coos Bay, the City of North Bend, the City of Eastside, and the Port of Coos Bay need to be informed of all phases of the planning process as it occurs. While the jurisdictions will have various representatives participating in the different program components, there still needs to be involvement and information provided to the jurisdictions' policy bodies as a whole. As part of the initial intergovernmental agreements negotiation, project staff will meet with each jurisdiction to brief them on the process. During the course of the planning process, monthly summary reports will be provided and project staff will meet with each jurisdiction on a quarterly basis to review progress. In addition, project staff will be available for special presentations on request of the jurisdictions.

General Agency Coordination: Due to the various components, it is difficult to conceive of any agency not being included in some phase of the program. However, a master roster of local, State and Federal agencies will be maintained so that materials are made available. Further, project staff will conduct one general agency briefing meeting at the outset. At this meeting, the specific roles of interested parties and the specific opportunities for participation in the process will be delineated. The project staff will be responsive to special requests for meetings or briefings.

Program Support and Coordination: Detailed management work programs, special work programs, and organizational systems and structures will be developed and maintained. Overall coordination and allocation of work will be organized and monitored. The overall progress will be evaluated on a quarterly basis to identify problems and take corrective action; to assess need for alternative strategies; to identify areas where work can proceed on an accelerated schedule. It will be essential to maintain a comprehensive program management information system for the concurrent activities to proceed and to interface in an appropriate manner. Among the management techniques to be used will be master work program detail, flow charts, process check lists, and monthly staff meetings which will include all staff associated with various work components.

Process Management: Among the tasks for process management are record **maintenance**, administrative record compilation, clippings file **maintenance**, meetings procedures, media coordination, mailing list and **rosters** maintenance, mailing of materials, agenda preparation, developing **work** strategies, correspondence, monitoring policy systems, developing **evaluation** and monitoring procedures, materials and document preparation **and** distribution, and general work maintenance functions.

Grant Administration: Documentation of work activities, fiscal manage**ment**, grant accounting, program reporting, documentation of in-kind, and **other** associated activities are involved with this function.

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INTERTIDAL LOG RAFT IMPACTS IN COOS BAY AND OTHER NORTHWEST ESTUARIES

R. B. Herrmann
Weyerhaeuser Company

The following information was abstracted from a 1979 Company report on log storage impacts in Coos Bay, Oregon. Our study addressed the general question of the environmental consequences of intertidal log storage in the Northwest and more specifically, the environmental issues surrounding intertidal log storage in Coos Bay. The extensive published information and the results of ongoing research on log storage which we reviewed show minimal water quality alterations (DO depression) except in areas of poor water exchange. The more important effects relate to the physical and chemical alterations of the tideflats - softening or compaction of the bottom and organics buildup and biological effects. Biologically speaking, log grounding depresses the diversity and biomass of the benthos - organisms in or on the bottom beneath the logs. This may translate to less food throughout the estuarine or riverine food chain, depending on the bottom productivity for benthos. Physical crushing is the primary cause of benthos damage in tidal storage, and physical debris build-up and organic alteration of the bottom is the mode of action in subtidal areas.

Published information on juvenile fish distribution for Coos Bay and other Northwest estuarine areas shows salmon, trout, sole, cottids and surf perch utilize the upper bay areas, where log storage mainly occurs. The feeding fish which occur in these areas concentrate on the epibenthic forms - mainly crustacean amphipods, with mud worms and small clams subordinate food items, at least for the salmonids. The smaller benthic animals (called meiofauna) are utilized as a food resource within the benthos system and may be largely unavailable for fish food because of their small size and mud-dwelling habits (see Figure). As a rule of thumb, only about 10% of the energy or biomass available at one trophic level - for example, the benthos - is passed upward to the next trophic level - the juvenile fish.

In Coos Bay, log storage occupies about 300 acres; about half is intertidal. The areas of concentrated log storage are Isthmus Slough, Cooston Channel and the main channel off Coos Bay and North Bend. In the 1978 DEQ study at four log raft sites in these areas, data on the number of organisms found in the rafted areas were compared to that found in unrafted locations nearby. We assessed the possible improvement in benthos derived by removing rafts by converting the average animal density at the control sites in summer (when maximum numbers occur) to biomass, using average weight data we derived from studies in other areas and from published sources. The resultant biomass estimates were 3,000 pounds (dry wt.) and 6,000 pounds for tideflat areas of 150 and 300 acres. These figures compare to a benthic biomass estimate of 142,000 pounds for the upper bay above the Highway 101 bridge based on data developed by the staff and students at the Oregon Institute of Marine Biology (OIMB) several years ago. If the OIMB data are indicative of benthic biomasses throughout the bay, a total of about 710,000 pounds of biomass is available as fish food, excluding the larger clams,

worms, crabs, etc., which occur in more saline locations away from the log storage areas.

If the entire benthic biomass could be consumed by fish, using a 6:1 conversion efficiency, an estimated 3,000 pounds (live weight) of fish could be produced off the rafted areas if the rafts were entirely removed versus 95,000 pounds in the upper bay and almost 500,000 pounds of fish flesh produced for the whole bay. If the benthos renews itself several times in a year, all these figures might be increased by a factor of two to three. However, on the other hand, the conversion efficiency we used was 6:1, which maximized fish production, rather than the usually quoted figure of 10:1. The estimated gain in fish production if rafts were entirely removed from the tideflats is small - amounting to only 0.6% of the total tideflat production figure.

The key point here is that the intertidal areas where logs are stored are not nearly as productive as the rest of the tideflats and would not produce as much benthic biomass per unit area as other areas of the bay proper. The data from the control sites compared to that from other non-raft storage areas show this. Also, for Isthmus Slough, the single major raft storage area, studies have shown depressed water quality in summer and important food fish apparently are uncommon in the area. Increased benthos in this area would only indirectly benefit recreational and food fish through producing more sculpins and shiner perch.

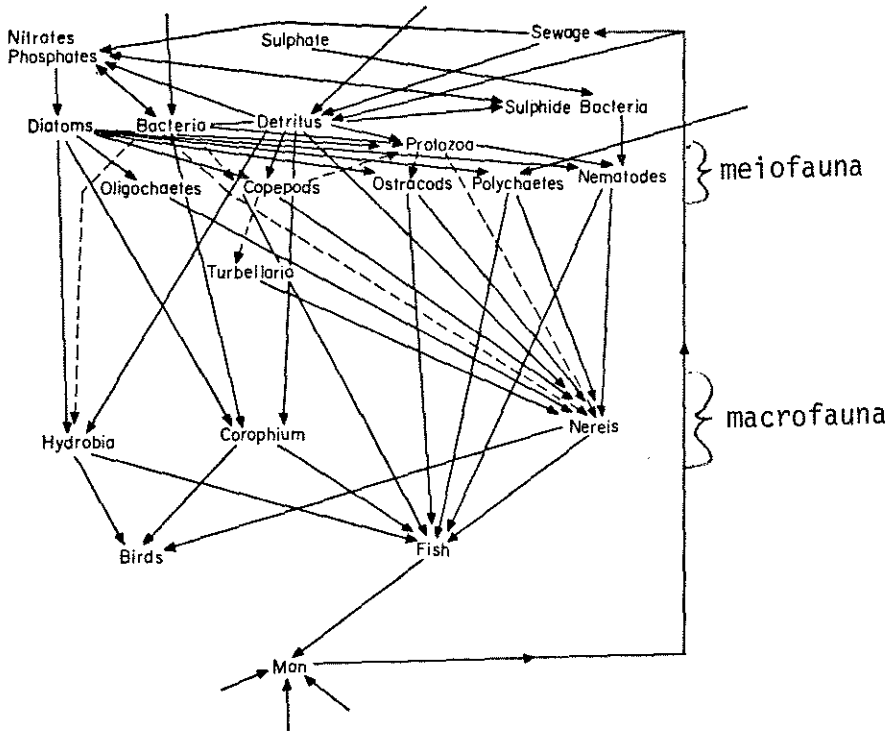

Fig. 13.2. The food web relationships of the microbenthos of a sandy flat at Whitstable, Kent (after Perkins[215]).

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KNUTSON TOWBOAT COMPANY

400 N. FRONT — P. O. BOX 908
COOS BAY, OREGON 97420

Statement
before
Oregon Commission on Environmental Quality
by
Knutson Towboat Company
Coos Bay, Oregon
September 21, 1979

I am John Knutson, Knutson Towboat Company, Coos Bay, Oregon.

Knutson Towboat Company was established in 1915. During the ensuing 64 years of operation on Coos Bay and its tributaries, we have handled logs and log rafts for virtually every timber company operating here. Our company personnel are very familiar with the Bay. Considering this, I feel we know where it is both, reasonable and feasible, to tie log rafts regarding their safety and the safety of others, with respect to weather conditions, tidal effects, and high water freshet situations. Knutson Towboat Company currently handles all the log rafts generated by Coos Head Timber Company, Weyerhaeuser Company, North Bend, and Knutson Log Storage Inc., this amounts to approximately 2,900 log rafts per year.

I would like to provide the Commission with a simplified overview of the current log handling activities on Coos Bay, to aid your members in visualizing this mode of log transport. Also, I would like to point out the importance of a good piling system for securing log rafts.

The Coos River log handling system, depicted in this aerial photograph, provides a representative model of the work we do on various parts of the Bay for the aforementioned Companies.

This portion of the testimony is a general explanation of the log movement down the Coos River system from log dump site to mill, through the use of a aerial photograph. Reference will be made tointerim log raft tie ups, as the logs move along the system. Also, log raft inventory needs will be addressed. The importance of piling will be stressed, as well as factors involved in determining whether particular sites on the Bay are feasible for deep water or tidal storage.

The policy changes requested by the DEQ, suggest their continued interest in removing logs from Coos Bay and other waters of the State. Through the proposed policy 4a changes, logs could be displaced from the Bay through the forced removal of logs from areas where they go aground. Also, policy 4b would give the DEQ the ability to inhibit the replacement of piling that are curcial to the continued use of present, long established, log raft tie up areas. EQC's current policies 4 and 7, provide the DEQ with sufficient regulatory authority.

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OCZMA LOG HANDLING COMMITTEE

September 13, 1979
10:30 a.m. - 2:00 p.m.

Oregon Department of Fish & Wildlife Conference Room
Newport, Oregon

In Attendance:

Bill Beck, Davidson Industries, Mapleton
Ross Brandis, Coos-Curry Council of Governments, North Bend
Doug Coyle, Oregon Department of Forestry, Salem
Don O. Corkill, Clatsop County Commissioner, Astoria
Bob Emmett, Coos County Commissioner, Coquille
Kathy Fitzpatrick, OCZMA, Newport
George Grove, Port of Astoria, Astoria
John Knutson, Knutson Towboat Company, Coos Bay
John Mingus, Georgia-Pacific Corporation, Coos Bay
Harold Pratt, International Paper Company,
Jay Rasmussen, OCZMA, Newport
Gene Rider, International Paper Company, Gardiner
Harold Sawyer, Oregon Department of Environmental Quality, Salem
L. H. "Red" Schneider, Publisher's Paper Company, Toledo
Mike Templeton, Oregon Department of Forestry, Salem
Wilbur E. Ternyik, OCZMA, Florence
Ray S. Waterman, Coos County Soil & Water Conservation District, Coquille
John Wolcott, Crown Zellerbach, Seaside

COMMITTEE PURPOSE

Following introductions, OCZMA Executive Director Wilbur Ternyik described the purpose and scope of the Log Handling Committee emphasizing that the committee is advisory to the Oregon Coastal Zone Management Association which is comprised of elected officials from counties, cities, ports and soil & water conservation districts throughout the coastal area. The purpose of the committee is to examine the pros and cons of various log handling issues and to make recommendations to OCZMA with regard to (1) log handling and transportation, and (2) log handling within the context of local comprehensive plans.

ELECTION OF CHAIRMAN

Those in attendance voted unanimously to elected John Mingus to serve as Chairman of the Committee (Bob Emmett/Ray Waterman).

BACKGROUND OF DEQ POLICY AMENDMENT

To summarize the state-of-the-arts in log handling in Oregon, Mr. Mingus presented a video recording that was prepared by a Coos Bay television station which portrayed the pros and cons of DEQ's recently proposed revisions to "Log Handling in Oregon's Public Waters--An Implementation Program & Policy" adopted by EQC in 1975. John explained that under the McCall administration, Oregon developed log handling policies based on considerable research and input. The EQC is now considering amending that policy to provide more specific guidelines for log handling within the Coos Bay estuary, but the amendments will have statewide application.

The DEQ is proposing revision of the 1975 policy to accomplish the following four major objectives: (refer to Memorandum from Bill Young, Agenda Item No. L, September 21, 1979, EQC Meeting, "Log Handling - Consideration of Adoption of Additional Guidelines for Log Storage in Coos Bay)

(1) tighter log rafts; (2) curtailment of long term storage; (3) bundling

of logs; and (4) replacement of shallow water with deep water storage.

Many individuals expressed concerns for the proposed amendments summarized as follows:

CONCERNS REGARDING PROPOSED POLICY CHANGES

--deep water storage is generally located along side shallow storage areas, consequently elimination of shallow storage areas would disallow opportunity for deep water storage because there would be no logs to tie onto;
--problems with deep water storage include navigational hazards which result due to the susceptibility of the logs to loosen and drift;
--the cost of moving logs into deep water storage was questioned. One individual noted that the cost to his company is estimated to be between $200,000 to several million dollars.
--some questioned what would actually be gained as a result of moving logs from shallow storage areas to deep water. While log storage has been substantially reduced over the past 20 years, and while log rafts used to be 4-5 times larger, several individuals commented that salmon runs were larger in previous years than they are now.

BACKGROUND ON DEQ LOG HANDLING POLICY

Harold Sawyer, DEQ, provided additional background on the State's log storage policy. In 1975, the State identified key problem areas, the first of which was the Klamath River Basin. In that instance, the extent of log storage today is minimal in comparision to what was previously the case. In addition, the frequency to dredge has also decreased. The second area was the Deschutes River in Bend. Recently, DEQ has been looking at minimizing adverse impacts of log handling in the Coos Bay estuary. However, during the last few years, log storage has generally decreased, and there have been few complaints regarding log handling in the State's waterways. It should be noted that the Oregon State constitution states that the waters of the State can be used for transportation of logs; the policy statement developed by DEQ in 1975 is based on this premise and has generally served the State quite well. However, the 1975 policy did not fully address the subject of grounding (logs moored in shallow areas that fluctuate with the tide) nor was storage time fully addressed previously. It is the intention of DEQ to, over a period of time, minimize damage due to grounding that can be implemented without adverse impact on the local economy. DEQ's effort to minimize loose log storage is to minimize the acreage impacted by log storage. DEQ's approach to log handling can be summarized as follows: we are better off to minimize the environmental impact if it is practicable to do so.

PARTICIPANTS SUMMARIZE CONCERNS

John Mingus commented that most agree with better management for a better environment. The question this Committee must address with the help of DEQ is what are the implications of better management. Local jurisdictions are beginning to designate areas suitable or not suitable for log storage, pursuant to land use planning laws. How does DEQ's proposed policy amendment relate to this effort and what is the overall impact throughout the Coast? The Chairman then requested that each individual in attendance summarize their concerns, if any, with the proposed revisions to DEQ's log handling policy of 1975.

Wilbur Ternyik (representing Port of Siuslaw): The Port of Siuslaw is working on improved navigation which is dependent upon jetty improvements. Improvements to the jetty are, in turn, dependent on commercial tonnage crossings as computed in the cost/benefit ratio by the Corps of Engineers. Almost 100% of the Port's cost/benefit ratio is derived from exports from Davidson Industries' plant. Thus, should the proposed DEQ policy amendments hurt

Davidson Industries, it will also hurt the Port of Siuslaw and the entire coastal community in the West Lane County area.

Bill Beck, Davidson Industries: Mr. Beck recalled the days when many acres were covered with logs and there were tons of fish. He thus questioned whether the proposed policy changes were based on factual information or speculation .

John Wolcott, Crown-Zellerbach: Mr. Wolcott noted that Crown-Zellerbach has been active in the CREST organization which is developing a land use plan for jurisdictions on the Lower Columbia River. CREST has developed a water use plan and some water storage areas have been identified but are not finalized as of yet. The Columbia River Basins Commission is doing a study to determine the effects of log storage which will provide information for finalization of this element of the CREST plan.

Within the Columbia River, only 1½% of the logs rafts are in areas subject to grounding. However, we need to look at the alternatives to water storage--rail and highways. Crown has estimated that it would require 300 round trips through Astoria per day if log storage were prohibited. The policy should include a provision to look at areas on a case-by-case basis. With regard to long term storage, it should be noted that the majority of bark loss occurs early in the storage process. A one year time limitation is arbitrary and by that time the damage is already done anyway. This Committee should look at what CREST did--no NEW log storage will be allowed where grounding occurs. However, studies will identify critical food production areas and log storage areas can then be moved as appropriate based on information. Unfortunately, industries are spending significant amounts of money which in no way contributes towards the productivity of the firm; this cost is passed on to consumers. In the case of log storage and handling, industries should not have to move the logs unless a need is demonstrated.

Red Schneider, Publisher's Paper: Publisher's has had problems with log storage in Washington State particularly in Everett and Anacordes. In Anacordes the mill was closed. To date, however, 95% of Publisher's log storage is on land.

George Grove, Port of Astoria: If the policy results in changes in the patterns of transportation, it will result in a change in costs. The Port of Astoria has a payroll of over $3,000,000 and employs 125 people. 95% of the Port's business is related to logs. Changes in the patterns of transportation can devastate the Port, which is already trying hard to remain competitive on the international market. This is the first time the Port of Astoria was made aware of the proposed change to DEQ's log handling policy. Such laws are easy to make, but who pays the cost, and who assesses the impact of the proposed policy on the ability of the Port to compete?

Don Corkill, Clatsop County: Commissioner Corkill recalled the days when there were seven sawmills on the Lower Columbia and all the logs were stored in the estuary. Now there is only one mill left, and 90% of the logs harvested in Clatsop County are processed elsewhere. Once rafts are moved out of the County, there is little likelihood that the timber will ever be

processed in Clatsop County. The one year limitation is arbitrary; storage of logs depends on the economics of timing and species. Commissioner Corkill recalled seeing trees growing on the logs in storage awaiting better marketability. We also need to consider the impact of land storage; many will object to the noise, dust and unsightliness of land storage. Recently there have been objections to land storage areas, however Clatsop County's ordinance reads that "log storage can be put in proximity of ownership".

Doug Coyle, Oregon Department of Forestry: While the Oregon Department of Forestry does not use log storage, its purchasers do. If a lack of storage space results in a lack of harvest, stumpage fees which go to the counties will be reduced. We must also consider the impacts on land of land storage.

Mike Templeton, Oregon Department of Forestry: If lack of storage space results in higher costs to industry, it is possible that industry will cut back on its harvest which will result in less stumpage values for schools, counties, and DOF for fire protection, etc. We must also consider the implications of land storage. If logs are placed on forest or agriculture land, potentially productive land is taken out of production. Similarly, if logs are placed within urban areas, lands for housing will be reduced. We must look at the planning process that is taking place and keep things in perspective.

Ross Brandis, Coos-Curry Council of Governments: CCCOG is currently involved in an estuary plan that involves three cities and the county. The jurisdictions are attempting to reach a consensus with state and federal agencies on estuarine management units and uses within them. Mr. Brandis expressed concern that the proposed DEQ policy was being developed outside of the planning process, and noted that the estuary plan should address areas appropriate for log storage. He added that the Estuary Task Force could use the expertise of this committee when it gets to the point of identifying appropriate areas.

Ray Waterman, Coos Soil & Water Conservation District: Mr. Waterman expressed concern about the cost of implementing the proposed policy and cited the need for economic and environmental balance.

Bob Emmett, Coos County: Commissioner Emmett recalled when there used to be ten mills in the Coos Bay area, while now there are only five. He summarized four issues needing further clarification: (1) the proportion of the estuary potentially affected by the proposed policy; (2) impacts associated with land versus water storage; (3) potential economic and transportation impacts associated with the proposed policy; and (4) future demands for log storage and how they would be accomodated.

John Mingus, Georgia-Pacific: Expressed concern that the policy and planning process must recognize that timber is a renewable resource and as such, volumes of logs may vary and that at times more or less space may be needed for water storage.

Don Corkill, Clatsop County: Commissioner Corkill added that 54% of the timber sold through the Oregon Department of Forestry is from Clatsop County. Within Clatsop and Tillamook Counties timber harvest is on the upswing and log handling policies must recognize this. Clatsop County is looking for new industries to locate there to harvest the increase in timber. Local plans must accomodate water storage if processing of this timber is to remain in Clatsop County. Oregonians can have timber and salmon; in fact, the timber industry is a forerunner in producing salmon through aquaculture.

John Wolcott, Crown-Zellerbach: Noted that industry needs 60 acres for land storage of 20 million board feet for a processing mill.

John Knutson, Knutson Towboat Company: While areas are available for land storage of logs, most are not in areas suitable to industry. Oregon already requires permits and a review process, and consequently Mr. Knutson questioned the need for policy revisions. Mr. Knutson noted that his company has prospered for 65 years and is in its third generation of ownership by the Knutson family. He has seen times when large portions of the Coos Bay estuary were covered and the tributaries filled with logs, and the consensus at the time was that when there were lots of logs there were lots of fish.

Mr. Knutson explained that piling is necessary to tie rafts between the point of origin and the mill. Only about 10% of the high level storage areas are currently in use, and the pilings are susceptible to bug infestations. If pilings are lost for one reason or another they must be replaced to maintain a string of piling needed to hold a raft. If DEQ requires unnecessary scrutiny of replacement this will result in delays at a time when there are few other areas to tie to.

Gene Rider, International Paper Co.: The peak storage season coincides with the peak tourist season. In the Gardinier area there is very little water storage area that would not be classified as shallow water. If International Paper had to truck these logs (25,000,000 board feet per year) it would result in congestion, noise, and dust problems.

Harold Pratt, International Paper Co.: International Paper is at the point where it must enlarge. Where is there deeper water in Gardinier? Besides the tourists are attracted to the log rafts for fishing. When log rafts are moved, tourists flock to the original site to go clamming--and they get their limits, too!

Don Corkill, Clatsop County: In the Columbia River, the large ships can give off a pretty heavy wake that can break up the rafts if they are in deep water. The rafts can also result in navigational problems.

Wilbur Ternyik, Port of Siuslaw: Ports are responsible for establishing the 'pier headline' and ensure that there are no problems with navigation in this area. The Corps of Engineers won't issue permits for activities which impede this area.

In the past, Davidson's Industries evaluated the feasibility of trucking logs to Florence and shipping them by barge. It was estimated

that a log truck would drive through Florence every two minutes, 24 hours per day.

GENERAL DISCUSSION

John Mingus read an excert from a study done in Stonybrook, New York, which noted that man is the species most dependent on estuaries. Mr. Mingus then directed the Committee's attention to how the Committee could effectively provide input on the DEQ's proposed policy changes. While it was agreed that the proposed policy changes would very likely not result in the problems expressed at the meeting, it was the general consensus that implementation of the policy was a matter of interpretation--that while the coastal people have and continue to work well with Bill Young and his administrative staff, field people and future DEQ personnel may interpret the policy changes differently. Hal Sawyer noted that there is a system within DEQ to expidite such potential problems, mainly the field representatives that can help to render timely decisions, and the appeal process to EQC. Mr. Sawyer noted that in the case of Georgia-Pacific in Toledo, logs are being imported and that there would be a need for new piling. The DEQ would strive for the most cost effective method of providing for piling while minimizing environmental impacts.

Don Corkill questioned why the policy changes were written in the negative (example--#4 on page 9) and suggested that the policy would be more palatable if it were written in the positive. John Mingus noted that the EQC will be meeting in Portland on September 21 to consider the proposed amendments to the Log Handling Policy. The proposed amendements were mailed to interested parties in the Coos Bay area on August 24, and were given until September 7th to comment. It was noted that 120 days (for industries to submit program for minimizing tideland impacts) was unrealistic given all the other regulatory programs the industry is required to cope with, plus the business of the industry.

Bob Emmett noted that the Committee, indeed the coastal communities, need clarification of the policy, and that balance must be ensured through the planning process. John Mingus added that local jurisdictions should work with DEQ in keeping the Department informed of estuarine concerns pertaining to log handling. Wilbur Ternyik suggested that perhaps the Committee sould summarize its concerns and convey them to the Governor's Office, coastal legislators and the Department of Economic Development if appropriate. Don Corkill suggested that the Committee recommend that DEQ slow down and reorganize its effort to amend the policy in an effort to involve those affected and to ensure that the policy takes into consideration the concerns identified. Hal Sawyer explained that the primary discussions pertaining to the policy changes were with Coos Bay industries and that some of the potentially affected people have not been informed. This was an oversight on DEQ's part. Don Corkill noted that the CREST plan has been adopted by all participating jurisdictions and Governors of Oregon and Washington; he questioned if the policy proposed by DEQ was consistent with the CREST policies. Hal Sawyer agreed that the importance of the policy and the land use plan cannot be overestimated. State agencies sign-off on the land use plan and it then becomes the ruling document for land use actions. Don Corkill suggested that perhaps the Committee could focus on what CREST and DEQ have developed, and that coastal jurisdictions may be able to benefit from their efforts. He suggested that the Yaquina Bay and Coos Bay Estuary Task Forces be involved in an effort to further coordination of log handling efforts throughout the Coast.

John Wolcott noted that Crown Zellerbach had received a letter from the Department of Land Conservation & Development noting that log storage is not considered a water-dependent use and consequently is not allowed in conservation units of estuaries. He suggested the Committee give some attention to discussing this further with DLCD.

COMMITTEE DIRECTIVE

ACTION TAKEN: Motion was made and seconded (Emmett/Corkill) that the Log Handling Committee recommend to OCZMA (1) that OCZMA request the EQC to delay action on the proposed policy amendments regarding log handling (2) that the Log Handling Committee and OCZMA be given an opportunity to work with DEQ toward resolution of the concerns with the proposed amendments (3) that attention be given to the relationship of the policy amendments to the on-going comprehensive planning effort, and (4) that opportunity be provided for affected parties to review and provide input on the proposed policy amendments. The motion was unanimously approved; (5) THAT DLCD STAFF MEET W/CREST TO DEVELOP COORDINATION of Oregon Log Storage Policy and CREST Log Storage program

John Mingus added that in Coos County, the policies for land use planning noted that log storage was under the jurisdiction of DEQ. It was suggested that someone from OCZMA and the Log Handling Committee attend the EQC meeting to convey the concerns of elected officials, to answer questions, and to work with DEQ as appropriate in resolving to concerns of coastal people.

COMMITTEE WORK PROGRAM

With regard to the work program for the Committee, the following topics were suggested: Land storage of logs including transportation (rail, road, tourist problems, air quality), conjestion, space requirements, dust, and noise; and bark disposal.

COMMITTEE MEMBER-SHIP

Other individuals to be invited to participate on the Committee are Hal Hartman with Industrial Forestry Association and Don Edy, Manager of Astoria Tug and Barge Company. All Committee members will be added to OCZMA's newsletter mailing list.

NEXT MEETING

The next meeting of the Log Handling Committee was scheduled for October 16, 10:30 a.m. at the Oregon State University Marine Science Center Conference Room, Newport.

There being no further business, the meeting was adjourned by Chairman John Mingus.

PREPARED BY: Kathy Fitzpatrick

Kathy Fitzpatrick, Assistant Director
OREGON COASTAL ZONE MANAGEMENT ASSOC.

Rec'd 9-31-79

COOS HEAD TIMBER COMPANY lumber / plywood
P. O. BOX 750 • COOS BAY, OREGON 97420 • PHONE 503-267-2193

August 30, 1979

Department of Environmental Quality
P. O. Box 1760
Portland, Oregon 97207

Attention: Mr. Harold L. Sawyer, Administrator
Water Quality Division

Gentlemen:

We were surprised as well as disappointed to receive your letter of August 24, 1979 with which you enclosed many pages of material known as "Log Handling - Consideration of Adoption of Additional Guidelines for Log Storage in Coos Bay."

After reviewing this lengthy material which you sent to us, it appears that we are now right back where we started some two years ago in dealing with this subject of logs in the waters in the Port of Coos Bay. You state that a meeting has been scheduled before the EQC in Portland on September 21, 1979 and it appears that we must take the time and expense to be represented at this meeting in an effort to protect the economy and employment in the Coos Bay area.

Your Guidelines deal with the subject of logs stored in a boom. Our company has only one boom in which loose logs are stored and this is known as the "Kennedy Farm Boom". For many years, Willis Kennedy operated this piece of land as a highly developed pasture on which a herd of Black Angus cattle grazed. It was only after Willis Kennedy's death that the old dikes protecting these grazing lands were breached by high tides and storms and there was nobody that took the interest to repair the dikes; hence, this pasture became inundated with tide water. Our company owns these lands and have logs stored thereon, which is very desirable and essential to our operation.

Your study shows that there is a reduction in the invertebrate population, or mud worms, under logs on tide flats. The DEQ did not carry their study to any meaningful finding, or conclusion, that the reduction in invertebrate population resulted in damage to fish, or other aquatic life, from a shortage of food to sustain them. Hence, your study has no real validity or arrives at any conclusion that has any meaning.

(Next page, please)

Your Guidelines and recommendations make reference to trade-offs, which we assume is some form of mitigation. Our company has already abandoned boom areas, which many times exceed the areas we are presently using for log storage, and a few of the more important booms that have been abandoned are as follows:

(1)	Coos Head Timber Company log booms in the Empire area	90 Acres
(2)	The Evans boom on the Coos River channel, which we used for many years	74 "
(3)	Miscellaneous booms used by C.H.T.Co. in the Catching Slough area	35 "
(4)	South Slough area	57 "
	Total	256 Acres

The forest products industry as a whole in the Port of Coos Bay and its tributaries, has abandoned the use over the years -- from recent to 30 years back -- of over 700 acres of log boom storage area and log raft tie-up. We believe it is conservative to say that there is only one-tenth of the log volume stored in the Port of Coos Bay and its tributaries as were stored back over the last thirty years. When there were ten times as many logs stored in the waters of Coos Bay, we had more salmon, striped bass and other fish than we do now. We know that many factors affect fish population, but following the premise used by the DEQ, one could correctly reach the conclusion that more logs in the waters of Coos Bay mean more fish rather than less. We are well aware that fishing pressure, both commercial and sports, and many other factors affect fish populations, but it is impossible for us to reach any valid conclusion that the number of fish has anything to do with log storage.

In accepting the DEQ figures, the Port of Coos Bay has some ~~4,600~~ 6,200 (corrected) acres of tide flats and some 11,000 acres of total area at stage of high tide. Is it unreasonable to ask that the handling and storage of logs occupy some 1 to 3% of these tide flats and only 1%, or less, of the total area in the Port of Coos Bay? After all, the forest products industry is the principal source of employment here. Logs in the water do make up the source of the food chain for many people living in the Port of Coos Bay and employed in various phases of the forest products industries.

(Next page, please)

Over the past thirty years, and right up to the present time, there has been a large and continuous reduction in the volume of logs stored and handled in the waters of Coos Bay. The acres of tidelands which have been abandoned as log storage areas is referred to above and also the fact that there are only about 10% of the volume of logs in the waters of Coos Bay and its tributaries now as have been stored at many times over the past thirty years. The removal of these logs has not resulted in the increase in the numbers of fish, or other aquatic life, but rather there has been a decrease. Based on this historical record and past experience, it is reasonable to assume that there will be a further reduction in log storage over the next five to ten years. Removal of these logs will in no conceivable or rational manner, based on past experience, increase or enhance the fish or other aquatic life in this area, but it will have a very adverse effect upon the environment of the Port of Coos Bay.

The present actions being taken by the DEQ are now bordering on harassment and a waste of our time. This subject has been hashed over for some two years now and it is time that this was put to rest. Let us all spend our time and energy on the much more important and pressing problems facing the forest products industry.

Yours very truly,

COOS HEAD TIMBER COMPANY

C. Wylie Smith
Vice President

CWS:ej

ABANDONED BOOM AREAS - COOS BAY
February 8, 1979

		ACRES		
		MUD FLATS	SUBMERGED	TOTAL
1.	Coos Head Timber Co., Empire	61	29	90
2.	Moore Mill, Cape Arago	4	4	8
3.	Weyco Boom (Pierce Point)	16	1	17
4.	Menasha Boom (Pierce Point)	84	8	92
5.	Waterford Boom	29	10	39
6.	Port Boom	191	5	196
7.	Evans Boom	63	11	74
8.	Evans Tie-up (Coalbank Slough)	-	8	8
9.	Catching Slough 1.	11	4	15
	2.	3	3	6
	3.	5	3	8
	4.	3	3	6
10.	South Slough Area			
	Long Island Point Area	23	19	42
	Southern-most area near school	6	9	15
11.	Davis Slough	30	20	50
	GRAND TOTAL - Approximate acres	529	137	666

MEMO:

OTHER AREAS NOT INCLUDED IN ABOVE - COOS BAY & TRIBUTARIES

North Slough - Large log dump

Haynes & Larson Slough - Log dump and sawmill

Old Town Mill at North Bend

Menasha Plant at North Bend

Henryville Log Dump & Boom - Isthmus Slough

Delmar Log Dump - Isthmus Slough

South Slough

Rec'd 9-21-79
Q8

EQC MEETING - SEPTEMBER 21, 1979

WEYERHAEUSER STATEMENT

I AM BOB HOWRY, RAW MATERIAL MANAGER, REPRESENTING WEYERHAEUSER COMPANY'S SOUTHWEST OREGON REGION. WEYERHAEUSER EMPLOYS 1600 PEOPLE IN THE COOS BAY AREA.

DURING THE PAST TWO YEARS, WE, ALONG WITH OTHER FOREST PRODUCTS COMPANIES, HAVE CONTRIBUTED FREELY OF OUR TIME AND FACILITIES IN COOPERATION WITH THE DEQ; STUDYING THE IMPACT OF LOG GROUNDING ON THE ENVIRONMENT. THE STUDY AND REPORTS PUBLISHED TO DATE GIVE NO EVIDENCE THAT LOG GROUNDING HAS MORE THAN AN INSIGNIFICANT EFFECT ON THE AQUATIC ENVIRONMENT WITHIN THE COOS BAY ESTUARY.

ON THE CONTRARY, LOG STORAGE IN THE ESTUARY HAS DRAMATICALLY REDUCED IN THE PAST 15 YEARS. LOG GROUNDING THIS YEAR OCCURS ON LESS THAN 20% OF THE AREA USED IN 1965 AND INVOLVES ONLY 3% OF THE TOTAL TIDELANDS AREA. REDUCTION IN THE USE OF TIDELANDS IS LOGICAL, SINCE INDUSTRY PREFERS DEEP WATER STORAGE, AND ECONOMICS NECESSITATE MINIMUM INVENTORY LEVELS. WE ARE AT MINIMUM INVENTORY LEVELS NOW. FURTHER REDUCTION IN LOG STORAGE AREA WOULD CREATE GREAT RISK OF MILL AND WOODS CLOSURES DIRECTLY AFFECTING 1600 JOBS AND FAMILIES.

WEYERHAEUSER IS PRESENTLY UNDER PERMIT WITH THE DEQ RESTRICTING THE STORAGE OF LOGS IN THE COOS BAY ESTUARY. THE CONDITIONS OF THE PERMIT STATE:

G2 - "THE PERMITTEE SHALL MAINTAIN AS LOW AN INVENTORY OF LOGS IN PUBLIC WATERS AS IS PRACTICAL."

G3 - "NO NEW AREAS WHERE GROUNDING DUE TO TIDE CHANGES OCCURS SHALL BE USED FOR LOG STORAGE WITHOUT WRITTEN APPROVAL FROM THE DEPARTMENT."

ALSO, WEYERHAEUSER IS REQUIRED TO IDENTIFY ALL STORAGE AREAS AND THE VOLUME OF LOGS STORED EACH QUARTER OF THE PRECEDING YEAR.

WE SUBMIT THAT THE AQUATIC PRODUCTIVITY OF THE COOS BAY ESTUARY IS ADEQUATELY PROTECTED BY THE EXISTING POLICY AND PERMIT PROCESS, AND

THE AREAS WHERE LOGS GO AGROUND HAVE ALREADY BEEN MINIMIZED. FOR REASONS EXPRESSED ABOVE, WE TOTALLY OBJECT TO ANY REVISIONS TO THE CURRENT LOG HANDLING POLICY BECAUSE THEY ARE ENTIRELY UNJUSTIFIED FROM AN ENVIRONMENTAL STANDPOINT.

IF, HOWEVER, THE COMMISSION FEELS A POLICY CHANGE SHOULD BE CONSIDERED, THEN CERTAINLY A STUDY SHOULD FIRST BE COMPLETED THAT SPECIFICALLY IDENTIFIES WHETHER REASONABLE ALTERNATIVE DEEP WATER STORAGE DOES OR DOES NOT EXIST.

IN FACT, THE DEPARTMENT OF ENVIRONMENTAL QUALITY HAD AT ONE TIME SUGGESTED THIS SAME COURSE OF ACTION. I QUOTE FROM A JULY 13, 1977 LETTER TO ME FROM THE ASSISTANT REGIONAL MANAGER: "IF THIS STUDY DOES SHOW ADVERSE ENVIRONMENTAL DAMAGE FROM TIDELAND LOG STORAGE, WE WOULD MOST LIKELY MODIFY WEYERHAEUSER'S PERMIT TO INCLUDE SPECIFIC LOCATIONS IN DEEP WATER AND AMOUNTS OF LOGS TO BE STORED THERE BEFORE ANY TIDELANDS COULD BE USED FOR STORAGE. WE WOULD, OF COURSE, GET MORE ACCURATE INFORMATION ON WATER DEPTHS AND NAVIGATION REQUIREMENTS AND DISCUSS THIS WITH WEYERHAEUSER BEFORE MAKING ANY PERMIT CHANGES."

WEYERHAEUSER CONTINUES TO SUPPORT DEEP WATER STORAGE PROVIDING ADEQUATE PROTECTION IS AFFORDED. RISK OF LOSS TO HIGH WINDS AND FRESHETS IS THE LARGEST SINGLE PROBLEM WITH UNUSED DEEP WATER STORAGE SITES. POTENTIAL DANGER TO PROPERTY AND HUMANS IS HIGH. LIABILITY IS A MAJOR CONCERN, POTENTIALLY MILLIONS OF DOLLARS. SAFETY MUST BE A MAJOR FACTOR WHEN CONSIDERING OTHER DEEP WATER STORAGE. IN WEYERHAEUSER'S INVESTIGATION OF THE ESTUARY, WE HAVE BEEN UNABLE TO LOCATE SAFE ALTERNATIVE SITES EVEN THOUGH IT WOULD BE ECONOMICALLY ADVANTAGEOUS TO DO SO. A GREAT DEAL OF TIME AND EFFORT HAS ALREADY BEEN APPLIED TO THIS SUBJECT, AND A JOINT STUDY COULD BE CONCLUDED IN A RELATIVELY SHORT TIME. NO POLICY CHANGE SHOULD BE CONSIDERED UNTIL ALTERNATIVE DEEP WATER STORAGE AREAS WHICH AFFORD ADEQUATE PROTECTION CAN BE SPECIFICALLY IDENTIFIED.

THANK YOU.

ROBERT S. HOWRY
RAW MATERIAL MANAGER
WEYERHAEUSER COMPANY
SOUTHWEST OREGON REGION

Rec'd 9-21-79
Q8

EQC MEETING SEPT 21 1979

I AM DOUGLAS KIME AND I REPRESENT IWA LOCAL 3 261 NORTH BEND OREGON WITH A MEMBERSHIP OF ~~1600~~ 1300

I ALSO REPRESENT THE SOUTHWESTERN OREGON CENTERAL LABOR COUNCIL WHICH CONSIST OF 22 UNIONS AND A MEMBERSHIP OF 4200.

LAST MONTH THE ~~5800~~ 4200 PEOPLE I REPRESENT VOTED 100 % OPPOSING THE BAN OF LOG STORAGE IN THE COOS BAY ESTUARIES.

IF THE LOG STORAGE BAN WAS PUT INTO EFFECT IT WOULD NOT ONLY EFFECT THE ~~5800~~ 4200 PEOPLE I REPRESENT, BUT THE TOWN AS A WHOLE RELIES ON THE LUMBER INDUSTRIES FOR THIER MAIN SUPPORT.

AFTER READING THE DEQ REPORT WE FIND THERE IS NOT ENOUGH SIENTIFIC RESEARCH DONE TO DETERMINE THE BIOLOGICAL EFFECT ON THE INTERTIDAL LOG STORAGE.

THE LUMBER COMPANYS INVOLVED IN THE LOG STORAGE BAN HAVE OVER THE LAST YEARS CLEANED UP THE ESTUARIES, THEY HAVE ALSO SET UP LOG STORAGE YARDS WHICH HAS GREATLY REDUCED THE LOGS IN THE BAY.

WE FEEL THE COMPANYS HAVE MADE THECOOS BAY AREA A CLEAN PLACE FOR FISHERMEN HUNTERS BUSSINESSMEN AND LABOR PEOPLE ALIKE, AND TO HAVE THESE LUMBER COMPANYS SHUT DOWN WOULD BE AN ECONOMIC BURDEN ON THE ENTIRE BAY AREA.

THANK YOU

DOUGLAS KIME
SAFETYCOMMITTEEMAN IWA 3 261
member SOUTHWESTERN OREGON
CENTERAL LABOR COUNCIL

Rec'd 9-21-79
Q8

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THANK YOU

DOUGLAS KIME
SAFETYCOMMITTEEMAN IWA 3 261
member SOUTHWESTERN OREGON
CENTERAL LABOR COUNCIL

Rec'd 9-21-79

INTERNATIONAL WOODWORKERS OF AMERICA

A.F.L.-C.I.O.

REGION 3 LOCAL 116

PHONE (503) 267-2911 OR 267-3808
625 WEST COMMERCIAL
COOS BAY, OREGON 97420

September 17, 1979

Department of Environmental Quality
P.O. Box 1760
Portland, OR 97207

Attn: Mr. Harold Sawyer, Administrator
Water Quality Division

Gentlemen:

The membership of I.W.A. Local 3-116 was shocked beyond belief by an article printed in the Coos Bay World newspaper August 28, 1979 in regards to log storage in the Coos Bay Estuarie.

We are greatly disturbed over the job losses in the past and jobs of the future. We are seriously wondering where working people fit with the ecology chain.

In 1971 this local lost approximately one hundred jobs and the pulp mills lost the same number of jobs. The fish and game commission claimed the effluents had destroyed 47 acres of crab life, and it would remove 80 to 90 acres of loose logs from lower bay. "Our members had crab nets placed within 200 feet of out flow pipes and were catching crabs."

No one has ever explained to us why forty seven acres of crab life out of a 4600 acre estuarie is more important than 200 plus good paying jobs. On August 1, 1979, Georgia Pacific Corporation closed down their sanded plywood mill. They stated to this union one of the reasons, was stiff regulations by D.E.Q.

The working people in Coos Bay, Oregon are deeply concerned over the future growth of the bay. With the present regulation on dredging, pilings, etc. that must be done to maintain a profitable port.

What company would spend money and fight those odds to build any type of business here.

At the present time this local represents approximately 600 working people whose jobs depend on saw mills designed to use the water ways of the bay, they do not have dry land storage or land enough to maintain the logs they need through the rainy season.

Some of the statics we do not understand are as follows:

Over #600 acres in estuarie "mudflats", the mills are using approximately 150 acres to store logs. By D.E.Q. terms does that mean no ships in bay that might touch the mud in low tides. Ships and sport boats can not use anchors that might disturb the mud worms.

We working people would be the first to admit being layman in the study of the invertebrate population. But feel very strongly, the study is far from being complete, for instance what part in the ecology chain does the mud worm fit? What effect does that have on other marine animals, was there an impack study on job loss?

What is the total impack study of the 150 acres of tide flats now being used?

The membership of this local union feel we have sacrificed enough jobs and would hope that our plight would be considered.

Sincerely,

Harold L. Walton

Members of IWA 3-116
Business Agent
Financial Secretary

HLW/al
opeu #11
afl-cio

WORLD'S LEADING FOREST PRODUCTS PORT

Port of Coos Bay

TELEPHONE (503) 269-1131

POST OFFICE BOX 1226 COOS BAY, OREGON 97420

September 21, 1979

Oregon Environmental Quality Commission
Terminal Sales Building
1234 S.W. Morrison Street
Portland, Oregon 97205

Re: Log Storage on Tidelands in Coos Bay

Gentlemen:

The Port of Coos Bay appreciates the opportunity to comment before the Commission on proposed changes in guidelines for log storage in Coos Bay.

Several problems will result if the proposed change is approved.

First, all deep water sites available within reasonable proximity to the mills are being utilized to their fullest capabilities. The Port of Coos Bay has no intention of allowing encroachment on the navigation channel by log rafts. This latest channel deepening took 13 years to achieve and required substantial community effort and funding. Assuming that rafts could be placed any closer to the channel than they are now is completely unacceptable.

Second, it is important to realize that all the wood products mills in Coos Bay were placed next to the bay for an important reason. Historically, the mills have required bay frontage for the water transportation of raw products. Any change in this system, as is implied in Mr. Young's recommendations, cannot be tolerated by an already fragile economic system in Coos Bay.

In conclusion, it is more than a little aggravating to note the continuing harassment of existing Coos Bay industries by the proposed recommendations when existing regulations not only restrict, but actually prohibit any expansion outside of the existing 3% affected tidal area. The Port of Coos Bay recognizes the efforts of the Department of Environmental Quality to protect the efforts of the state's waters, but feels that in view of resultant economic hardships and the existence of adequate restrictions, no change in current log storage areas or methods should be allowed.

Yours truly,

Jeff F. Kaspar
Operations Manager

JFK/ea

TO: Oregon Environmental Quality Commission

Re: Log Storage on Tidelands in Coos Bay

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Thank you,

Jeff F. Kaspar
Operations Manager
Port of Coos Bay

JFK/ea

Rec'd 9-21-79
CB

VICTOR ATIYEH
GOVERNOR

Department of Economic Development

921 S.W. WASHINGTON STREET, PORTLAND, OREGON 97205 PHONE (503) 229-5535

September 21, 1979

MEMORANDUM

TO: Oregon Environmental Quality Commission

FROM: Greg Baker
Ports Division

SUBJECT: Log Storage in Coastal Estuaries and Rivers

My name is Greg Baker, representing the Oregon Department of Economic Development. The Department appreciates the opportunity to comment before the Environmental Quality Commission on its proposed guidelines for log storage in Coos Bay.

The Department of Economic Development recognizes Oregon's long history of concern for its environment. The Department of Economic Development shares in this environmental concern and realizes that Oregon's "quality of life" is an important selling point in attracting new, clean industries into Oregon for its long term economic needs.

It is also recognized that preservation and conservation efforts in many cases create significant economic costs to certain segments of the economy, and that a reasonable balance between preservation and the economy should exist. Accordingly, any environmental benefits achieved should be weighed with careful consideration to the economic impact of such decisions.

The Department of Economic Development is concerned that your proposed guidelines will have an inordinate economic impact in the Coos Bay area, while achieving only small benefits to the

enhancement of the Coos Bay estuary.

Coos Bay is the major economic center of the South and Central Oregon coast, and is important to the state's economy. However, it also suffers from higher than average levels of unemployment and is a target for many of the Department's assistance and development programs.

The regulations the Department of Environmental Quality are proposing may have the impact of ~~undoing much of~~ significantly affecting what has been accomplished in aiding employment and economic stability in Coos Bay by directly affecting the major employers in the area.

The Department of Economic Development requests that no action be taken on changes as proposed by Director ~~Young~~ of the DEQ in his report to the Environmental Quality Commission, specifically Sections 4 and 7 of the Statement of General Policy on Log Handling in Oregon's Public Waters, until the resulting economic impact of these changes can be adequately evaluated for Coos Bay and all other areas that these regulations may be applied to.

Thank you.

GB:kd

Jeff Campbell Rec'd 9-21-79
QS

AREA OF OREGON ESTUARIES

STATE OF OREGON
DIVISION OF STATE LANDS

ESTUARY	TOTAL AREA ACRES	RELATIVE SIZE	TIDELAND AREA ACRES	SUBMERGED LAND ACRES
Columbia*	93,782	1	24,507	69,275
Necanicum	278	15	149	129
Nehalem	2,309	7	1,078	1,231
Tillamook	8,289	3	4,163	4,126
Netarts	2,325	6	1,513	812
Sand Lake	528	14	397	131
Nestucca	1,000	11	578	422
Salmon River	204	16	126	78
Siletz	1,187	10	775	412
Yaquina	3,910	5	1,353	2,557
Alsea	2,146	9	979	1,168
Siuslaw	2,245	8	756	1,489
Umpqua	6,830	4	1,531	5,298
Coos Bay	12,380	2	6,200	6,180
Coquille	771	12	301	470
Rogue	627	13	149	478
Chetco	102	17	12	90
Total	**138,913**		**44,567**	**94,346**

Areas were determined by planimeter from Division of State Lands' tideland maps at the scale of 1" = 1000'. The estuary area measured extended from a line across the entrance to the upper extent of tideland. The upper limit chosen usually coincided with the point of continuous diking along the river edge and was not necessarily the head of tide. At the point of continuous diking, the tideland narrows to a width of 20 to 30 feet.

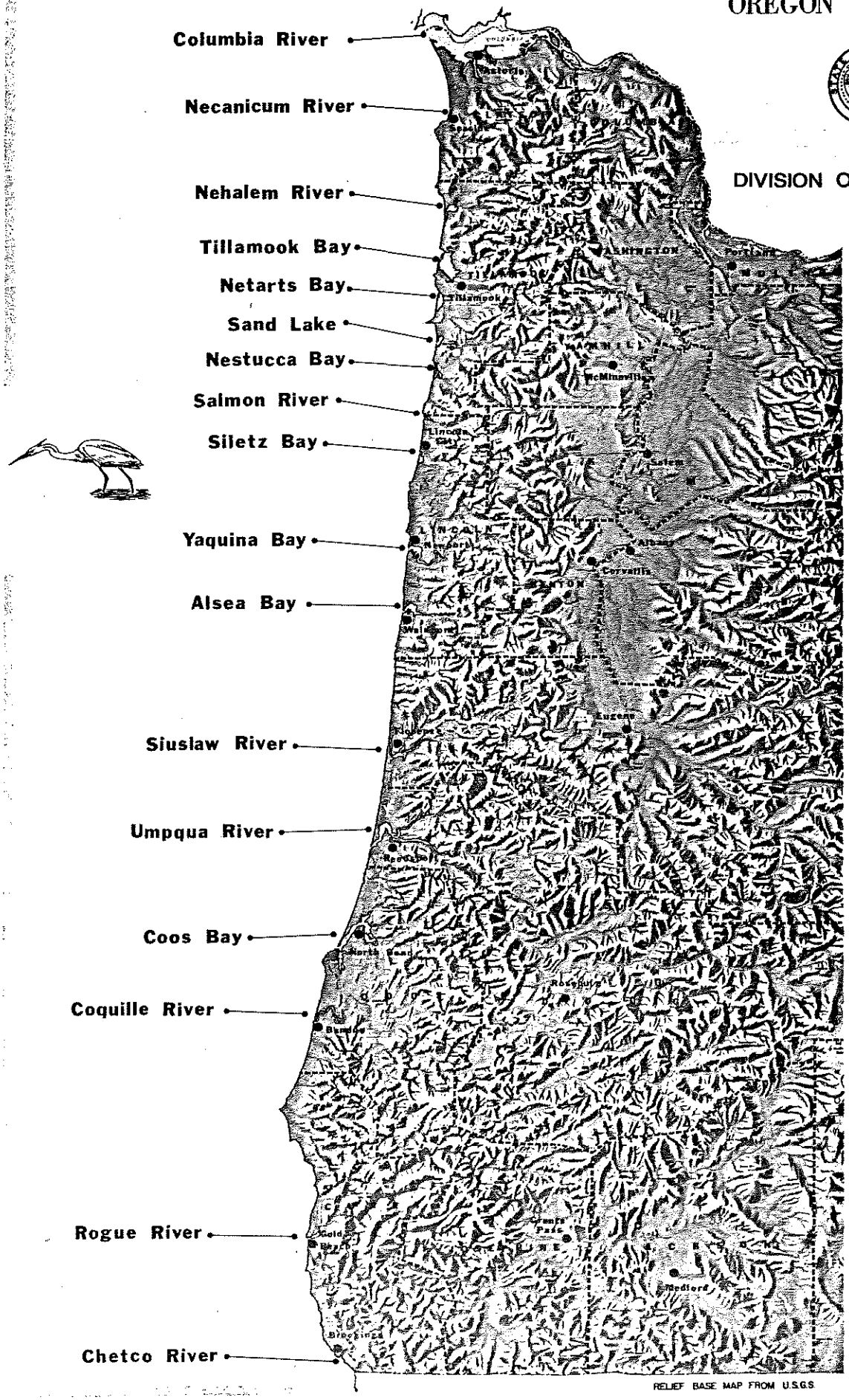
The tideland area given is that land between mean high water and mean low water. The submerged land is that area below mean low water. All mapping and area determination was completed between February 1972 and March 1973.

*Area of the Columbia River estuary was computed from USC&GS charts 6151 and 6152. The limits extend from the entrance jetties to the lower tip of Puget Island. The C&GS line of mean lower low water was used for the computation. Tideland and submerged land in both Oregon and Washington are included in the figures.

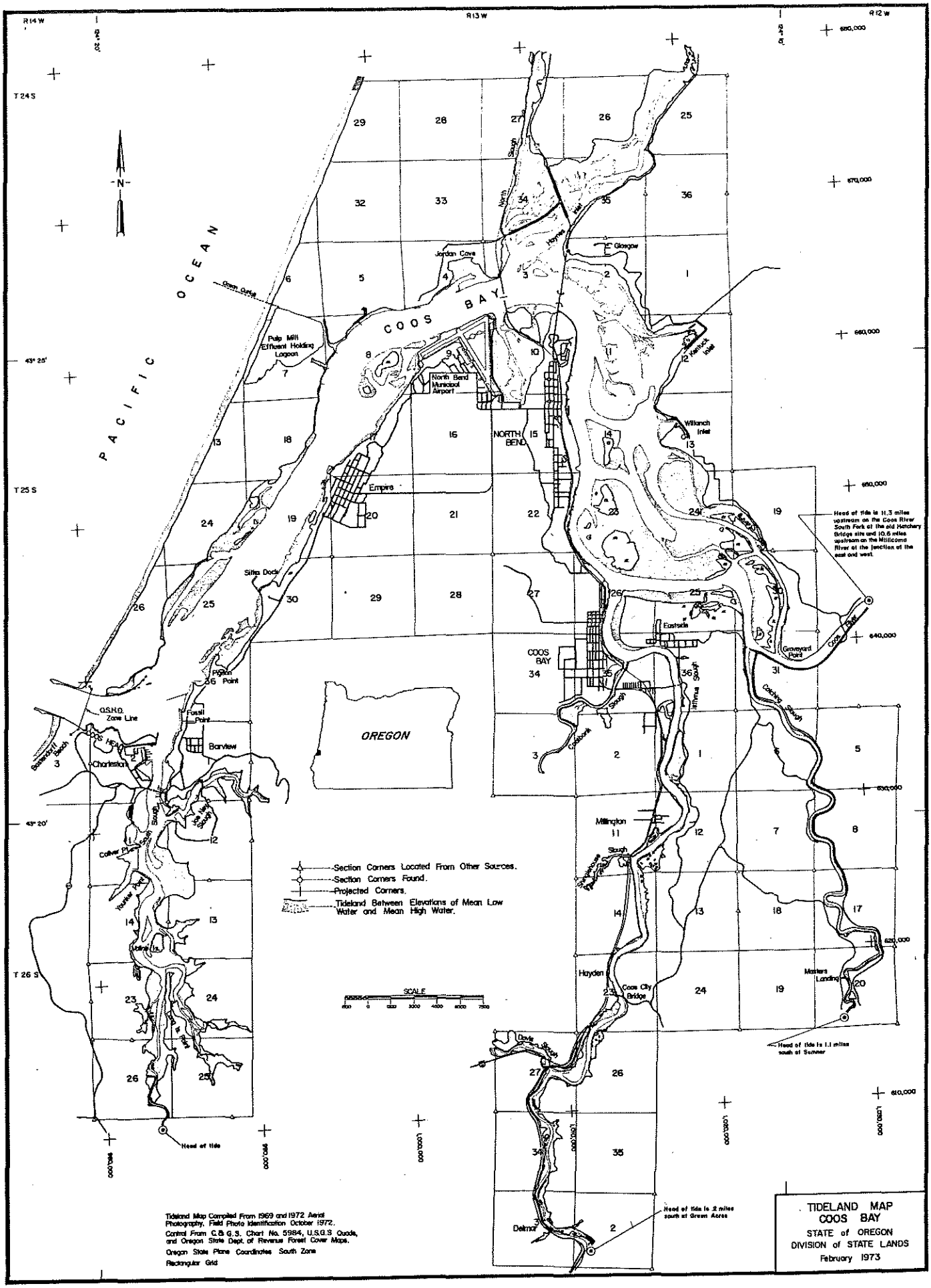
Minor Oregon estuaries not tabulated are: Elk Creek, Neskowin Creek, Yachats River, Ten Mile Creek, Sixes River, Elk River, Hunter Creek, Pistol River, and Winchuck River.

OREGON ESTUARIES

DIVISION OF STATE LANDS



RELIEF BASE MAP FROM U.S.G.S.



Tideland Map Compiled From 1969 and 1972 Aerial Photography. Field Photo Identification October 1972.
Control From C.& G.S. Chart No. 5984, U.S.G.S. Quads, and Oregon State Dept. of Revenue Forest Cover Maps.
Oregon State Plane Coordinates South Zone
Rectangular Grid

TIDELAND MAP
COOS BAY
STATE of OREGON
DIVISION of STATE LANDS
February 1973

LAW OFFICES OF

NEWHOUSE, FOSS, WHITTY & ROESS

P. O. BOX 119

444 N. FOURTH STREET

COOS BAY, OREGON 97420

ANDREW J. NEWHOUSE
JOHN T. FOSS
JOHN W. WHITTY
PAUL L. ROESS
JON LITTLEFIELD
G. JEFFERSON CAMPBELL, JR.
WILLIAM A. McDANIEL

JOSEPH A. McKEOWN
(1907-1974)

TELEPHONE
(503) 267-2156

January 17, 1979

Ms. Barbara A. Burton
Environmental Specialist
Department of Environmental Quality
1927 W. Harvard Boulevard
Roseburg, Oregon 97470

Re: Proposed Coos Bay Log Grounding Policy

Dear Barbara:

Our office represents Al Peirce Lumber Company and Coos Head Timber Company. Our office has also recently been retained to represent Knutson Tow Boat Company with regard to the recent proposals of the Department of Environmental Quality set forth in Mr. Zegers study entitled "The Effects of Log Raft Grounding on the Benthic Invertebrates of the Coos Estuary".

At the January 11, 1979 hearing, which the Department held in Coos Bay, I indicated that we would be submitting, on behalf of our clients, a number of questions concerning Mr. Zegers' Study and the proposed recommendations of the Department. Enclosed please find the questions which our clients would request be answered by the Department. As I understand it, you intend to present this matter to the Environmental Quality Commission sometime in the near future and we would request that the responses be completed as soon as possible so that we may have further input into the process.

Very truly yours,

G. Jefferson Campbell, Jr.

GJC/gr
cc: William Young
cc: Water Quality Division
cc: Al Peirce Lumber Company
cc: Coos Head Timber Company
cc: Knutson Tow Boat

Enclosure

DEQ QUESTIONS

1. Please list all employees of the Department of Environmental Quality who were involved with the development of the Study and Recommendation set forth in the document published December, 1978 entitled the "Effects of Log Raft Grounding on the Benthic Invertebrates of the Coos Estuary".

2. Were any reports, studies, or texts consulted in the preparation of the Study entitled "The Effects of Log Grounding on the Benthic Invertebrates of the Coos Estuary" (hereinafter the "Report") which are not set forth on pages 19 and 20 of the Report under the heading, "Literature Cited"? If so, please list all of said sources.

3. Please indicate with regard to the Lillian Creek, Cooston Channel, Isthmus Slough Area, and Isthmus Slough No. 43 site the following information:
   a. The elevation in feet (plus or minus) of the control area measured from mean-lower low water.
   b. The elevation of the log raft sites measured in feet (plus or minus) from mean-lower low water.

4. Is the Environmental Quality Commission log handling policy reference on page 2 of the Report the policy adopted by the Oregon Environmental Quality Commission on October 24, 1975 entitled "Log Handling in Oregon's Public Waters, and Implementation Program and Policy"? If so, please indicate where in said policy the "documentation of the problem" of log raft grounding is required before requiring remedial action.

5. Were the organisms set forth in Tables 1, 2, 3 and 4 of the Report weighed to determine their biomass? If so, please indicate the average weight and biomass of the organisms on each of the sampling dates for the control and grounded sampling locations for the Cooston Channel, Isthmus Slough, Lillian Creek and Isthmus Slough Site No. 43 sites.

6. If the organisms which are set forth in Tables 1, 2, 3 and 4 of the Report were not weighed to determine their biomass, please indicate the following:

   a. The average weight of each of the organisms set forth on Tables 1, 2, 3 and 4 of the Report, if available from other scientific texts or studies.

   b. The range of minimum and maximum weights for each of the organisms set forth on Tables 1, 2, 3 and 4 of the Report, if available from their scientific texts or studies.

   c. Mr. Zegers' "best estimate" of the average weight for each of the organisms set forth on Tables 1, 2, 3 and 4.

7. What types of fish in the Coos Estuary feed directly off of the benthic invertebrate organisms identified in Tables 1, 2, 3 and 4 of the Report. Please identify by scientific and popular name.

8. Are there any studies available which would indicate the relative distribution in the Coos Estuary, by area, of the benthic invertebrate organisms identified in Tables 1, 2, 3 and 4 of the Report? If so, please list and indicate whether copies of said studies are availabe on the payment of reproduction costs.

9. Please list for each of the four sites studied in the Report the following information:

   a. The average number of benthic invertebrate organisms found in the control areas over the course of the study.

   b. The average number of benthic invertebrate organisms found in the grounded areas over the period of study.

10. With regard to the following scientific studies, please indicate whether the Department of Environmental Quality recognizes said studies as scientifically accurate. If the Department of Environmental Quality does not recognize said studies as being scientifically accurate, please indicate in what way said studies are deficient.

    Ramoane and Schlieper, <u>The Biology of Brackish Waters</u>, John Wylie and Sons, Publishers (New York, New York), 1971.

Bolinger, A., Fouler, B., and Elliott, L. "Bay Project Report Area B-10", Oregon Institute of Marine Biology, Charleston, Oregon, 1970.

Conley, R. L. "Distribution, Relative Abundance, and Feeding Habits of Anadromous Fishes of Everett Bay, Washington." Washington Cooperative Fishing Research Unit, University of Washington, Seattle, Washington, 1977.

Firth, B.K. and Herrmann, R.B. "An Assessment of the Effects of Everett Kraft Secondary Treatment System Wastes on the Tideflat Benthos and Substrate of Steamboat Slough (Snohomish River)," Weyerhauser Company Report, Project No. 046-4106, 1976.

Fitchko, R. and Smollen, M. "Study of Physical and Biological Parameters of Area A-7," Oregon Institute of Marine Biology, Charleston, Oregon, 1970.

McConnaughey, Edward A. (Project Director, Student Task Force). "Coos Bay Study: An Interdisciplinary Study of Man and the Estuary," Oregon Institute of Biology, Charleston, Oregon, 1972.

Radosh and Fenney. "A Fish Gut Study of the Coos Bay Estuary," Oregon Institute of Marine Biology, Charleston, Oregon, 1970.

Thompson, Jan. "Isthmus Slough - Biological, Chemical and Physical Factors," Oregon Institute of Marine Biology, Charleston, Oregon, 1971.

11. Please indicate the basis of the assumption that 30 to 60 percent of the log rafts stored in Coos Bay go aground at low tide, which assumption is set forth on page 15 of the Report.

12. Please indicate what investigation was done by the Department of Environmental Quality to determine that "present information does not allow one to estimate the adverse impact on productivity of the Coos Estuary" by logs going aground, which statement is set forth on page 16 of the Report.

13. Attached hereto please find a map of the Coos Bay Estuary. Please indicate thereon those areas in the Coos Bay Estuary which the Department of Environmental Quality feels are available for deep water storage of logs so that said logs will not go aground at low tide.

14. When were the recommendations set forth on page 17 of the Report first arrived at? Please outline the process for the development of said recommendations, including all individuals involved.

15. Prior to the recommendations being formulated, was there any study on whether the adverse effects on the benthic organisms identified by the Report could be remedied by increasing the productivity of estuarine resources in other areas of the Coos Bay Estuary where logs do not go aground at low tide?

16. Is it possible to increase the estuarine resources available to fish and birds in other areas of the Coos Estuary where logs do not go aground? If not, please indicate why such an action is not possible.

17. Prior to the formulation of the recommendations set forth in the Report was any study or analysis undertaken of the cost to industry of implementing the recommendations? If so, please indicate the anticipated costs of such an implementation program which was the basis of the Department's recommendations in the Report. How were such cost estimates arrived at?

18. Please indicate whether there was any consultation with industry over the feasibility of the recommendations set forth on page 17 of the Report. If so, please indicate with whom such discussions took place.

19. Please indicate where "existing pen areas" identified in item 5 of the recommendations currently exist in the Coos Estuary.

20. Please indicate all instances of which the Department of Environmental Quality is aware,where water stored logs have not been used within a twelve month calendar period within the last five years. How were such instances established by the Department of Environmental Quality?

21. Was any consideration given to increased energy requirement resulting from the recommendations set forth on page 17 of the Report? If so, please indicate the Department's estimate of the total increase in energy consumption in terms of gallons.

of gasoline, diesel, or other fuel sources.

22. Was any study done of the adverse environmental trade-offs which may occur as a result of the recommendations set forth on page 17 of the Report. If so, please indicate who undertook said study and indicate the nature of the study that was undertaken. Please indicate in summary form the conclusions reached, if any, as to any adverse environmental impacts resulting from the recommendations set forth on page 17 of the Report.

23. Is it the primary causal conclusion of Mr. Zegers that the grounding of logs at low tide causes the mud of the tidelands to lose its consistency and thereby deprive benthic invertebrate organisms from maintaining their habitats in the mud?

24. Please indicate whether the "tideland" referred to in the recommendation set forth on page 17 of the Report refers to land exposed by mean low water, mean lower low water, ordinary low water, or some other tide measurement. If some other tide measurement is being used, please describe in detail said tide measurement.

A BASELINE STUDY OF INVERTEBRATES AND OF THE ENVIRONMENTAL IMPACT OF INTERTIDAL LOG RAFTING ON THE SNOHOMISH RIVER DELTA

James E. Smith

FINAL REPORT

March - 1977

Washington Cooperative Fishery Research Unit
College of Fisheries
University of Washington
Seattle, Washington 98195

A study conducted by the Department of Environmental Quality showed that benthic organisms were reduced 88-95% as a result of log storage. A study of the invertebrate and the environmental impact of intertidal log rafting on the Snohomish River delta by James E. Smith also showed a reduction in benthic organisms. A copy of the cover page is attached for your reference. Dr. John Sibert at the Pacific Biological Station in Nanaimo, B. C. conducted a study on the Nanaimo estuary and found that the character of the substrate changed with intertidal log storage. The sediments were finer, more compact, more organic and contained very little infauna. He also found that the areas beneath and around log booms had low productivity and that the activities of the tugs affected areas around the booms. He also determined that salmonids avoided the grounding booms and adjacent areas. In Coos Bay, logs are rafted and stored at high tides, but are obviously pulled off the tideflat as soon as the powerful tugs can remove them. This is easily observed at low tide after the logs are dragged across the tideflat and form deep furrows in the substrate.

The area impacted in Coos Bay by tideland storage varies between 1.4 and 3.3%, varying with the stage of tide. I would like to equate the loss of 1.4 to 3.3% of the production of an estuary to a similar loss of forest land and an example of farm land.

Second growth timber on 100 acres at 47,000 board feet per acre at cost $500 per ground board foot (today's bid price) is valued at $2,350,000. The value of 1.4 to 3.3% of this equals $32,900 to $77,550. The projected

rotation for the final cut of second growth timber is 76 years on the Elliott State Forest. The annual value of timber must be prorated through the length of timber cycle. If a farmer has 100 acres, and 25% of his lands are nonproductive for a year, his production and profits would be reduced by 25%. These analogies are easy to understand and accept.

The dockside value of chinook salmon landed in Oregon by the troll fishery in 1979 was $4.8 million. Chinook salmon rear in the estuary through the summer months; therefore, only the value of the troll-caught chinook will be used. The recreational value of the salmon fishery in the ocean during 1979 at $60 per angler day equals $17,601,780. The value of the combined fisheries equals $22,401,780.

If 1.4-3.3% of the estuaries (cropland) becomes unproductive during a crucial time of the life cycle of the chinook salmon, we might assume a reduction in landing, catch, and return valued at $313,624 to $739,555 annually to the state of Oregon.

It would not be fair to imply that this would be loss of value as a result of tideland log storage in Coos Bay since total production of chinook salmon in Coos Bay is a percentage of the total production of Oregon. It is safe to assume that the loss would be valuable. We have only been talking about salmon. The areas where log grounds are typically utilized by many species of fish including striped bass, shad, starry flounder, cutthroat and steelhead trout and coho salmon. Striped bass live in this area during most of their life while the others are present--a varied duration--although crucial. We have not investigated the use by waterfowl and shorebirds.

The section of Bay where logs are stored is truly estuary where fresh and salt water mix. This portion of estuary is where anadromous fish adapt physiologically to salt water. Even though the density of invertebrate food organisms may be less than in the lower portion of the Bay, each organism becomes more important to the predator (fish). The Department of Environmental Quality is recommending that alternate plans for log storage and handling be utilized. The most feasible alternate plans are:

1. eliminate loose log storage,
2. increase deep water storage,
3. limit storage time.

The Oregon Department of Fish and Wildlife believes these recommendations are reasonable and asks the Environmental Quality Commission to adopt them to further improve water quality, impact on aquatic life and upgrade Oregon's livability.

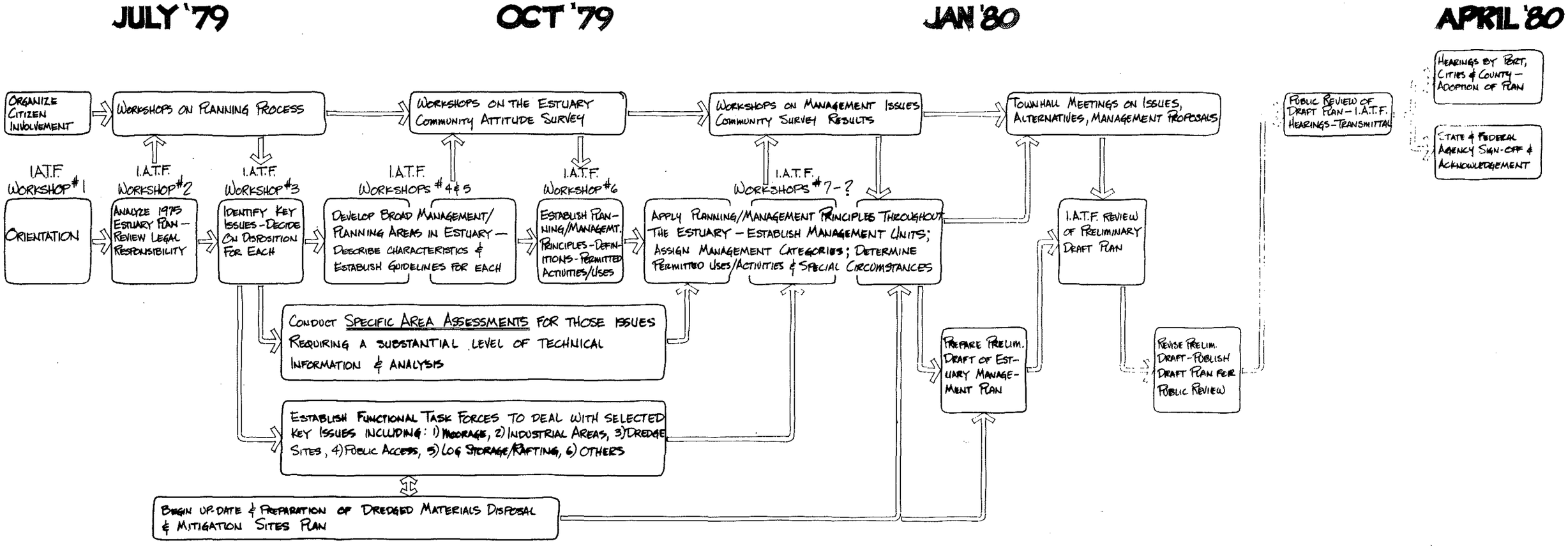
In closing, we ask the Commission to consider:

1. The biological and economic gain to the people of Oregon by removing logs from the tidelands.
2. The Department of Environmental Quality is not asking for a policy to eliminate log storage and handling from the waters of the state, but just modifying activities to minimize impact on public resources.
3. The Oregon Department of Fish and Wildlife supports the Department of Environmental Quality's recommendations.

Thanks for allowing us to state our position.

9/21/79

SIMPLIFIED WORK CHART
COOS BAY ESTUARY MANAGEMENT PLAN



I.A.T.F. - INTERAGENCY TASK FORCE

9-21-79
EQC file

DESCHUTES COUNTY

BOARD OF COMMISSIONERS
BEND, OREGON 97701
(503) 382-4000 ext. 200

Albert A. Young | Clay C. Shepard | Robert C. Paulson

June 19, 1979

State of Oregon
Environmental Quality Commission
796 Winter, N. E.
Salem, Oregon 97310

Dear Sirs:

It appears to me, and to most of the people in the La Pine area of Southern Deschutes County, that there is an urgent need to revise or reinterpret the DEQ rules for the permitting of septic tanks and drainfields in this area.

As a result of our concerns, we have had several meetings with Bill Young of the State DEQ Office, and also Dick Nichols of the Bend DEQ Office. To date, we have been unsuccessful in initiating any changes in the approval methods for our systems. Consequently, I am hereby submitting a Petition requesting that you initiate a review of our concerns and the rules which we must work under. At this point, we are not sure if we need a rule amendment, repeal and new adoption, or merely a reinterpretation. However, we are requesting that you investigate the matter at the EARLIEST POSSIBLE DATE, and either set a public hearing whereby all persons can express their concerns and submit information, or request that information be submitted to you for exploration prior to instituting a change.

We are very concerned that any further delay in revision of these rules will cause many of the citizens of this area to be forced to go an entire "building season" without being able to get a permit for septic tanks and drainfields, even though it appears that they could install one without any short-term or long-term damage to the area's domestic water supply. We are currently experiencing permit denials on roughtly 60% of the applications submitted, including those where the actual identifiable water level is twenty or thirty feet below the ground surface.

At this time, according to the local DEQ Office, the sole criteria for approving or denying permits in this area relates to the existence of "mottling" in the soil. If the soil shows mottling, the permit is denied, even in cases where it is demonstrated that the existing well water is 15 to 30 feet below the surface and has never been above that in the past 20 years. Even the DEQ officials seem to feel that this system is not sufficient.

Even though I am calling for a change in how permits are issued, be assured that I and all of the people in the La Pine area agree to the following points:

1. We do not want to take any actions which will jeopardize the short-term or long-term water quality of the area.

2. We agree that there should be adequate separation between the bottom of a drainfield trench and the top of the high water table (generally assumed to require a two to four foot separation).

3. We agree that more scientific information is needed to help make better determinations regarding permit applications and protection of the area's water quality.

Attached is a sheet which specifically outlines the information which is required to initiate a rule change, etc., as required by the DEQ Rules of General Applicability and Organization, Division 11, OAR 340-11-047(1).

Please contact me if you have need for additional information. I would greatly appreciate your prompt attention to this difficult issue.

Sincerely,

Robert C. Paulson, Jr.

ROBERT C. PAULSON, JR.
County Commissioner

RCP:jlc

enc.

cc: Bill Young, DEQ
Betty Ahern, Realtor
Representative Tom Throop
Senator Fred Heard
Vic Russell
Marvin Russell
Kay Nelson
Floyd Welch
C. W. Reeve
Daniel E. Van Vactor, Esq.
Dick Rasmussen
Pat Gisler
John Hopper, La Pine Incorporation Committee

P.S.: If it is more convenient to consider this request at the July 27 EQC meeting, that is acceptable.

PETITION TO PROMULGATE, AMEND OR REPEAL RULE

OAR 340-11-047

340-11-047(1) The rule Petitioner requests the Commission to promulgate, amend or repeal.

(a) OAR 340-71-030(1)(d) (A & B). The application of these sections seems to cause continuous problems in the La Pine area because of the apparent inconsistent relationship between the mottling and high water levels. Mottling does not appear to be a reasonable method of determining the seasonal, annual, or even long-term high water level. See attachment "A."

(b) Ultimate facts in sufficient detail to show the reasons for adoption, amendment or repeal of the rule.

1. Many applications for subsurface sewage disposal suitability evaluations have been denied in the La Pine area. The denials have been based upon mottling of soils. Actual water table levels (as observed by water well measurements) are known to be much deeper than mottling indicates. The use of mottling as an indicator of high water table levels appears to be erroneous in some areas of La Pine. A list of lots denied permits, and related information is available on request.

2. In lieu of exclusive use of mottling as the indicator of high water table levels, the petitioner believes DEQ should delineate a specific combination of criteria to be used in Southern Deschutes and Northern Klamath Counties. Some or all of the following might be considered part of the permit acceptance criteria:

   A. Winter water level checks.

   B. Measurement of adjacent well levels.

   C. Soil conditions.

   D. Lot sizes.

   E. Augering to determine the existent water table around the disposal site (at different times of the year if necessary).

   F. Location and definition of areas (terraces?) where mottling is not a true indicator of actual water level.

3. Additional studies and data gathering should be initiated as soon as possible so that future determinations can be based on sound knowledge of what in fact the effects of local disposal systems are. Such studies could include the use of test wells and pollution monitoring, as well as dissection and analysis of existing disposal systems to see how they function.

4. Alternative systems should be developed and initiated. These systems must be at competitive costs and relatively easy to maintain on an individual basis.

(c) All propositions of law to be asserted by the Petitioner. (None asserted).

(d) Sufficient facts to show how Petitioner will be affected by adoption, amendment or repeal of the rule.

1. The current system results in roughly 60% turn-down for applications.

2. Of the thousands of lots in the area which were approved through the County planning process, the current permit approval system is forcing them to be devalued from perhaps $10,000 per lot to $2,000 per lot.

3. The loss in property evaluation is an obvious handicap to the property owners, and if it continues, it will be a financial loss to the County, due to a reduction in taxes.

(e) Name and address of Petitioner and any other persons known by the Petitioner to have special interest in the rule sought to be adopted, amended or repealed.

ROBERT C. PAULSON, JR.
Deschutes County Commissioner
Courthouse Annex
Bend, Oregon 97701

BETTY AHERN, Realtor
52427 River Pine Road
La Pine, Oregon 97739

REPRESENTATIVE TOM THROOP
State Capitol Building
Salem, Oregon 97310

VIC RUSSELL
Vic Russell Excavating-Construction
La Pine, Oregon 97739

MARVIN RUSSELL
51636 Pengra-Huntington Road
La Pine, Oregon 97739

KAY NELSON
P. O. BOX 477
La Pine, Oregon 97739

FLOYD WELCH
Seed Road
La Pine, Oregon 97739

DICK RASMUSSEN
52755 Huntington Road
La Pine, Oregon 97739

PAT GISLER
63333 Old Deschutes Road
Bend, Oregon 97701

JOHN HOPPER
La Pine Incorporation Committee
16023 Holiday Lane
La Pine, Oregon 97739

DANIEL E. VAN VACTOR, ESQ.
VAN VACTOR, KOLB & FRANCIS
P. O. Box 343
Bend, Oregon 97701

C. W. REEVE
Seed Road
La Pine, Oregon 97739

Attachment "A"

(a) An impervious layer is less than thirty-six (36) inches below the surface of the ground. A twelve (12) inch separation must be maintained between the impervious layer and the bottom point of the effective sidewall of the disposal trench.

(b) A restrictive layer is less than thirty (30) inches below the surface of the ground. A six (6) inch separation must be maintained between the restrictive layer & the bottom point of the effective sidewall of the disposal trench.

(c) An area where the highest level attained by a permanent water table or permanently perched water table will be within four (4) feet of the bottom point of the effective sidewall of the disposal trench, except in defined areas that have been the subject of a groundwater study and where the Department has determined that degradation of groundwater supplies or health hazards would not be caused. Diagram 7A shows an acceptable design where such water table will be five (5) feet or more but less than five and one-half (5-1/2) feet below the surface of the ground. Water table levels may be predicted during periods of dry weather utilizing one of the following criteria:

(A) Where water movement is laterally restricted, mottling consisting of various shades of gray and red specks, splotches, and/or tongues throughout the soil caused by alternated saturation and desiccation, or dark, highly organic layers of grayish low chroma layers may be found at the highest seasonal level of the water table. Some soils including, but not limited to, certain salt affected soils and low iron bearing soils may not show signs of mottling even though they become saturated under laterally restrictive conditions for extended periods of time.

(B) Where water movement is laterally unrestricted, and mottling is not evident, predictions of the highest seasonal level of the water table where possible shall be based on past observations by the Director or his authorized representative. If such observations have not been made, or are not conclusive, application for a permit shall be denied until appropriate observations can be performed as prescribed in subsection (1)(c)(C) of this section.

(C) Where the Department or its authorized representatives require, water level investigations shall be performed during:

(i) The winter months where mottling is present, and exact confirmation of water level is desired, or where water levels are expected, and no mottling is present or where parent material or other factors may be causing mottling.

(ii) July, August, and September in irrigated areas where elevated ground water levels are expected or where parent materials or other factors may be causing mottling.

(iii) Periods of runoff in artificially drained areas which may be subject to influence from runoff.

(d) An area where the highest level attained by a temporarily perched water table would be less than twenty-four (24) inches below the surface of the ground or would cause temporarily perched ground water to come in contact with the absorption facility's effective sidewall. Water table levels may be predicted during periods of dry weather utilizing criteria set forth in subsections (1)(c)(A), (B), and (C) of this section.

(e) Slope exceeds twenty-five (25) percent or the values in Tabel 4A.

(f) Where coarse grain material is located within thirty-six (36) inches of the natural ground surface and the installation and utilization of a disposal trench would cause degradation of the quality of public waters. A minimum separation distance of eighteen (18) inches shall be maintained between coarse grained materials and the bottom of the trench. Diagram 7A shows an acceptable design where coarse grain material is thirty (30) or more inches but less than thirty-six (36) inches below the natural ground surface.

(g) An area where an accumulation of surface water will occur for a period of two (2) consecutive weeks or longer.

(h) An area that has been filled or the soil has been modified, except in subdivisions or lots approved by the appropriate governing body prior to January 1, 1974, lots or parcels in rural zoning classifications designated by the county and approved by the Department, or individual lots for repair of existing systems, provided in the case of the aforesaid subdivisions or lots approved prior to January 1, 1974, the native soil and fill material shall consist of weakly structured soils such as sand, sandy loam, or loamy sand.

STATE OF OREGON

INTEROFFICE MEMO

9-21-79
EQC file

TO: WHYoung

DATE: 9-14-79

FROM: Carol Splettstaszer

SUBJECT: September 21 EQC Meeting

1. The attached letter on field burning has been forwarded to the Commission for their information.

2. Agenda Item K(2), appeal of subsurface variance decision by Darlene Steigleder has been postponed until a later meeting because Ms. Steigleder's attorney is unable to be present on September 21.

Carol

81-125-1379

LINN COUNTY FARM BUREAU
33254 Hwy. 99-E
Tangent, Oregon 97389

September 12, 1979

Honorable Joe Richards
Chairman, Environmental Quality Commission
P. O. Box 1760
Portland, Oregon 97207

Re: Permanent Revision of Rules Regulating Agricultural Open Field Burning, Sept. 21 EQC Hearing

Dear Chairman Richards:

The Linn County Farm Bureau requests that the EQC modify the proposed permanent rule "to prohibit burning of south priority acreages upwind of Eugene/Springfield" so as to allow grass seed fields adjoining Interstate Highway 5 on the west, Highway 99 on the west, Highway 228 on the south, Highway 34 on the south, and Highway 20 on the south to be burned when wind conditions will keep the smoke off these vital highways.

The temporary rule adopted by the EQC on August 9 of this year forces growers with fields situated as described above to be permanently banned from field burning, or to burn these fields under the most hazardous conditions possible. The rule completely ignores the safety of citizens traveling these highways, and it discriminates against seed growers having property adjoining these highways as described.

A relatively small amount of acreage is involved, but it is important to the livelihood of the growers and land owners who farm and own this land. Prior to this year and 1978, all of the south valley priority acreage was burned with northerly winds and the DEQ record on air pollution showed that the Eugene-Springfield area had less smoke from field burning than it did from slash burning. The DEQ record on field burning smoke in the Eugene-Springfield area over the past five years was good enough to convince the Oregon Legislature to increase acreage limitations in 1975, 1977, and 1979. In these years, <u>all</u> of the priority acreage in the south valley was burned with northerly winds.

The Linn County Farm Bureau feels that a portion of this priority acreage could be burned with northerly winds without seriously affecting the Eugene-Springfield area, if only a very small acreage were released each day, starting early in the season when fields were very dry. This would then allow growers to burn their fields without putting smoke on these congested highways.

The Linn County Farm Bureau would appreciate your bringing this letter to the attention of the other members of the EQC before your September 21 meeting.

Sincerely,

John G. Swatzka

John G. Swatzka
Chairman, Field Burning Cmte.
Linn Co. Farm Bureau

cc: Roy Grimes, president, Linn Co. Farm Bureau, Harrisburg
Scott Freeburn, DEQ Field Burning Office, Eugene

NORTHWEST PULP AND PAPER ASSOCIATION

TESTIMONY ON

THE STATE OF OREGON DEPARTMENT OF
ENVIRONMENTAL QUALITY PROPOSED REVISIONS
TO THE WATER QUALITY STANDARDS

September 21, 1979

INTRODUCTION

The following testimony is presented by the NWPPA in critique of changes proposed by the Oregon Department of Environmental Quality (DEQ) to the Oregon State Water Quality Standards. The NWPPA has taken the opportunity to comment on two previous occasions while the proposed revisions were being developed. Our comments today reflect two key issues which we have previously raised but which we feel were not adequately presented and thus addressed by the DEQ in the two previous comment periods. We would like to take this occasion to provide further illustration of these two issues in order to allow the same full consideration which has been exhibited by the DEQ toward other issues.

The NWPPA represents ten (10) pulp and paper mills in the State of Oregon and the testimony offered today reflects a consensus of these mills.

BACKGROUND CONDITIONS

Previous NWPPA testimony raised an issue of general application to all of the Water Quality Standards for Oregon river basins. This issue relates to the manner in which background conditions are taken into account for the purpose of applying the standards.

OAR 340-41 contains the following language which is applicable to each of the Oregon river basins: "Where the natural water quality parameters of waters of the _____ Basin are outside the numerical limits of the above assigned

water quality standards, the natural water quality shall be the Standard." This language appears also in regard to the toxic substances standard on page 18 of the Memorandum for Agenda Item No. M, dated September 21, 1979.

In effect, this provision allows natural fluctuations to be taken into account when unusual water quality conditions occur. For example, the proposed copper Standard is 0.005 mg/liter. If natural background conditions elevate the background conditions to 0.006 mg/liter, then the background level of 0.006 mg/liter becomes the Standard.

A problem arises when the standards are varied as allowed by this phrase while still accommodating the discharges which would otherwise be allowed in times of more normal water quality. The following example illustrates the problem.

Assume a given body of water with a dissolved oxygen Standard of 6.0 mg/liter and natural conditions generally create background levels of 7.0 mg/liter. Assume also that there are some industries whose discharges use up oxygen and generally depress natural conditions by 0.2 mg/liter. During normal times, the industrial dischargers would not cause a violation of the standards. Now assume abnormal conditions have caused the dissolved oxygen levels to drop to 5.0 mg/liter. The Standard would also be dropped to 5.0 mg/liter. The same industrial discharges which caused a 0.2 mg/liter depression in dissolved oxygen levels would now technically create a violation of the Standard.

Thus as a matter of consistency it would appear logical to allow a slight degradation of the dissolved oxygen content of the natural water condition in order to prevent placing municipal and industrial dischargers in an untenable position. That is from either having to shut down or having to apply for a variance when they are operating within their NPDES permits.

This distinction in language will be of significance when a facility may choose to request a waiver from one of the non-toxic pollutant guideline requirements. Under the Federal Clean Water Act the facility would not be eligible for any waivers if there is a violation of the Water Quality Standard even under the variance process.

Washington State addresses the problem in regard to the dissolved oxygen standard by allowing natural dissolved oxygen levels to be degraded by up to 0.2 mg/liter by "man-caused" activities. Such an approach would be desirable in Oregon also because of mutual concerns and consistency of enforcement on the Columbia River.

The concept of a minor variance for man-made activities is found in the Oregon Water Quality Standard which pertains to temperature. The temperature standard specifies how much of an increase will be allowed due to a single source or all sources, as the case may be, when a given temperature is exceeded. Also this approach is found in the turbidity standard which allows a percent increase in natural stream turbidities.

USE OF EPA'S "QUALITY CRITERIA FOR WATER, 1976"

In prior NWPPA testimony, it was suggested that adoption of toxic substances standards referencing the EPA's "Quality Criteria for Water - 1976" (commonly referred to as the Red Book) may exceed the intended use of the document. We would like to provide additional information from the Federal Clean Water Act and EPA's policy statements for your consideration.

Section 304 (a) of the Federal Clean Water Act states:

"(1) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall develop and publish, within one year after the date of enactment of this title (and from time to time thereafter revise) criteria for water quality accurately reflecting the latest scientific knowledge .....

(3) Such criteria and information and revisions thereof shall be issued to the States and shall be published in the Federal Register and otherwise made available to the public.

The above language requires EPA to develop criteria and "issue" them to the States for their use in developing their Standards. The term "issue", as used in the Clean Water Act, merely means that EPA is to pass the information along to the States. It does not connote any formal issuance in the sense of a rule or order. This is further evidenced by the fact that the Red Book was never the subject of any formal adoption proceeding in the Federal Register. (On July 10, 1978, 43 F.R. 29588 the criteria were merely published with a notice of their availability.) To our knowledge, the public has never had the opportunity to review and comment on the document in terms of its adequacy as a basis for establishing standards.

A separate section of the Clean Water Act, Section 303, requires that state standards be consistent with the applicable requirements of the Act. Nowhere does the Act make the Water Quality Criteria of Section 304 mandatory to the States. The criteria in the Red Book are merely suggestions which Congress requires that EPA make available to the States.

In EPA's preface to the Red Book in a section titled The Philosophy of Quality Criteria, a distinction is noted between "criterion" and "standards", as follows:

> "The word 'criterion' should not be used interchangeably with, or as a synonym for, the word 'standard'. The word 'criterion' represents a constituent concentration or level associated with a degree of environmental effect upon which scientific judgement may be based..... On the other hand a standard connotes a legal entity for a particular reach of waterway or for an effluent..... Quality criteria have been designed to provide long-term protection. Thus, they may provide a basis for effluent standards, but it is not intended that criteria values become effluent standards. (emphasis added)."

In prior NWPPA testimony, we have provided other similar quotations from EPA's foreward material to the Red Book. Nowhere has the DEQ publically come to grips with the fact that the EPA's water quality criteria are not made

mandatory under the Federal Clean Water Act, or by any formal rulemaking process, and that the Red Book itself specifically disavows such a result. Clearly, greater consideration should be given to this issue before the DEQ recommends blanket adoption of the pesticides and organics criteria of the Red Book as part of its Toxic Substances Standard.

MSD METROPOLITAN SERVICE DISTRICT
527 S.W. HALL PORTLAND, OREGON 97201 503/221-1646

August 10, 1979

Mr. Joe B. Richards
P.O. Box 10747
Eugene, Oregon 97401

Dear Joe:

Enclosed is a copy of the testimony I gave at the August 3 hearing. It is my understanding that the Commission will address our concerns at your meeting on Friday, August 31.

The problems this region is facing with sewer funding are significant. I believe my testimony offers some reasonable options for allocation of funds for sewerage expansion. I have also included supporting figures on the availability of pollution control bond funds and the difference in funding levels which would occur with use of those funds.

I hope to have the opportunity to talk with you before the meeting on August 31. Thank you for your consideration of my testimony.

Sincerely,

Rick

Rick Gustafson
Executive Officer

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MSD METROPOLITAN SERVICE DISTRICT
527 S.W. HALL PORTLAND, OREGON 97201 503/221-1646

Statement of Rick Gustafson, Executive Officer
before the Environmental Quality Commission

August 3, 1979

MSD PROPOSED POLICY FOR ALLOCATION OF SEWER FUNDING

Recently, the Metropolitan Service District has been embroiled in controversy over the proposed Urban Growth Boundary. In my opinion, no matter where the Boundary is drawn, sewer availability is currently the biggest constraint to urban development.

The Tri-Cities area (Oregon City, Gladstone and West Linn) recently held a lottery for the last sewer hookups available. Until there is additional sewer capacity in that area, there will be no new development -- and yet, there is land available within the Urban Growth Boundary.

The East County area is coming closer and closer to reaching its sewer capacity. Inverness is estimated to reach capacity in 1981. Gresham and Troutdale are constructing interim expansions which are expected to extend Troutdale's capacity to 1982 and Gresham's capacity to about the same time.

Other communities within the MSD face nearly the same situation. In virtually every area, sewer capacity represents the major limit to growth. And just at this time of greater need for more sewer capacity to handle our rapid growth, federal funds for sewerage projects are being cut.

Sewer funding is a significant problem, and the state plays a key role in allocation of funds. The special Task Force of

the MSD Water Resources Policy Alternatives Committee submitted a list of recommendations to this Commission in June. The Task Force is very concerned about the sewer crisis we are facing in this region and has asked me to address you today to expand on some of their recommendations.

Recommendation 1

Limit any jurisdiction to no more than 20% of the total project grant funds available in the state in any one year.

Without the proposed 20% limitation, the $49.3 million in EPA funds for 1980 would fund only four (4) of the top priority projects.

With the 20% limitation we could expand the number of projects funded to thirteen (13).

Recommendation 2

Pollution control bond funds should be utilized to fund projects that exceed the 20% limitation. The available state bond funds could be used to complete even more projects.

It is important to have conservative criteria for use of bond funds for sewer projects. We recognize that sewers are not the only need for pollution control bond funds, but the need is so great throughout the state, we have to go to the well.

Recommendation 3

We recommend phased construction projects eliminating tertiary treatment stages, at least temporarily, in order to provide more primary and secondary facilities.

For example, it may be possible to separate plant repairs from other improvements such as infiltration/inflow correction, new process units or efficiency improvements, and fund repair projects in 1980 followed by the remaining improvements in later years.

DEQ staff estimates that just postponing infiltration/inflow correction from the first twenty (20) projects on the list would save $500,000 to $1 million. Careful studies of the cost-effectiveness of this phased construction would have to be done, but it should be seriously considered.

We also recommend terminating eligibility for funding collection sewer construction.

It is not an easy situation. All areas of the state are facing significant pressures. The Environmental Quality Commission plays a key role in programming future sewer capacities, and I would like to note again that the MSD believes sewer capacity is the major constraint to future growth in this region.

These recommendations will help to more fairly address the needs of the entire state while still allowing communities with particularly costly projects to proceed.

I urge you to consider the Task Force recommendations.

CW:pj

MSD WATER RESOURCES POLICY ALTERNATIVES COMMITTEE
RECOMMENDATIONS ON THE STATE'S SEWERAGE WORKS CONSTRUCTION GRANTS PROGRAM

June 22, 1979

On June 21, 1979, a special Task Force of the MSD Water Resources Policy Alternatives Committee met and formulated recommendations on the State's Sewerage Works Construction Grants Program. The Task Force consisted of the following persons: Dave Abraham, Clackamas County; Oliver Domreis, Multnomah County; Bill Cameron, Gresham; Tom Sandwick, Oak Lodge Sanitary District; George Schroeder, Soil and Water Conservation District; Bob Gilbert, DEQ; Terry Waldele, MSD; Duane Lee, Troutdale (Consultant); John Kaye, Portland (representing Cowles Mallory).

The recommendations are structured according to a set of issue papers prepared by the Oregon Department of Environmental Quality staff and circulated on May 25, 1979. The recommendations are as follows:

RECOMMENDATIONS

1. The EPA Criteria for future growth should be adopted by DEQ with the exception that sewage treatment plants and pumping stations should be built at the lower end of the range of growth periods permitted by the EPA criteria.

2. There is no need for DEQ to assist local jurisdictions in developing funding programs for growth capacity, but DEQ should use criteria that encourage financing plans in the state's prioritization system.

3. The Task Force endorses the policy of using federal grants for agencies under regulatory action (a current priority criteria); the Task Force recognizes that DEQ's responsibility is to concern itself with the most serious water pollution problems. However, at the same time, the Task Force opposes the funding of projects that result from the lack of action by local government.

4. The Task Force recommends that beginning with the 1980 allocation, no one jurisdiction shall receive more than 20 percent of the total project grant funds available for the state in any single fiscal year; and further recommends that it is imperative that a state program be developed to supplement the federal funding program.

5. The Task Force supports phased construction projects and some alternatives for financing phases such as the following:

   a. postpone several components of the treatment plant projects for tertiary; that is, nutrient removal, polishing ponds, mixed media filtration, etc.

b. terminate eligibility for funding collection sewer construction.

6. The Task Force recommends that economic considerations (other than a community's ability to pay) should not be made part of the priority system.

7. The Task Force recommends that one to three percent of the annual grant fund be available for Step 1 grants in any year and that the remaining funds be managed in such a way as to insure phasing of projects into Step 3 with minimal delays.

These recommendations were passed by unanimous vote of the Task Force.

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ESTIMATED FISCAL IMPACT OF MSD PROPOSED POLICY
FOR
ALLOCATION OF SEWER FUNDING

August 8, 1979

1. A 20% limitation would expand the number of projects funded. Of Oregon's $49.3 million FY 1980 allocation of federal water pollution control funds, 79% or $38,950,000 is available for municipal sewerage works in the state. Limiting FY 1980 grants to 20 percent of this amount for any jurisdiction would mean grants could not exceed $7.79 million per jurisdicton. Under this policy, eleven (11) project elements (phases) in the "Extended Priority List for FY 1980 and Beyond" could receive funding. Seven (7) out of the nine (9) respective jurisdictions could receive grants large enough to completely fund their needs as projected by DEQ for FY 1980 and 1981.

2. By postponing the severable components of the first 20 projects on the list, up to $1,000,000 could be saved and made available for other projects.

3. With a 20 percent grant limitation, and postponement of severable components, up to thirteen (13) project elements could be funded.

4. If pollution control bond funds are used to supplement federal funds, the number of project elements funded can be expanded to sixty (60). If the $29.5 million currently in the bond fund were applied to 30 percent grants (the statutory maximum amount), a total of $47.9 million would be available for projects in FY 1980 and beyond. Thirteen (13) project elements could be funded with federal grants and at least forty-seven (47) project elements could be funded at the 30 percent level with state grants.

5. If $60 million in state bonds were sold, an additional $20 million in funds would be available for 30 percent grants or for loans. These funds could be used for loans on the sixty (60) projects referred to above or for additional projects throughout the state.

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Item E

① Morgrie Raymond
204 Maple
no noise complaint, dust

② Ethel Kissell
218 Maple

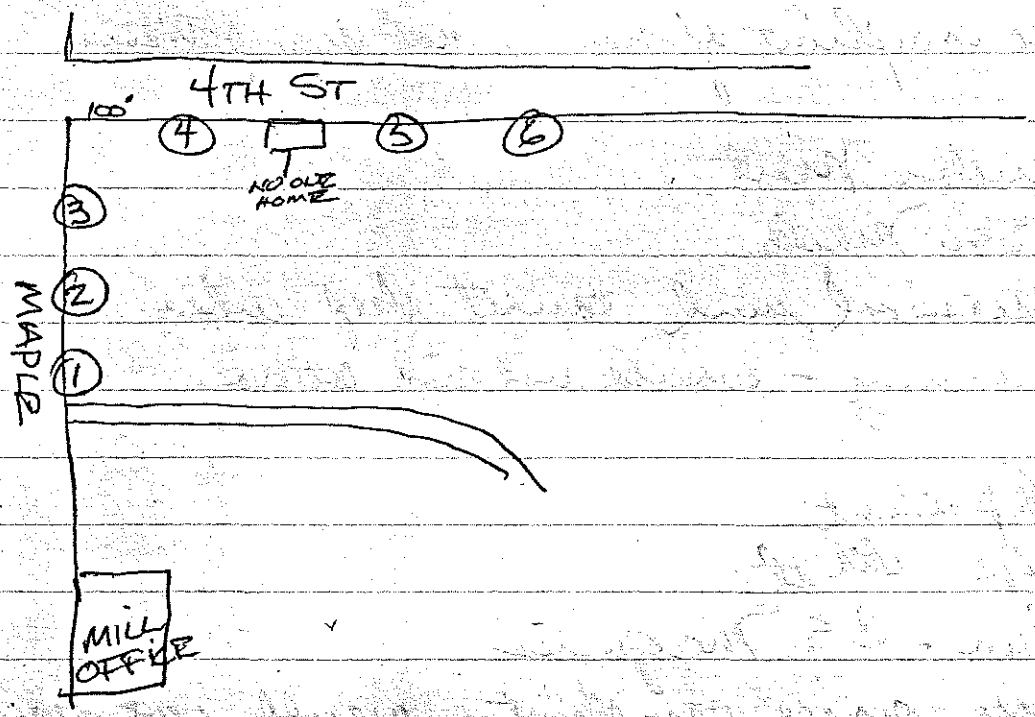
no complaint of noise, not sign petition

③ Milton Mast
230 Maple
occasional mud, cannot sleep when mill not running - would not sign petition

④ Apartment
436 4th st
Ann + C.S. McGuires
no noise complaint, would not sign petition

⑤ Velma Porter (60's)
512½ 4 st
no noise complaint, lived there for long time before original owner.

⑥ B. Ellis
520 4th st
no noise complaint


4TH ST
100'
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NO OLD HOME
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1
MAPLE
MILL OFFICE

August 21, 1979

Board of County Commissioners
Courthouse
Bend, Oregon

Dear Commissioners:

The purpose of this letter is to clarify some basic procedural facts involving development approvals under county ordinances while I was County Planning Director. If I were still in that position I would advise anyone as follows as I have done many times in the past.

In the development of the Subdivision Ordinance, the Citizens Advisory Committee reviewed various proposals on how to handle preliminary and final plat approvals which includes Planned Unit Developments. It was recognized that some time passes between these approvals and it is during this time that a subdivider must meet any conditions of approval placed on the preliminary plat of a subdivision on Planned Unit Development. The conditions of approval include the recommendations of the Subdivision Review Committee, the city within an urban area and the requirements of any state agencies that are in effect at that time.

The most important aspect of this procedure is the fact that meeting the conditions of preliminary plat approval constitutes final plat approval subject to the necessary certifications, posting of bonds, payment of taxes, etc. The background philosophy behind this procedure is that the public is protected by requiring the developer to meet the conditions of approval and in turn, the developer is assured that his investments and commitments are protected from the retroactive application of any new or changing rules.

Respectfully Submitted,

Lorin Morgan

Lorin Morgan, Planning Consultant

cc: Sunrise Village

February 27, 1979

Board of Commissioners
Deschutes County
Bend, Oregon

Re: Sunrise Village sanitation district

Dear Commissioners:

I was a Deschutes County Commissioner during the period of time Sunrise Village underwent the legal planning processes of zone changes to full service planned unit development and preliminary and recorded plat approvals.

From the inception of the Sunrise Village development it was necessary for the developers to plan and give assurances for the providing of its own water supply and sewage disposal as neither facility was available from any other source.

The formation of a sanitation district to maintain and operate Sunrise Village's approved community sewer system can only be viewed as a practical, natural, and intended consequence of the developments approvals.

For these reasons and in the interest of preserving the integrity of County planning decisions, I strongly support the formation of a sanitary district for Sunrise Village.

Sincerely,

Bob Montgomery

Bob Montgomery

August 16, 1979

Board of Commissioners
Deschutes County
Bend, OR 97701

Re: Sunrise Village sanitation district

Dear Commissioners:

The Sunrise Village development was planned and approved to have its own community sewer system while I was a Deschutes County Commissioner. I consider the formation of a sanitation district for the developments sewer system to be a desirable, operative component to the systems approvals.

Sincerley,

Donald Grubb

cc: Tim Ward
Sunrise Village

Crop Science Dept.
EXTENSION SERVICE

Oregon State University

(503) 754-2771
Corvallis, Oregon 97331

August 30, 1979

Scott Freeburn
Coordinator
Field Burning Program
Department of Environmental Quality
16 Oakway Mall
Eugene, Oregon 97401

Dear Scott:

I have two comments regarding the rules regulating open field burning in the Willamette Valley to be considered by the Environmental Quality Commission on August 31.

The agronomic value of strip lighting on seed crops has not been fully evaluated. I am concerned about the making of rules that require restrictive techniques in field sanitation. Certainly strip lighting should not be extended to include perennial seed crops.

While making rules, the Commission should consider the practical problems presented by requireing restrictive lighting techniques. These rules may be applicable in rectangular fields oriented properly to prevailing winds. Many fields are not rectangular, or portions of a field may be burned under circumstances that growers cannot comply. Ample provision in the rules should be made for these situations.

Sincerely,

Harold Youngberg
Extension Agronomist

ern

bcc: Dave Nelson, Oregon Seed Council

C O M M E N T S

208 PLAN FOR THE IZEE AREA
UPPER SOUTH FORK OF THE JOHN DAY RIVER

MR. CHAIRMAN---MEMBERS OF THE COMMISSION

MY NAME IS CHARLES D. BAILEY. I RESIDE AT 911 WILLIAMS AVE. TILLAMOOK, OREGON. I AM PRESENTLY EMPLOYED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION.

IT IS A PLEASURE FOR ME TO BE HERE AND BE A PART OF A MOST IMPORTANT STEP IN A PROGRAM OF THIS MAGNITUDE, MADE POSSIBLE BY PUBLIC LAW 92500, THE CLEAN WATER ACT. AS AMENDED (92217).

MUCH EFFORT, OVER SEVERAL MONTHS, BY LANDOWNERS, LOCAL SOIL AND WATER CONSERVATION DISTRICT BOARD MEMBERS, PROFESSIONAL PEOPLE FROM SEVERAL OF THE AGENCIES, AND OUR OWN SOIL AND WATER CONSERVATION COMMISSION STAFF, HAS BEEN EXPENDED ON RESEARCH, ON SITE INVESTIGATIONS, PLANNING, DISCUSSIONS, TRAVEL, AND CLERICAL WORK, ALL FOR THE PURPOSE OF DEVELOPING THE PROPER 208 WATER QUALITY MANAGEMENT PLAN FOR THE IZEE AREA ON THE UPPER SOUTH FORK OF THE JOHN DAY RIVER.

I FEEL THIS PROGRAM, IF SUCCESSFUL, WOULD HAVE A TREMENDOUS BENEFICIAL IMPACT ON THE STATE AS A WHOLE. IT ALSO WILL, NO DOUBT, BE USED BY OTHER STATES AS A GUIDE FOR THEM TO HELP ALLEVIATE A NON POINT SOURCE POLLUTION PROBLEM THAT THEY MAY HAVE.

THE BENEFITS OF A PROGRAM SUCH AS THIS ARE FAR REACHING. NOT ONLY BY THE USE OF BEST MANAGEMENT PRACTICES, WILL IT PROTECT AND CONSERVE OUR AGRICULTURE LANDS, REDUCE THE SEDIMENT LOAD IN THE STREAMS, GREATLY ENHANCE THE FISH RUNS IN THE COLUMBIA AND IT'S TRIBUTARIES, BUT IT WILL GIVE ALL THOSE WHO HAVE BEEN ACTIVELY ENGAGED IN SEEING THIS PROGRAM THROUGH TO COMPLETION, A NEW LEASE ON LIFE. THEY WILL HAVE REACHED A MILESTONE IN THEIR LIFE. THEY WILL TRULY BE ABLE TO HAND DOWN TO THE NEXT GENERATION A SET OF PROVEN BEST MANAGEMENT PRACTICES FOR TRUE SOIL AND WATER CONSERVATION.

MILLIONS OF ACRES OF AGRICULTURE LAND HAS BEEN LOST BECAUSE WE HAVE NEVER LEARNED OR BEEN ABLE TO IMPLEMENT PROPER MEANS OF CONTROLLING EROSION. THE DEVESTATING EFFECTS OF THIS LOSS IS FELT THROUGHOUT THE WORLD.

AN AGRICULTURE INFORMATION BULLITIN NO. 99 POINTS OUT THE SERIOUSNESS OF THIS GREAT LOSS SINCE THE YEAR OF 5000 B.C. AS REPORTED BY W.C. LOWDERMILK, A FORMER ASSISTANT CHIEF OF THE SOIL CONSERVATION SERVICE. THIS BULLITIN IS VERY INTERESTING AND INFORMATIVE; I'D LIKE TO LEAVE A COUPLE OF THEM WITH YOU.

THE JOHN DAY RIVER BASIN IS THE THIRD LARGEST BASIN IN OUR STATE. OUR PRIME CONCERN AT THIS TIME COVERS 182,000 ACRES OF THIS AREA.

THE APPLICATION, THE EXIBITS AND THE SYNOPSIS THAT YOU HAVE BEFORE YOU POINT OUT RATHER CLEARLY OUR PURPOSE. IT ALSO INDICATES THE DEGREE OF COOPERATION BETWEEN AGENCIES, DISTRICTS, THE COMMISSION, AND INDIVIDUALS.

A FAIR AND ADEQUATE ASSESSMENT OF COSTS, BENEFITS AND TIME FRAME ARE INDICATED.

THE PEOPLE THAT PUT THIS APPLICATION TOGETHER TRIED TO INCLUDE ALL THE INFORMATION CONCERNING THE PROJECT. THEIR HOPE WAS TO MAKE IT READABLE AND UNDERSTANDABLE. I FEEL THEY HAVE DONE A GOOD JOB.

I REALIZE THAT THIS IS A TREMONDOUS UNDERTAKING; THAT IT WILL COST A LOT OF MONEY. BUT WE MUST REMEMBER THE BENEFITS WILL BE LONG LASTING, NOT JUST FOR US, BUT FOR ALL MANKIND; EVEN TO INCLUDE FISH AND WILDLIFE.

I VIEW THIS AS A TEST CASE, TO SEE IF IT IS OR IF IT IS NOT POSSIBLE TO CONTROL THE MANY TYPES OF EROSION THAT HAS PLAQUED US ALL FOR SO LONG. WITH THE TECHNOLOGY, MANPOWER, AND FUNDING WE HAVE AVAILABLE TO US, I THINK WE CAN. I THANK YOU FOR HEARING ME.

I HOPE YOU CAN SEE THIS PROJECT AS WARRANTING A FAVORABLE DECISION.

Chas D Bailey
ass't Dir.
S.S.W.C.C.

9-21-79
EQC file

AUDUBON SOCIETY OF PORTLAND

A Branch of National Audubon Society

PHONE 292-6855 • 5151 NORTHWEST CORNELL ROAD • PORTLAND, OREGON 97210

September 21, 1979

Dear Mr. Somers,

I would like to respond to some questions you raised during testimony today concerning log storage in Coos Bay estuary. As you no doubt noticed, I was somewhat nervous during my testimony and was unable to respond to your queries as articulately as I would have liked. I hope you will accept this written response into the record.

You asked me if I had any data available that would indicate numbers of birds present at the turn of the century when rivers such as the Snake were literally choked with logs that had to be blasted out to free the jams. My response is that that question is irrelevant inasmuch as the issue before you today is the impact of log storage on estuaries, not free-running rivers. I will stand by my comment offered during testimony that any impact on our estuaries that is judged to be detrimental to those ecosystems is unacceptable for any reason. I would also like to restate that any activity that reduces those organisms at the bottom of the food "web"/pyramid will certainly have an impact on higher order organisms such as shore birds. The most logical response, as I attempted to illustrate, to your theoretical question is that if the logs you spoke of were present in estuaries in the numbers/concentration you cited there would have been few or no birds present that depended on estuarine invertebrates and other food sources.

I would also like to respond to the Port of Astoria's comments that I dismissed the potential economic impacts out of hand. I addressed this issue in my written testimony. We all must bear the environmental costs of preserving a liveable environment. As a consumer, I am willing to pay my fair share of those commodities that have a higher price tag due to environmental constraints imposed in their production. I do not like higher prices any more than you or the director of the Port of Astoria (especially on a teacher's salary), but am willing to alter my lifestyle when necessary to accommodate environmental protection. By the way I rode my bicycle to the hearing, back home to type this, and back downtown to deliver it this afternoon.

I really appreciate the opportunity to testify today and commend you all on the good work you are doing. I am impressed with the obvious diligence that went into your recommendations and want you to know that we realize the complexity of this and other issues that you must deal with...keep up the good work.

Sincerely,

Mike Houck

Mike Houck, Board of Directors

Management Services Div.
Dept. of Environmental Quality
RECEIVED
SEP 24 1979

cc Burgess, Densmore, Richards

Department of Environmental Quality

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5891

EQC FILE — Report prepared for the Director By George Lee

STATE POLLUTION CONTROL BOND FUND

A Report On Its Use To Supplement Federal Fund Grant Assistance On Eligible Local Government Sewerage System Construction Projects,

For the EQC Breakfast Meeting: 21 September 1979

STATE POLLUTION CONTROL BOND FUNDS AVAILABLE

The beginning balance in the Fund as of 1 July 1979:	$23,817,142
Projected sale of additional General Obligation Bonds during the 1979-1981 biennium:	+ 60,000,000
Estimated aid to local governments during the 1979-1981 biennium:	- 20,377,000
TOTAL Available for Additional Assistance:	$63,440,142

FUNDS NEEDED TO SUPPLEMENT FEDERAL GRANTS

Federal Fiscal Year	Estimated 75% Federal Grant Assistance on eligible sewerage works projects	Estimated Oregon Share	Projected Shortfall
1980	$60,038,000	$32,190,000*	$27,848,000
1981	112,505,000	If we get $32 million	108,353,000
1982	67,711,000		
1983	12,633,000		
1984	4,372,000		
TOTAL	$257,259,000		

*The $32,190,000 represents the amount of Federal Funds available for general sewerage works construction projects out of the estimated $43.5 million share of the national pot of $3.4 billion.

MSD SUGGESTED USE OF THE STATE POLLUTION CONTROL BOND FUND

The Metropolitan Service District (MSD) at the August 3rd priority list criteria public hearing suggested funding "to 30 percent grants (the statutory maximum amount)". That suggestion was reinforced in a letter from Rick Gustafson to members of the EQC on August 9, 1979, in advance of the Commission meeting of August 31, 1979.

GRANTS AND LOANS FROM THE STATE FUND

ORS 468.220 permits 30% grants with prior Ways and Means or Emergency Board approval and the acquisition of 70% General Obligation Bonds or other obligations.

BACKGROUND ON GRANTS FROM THE STATE FUND

. From the DEQ Budget Report by the Joint Committee on Ways and Means, 59th Legislative Assembly dated May 20, 1977, Subcommittee No. 5, Representative Rick Gustafson, Chairman:

Debt Service

The Debt Service budget requires the agency to manage the Pollution Control Bond Sinking Fund in a manner which allocates responsibility to the state and local governments on a current basis.

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page 5

Before that Subcommittee, the agency asked for $4.7 million in General Funds at a time when the analysts' practice was to recommend using all Sinking Fund monies first and then asking for General Funds. We urged them to begin paying as we go to cover the cost of their grants and not mortgaging an uncertain future.

Pollution Control Bond Fund

The Subcommittee approved the expenditure of $22,453,153 as recommended by the Governor to provide loan funds to local governments for the construction of sewage treatment facilities. The Subcommittee discussed the issues surrounding the use of the Pollution Control Bond Fund for hardship construction grants and adopted an amendment to abolish use of the Fund for the hardship grant program. If a hardship situation arises a direct General Fund appropriation is contemplated.

The Subcommittee approved expenditures totaling $1,325,000 for construction of the following Solid Waste projects during the biennium:

Clatsop/Tillamook	$ 500,000
Deschutes County	150,000
Klamath County	150,000
Sherman County	25,000
Small and/or supplemental projects under $50,000	500,000
Total	$1,325,000

The Subcommittee deleted $24,735,000 included in the Governor's recommended budget for additional Solid Waste projects beyond those approved as supporting information was not complete. Authority to allocate funds for additional projects beyond those specifically approved in this budget must be obtained from the legislative review agency.

The Subcommittee adopted an amendment to ORS 468.220 to require that grants made for planning of solid waste projects shall be included as part of the total project cost when the project is implemented. This provision does not apply to grants issued prior to January 1, 1974 or to grants where the agency required repayment by contractual agreement.

HB 5028
page 6

Senate Amendments

HB 5028 was amended in committee prior to its referral to the Senate. The amendments clarify the committee's intention regarding the abolition of the so-called hardship grant provision allowing the agency to make these grants from the Pollution Control Bond Fund. Attention is directed to page 6, 1st paragraph which was modified to reflect the change.

HB 5028
page 8

. From the DEQ Budget Report by the Joint Committee on Ways and Means, 60th Legislative Assembly dated June 12, 1979, Subcommittee No. 5, Senator Fred Heard, Chairperson:

POLLUTION CONTROL BOND FUND

The Subcommittee appropriated $4,623,000 to the Emergency Board to be released to local governments for waste water treatment hardship grants and solid waste grants in lieu of Pollution Control Bond Fund revenues. The result of this action is to forestall future General Fund liability for Debt Service requirements of the Pollution Control Bond Fund when the availability of General Fund revenues may be more constrained.

The Subcommittee reviewed the potential shortfall of Federal Funds to local governments for waste water treatment facilities construction. To alleviate the immediate problem, the Subcommittee authorized the Department to sell Pollution Control Bonds up to the $160 million statutory limit. Recognizing the possibility of continuing shortfalls in Federal Funds construction grants and the constraints upon the state's financial resources, the Department should inform local governments of the need to develop other alternatives. The Subcommittee also instructed the Department to solicit the advice of the committee formed by the League of Oregon Cities representing a cross section of cities, to assure an equitable distribution of the impact of the federal funding shortfall.

1977-79 BIENNIUM

Pollution Control Bond Fund

The Subcommittee approved the agency's request to fund City of Hood River and Crook and Curry counties' solid waste projects amounting to $236,369. Rather than financing these projects from bond revenues, the Subcommittee approved a General Fund appropriation consistent with its desire to forestall future debt service requirements when the limits on the General Fund may be more severe.

SUMMATION AND EVALUATIONS

. The Pollution Control Bond Fund can be applied to 30 percent grants and 70 percent loans. (ORS 468.220).

. An estimated $63 million could be made available during the current 1979-1981 biennium to assist local projects to levels not contemplated in our current budget.

. The first year supplement needed if the State gets to use the rumored $32,190,000 in Federal Funds is $27.8 million. If 1981 brings the same Federal share or less, the supplement needed will be $108.4 million or more.

. The Legislature over the last several sessions has clearly moved toward eliminating all grants out of the fund.

. Ways and Means has shown they mean to pay current obligations out of current revenues and not burden future legislatures with future problems created today.

. The question of increasing the loan portion from our current 25% to up to the permissible 70% level has not been addressed head-on by any of the past Ways and Means Subcommittees.

. Increasing the loan percentage increases the State's exposure to local government problems which may arise from their growing debt burden.

. The introduction of legislation to increase the statutory $160,000,000 limit on the Pollution Control bond debt principal that can be outstanding at any one time could have no effect until well into the State 1981-1983 biennium. It would take that long to go through the next legislature, market the State General Obligation Bonds and have the funds available for use.

. The Constitution of Oregon limits issuance of State Pollution Control Bonds to 1% of the True Case Value of all taxable property in the State. Based on figures certified by the Secretary of State in 1978, that 1% is $466 million.

Increasing the statutory amount of debt principal we can have outstanding may not bring us cheaper money. If the probability of repayment decreases, investors will undoubtedly demand higher returns. In this 12 months from July, 1979 to July, 1980 the State will market $1,024.2 million in General Obligation Bonds plus $99.6 million in Revenue Bonds. The General Obligation Bonds alone represent almost 2.2% of the $46.6 billion True Cash Value of the taxable property of the State. That is an immense amount of Oregon paper hitting the streets this year.

- Available approaches to the problem of supplementing Federal Grant Funds include:
  - Using the available Pollution Control Fund money to the extent currently possible for loans.
  - Follow the priority list developed through the approved ranking criteria.
  - Urge the development of other alternatives for acquiring and financing public capital projects by local jurisdictions.

9-21-79
EPC file

VICTOR ATIYEH
GOVERNOR

Department of Environmental Quality

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5365

September 20, 1979

Mr. Kevin Murphy
The Murphy Co.
Myrtle Point Division
06370 Hwy. 126
Florence, OR 97439

Re: NP - Murphy Co., Myrtle Point
CBBO - Coos Co.

Dear Mr. Murphy:

We are writing this letter to confirm the results of our September 18, 1979 meeting to discuss your compliance program. In attendance with you were Glen O'Dell and Tom Arnold from S J & O Consultants and Fred Bolton, Larry Schurr and myself from DEQ.

During our meeting we came to agreement on the compliance program and dates listed in the following table:

Murphy Co., Myrtle Point Compliance Program

Noise Reduction Measure	Engineering Plans to be Submitted by	Construction to be Completed by
Place muffler on air pressure release line, enclosure for lily pad chipper	October 1, 1979	December 1, 1979
Enclosure for bark hog	October 15, 1979	January 15, 1980
Enclosure for debarker building	November 1, 1979	March 1, 1980
Lining for outside conveyors	November 1, 1979	March 1, 1980

A compliance program for the two diesel log loaders was not agreed upon.

Your consultants stated that they had obtained new information that made the retrofit modifications to the two diesel log loaders, mentioned in your July 16, 1979 letter to Bill Young, no longer feasible. Your consultant stated that the proposed modifications, which would include engine enclosure and cooling system modifications,

would render the diesel units unusable during much of the hot weather (90°+) that occurs in Myrtle Point during the summer. We request that you or your consultant submit a copy of this information and your design goals to the Department by September 27, 1979.

Pursuant to this new information, we agreed that you would need to seek out additional opinions on compliance measures for the diesel loaders from other consultants, manufacturers or equipment dealers. To obtain this information, you and your consultant committed to let bids on new diesel log loading equipment, by no later than November 1, 1979. These bids will specify equipment that allows Murphy Co. to operate within allowable DEQ nighttime noise pollution standards. You agreed that this bid process and engineering study would be completed and that Murphy Co. would submit the results of this study to the Department by no later than April 1, 1980. During this time period, our Noise Control staff will also study the feasibility of quieting mobile diesel equipment.

During the study period, Murphy Co. agrees to implement the following interim controls on diesel log loader operation:

1. Diesel powered log yard equipment shall operate within restricted areas of the log yard between 6 am and 8 am and 8 pm to 12:30 am. From 8 am to 8 pm the log loaders will operate on any part of the Murphy Co. log yard.
2. The restricted area shall be the middle and west side of the Murphy Co. property. The diesel loaders may not operate near (or a specified distance from) noise sensitive property on the north and east sides of the Murphy Co. outside of the 8 am to 8 pm hours.
3. Any other administrative or operational controls that will minimize noise impact from the diesel equipment will be implemented voluntarily during this interim period by Murphy Co.

Finally, the Department expressed its concern over the time taken to achieve noise reduction on the diesel log loaders since they presently cause a violation of the daytime noise standards. You stated that because you believe the noise reduction kits on the existing diesel equipment would not be feasible, the Murphy Co. will request another variance from the noise pollution limits. The Department can prepare a variance request for the October 19, 1979 EQC meeting only if a written request for a variance is submitted according to OAR Chapter 340, Section 35-100 and only if detailed information on the feasibility, economic and other pertinent factors is included in the justification for such a variance request. This request and supporting information for the October 1979 EQC variance hearing is due to us on September 27, 1979, along with the other requested information to allow the Department adequate time to prepare a staff report.

The Department understands and concurs that your variance request will ask for a variance from the daytime statistical noise standards for the diesel log loading equipment until July 1, 1980. The variance would require that feasibility or economic report would be made to the EQC at their April, 1980 meeting to inform them whether an extension of the variance beyond July 1, 1980 would be justified or a recommendation would be made to replace the old diesel equipment for those of a new and quieter design. In researching this issue, we reviewed the tapes of the Murphy Co. noise variance hearing at the August 31 EQC meeting; a copy of this tape was obtained by S J & O at their request. Mr. Glen O'Dell questioned the EQC that perhaps there was a need to incorporate the diesel equipment into the variance after some discussion about the diesel equipment being out of compliance with the daytime standards.

The Department believes you should be aware Commission Chairman Joe Richards responded that the variance as stated involves the whole source. He further said, "If other [diesel] equipment is out of compliance and requires enclosing the engines or something to otherwise comply, I don't intend to make a special exclusion for that equipment."

It is because of this statement and concurring remarks by other commissioners that we want to impress upon you the importance of getting timely, detailed new information if the variance request is to be justified.

If I can help you, please contact me at the above number.

Sincerely,

Gerald T. Wilson

Gerald T. Wilson
Noise Program Operation Specialist
Noise Pollution Control

GTW:pw

cc: Environmental Quality Commission
William H. Young
Seton, Johnson & O'Dell w/ enclosure: TC-1 DEQ Tax Credit Request Form
Regional Operations
Southwest Region
Coos Bay Branch Office