PUBLIC NOTICE

Date posted: 2/13/2025

DEQ Requests Comments on Proposed Mt. Hood Meadows Ski Resort Water Quality Permit Renewal

HOW TO PROVIDE PUBLIC COMMENT

Facility name: Meadows Utilities Co., LLC

Permit type: NPDES Domestic Minor

Comments due by: Friday, March 21, 2025 at 5 p.m.

Send written comments to:

By mail: Patty Isaak, Oregon DEQ
800 SE Emigrant Ave, Suite 330, Pendleton, OR 97801

By email: water.permiter@deq.oregon.gov

The Oregon Department of Environmental Quality invites the public to provide written comments on the conditions of Meadows Utilities Co., LLC's (doing business as the Mt. Hood Meadows Ski Resort) proposed water quality permit, known officially as a National Pollutant Discharge Elimination System permit.

Summary

Subject to public review and comment, DEQ intends to renew the proposed water quality permit, which allows the Mt. Hood Meadows Ski Resort Wastewater Treatment Plant to discharge wastewater to the Upper East Fork Hood River.

About the facility

Meadows Utilities Co., LLC has applied for a water quality permit renewal for its sanitary wastewater collection and treatment facilities at the Mt. Hood Meadows Ski Resort located at 14040 Highway 35 on Mount Hood. DEQ last renewed this permit on April 21, 2020.

Sanitary wastewater generated by the resort's food service establishments, laundry, day care center, restrooms, offices, rental, sales and maintenance shops, and the on-site Providence Hood River Memorial Hospital Mountain Clinic is conveyed to an activated sludge sewage treatment plant located approximately one mile south of the resort. The treated wastewater contains several regulated pollutants such as biochemical oxygen demand, total suspended solids, pH, temperature, and bacteria.

The Mt. Hood Meadows facility discharges to the Upper East Fork Hood River near River Mile 26, upstream of the Highway 35 bridge crossing. This section of the river is listed as impaired (Category 4 or 5) for two pollutants according to the most recent U.S. Environmental Protection Agency-approved integrated report for Oregon. The proposed permit reflects effluent limits established through reasonable potential analysis, best available technology, or the Western Hood Subbasin Total Maximum Daily Load, or TMDL, for temperature.

The most recent DEQ inspection of the Mt. Hood Meadows facility was on October 25, 2023. DEQ did not identify violations during this inspection. The facility has had several water quality violations in the past permit

term. The issues related to these past compliance issues have been resolved and the facility is currently operating in full compliance.

The facility holds no other permits from DEQ.

What types of pollutants does the permit regulate?

This permit sets conditions for how the facility deals with the following pollutants: biochemical oxygen demand (BOD_5), Total Suspended Solids (TSS), bacteria, pH, temperature, and BOD_5 and TSS removal efficiency.

The facility treats wastewater solids to produce biosolids for beneficial reuse on agricultural lands located in Wasco Count. The biosolids program including the beneficial use sites are described in the biosolids management/land application plan. As part of this permit renewal, the plan will be updated during the next permit term and will be made available for public comment.

Would the draft permit change the amount of pollution the facility is allowed to release?

Yes. The draft water quality permit would change the amount of pollution the facility can discharge by setting more stringent limits for pH.

Pollutant	Change
pH	Reduce allowable range of pH

How did DEQ determine permit requirements?

DEQ evaluates types and amounts of pollutants and the water quality of the surface water or groundwater where the pollutants are proposed to be discharged and determines permit requirements to ensure the proposed discharges will meet applicable statutes, rules, regulations and effluent guidelines of Oregon and the Clean Water Act.

For this proposed permit action, DEQ evaluated the permittee's permit renewal application, annual reports, TMDLs and discharge monitoring reports. These materials may be viewed in person at the DEQ offices located at: 800 SE Emigrant Ave, Suite 330 in Pendleton or 700 NE Multnomah Street, Suite 600 in Portland.

DEQ relied solely on these documents and made no other discretionary decisions for the permit action.

How does DEQ monitor compliance with the permit requirements?

This permit will require the facility to monitor pollutants discharged using approved monitoring practices and standards. DEQ reviews the facility's discharge monitoring reports to check for compliance with permit limits.

What happens next?

Submit comments by sending an email or using mail service addressed to the permit coordinator listed in the "how to provide public comment" box above.

DEQ will hold a public hearing if it receives written requests for a hearing during the public comment period from at least 10 people or from an organization representing at least 10 people.

DEQ will consider and respond to all comments received and may modify the proposed permit based on comments.

For more information

Find more information by reviewing draft permit documents attached to this notice, or contact Patty Isaak, at water.permiter@deq.oregon.gov or 541-613-1125 with questions or to view documents in person at a DEQ office.

Non-discrimination statement

DEQ does not discriminate on the basis of race, color, national origin, disability, age, sex, religion, sexual orientation, gender identity, or marital status in the administration of its programs and activities. Visit DEQ's Civil Rights and Environmental Justice page.

State of Oregon Department of Environmental Quality

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE PERMIT

Oregon Department of Environmental Quality
Eastern Region – Pendleton Office
800 SE Emigrant, #330
Pendleton, OR 97801
Telephone: 541-276-4063

Issued pursuant to ORS 468B.050 and the federal Clean Water Act

ISSUED TO:

Meadows Utilities Co., LLC
PO Box 470
Mt. Hood Parkdale, OR 97041

SOURCES COVERED BY THIS PERMIT:

Type of Waste	Outfall Number	Outfall Location
Treated Wastewater	001	45.321084/-122.652172
Biosolids	003	Specified in Biosolids Management/Land Application Plan

FACILITY LOCATION:

Mount Hood Meadows Ski Resort
14040 Highway 35
Mount Hood, Oregon 97041
County: Hood River
EPA Permit Type: Minor

RECEIVING STREAM INFORMATION:

Receiving stream/NHD name: East Fork Hood River
USGS 12-Digit HUC: 170701050501
OWRD Administrative Basin: Middle-Columbia/Hood
NHD Reach Code & % along reach: 170701050000131 40.1%
ODEQ LLID & RM: 1216272455754 RM 25.8
Integrated Report AU ID: OR_WS_170701050501_02_101996

Issued in response to Application No. 948045 received September 19, 2024. This permit is issued based on the land use findings in the permit record.

DRAFT	DRAFT	DRAFT
Mike Hiatt, WQ Permitting Manager Eastern Region	Issuance Date	Effective Date

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permittee is authorized to: 1) operate a wastewater collection, treatment, control and disposal system; and 2) discharge treated wastewater to waters of the state only from the authorized discharge point or points in Schedule A in conformance with the requirements, limits, and conditions set forth in this permit.

Unless specifically authorized by this permit, by another NPDES or Water Pollution Control Facility permit, or by Oregon statute or administrative rule, any other direct or indirect discharge of pollutants to waters of the state is prohibited.

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SCHEDULE A: WASTE DISCHARGE LIMITS

1. Outfall 001 – Permit Limits

During the term of this permit, the permittee must comply with the limits in the following tables. The BOD_5 and TSS limits in Table A1 vary seasonally dependent upon the indicated dilution values:

Table A1: BOD_5 and TSS Permit Limits

Parameter	Receiving Stream Dilution (Q_R/Q_E) (See Note a.)	Units	Average Monthly	Average Weekly	Daily Maximum
Effluent Flow	<10 (Year-round)	MGD	**No discharge (Daily Max limit = 0 MGD)**		
	≥10 and <20 (Year-round)	MGD	-	-	0.0375
	≥20 (May 1 – October 31)	MGD	-	-	0.01875
	≥20 (Nov 1 – April 30)	MGD	-	-	0.0375
BOD_5 (Year-round)	≥10 and <20	mg/L	10	10	-
		lb/day	3.1	4.7	6.2
TSS (Year-round)	≥10 and <20	mg/L	10	10	-
		lb/day	3.1	4.7	6.2
BOD_5(May 1 - Oct. 31)	≥20	mg/L	20	20	-
		lb/day	3.1	4.7	6.2
TSS (May 1 – Oct. 31)	≥20	mg/L	20	20	-
		lb/day	3.1	4.7	6.2
BOD (Nov. 1 – April 30)	≥20	mg/L	20	20	-
		lb/day	6.3	9.5	13
TSS (Nov. 1 – April 30)	≥20	mg/L	20	20	-
		lb/day	6.3	9.5	13
BOD and TSS Percent Removal (Year-round)	N/A (All dilutions)	% Removal	85	-	-

Notes:
a.) The dilution value is equal to the maximum daily receiving stream flow (Q_R-MGD) divided by the maximum daily effluent flow (Q_E – MGD).

Table A2: Permit Limits for pH, Bacteria, Temperature and Thermal Load

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum
pH (Year-round)	SU	Instantaneous limit between a daily minimum of 6.2 and a daily maximum of 9.0		
E. coli (Year-round) (See note a.)	#/100 mL	Must not exceed a monthly geometric mean of 126, no single sample may exceed 406		
Temperature (effluent flow) (Year-round)	MGD	Discharge prohibited any time effluent temperature exceeds 20 °C		
Temperature (effluent flow) (January 1–April 30)	MGD	Discharge prohibited any time the temperature of the EF Hood R exceeds 12.8 °C (measured at the downstream edge of the mixing zone)		
Temperature (effluent flow) (October 1–December 31)	MGD	Discharge prohibited any time the temperature of the EF Hood R exceeds 17.8 °C (measured at the downstream edge of the mixing zone)		
Excess Thermal Load Limit (ETLL) (May 1 – September 30) (See note b.)	million kcal/day	Option A: 3.0 as a 7-day rolling average		
		Option B: ETL Limit (ETLL) = (0.18)*(Q_E + Q_R *0.646)*3.785 as a 7-day rolling average		

Notes:

a. If a single sample exceeds 406 organisms/100 mL, the permittee may take at least 5 consecutive re-samples at 4-hour intervals beginning within 28 hours after the original sample was taken. A geometric mean of the 5 re-samples that is less than or equal to 126 *E. coli* organisms/100 mL demonstrates compliance with the limit.

b. The permittee must select either Option A or Option B as the applicable 7-day rolling average Excess Thermal Load Limit (ETLL). If the permittee selects Option B, the permittee must calculate the daily ETLL using the above equation. Using these daily ETLLs, the permittee must then calculate the 7-day rolling average ETLL for each day that Option B limit is selected. Q_E = Daily Average Effluent Flow (mgd). Q_R = Daily Average River Flow, upstream from the outfall (cfs). When using Option B to calculate the ETLL and the Q_R is less than the 7Q10 value of 6.7 cfs, the 7Q10 value must be used as a substitution for actual river flow in the equation listed above. Permittee must calculate the daily Excess Thermal Load (ETL) using the formula listed at the bottom of Table B3 (Effluent Monitoring Requirements).

2. Regulatory Mixing Zone

Pursuant to OAR 340-041-0053, the permittee is granted a regulatory mixing zone as described below:

The Regulatory Mixing Zone (RMZ) is defined as 50 percent of the East Fork Hood River flow and no more than 100 feet downstream from the outfall. The Zone of Initial Dilution (ZID) is defined as 10 percent of the East Fork Hood River flow and no more than 10 feet downstream from the outlet into the river.

3. Biosolids

The permittee may land apply or provide biosolids for sale or distribution, subject to the following conditions:

a. Biosolids Management Plan - The permittee must manage biosolids in accordance with its DEQ-approved Biosolids Management Plan and Land Application Plan (see Schedule D).

b. Agronomic Rates for Nutrient Loading - The permittee must apply biosolids at or below the agronomic rates approved by DEQ to minimize potential groundwater degradation. At the time of sale or distribution of the exceptional quality biosolids, the origin must be identified and biosolids analyses must be available to appliers or users of the biosolids.

c. Land Application Site Authorization - The permittee must obtain written site authorization from DEQ for each land application site prior to land application (see Schedule D) and follow the site-specific management conditions in the DEQ-issued site authorization letter. This requirement does not apply for exceptional quality biosolids, which may be land applied as any other fertilizer or soil amendment.

d. Pathogen and Vector Attraction Reduction - Prior to land application, the permittee must ensure that biosolids meet one of the pathogen reduction standards under 40 CFR 503.32 and one of the vector attraction reduction standards under 40 CFR 503.33. For exceptional quality biosolids, the biosolids must meet one of the Class A pathogen reduction requirements in 40 CFR 503.32(a) and one of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (b)(8) prior to land application.

e. Pollutants - The permittee must not apply biosolids containing pollutants in excess of the ceiling concentrations shown in Table A3. The permittee may apply biosolids containing pollutants in excess of the pollutant concentrations. However, the total quantity of these pollutant(s) cannot exceed the cumulative pollutant loading rates in Table A3. For biosolids to be managed as exceptional quality biosolids, the biosolids cannot exceed any of the ceiling concentration limits or the pollutant concentration limits in Table A3.

f. Approval to Apply Cumulative Pollutant Loading Rates - If the permittee's biosolids are subject to the cumulative pollutant loading rates as described in section e. above, the permittee must obtain specific approval from DEQ to land apply these biosolids in accordance with their approved Biosolids Management and Land Application Site Authorization (see Schedule D).

Table A3: Biosolids Limits

Pollutant (See note a.)	**Ceiling concentrations (mg/kg)**	**Pollutant concentrations (mg/kg)**	**Cumulative pollutant loading rates (kg/ha)**
Arsenic	75	41	41
Cadmium	85	39	39
Copper	4300	1500	1500
Lead	840	300	300
Mercury	57	17	17
Molybdenum	75	–	–

Pollutant (See note a.)	**Ceiling concentrations (mg/kg)**	**Pollutant concentrations (mg/kg)**	**Cumulative pollutant loading rates (kg/ha)**
Nickel	420	420	420
Selenium	100	100	100
Zinc	7500	2800	2800

Note:

a. Biosolids pollutant limits are described in 40 CFR 503.13, which uses the terms *ceiling concentrations*, *pollutant concentrations*, and *cumulative pollutant loading rates*.

4. Chlorine Usage

The permittee is prohibited from using chlorine or chlorine compounds for effluent disinfection purposes. Chlorine residual in effluent resulting from chlorine or chlorine-containing chemicals used for maintenance or other purposes is also prohibited.

SCHEDULE B: MINIMUM MONITORING AND REPORTING REQUIREMENTS

1. Reporting Requirements

The permittee must submit to DEQ monitoring results and reports as listed below.

Table B1: Reporting Requirements and Due Dates

Reporting Requirement	Frequency	Due Date (See note a.)	Report Form (See note b.)	Submit To:
Tables B2, B3, and B4 Influent Monitoring, Effluent Monitoring, and Receiving Stream Monitoring	Monthly	By the 15th of the following month	Specified in Schedule B. Section 2 of this permit	Electronic reporting as directed by DEQ
Receiving Water Flow Monitoring Plan (see Schedule D)	One time	Submit by XX/XX/2028 In the 3rd year of the permit.	Electronic copy in a DEQ-approved format	Attached via electronic reporting as directed by DEQ
Biosolids Annual Report (See Schedule D)	Annually	By February 19 of the following year	Electronic copy in a DEQ-approved form	Attached via electronic reporting as directed by DEQ DEQ Biosolids Program Coordinator
Hauled Waste Control Plan (see Schedule D)	One time	Submit at least two months prior to accepting hauled waste	Electronic copy in a DEQ-approved format	Attached via electronic reporting as directed by DEQ
Hauled Waste Annual Report (see Schedule D	Annually, if facility accepts hauled waste	January 15	Electronic copy in a DEQ-approved format	Attached via electronic reporting as directed by DEQ
Outfall Inspection Report (see Schedule D)	Once per permit cycle	Submit by XX/XX/2028 In the 3rd year of the permit.	Electronic copy in a DEQ-approved format	Attached via electronic reporting as directed by DEQ

Notes:
a. For submittals that are provided to DEQ by mail, the postmarked date must not be later than the due date.
b. All reporting requirements are to be submitted in a DEQ approved format, unless otherwise specified in writing.

2. Monitoring and Reporting Protocols

a. Electronic Submissions

The permittee must submit to DEQ the results of monitoring indicated in Schedule B in an electronic format as specified below.

i. The permittee must submit monitoring results required by this permit via DEQ-approved web-based Discharge Monitoring Report (DMR) forms to DEQ via electronic reporting.

Any data used to calculate summary statistics must be submitted as a separate attachment approved by DEQ via electronic reporting.

ii. The reporting period is the calendar month.

iii. The permittee must submit monitoring data and other information required by this permit for all compliance points by the 15th day of the month following the reporting period unless specified otherwise in this permit or as specified in writing by DEQ.

b. Test Methods

The permittee must conduct monitoring according to test procedures in 40 CFR 136 and 40 CFR 503 for biosolids or other approved procedures as per Schedule F.

c. Detection and Quantitation Limits

i. Detection Level (DL) – The DL is defined as the minimum measured concentration of a substance that can be distinguished from method blank results with 99% confidence. The DL is derived using the procedure in 40 CFR 136 Appendix B and evaluated for reasonableness relative to method blank concentrations to ensure results reported above the DL are not a result of routine background contamination. The DL is also known as the Method Detection Limit (MDL) or Limit of Detection (LOD).

ii. Quantitation Limits (QLs) – The QL is the minimum level, concentration or quantity of a target analyte that can be reported with a specified degree of confidence. It is the lowest level at which the entire analytical system gives a recognizable signal and acceptable calibration for the analyte. It is normally equivalent to the concentration of the lowest calibration standard adjusted for sample weights, volumes, preparation and cleanup procedures employed. The QL as reported by a laboratory is also sometimes referred to as the Method Reporting Limit (MRL) or Limit of Quantitation (LOQ).

d. Sufficient Sensitivity of Quantitation Limits

i. The Laboratory QLs (adjusted for any dilutions) for analyses performed to demonstrate compliance with permit limits or as part of effluent characterization, must meet at least one of the requirements below:

(A) The QL is at or below the level of the water quality criterion for the measured parameter.

(B) The QL is above the water quality criterion but the amount of the pollutant in a facility's discharge is high enough that the method detects and quantifies the level of the parameter in the discharge.

(C) The QL has the lowest sensitivity of the analytical methods procedure specified in 40 CFR 136.

(D) The QL is at or below those defined in Oregon DEQ list of quantitation limits posted online at DEQ permitting website.

e. Quality Assurance and Quality Control

i. Quality Assurance Plan – The permittee must develop and implement a written Quality Assurance Plan that details the facility sampling procedures, equipment calibration and maintenance, analytical methods, quality control activities and laboratory data handling and reporting. The QA/QC program must conform to the requirements of 40 CFR 136.7.

ii. If QA/QC requirements are not met for any analysis, the permittee must re-analyze the sample. If the sample cannot be re-analyzed, the permittee must re-sample and analyze at

the earliest opportunity. If the permittee is unable to collect a sample that meets QA/QC requirements, then the permittee must include the result in the discharge monitoring report (DMR) along with a notation (data qualifier). In addition, the permittee must explain how the sample does not meet QA/QC requirements. With the exception of BOD_5/$CBOD_5$, the permittee may not use the result that failed the QA/QC requirements in any calculation required by the permit unless authorized in writing by DEQ. For BOD_5/$CBOD_5$, the permittee may not use the result that failed the QA/QC requirement in any calculation except as follows:

(A) When the glucose-glutamic acid, dilution water, and/or seed control check are not met, the values are reported with the "E" (estimate) data qualifier. The estimated values are not used in the calculations.

(B) When the minimum DO depletion or the minimum residual DO is not met, the values are reported with the "<" or ">" data qualifiers as appropriate. The data must be used in the calculations. It is not acceptable to report "non-detect" on the discharge monitoring report. The data qualifiers carry to the summary statistic. For example, when calculating the loading, the data qualifiers are added to the value.

iii. Flow measurement, field measurement, and continuous monitoring devices - The permittee must:

(A) Establish verification and calibration frequency for each device or instrument in the quality assurance plan that conforms to the frequencies recommended by the manufacturer.

(B) Verify at least once per year that flow-monitoring devices are functioning properly according to manufacturer's recommendation. Calibrate as needed according to manufacturer's recommendations.

(C) Verify at least weekly that the continuous monitoring instruments are functioning properly according to manufacturer's recommendation unless the permittee demonstrates a longer period is sufficient and such longer period is approved by DEQ in writing.

iv. The permittee must develop a receiving water sampling and analysis plan that incorporates QA/QC prior to sampling. This plan must be kept at the facility and made available to DEQ upon request.

f. Reporting Sample Results

i. The permittee must report the laboratory DL and QL as defined above for each analyte, with the following exceptions: pH, temperature, BOD, CBOD, TSS, Oil & Grease, hardness, alkalinity, bacteriological analytes and nitrate-nitrite. For temperature and pH, neither the QL nor the DL need to be reported. For the other parameters listed above, the permittee is only required to report the QL and only when the result is ND.

ii. The permittee must report the same number of significant digits as the permit limit for a given parameter.

iii. (For Discharge Monitoring Reports) If a sample result is above the DL but below the QL, the permittee must report the result as the DL preceded by DEQ's data code "E". For example, if the DL is 1.0 µg/l, the QL is 3.0 µg/L and the result is estimated to be between the DL and QL, the permittee must report "E1.0 µg/L" on the DMR. This

requirement does not apply in the case of parameters for which the DL does not have to be reported.

iv. (For Discharge Monitoring Reports) If the sample result is below the DL, the permittee must report the result as less than the specified DL. For example, if the DL is 1.0 µg/L and the result is ND, report "<1.0" on the discharge monitoring report (DMR). This requirement does not apply in the case of parameters for which the DL does not have to be reported.

g. Calculating and Reporting Mass Loads

The permittee must calculate mass loads on each day the parameter is monitored using the following equation:

Example calculation: Flow (in MGD) X Concentration (in mg/L) X 8.34 = Pounds per day

i. Mass load limits all have two significant figures unless otherwise noted.
ii. When concentration data are below the DL: To calculate the mass load from this result, use the DL. Report the mass load as less than the calculated mass load. For example, if flow is 2 MGD and the reported sample result is <1.0 µg/L, report "<0.017 lb/day" for mass load on the DMR (1.0 µg/L x 2 MGD x conversion factor = 0.017 lb/day).
iii. When concentration data are above the DL, but below the QL: To calculate the mass load from this result, use the DL. Report the mass load as the calculated mass load preceded by "E". For example, if flow is 2 MGD, the DL is 1.0 µg/L, the QL is 5 µg/L and the reported sample result is E3.5 µg/L, report "E0.017 lb/day" for mass load on the DMR (1.0 µg/L x 2 MGD x conversion factor = 0.017 lb/day,).

3. Monitoring and Reporting Requirements

a. The permittee must monitor influent at the headworks, downstream from the grinder and report results in accordance with Table B1 the table below.

Table B2: Influent Monitoring Requirements

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type / Required Action (See note a.)	Report Statistic (See note b.)
Flow (50050)	MGD	Year-round	Daily	Metered	1. Monthly Average 2. Daily Maximum
BOD_5 (00310)	mg/L	Year-round	2/month	24-hour composite	Monthly Average
TSS (00530)	mg/L	Year-round	2/month	24-hour composite	Monthly Average
pH (00400)	SU	Year-round	3/week	Grab	1. Monthly Maximum 2. Monthly Minimum

Notes:

a. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If new equipment cannot be immediately deployed, the permittee must perform grab measurements.

b. When submitting DMRs electronically, the permittee must submit all data used to determine summary statistics in a DEQ-approved format as a spreadsheet via electronic reporting unless otherwise directed by DEQ.

b. The permittee must monitor effluent for Outfall 001 after disinfection and report results in accordance with Table B1 and the table below:

Table B3: Effluent Monitoring Requirements

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type/ Required Action (See note a.)	Report Statistic (See note b.)
Flow (50050)	MGD	Year-round	Daily	Metered	1. Monthly Average 2. Daily Maximum
BOD_5 (00310)	mg/L	Year-round	2/month	24-hour composite	1. Monthly Average 2. Maximum Weekly Average
BOD_5 (00310)	lb/day	Year-round	2/month	Calculation	1. Daily Maximum 2. Monthly Average 3. Maximum Weekly Average
BOD_5 percent removal (See note c.) (81010)	%	Year-round	Monthly	Calculation based on monthly average BOD_5 concentration values	Monthly Average
TSS (00530)	mg/L	Year-round	2/month	24-hour composite	1. Monthly Average 2. Maximum Weekly Average

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type/ Required Action (See note a.)	Report Statistic (See note b.)
TSS (00530)	lb/day	Year-round	2/month	Calculation	1. Daily Maximum 2. Monthly Average 3. Maximum Weekly Average
TSS percent removal (81011) (See note c.)	%	Year-round	Monthly	Calculation based on monthly average TSS concentration values	Monthly Average
pH (00400)	SU	Year-round	3/week	Grab	1. Daily Maximum 2. Daily Minimum
Temperature (00010)	ºC	Year-round	Daily	Continuous (See note d.)	1. Daily Maximum 2. Monthly Average 3. 7-day Rolling Average of Daily Maximum
Excess Thermal Load (51405)	Million kcal/day	Year-round	Daily	Calculation (See note e.)	Maximum 7-day Rolling Average
Excess Thermal Load Limit (if using limit Option B)	Million kcal/day	Year-round	Daily	Calculation (see Table A2, also see note f.)	7-day Rolling Average
E. coli (51040)	#/100 mL	Year-round	2/month	Grab	1. Daily Maximum 2. Monthly Geometric Mean
Total ammonia (as N) (00610)	mg/L	Year-round	Monthly	24-hour composite	Monthly Maximum
Alkalinity as $CaCO_3$ (00410)	mg/L	Year-round	Monthly	24-hour composite	Monthly Maximum
UV Transmittance	%	Year-round	Daily	Continuous	Maintain records on-site
Dissolved Oxygen (00300)	mg/L	Third year of permit cycle [2028]	Quarterly	24-hour composite (See note g.)	Quarterly Minimum
Total Kjeldahl Nitrogen (TKN) (00625)	mg/L	Third year of permit cycle [2028]	Quarterly	24-hour composite	Quarterly Maximum

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type/ Required Action (See note a.)	Report Statistic (See note b.)
Nitrate (NO_3) Plus Nitrite (NO_2) Nitrogen (00630)	mg/L	Third year of permit cycle [2028]	Quarterly	24-hour composite	Quarterly Maximum
Oil and Grease (00556)	mg/L	Third year of permit cycle [2028]	Quarterly	Grab	Quarterly Maximum
Total Phosphorus (00665)	mg/L	Third year of permit cycle [2028]	Quarterly	24-hour composite	Quarterly Maximum
Total Dissolved Solids (70295)	mg/L	Third year of permit cycle [2028]	Quarterly	24-hour composite	Quarterly Maximum

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type/ Required Action (See note a.)	Report Statistic (See note b.)

Notes:

a. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If new equipment cannot be immediately deployed, the permittee must perform grab measurements. If the failure or loss is for continuous temperature monitoring equipment, the permittee must collect one grab sample daily between 12 PM and 5 PM until continuous monitoring equipment is redeployed.

b. When submitting DMRs electronically, all data used to determine summary statistics must be submitted in a DEQ-approved format as a spreadsheet via electronic reporting unless otherwise directed by DEQ.

c. Percent Removal must be calculated on a monthly basis using the following formula:

$$Percent\ Removal = \frac{[Influent\ Concentration] - [Effluent\ Concentration]}{[Influent\ Concentration]} \times 100$$

Where:
Influent Concentration = Corresponding Monthly average influent concentration based on the analytical results of the reporting period.
Effluent Concentration = Corresponding Monthly average effluent concentration based on the analytical results of the reporting period.

d. When determining the daily maximum temperature, the permittee may report the hourly average maximum temperature if continuous monitoring of temperature is performed at less than hourly intervals.

e. The daily excess thermal load (ETL) discharged must be calculated using the daily maximum effluent temperature and the corresponding daily effluent flow using the formula below.
The 7-day rolling average is then calculated from the daily ETLs. 7-day average periods must not include daily ETLs outside of a limited period or daily ETLs with different criteria.
The daily ETL is calculated as follows: $ETL = 3.785 * Q_E * \Delta T$
Where:

ETL = Excess Thermal Load (million kcal/day)
Q_E = Daily effluent flow (MGD)
ΔT = Daily maximum effluent temperature (°C) minus ambient criterion from TMDL (18 °C)

f. If the permittee selects final Excess Thermal Load Limit (ETLL) Option B from Table A2, then the permittee must calculate the ETLL (million kcal/day) each day the permittee uses this option. The permittee must use the equation and procedure noted in Table A2.

g. CFR 122.21 requires that Dissolved Oxygen be collected as a 24-hour composite for permit application purposes. CFR 136.3(e) specifies that if a composite measurement is required but a composite sample would compromise sample integrity, that individual grab samples must be collected. For Dissolved Oxygen, the permittee must collect and analyze at least four discrete grab samples over the operating day with samples collected no less than one hour apart. The analytical results for all samples in a day must be averaged for reporting purposes.

c. The permittee must monitor the East Fork Hood River and report the results in accordance with Table B1 and the table below. The permittee must collect samples such that the effluent does not impact the samples (e.g., upstream for riverine discharges).

Table B4: Receiving Stream Monitoring (Upper East Fork Hood River)

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type / Required Action (See note a.)	Report Statistic (See note b.)
Flow, stream (00056)	cfs	Year-round	Daily	Measurement	Monthly Average Daily Maximum
pH (00400)	SU	Year-round	1/month	Grab	Monthly Maximum
Temperature (00010) (See note c.)	ºC	Year-round	Daily	Continuous	Monthly Maximum
Alkalinity as $CaCO_3$ (00410)	mg/L	Year-round	1/month	Grab	Monthly Maximum
Ammonia (00610)	mg/L	Year-round	1/month	Grab	Monthly Maximum
Audit continuous temperature sensors (See note d.)	n/a	June and September	Twice annually	Audit	Document action
Field check temperature sensors (See note e.)	n/a	May–October	Monthly	Audit	Document results

Notes:

a. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If new equipment cannot be immediately deployed, the permittee must perform grab measurements. If the failure or loss is for continuous temperature monitoring equipment, the permittee must perform grab measurements daily between 12 PM and 5 PM until continuous monitoring equipment is redeployed.

b. When submitting DMRs electronically, all data used to determine summary statistics must be submitted in a DEQ-approved format as a spreadsheet via electronic reporting unless otherwise directed by DEQ.

c. Temperature must be monitored at the downstream edge of the mixing zone to determine compliance with temperature limits in Table A2.

d. The continuous monitors must be audited in June and September following procedures described in the DEQ Procedural Guidance for Water Temperature Monitoring.

e. Check continuous monitors verifying devices remain in place and are submerged.

4. Biosolids Monitoring Requirements

The permittee must monitor biosolids land applied or produced for sale or distribution as listed below. The samples must be representative of the quality and quantity of biosolids generated and undergo the same treatment process used to prepare the biosolids. Results must be reported as required in the biosolids management plan described in Schedule D.

Table B5: Biosolids Monitoring

Item or Parameter	Minimum Frequency	Sample Type
Nutrient and conventional parameters (% dry weight unless otherwise specified): Total Kjeldahl Nitrogen (TKN) Nitrate-Nitrogen (NO_3-N) Total Ammonia-Nitrogen (NH_3-N) Total Phosphorus (P) Potassium (K) pH (S.U.) Total Solids Volatile Solids	As described in DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B6.	As described in DEQ-approved Biosolids Management Plan
Pollutants: As, Cd, Cu, Hg, Pb, Mo, Ni, Se, Zn, mg/kg dry weight	As described in DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B6.	As described in DEQ-approved Biosolids Management Plan
Pathogen reduction	As described in DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B6.	As described in DEQ-approved Biosolids Management Plan
Vector attraction reduction	As described in DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B6.	As described in DEQ-approved Biosolids Management Plan
Record of biosolids land application: date, quantity, location.	Each event	Record the date, quantity, and location of biosolids land applied on site location map or equivalent electronic system, such as GIS.

Table B6: Biosolids Minimum Monitoring Frequency

Quantity of biosolids land applied or produced for sale or distribution per calendar year		Minimum Sampling Frequency
(dry metric tons)	(dry U.S. tons)	
Less than 290	Less than 320	Once per year
290 to 1,500	320 to 1,653	Once per quarter (4x/year)
1,500 to 15,000	1,653 to 16,535	Once per 60 days (6x/year)
15,000 or more	16,535 or more	Once per month (12x/year)

SCHEDULE C: COMPLIANCE SCHEDULE

A compliance schedule is not part of this permit.

SCHEDULE D: SPECIAL CONDITIONS

1. Receiving Water Flow Monitoring Plan

By no later than the date in Table B1, the permittee must submit a plan that described the methods and standard operating procedures used to measure receiving stream flow. The plan must:

a. Describe the type of stream gauge or measurement used, who is collecting the measurements
b. Describe where the stream gauge is located relative to the outfall, and the channel type at the gauge or measurement location
c. Describe how the flow is being calculated based on measurement type, the standard operating procedures associated with taking measurements, the expected precision and accuracy of those measurements, and
d. Describe if the device used to determine depth, velocity, and/or flow is able to be calibrated, how often is it calibrated and how.

2. Emergency Response and Public Notification Plan

The permittee must develop an Emergency Response and Public Notification Plan ("plan"), or ensure the facility's existing plan is current and accurate, per Schedule F, Section B, and Condition 8 within 6 months of permit effective date. The permittee must update the plan annually to ensure all information contained in the plan, including telephone and email contact information for applicable public agencies, is current and accurate. An updated copy of the plan must be kept on file at the facility for DEQ review. The latest plan revision date must be listed on the plan cover along with the reviewer's initials or signature.

3. Exempt Wastewater Reuse at the Treatment System

Recycled water used for landscape irrigation within the property boundary or in-plant processes at the wastewater treatment system is exempt from the requirements of OAR 340-055 if all of the following conditions are met:

a. The recycled water is an oxidized and disinfected wastewater.

b. The recycled water is used at the wastewater treatment system site where it is generated or at an auxiliary wastewater or sludge treatment facility that is subject to the same NPDES or WPCF permit as the wastewater treatment system.

c. Spray and/or drift from the use does not migrate off the site.

d. Public access to the site is restricted.

4. Biosolids Management Plan

The permittee must maintain a Biosolids Management Plan and Land Application Plan meeting the requirements in OAR 340-050-0031. The permittee must submit any significant modification of these plans to DEQ for review and approval with sufficient time to clear DEQ review and a public notice period prior to implementing any significant changes to the biosolids program. The permittee must keep the plans updated. All plan revisions require written authorization from DEQ and are effective upon permittee's receipt of DEQ written approval. No significant modifications can be made to a plan for an administratively extended permit (after the permit expiration date). Conditions in the plans are enforceable requirements under this permit.

a. **Annual Report**

The permittee must submit a Biosolids Annual Report by February 19 each year documenting biosolids management activities of the previous calendar year as described in OAR 340-050-0035(6). The permittee must use DEQ approved Biosolids Annual report form. This report must

include the monitoring data and analytical laboratory reports for the previous year's monitoring specified under Schedule B.

b. **Site Authorization**

The permittee must obtain written authorization from DEQ for each land application site prior to its use. Conditions in site authorizations are enforceable requirements under this permit. The permittee is prohibited from land applying biosolids to a DEQ-approved site except in accordance with the site authorization, while this permit is effective and with the written approval of the property owner. DEQ may modify or revoke a site authorization following the procedures for a permit modification described in OAR 340-045-0055.

c. **Public Participation**

i. DEQ will provide an opportunity for public review and comment on any significant plan modifications prior to approving or denying. Public review is not required for minor modifications or changes to utilization dates.

ii. No DEQ-initiated public notice is required for continued use of sites identified in DEQ-approved biosolids management plan.

iii. For new sites that fail to meet the site selection criteria in the biosolids management plan or that are deemed by DEQ to be sensitive with respect to residential housing, runoff potential, or threat to groundwater, DEQ will provide an opportunity for public comment as directed by OAR 340-050-0030(2).

iv. For all other new sites, the permittee must provide for public participation following procedures in its DEQ-approved land application plan.

5. Wastewater Solids Transfers

a. *Within state.* The permittee may transfer wastewater solids including Class A and Class B biosolids, to another facility permitted to process or dispose of wastewater solids, including but not limited to: another wastewater treatment facility, landfill, or incinerator. The permittee must satisfy the requirements of the receiving facility. The permittee must report the name of the receiving facility, and the quantity of material transferred in the wastewater solids or biosolids annual report identified in Schedule B.

b. *Out of state.* If wastewater solids, including Class A and Class B biosolids, are transferred out of state for use or disposal, the permittee must obtain written authorization from DEQ, meet Oregon requirements for the use or disposal of wastewater solids, notify in writing the receiving state of the proposed use or disposal of wastewater solids, and satisfy the requirements of the receiving state.

6. Hauled Waste Control Plan

The permittee may accept hauled wastes at discharge points designated by the POTW after receiving written DEQ approval of a Hauled Waste Control Plan. Hauled wastes may include wastewater solids from another wastewater treatment facility, septage, grease trap wastes, portable and chemical toilet wastes, landfill leachate, groundwater remediation wastewaters and commercial/industrial wastewaters. A Hauled Waste Control Plan is not required in the event biological seed must be added to the process at the POTW to facilitate effective wastewater treatment.

7. Hauled Waste Annual Report

If the permittee has a Hauled Waste Control Plan, or otherwise accepts hauled waste, the permittee must submit an annual report of hauled waste received by the POTW. This report, if required, must be submitted as described in Table B1. This report must include the date, time, type, and amount received each time the POTW accepts hauled waste. Hauled waste must be described in the permittee's Hauled Waste Control Plan.

8. Operator Certification

a. Definitions

i. "Supervise" means to have full and active responsibility for the daily on-site technical operation of a wastewater treatment system or wastewater collection system.

ii. "Supervisor" or "designated operator", means the operator delegated authority by the permittee for establishing and executing the specific practice and procedures for operating the wastewater treatment system or wastewater collection system in accordance with the policies of the owner of the system and any permit requirements.

iii. "Shift Supervisor" means the operator delegated authority by the permittee for executing the specific practice and procedures for operating the wastewater treatment system or wastewater collection system when the system is operated on more than one daily shift.

iv. "System" includes both the collection system and the treatment systems.

b. The permittee must comply with OAR Chapter 340, Division 49, "Regulations Pertaining to Certification of Wastewater System Operator Personnel" and designate a supervisor whose certification corresponds with the classification of the collection and/or treatment system as specified in DEQ Supervisory Wastewater Operator Status Report. DEQ may revise the permittee's classification in writing at any time to reflect changes in the collection or treatment system. This reclassification is not considered a permit modification and may be made after the permit expiration date provided the permit has been administratively extended by DEQ. If a facility is re-classified, a certified letter will be mailed to the system owner from DEQ Operator Certification Program. Current system classifications are publicized on DEQ Supervisory Wastewater Operator Status Report found on DEQ Wastewater Operator Certification Homepage.

c. The permittee must have its system supervised on a part-time or full-time basis by one or more operators who hold a valid certificate for the type of wastewater treatment or wastewater collection system the operator is supervising and at a grade equal to or greater than the wastewater system's classification.

d. The permittee's wastewater system may be without the designated supervisor for up to 30 consecutive days if another person supervises the system, who is certified at no more than one grade lower than the classification of the wastewater system. The permittee must delegate authority to this operator to supervise the operation of the system.

e. If the wastewater system has more than one daily shift, the permittee must have another properly certified operator available to supervise operation of the system. Each shift supervisor must be certified at no more than one grade lower than the system classification.

f. The permittee is not required to have a supervisor on site at all times; however, the supervisor must be available to the permittee and operator at all times.

g. The permittee must notify DEQ in writing of the name of the system supervisor by completing and submitting the Supervisory Wastewater System Operator Designation Form. The most recent version of this form may be found on DEQ Wastewater Operator Certification homepage *NOTE: This form is different from the Delegated Authority form. The permittee may replace or re-

designate the system supervisor with another properly certified operator at any time and must notify DEQ in writing within 30 days of replacement or re-designation of the operator in charge. As of this writing, the notice of replacement or re-designation must be sent to Water Quality Division, Operator Certification Program, 700 NE Multnomah St, Suite 600, Portland, OR 97232-4100. This address may be updated in writing by DEQ during the term of this permit.

h. When compliance with item (d) of this section is not possible or practicable because the system supervisor is not available or the position is vacated unexpectedly, and another certified operator is not qualified to assume supervisory responsibility, the Director may grant a time extension for compliance with the requirements in response to a written request from the system owner. The Director will not grant an extension longer than 120 days unless the system owner documents the existence of extraordinary circumstances.

9. Outfall Inspection

The permittee must inspect Outfall 001 including the submerged portion of the outfall line and diffuser to document its integrity and to determine whether it is functioning as designed. The inspection must determine whether diffuser ports are intact, clear and fully functional. The inspection must verify the latitude and longitude of the diffuser. The permittee must submit a written report to DEQ regarding the results of the outfall inspection by the date in Table B1. The report must include a description of the outfall as originally constructed, the condition of the current outfall and identify any repairs needed to return the outfall to satisfactory condition.

SCHEDULE E: PRETREATMENT ACTIVITIES

A pretreatment program is not part of this permit.

SCHEDULE F: NPDES GENERAL CONDITIONS

DOMESTIC FACILITIES
October 1, 2015 Version

SECTION A. STANDARD CONDITIONS

A1. Duty to Comply with Permit

The permittee must comply with all conditions of this permit. Failure to comply with any permit condition is a violation of Oregon Revised Statutes (ORS) 468B.025 and the federal Clean Water Act and is grounds for an enforcement action. Failure to comply is also grounds for DEQ to terminate, modify and reissue, revoke, or deny renewal of a permit.

A2. Penalties for Water Pollution and Permit Condition Violations

The permit is enforceable by DEQ or EPA, and in some circumstances also by third-parties under the citizen suit provisions of 33 USC § 1365. DEQ enforcement is generally based on provisions of state statutes and Environmental Quality Commission (EQC) rules, and EPA enforcement is generally based on provisions of federal statutes and EPA regulations.

ORS 468.140 allows DEQ to impose civil penalties up to $25,000 per day for violation of a term, condition, or requirement of a permit.

Under ORS 468.943, unlawful water pollution in the second degree, is a Class A misdemeanor and is punishable by a fine of up to $25,000, imprisonment for not more than one year, or both. Each day on which a violation occurs or continues is a separately punishable offense.

Under ORS 468.946, unlawful water pollution in the first degree is a Class B felony and is punishable by a fine of up to $250,000, imprisonment for not more than 10 years, or both.

The Clean Water Act provides that any person who violates permit condition, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $25,000 per day for each violation.

The Clean Water Act provides that any person who negligently violates any condition, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than 1 year, or both.

In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or both.

Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than 3 years, or both.

In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

Any person who knowingly violates section any permit condition, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both.

In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both.

An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

Any person may be assessed an administrative penalty by the Administrator for violating any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act.

Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000.

Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000.

A3. Duty to Mitigate

The permittee must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit. In addition, upon request of DEQ, the permittee must correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

A4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application must be submitted at least 180 days before the expiration date of this permit.

DEQ may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

A5. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

a. Violation of any term, condition, or requirement of this permit, a rule, or a statute.
b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts.
c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
d. The permittee is identified as a Designated Management Agency or allocated a wasteload under a total maximum daily load (TMDL).
e. New information or regulations.
f. Modification of compliance schedules.
g. Requirements of permit reopener conditions
h. Correction of technical mistakes made in determining permit conditions.
i. Determination that the permitted activity endangers human health or the environment.
j. Other causes as specified in 40 CFR §§ 122.62, 122.64, and 124.5.
k. For communities with combined sewer overflows (CSOs):

(1) To comply with any state or federal law regulation for CSOs that is adopted or promulgated subsequent to the effective date of this permit.
(2) If new information that was not available at the time of permit issuance indicates that CSO controls imposed under this permit have failed to ensure attainment of water quality standards, including protection of designated uses.
(3) Resulting from implementation of the permittee's long-term control plan and/or permit conditions related to CSOs.

The filing of a request by the permittee for a permit modification, revocation or reissuance, termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

A6. Toxic Pollutants
The permittee must comply with any applicable effluent standards or prohibitions established under Oregon Administrative Rule (OAR) 340-041-0033 and section 307(a) of the federal Clean Water Act for toxic pollutants, and with standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act, within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

A7. Property Rights and Other Legal Requirements
The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, or authorize any injury to persons or property or invasion of any other private rights, or any infringement of federal, tribal, state, or local laws or regulations.

A8. Permit References
Except for effluent standards or prohibitions established under section 307(a) of the federal Clean Water Act and OAR 340-041-0033 for toxic pollutants, and standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

A9. Permit Fees
The permittee must pay the fees required by OAR.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

B1. Proper Operation and Maintenance
The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

B2. Need to Halt or Reduce Activity Not a Defense
For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permittee must, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B3. Bypass of Treatment Facilities

a. Definitions

(1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs b and c of this section.

(2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Prohibition of bypass.

(1) Bypass is prohibited and DEQ may take enforcement action against a permittee for bypass unless:

i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventative maintenance; and

iii. The permittee submitted notices and requests as required under General Condition B3.c.

(2) DEQ may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, if DEQ determines that it will meet the three conditions listed above in General Condition B3.b.(1).

c. Notice and request for bypass.

(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, a written notice must be submitted to DEQ at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required in General Condition D5.

B4. Upset

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of General Condition B4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the causes(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee submitted notice of the upset as required in General Condition D5, hereof (24-hour notice); and

(4) The permittee complied with any remedial measures required under General Condition A3 hereof.

d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

B5. Treatment of Single Operational Upset

For purposes of this permit, a single operational upset that leads to simultaneous violations of more than one pollutant parameter will be treated as a single violation. A single operational upset is an exceptional incident that causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one federal Clean Water Act effluent discharge pollutant parameter. A single operational upset does not include federal Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational upset is a violation.

B6. Overflows from Wastewater Conveyance Systems and Associated Pump Stations

a. Definition. "Overflow" means any spill, release or diversion of sewage including:
   (1) An overflow that results in a discharge to waters of the United States; and
   (2) An overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately owned sewer or building lateral), even if that overflow does not reach waters of the United States.

b. Reporting required. All overflows must be reported orally to DEQ within 24 hours from the time the permittee becomes aware of the overflow. Reporting procedures are described in more detail in General Condition D5.

B7. Public Notification of Effluent Violation or Overflow

If effluent limitations specified in this permit are exceeded or an overflow occurs that threatens public health, the permittee must take such steps as are necessary to alert the public, health agencies and other affected entities (for example, public water systems) about the extent and nature of the discharge in accordance with the notification procedures developed under General Condition B8. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

B8. Emergency Response and Public Notification Plan

The permittee must develop and implement an emergency response and public notification plan that identifies measures to protect public health from overflows, bypasses, or upsets that may endanger public health. At a minimum the plan must include mechanisms to:

a. Ensure that the permittee is aware (to the greatest extent possible) of such events;
b. Ensure notification of appropriate personnel and ensure that they are immediately dispatched for investigation and response;
c. Ensure immediate notification to the public, health agencies, and other affected public entities (including public water systems). The overflow response plan must identify the public health and other officials who will receive immediate notification;
d. Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained;
e. Provide emergency operations; and
f. Ensure that DEQ is notified of the public notification steps taken.

B9. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in such a manner as to prevent any pollutant from such materials from entering waters of the state, causing nuisance conditions, or creating a public health hazard.

SECTION C. MONITORING AND RECORDS

C1. Representative Sampling

Sampling and measurements taken as required herein must be representative of the volume and nature of the monitored discharge. All samples must be taken at the monitoring points specified in this permit, and must be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of

water, or substance. Monitoring points must not be changed without notification to and the approval of DEQ. Samples must be collected in accordance with requirements in 40 CFR part 122.21 and 40 CFR part 403 Appendix E.

C2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices must be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected must be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes.

C3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR part 136 or, in the case of sludge (biosolids) use and disposal, approved under 40 CFR part 503 unless other test procedures have been specified in this permit.

For monitoring of recycled water with no discharge to waters of the state, monitoring must be conducted according to test procedures approved under 40 CFR part 136 or as specified in the most recent edition of Standard Methods for the Examination of Water and Wastewater unless other test procedures have been specified in this permit or approved in writing by DEQ.

C4. Penalties for Tampering

The federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit may, upon conviction, be punished by a fine of not more than $10,000 per violation, imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, punishment is a fine not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both.

C5. Reporting of Monitoring Results

Monitoring results must be summarized each month on a discharge monitoring report form approved by DEQ. The reports must be submitted monthly and are to be mailed, delivered or otherwise transmitted by the 15th day of the following month unless specifically approved otherwise in Schedule B of this permit.

C6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR part 136 or, in the case of sludge (biosolids) use and disposal, approved under 40 CFR part 503, or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the discharge monitoring report. Such increased frequency must also be indicated. For a pollutant parameter that may be sampled more than once per day (for example, total residual chlorine), only the average daily value must be recorded unless otherwise specified in this permit.

C7. Averaging of Measurements

Calculations for all limitations that require averaging of measurements must utilize an arithmetic mean, except for bacteria which must be averaged as specified in this permit.

C8. Retention of Records

Records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities must be retained for a period of at least 5 years (or longer as required by 40 CFR part 503). Records of all monitoring information including all calibration and maintenance records, all original strip

chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit must be retained for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of DEQ at any time.

C9. Records Contents

Records of monitoring information must include:

a. The date, exact place, time, and methods of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of such analyses.

C10. Inspection and Entry

The permittee must allow DEQ or EPA upon the presentation of credentials to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

C11. Confidentiality of Information

Any information relating to this permit that is submitted to or obtained by DEQ is available to the public unless classified as confidential by the Director of DEQ under ORS 468.095. The permittee may request that information be classified as confidential if it is a trade secret as defined by that statute. The name and address of the permittee, permit applications, permits, effluent data, and information required by NPDES application forms under 40 CFR § 122.21 are not classified as confidential [40 CFR § 122.7(b)].

SECTION D. REPORTING REQUIREMENTS

D1. Planned Changes

The permittee must comply with OAR 340-052, “Review of Plans and Specifications” and 40 CFR § 122.41(l)(1). Except where exempted under OAR 340-052, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers may be commenced until the plans and specifications are submitted to and approved by DEQ. The permittee must give notice to DEQ as soon as possible of any planned physical alternations or additions to the permitted facility.

D2. Anticipated Noncompliance

The permittee must give advance notice to DEQ of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

D3. Transfers

This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and EQC rules. No permit may be transferred to a third party without prior written approval from DEQ. DEQ may require modification, revocation, and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under 40 CFR § 122.61. The permittee must notify DEQ when a transfer of property interest takes place.

D4. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

D5. Twenty-Four Hour Reporting

The permittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally (by telephone) to the DEQ regional office or Oregon Emergency Response System (1-800-452-0311) as specified below within 24 hours from the time the permittee becomes aware of the circumstances.

a. Overflows.
   (1) Oral Reporting within 24 hours.
      i. For overflows other than basement backups, the following information must be reported to the Oregon Emergency Response System (OERS) at 1-800-452-0311. For basement backups, this information should be reported directly to the DEQ regional office.
         (a) The location of the overflow;
         (b) The receiving water (if there is one);
         (c) An estimate of the volume of the overflow;
         (d) A description of the sewer system component from which the release occurred (for example, manhole, constructed overflow pipe, crack in pipe); and
         (e) The estimated date and time when the overflow began and stopped or will be stopped.
      ii. The following information must be reported to the DEQ regional office within 24 hours, or during normal business hours, whichever is earlier:
         (a) The OERS incident number (if applicable); and
         (b) A brief description of the event.
   (2) Written reporting postmarked within 5 days.
      i. The following information must be provided in writing to the DEQ regional office within 5 days of the time the permittee becomes aware of the overflow:
         (a) The OERS incident number (if applicable);
         (b) The cause or suspected cause of the overflow;
         (c) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
         (d) Steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps; and
         (e) For storm-related overflows, the rainfall intensity (inches/hour) and duration of the storm associated with the overflow.

      DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

b. Other instances of noncompliance.
   (1) The following instances of noncompliance must be reported:
      i. Any unanticipated bypass that exceeds any effluent limitation in this permit;
      ii. Any upset that exceeds any effluent limitation in this permit;
      iii. Violation of maximum daily discharge limitation for any of the pollutants listed by DEQ in this permit; and
      iv. Any noncompliance that may endanger human health or the environment.
   (2) During normal business hours, the DEQ regional office must be called. Outside of normal business hours, DEQ must be contacted at 1-800-452-0311 (Oregon Emergency Response System).
   (3) A written submission must be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission must contain:

i. A description of the noncompliance and its cause;
ii. The period of noncompliance, including exact dates and times;
iii. The estimated time noncompliance is expected to continue if it has not been corrected;
iv. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and
v. Public notification steps taken, pursuant to General Condition B**7.**

(4) DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

D6. Other Noncompliance

The permittee must report all instances of noncompliance not reported under General Condition D4 or D5 at the time monitoring reports are submitted. The reports must contain:

a. A description of the noncompliance and its cause;
b. The period of noncompliance, including exact dates and times;
c. The estimated time noncompliance is expected to continue if it has not been corrected; and
d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

D7. Duty to Provide Information

The permittee must furnish to DEQ within a reasonable time any information that DEQ may request to determine compliance with the permit or to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit. The permittee must also furnish to DEQ, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it has failed to submit any relevant facts or has submitted incorrect information in a permit application or any report to DEQ, it must promptly submit such facts or information.

D8. Signatory Requirements

All applications, reports or information submitted to DEQ must be signed and certified in accordance with 40 CFR § 122.22.

D9. Falsification of Information

Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed $125,000 per violation and up to 5 years in prison per ORS chapter 161. Additionally, according to 40 CFR § 122.41(k)(2), any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or non-compliance will, upon conviction, be punished by a federal civil penalty not to exceed $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

D10. Changes to Indirect Dischargers

The permittee must provide adequate notice to DEQ of the following:

a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the federal Clean Water Act if it were directly discharging those pollutants and;
b. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
c. For the purposes of this paragraph, adequate notice must include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

SECTION E. DEFINITIONS

E1. *BOD* or *BOD_5* means five-day biochemical oxygen demand.
E2. *CBOD* or *$CBOD_5$* means five-day carbonaceous biochemical oxygen demand.
E3. *TSS* means total suspended solids.
E4. *Bacteria* means but is not limited to fecal coliform bacteria, total coliform bacteria, *Escherichia coli* (*E. coli*) bacteria, and *Enterococcus* bacteria.
E5. *FC* means fecal coliform bacteria.
E6. *Total residual chlorine* means combined chlorine forms plus free residual chlorine
E7. *Technology based permit effluent limitations* means technology-based treatment requirements as defined in 40 CFR § 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-041.
E8. *mg/l* means milligrams per liter.
E9. *µg/l* means microgram per liter.
E10. *kg* means kilograms.
E11. *m^3/d* means cubic meters per day.
E12. *MGD* means million gallons per day.
E13. *Average monthly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
E14. *Average weekly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.
E15. *Daily discharge* as defined at 40 CFR § 122.2 means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge must be calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge must be calculated as the average measurement of the pollutant over the day.
E16. *24-hour composite sample* means a sample formed by collecting and mixing discrete samples taken periodically and based on time or flow.
E17. *Grab sample* means an individual discrete sample collected over a period of time not to exceed 15 minutes.
E18. *Quarter* means January through March, April through June, July through September, or October through December.
E19. *Month* means calendar month.
E20. *Week* means a calendar week of Sunday through Saturday.
E21. *POTW* means a publicly-owned treatment works.

State of Oregon
Department of
Environmental
Quality

National Pollutant Discharge Elimination System
Permit Fact Sheet
Mt. Hood Meadows Ski Resort
Wastewater Treatment Plant

Permittee	Meadows Utilities Co., LLC P. O. Box 470 Mt. Hood Parkdale, Oregon 97041
Existing Permit Information	File Number: 58827 Permit Number: 100681 EPA Reference Number: OR0022829 Category: Domestic Class: Minor Expiration Date: March 31, 2025
Permittee Contact	Patricio Ramos Pino Water Resources Manager 541-399-3721 P. O. Box 470 Mt. Hood Parkdale, Oregon 97041
Receiving Water Information	Receiving stream/NHD name: East Fork Hood River NHD Reach Code & % along reach:17070105000131 40.1% USGS 12-digit HUC: 170701050501 WRD Administrative Basin: Hood River DEQ LLID & River Mile: 121627245574 RM 25.8 Assessment Unit ID: OR_WS_170701050501_02_101996
Proposed Action	Permit Renewal Application Number: 948045 Date Application Received: September 19, 2024
Permit Writer	Mark W. Hynson 503-229-5295 Date Prepared: Feb. 2025

NPDES Permit Fact Sheet
Mt. Hood Meadows Ski Resort
Wastewater Treatment Plant

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1. Introduction

The Department of Environmental Quality (DEQ) proposes to renew the National Pollutant Discharge Elimination System (NPDES) wastewater permit for Meadows Utilities Company, LLC which owns and operates a private wastewater collection system and treatment plant located at the Mount Hood Meadows Ski Resort at 14040 Hwy. 35, Mt. Hood Parkdale, Or. 97041 (see Figure 2-1). This permit allows and regulates the discharge of treated domestic wastewater effluent to the East Fork of Hood River. The permit also allows the permittee to beneficially reuse wastewater solids.

As required by Oregon Administrative Rule 340-045-0035, this fact sheet describes the basis and methodology used in developing the permit. The permit is divided into several sections:

Schedule A – Waste discharge limitations
Schedule B – Minimum monitoring and report requirements
Schedule C – Compliance conditions and schedules
Schedule D – Special conditions
Schedule E – Pretreatment conditions
Schedule F – General conditions

The permit was last renewed in 2020 and expired on March 31, 2025. The proposed permit contains several substantive changes from the 2020 permit as a result of updated analysis of the facility's discharges. A summary of the major changes is presented below:

- Schedule A: (Waste Discharge Limits)
  - More stringent effluent limit for pH.
  - Updated monitoring and reporting protocols to current format

- Schedule D: (Special Conditions)
  Addition of requirements for:
  - Receiving Water Flow Monitoring Plan
  - Outfall Inspection

2. Facility Description

2.1 Wastewater Facility

Meadows Utilities Company, LLC owns and operates a private wastewater collection system and activated sludge wastewater treatment plant (WTP) that serves the Mt. Hood Meadows Ski Resort. The service area for the WTP includes the ski resort that contains two lodges consisting of six food service establishments, laundry, a day care center, three main restroom areas, offices, ski rental, sales and maintenance shops, and the on-site Providence Hood River Memorial Hospital Mountain Clinic. No overnight lodging facilities are currently included at the ski resort. Presently, the resort is undergoing a two-story addition. The addition includes gear rental and ski instruction areas plus a restaurant/bar. Kitchen waste will be conveyed to a grease interceptor prior to discharge to the collection system. The consultant overseeing the upgrades, Interface Engineering, Inc., indicated that wastewater operations should not expect a significant increase in effluent flow.

Sanitary wastewater is conveyed approximately one mile to a wastewater treatment facility that is located southeast of the ski resort's main parking area (Figure 2-1). Influent flows into a 600 gallon-per-minute sewage grinder. From the grinder, flow is directed into one of two 65,000-gallon sequencing batch reactor tanks (SBR2 and SBR3). The SBR2 and SBR3 alternate filling, mixing, aeration, and decanting on approximately 8-hour cycles. The third chamber (SBR1) is currently used to store and aerate wastewater solids. Secondary treated wastewater discharged from SBR2 and SBR3 is pumped into a 25,000-gallon tank, filtered through a Dynasand filter, disinfected with ultraviolet (UV) radiation, and discharged into the East Fork Hood River. Influent and effluent flows are measured using Fischer & Porter in-line magnetic flow meters.

Figure 2-1: Site Location

The facility produces Class B biosolids from the primary and secondary wastewater treatment processes for beneficial land applications. Solids from SBR1 are lime stabilized, pumped into a tanker truck and transported to an approved agricultural site south of The Dalles. Approximately 26,000 gallons of biosolids are land applied annually. The facility biosolids management plan and land application plan provide additional details and are available for public review upon request.

Primary solids (rags, plastics and other solids) are disposed of in a sanitary landfill. The facility transports such solids to the landfill by truck on a monthly basis.

A general facility treatment process diagram is provided as Appendix A.

2.2 Outfalls

The Mt. Hood Meadows Ski Resort WTP discharges year-round into the East Fork of Hood River at approximate River Mile 25.8. Effluent from the treatment facility is conveyed approximately 300 feet south to the river where is discharged through Outfall 001. The outfall is located on the north side of the river approximately 2 feet from riverbank and at a depth of 2 feet. The average flow rate per discharge is 0.01 MGD. Summary details on Outfall 001 are listed in the table below.

Table 2-1: List of Outfalls

Outfall Number	Type of Waste	Lat/Long
001	Treated Domestic Wastewater	45.321084/-123.652172 W

2.3 Stormwater

Stormwater is not addressed in this permit. A 1200-Z Industrial Stormwater permit is not required for facilities with a design flow of less than 1 MGD.

2.4 Industrial Pretreatment

The permittee does not have a DEQ-approved industrial pretreatment program. Based on current information, no industrial pretreatment program is needed since the sanitary collection system services a small ski resort with only domestic sources of wastewater (e.g., restrooms, food service establishments, laundry, and day care center). There are no industrial facilities or sources within the resort's limited sanitary collection system.

2.5 Wastewater Classification

OAR 340-049 requires all permitted municipal wastewater collection and treatment facilities receive a classification based on the size and complexity of the systems. DEQ evaluated the classifications for the treatment and collection system, which are publicly available at: https://www.deq.state.or.us/wq/opcert/Docs/OpcertReport.pdf.

3. Schedule A: Effluent Limit Development

Effluent limits serve as the primary mechanism in NPDES permits for controlling discharges of pollutants to receiving waters. Effluent limitations can be based on either the technology available to control the pollutants or limits that are protecting the water quality standards for the receiving water. DEQ refers to these two types of permit limits as technology-based effluent limitations (TBELs) and water quality-based effluent limits (WQBELs) respectively. When a TBEL is not restrictive enough to protect the receiving stream, DEQ must include a WQBEL in the permit.

3.1 Existing Effluent Limits

The table(s) below show the limits contained in the existing permit. The limits of Tables 3-1 and 3-2 vary seasonally depending upon dilution values.

Table 3-1:Existing Effluent Limits (May 1–October 31: effluent flow, BOD_5 and TSS)

Parameter	Units	Statistic	Dilution (Qr/Qe) See Note a.		
			≥ 20	≥ 10 and < 20	< 10
Flow	MGD	Daily maximum	0.01875	0.0375	Discharge prohibited
BOD_5	mg/L	Monthly average	20	10	
	mg/L	Weekly average	20	10	
	lb/day	Monthly average	3.1	3.1	
	lb/day	Weekly average	4.7	4.7	
	lb/day	Daily maximum	6.2	6.2	
TSS	mg/L	Monthly average	20	10	
	mg/L	Weekly average	20	10	
	lb/day	Monthly average	3.1	3.1	
	lb/day	Weekly average	4.7	4.7	
	lb/day	Daily maximum	6.2	6.2	
Note: The dilution value is equal to the daily receiving stream flow (Qr) divided by daily effluent flow (Qe).					

Table 3-2: Existing Effluent Limits (November 1 – April 30: effluent flow, BOD_5 and TSS)

Parameter	Units	Statistic	Dilution (Qr/Qe) See Note a.		
			≥ 20	≥ 10 and < 20	< 10
Flow	MGD	Daily maximum	0.0375	0.0375	Discharge prohibited
BOD_5	mg/L	Monthly average	20	10	
	mg/L	Weekly average	20	10	
	lb/day	Monthly average	6.3	3.1	
	lb/day	Weekly average	9.5	4.7	
	lb/day	Daily maximum	13	6.2	
TSS	mg/L	Monthly average	20	10	
	mg/L	Weekly average	20	10	
	lb/day	Monthly average	6.3	3.1	
	lb/day	Weekly average	9.5	4.7	
	lb/day	Daily maximum	13	6.2	
Note: The dilution value is equal to the daily receiving stream flow (Qr) divided by daily effluent flow (Qe).					

Table 3-3: Permit Limits (Percent removal, pH, E. coli, temperature, and thermal load)

Parameter	Units	Limits
BOD_5 percent removal (Year-Round)	% removal	85 as a monthly average
TSS percent removal (Year-Round)	% removal	85 as a monthly average
pH (Year-Round)	SU	Instantaneous limit between a daily minimum of 6.0 and a daily maximum of 9.0
E. coli (Year-Round) See note a.	#/100 mL	Must not exceed a monthly geometric mean of 126, no single sample may exceed 406
Excess Thermal Load (May 1–Sep 30)	million kcal/day	3.0 as a 7-day rolling average
Discharge limitation (effluent flow) (Year-Round)	MGD	Discharge prohibited any time effluent temperature exceeds 20°C
Discharge limitation (effluent flow) (January 1–April 30)	MGD	Discharge prohibited any time the temperature of the EF Hood R exceeds 12.8°C (measured at the downstream edge of the mixing zone)
Discharge limitation (effluent flow) (October 1–December 31)	MGD	Discharge prohibited any time the temperature of the EF Hood R exceeds 17.8°C (measured at the downstream edge of the mixing zone)

Notes:

a. The permittee may take at least 5 consecutive re-samples at 4-hour intervals beginning within 28 hours after the original sample was taken and the geometric mean of the 5 re-samples is less than or equal to 126 E. coli organisms/100 mL to demonstrate compliance with the limit.

3.2 Technology-Based Effluent Limit Development

40 CFR 122.44(a)(1) requires that all NPDES permits include technology-based effluent limits (TBELS). DEQ also uses best professional judgement, as allowed under federal rule (40 CFR 125.3), to apply the secondary treatment standards as TBELS for domestic wastewater treatment facilities that are not publicly-owned. Publicly-owned treatment works (POTWs) are required to meet specific TBELS for five-day biochemical oxygen demand (BOD_5), total suspended solids (TSS) and pH (i.e., federal secondary treatment standards). Substitution of 5-day carbonaceous oxygen demand ($CBOD_5$) for BOD_5 is allowed. The numeric standards for these pollutants are contained in 40 CFR 133.102.

In addition, DEQ has developed minimum design criteria for BOD_5 and TSS that apply to specific watershed basins in Oregon. These are listed in the basin-specific criteria sections under OAR 340-041-0101 to 0350. During the summer low flow months as defined by OAR, these design criteria are more stringent than the federal secondary treatment standards. The basin-specific criteria are not effluent limits, but are implemented as design criteria for new or

expanded wastewater treatment plants. The table below shows a comparison of the federal secondary treatment standards and the basin-specific design criteria for the Hood River basin.

Table 3-4: Comparison of TBELs for Federal Secondary Treatment Standards and Oregon Basin-Specific Design Criteria

Parameter	Federal Secondary Treatment Standards		Hood Basin-Specific Design Criteria (OAR 340-041-0165)
	30-Day Average	7-Day Average	Monthly Average
BOD_5 (mg/L)	30	45	Low stream flow (approximately May 1 - October 31; 10 mg/L for BOD and TSS High stream flow (approximately November 1 – April 30): minimum of secondary treatment or equivalent control
TSS (mg/L)	30	45	
pH (S.U.)	6.0 – 9.0. (instantaneous)		Not applicable
BOD_5 and TSS % Removal	85%	Not applicable	Not applicable

The limits for BOD_5 and TSS shown in the table above are concentration-based limits. Mass-based limits are required in addition to the concentration-based limits per OAR 340-041-0061(9). In 1988, during design of the current facility, the DEQ plan review engineer determined the appropriate dilution factors (e.g., daily receiving stream flow divided by the daily effluent flows) and corresponding effluent concentration limits to comply with these criteria. For the summer low stream flow period (May 1 – October 31), it was determined that an effluent concentration limit of 10 mg/L for both BOD and TSS was necessary along with a minimum stream flow/effluent flow dilution ratio of 10:1 and maximum daily effluent flow of 0.0375 MGD was necessary to comply with the basin criterion. The 0.0375 MGD is the facility's monthly average effluent design flow. In addition, it was determined that an effluent concentration of 20 mg/L for both BOD and TSS with effluent flows at or below one-half the design flow (a monthly average effluent flow 0.01875 MGD) and a stream/effluent flow dilution ratio of at least 20:1 would result in control equivalent.

For the Nov. 1 to April 30 period, it was determined that an effluent concentration of 20 mg/L for both BOD and TSS at a monthly average effluent flow 0.0375 MGD and a stream/effluent flow dilution ratio of 20:1 would provide equivalent to secondary treatment (the high stream flow period criterion). For dilution ratio below 20:1, the allowable effluent concentrations would need to be reduced (with concentrations of 10 mg/L at a dilution ratio of 10:1).

The following equation is used to develop the BOD5 and TSS monthly average mass load limits from the concentration limits described above. The limits are rounded to two significant figures.

Monthly Avg Mass Load = Design Flow* x Monthly Concentration Limit x Unit Conversion factor

Weekly Average Mass Load = 1.5 x Monthly Average Mass Load Limit

Daily Maximum Mass Load = 2 x Monthly Average Mass Load Limit

* Design flow is the average dry weather flow (ADWF) or average wet weather flow (ADWWF)

The following table lists the effluent flows and concentration limits used for the calculations.

Table 3-5: Design Flows and Concentrations Limits

Season	Design Flow (mgd)	Monthly TSS Concentration Limit (mg/L)	Monthly BOD_5 Concentration Limit (mg/L)
Dry Weather (See note a.)	0.0187	20	20
Dry Weather (See note b.)	0.0375	10	10
Wet Weather	0.0375	20	20
Notes: a). Monthly average design flows and concentrations when stream/effluent flow dilution ratios are greater than 20:1. b.) Monthly average design flows and concentrations when stream/effluent flow dilution ratios are $\geq$10:1 and <20:1.			

Dry Weather Mass Load Calculations (stream/effluent flow dilution ratios are greater than 20:1:

Monthly Average: 0.0187 MGD x 20 mg/L x 8.34 = 3.1 lbs/day

Weekly Average: 3.1 lbs/day monthly average x 1.5 = 4.7 lbs/day

Daily Maximum: 3.1 lbs/day monthly average x 2 = 6.2 lbs/day

Dry Weather Mass Load Calculations (stream/effluent flow dilution ratios are $\geq$10:1 and < 20:1):

Monthly Average: 0.0375 MGD x 10 mg/L x 8.34 = 3.1 lbs/day

Weekly Average: 3.1 lbs/day monthly average x 1.5 = 4.7 lbs/day

Daily Maximum: 3.1 lbs/day monthly average x 2 = 6.2 lbs/day

Wet Weather Mass Load Calculations:

Monthly Average: 0.0375 MGD x 20 mg/L x 8.34 = 6.3 lbs/day

Weekly Average: 6.3 lbs/day monthly average x 1.5 = 9.4 lbs/day

Daily Maximum: 6.3 lbs/day monthly average x 2 = 12.6 lbs/day (rounded to 13 lbs/day, two significant figures)

The proposed BOD_5 and TSS concentration, mass limits and percent removal efficiencies are listed in the following table.

Table 3-6: BOD5 and TSS Technology Based Effluent Limits

Parameter	Receiving Stream Dilution (Q_R/Q_E) (See Note a.)	Units	Average Monthly	Average Weekly	Daily Maximum
Effluent Flow	<10 (Year-round)	MGD	**No discharge (Daily Max Limit = 0 MGD)**		
	≥10 and <20 (Year-round)	MGD	-	-	0.0375
	≥20 (May 1 – October 31)	MGD	-	-	0.01875
	≥20 (Nov 1 – April 30)	MGD	-	-	0.0375
BOD_5 (Year-round)	≥10 and <20	mg/L	10	10	-
		lb/day	3.1	4.7	6.2
TSS (Year-round)	≥10 and <20	mg/L	10	10	-
		lb/day	3.1	4.7	6.2
BOD_5 (May 1 - Oct. 31)	≥20	mg/L	20	20	-
		lb/day	3.1	4.7	6.2
TSS (May 1 – Oct. 31)	≥20	mg/L	20	20	-
		lb/day	3.1	4.7	6.2
BOD (Nov. 1 – April 30)	≥20	mg/L	20	20	-
		lb/day	6.3	9.5	13
TSS (Nov. 1 – April 30)	≥20	mg/L	20	20	-
		lb/day	6.3	9.5	13
BOD and TSS Percent Removal (Year – round)	N/A (All dilutions)	% Removal	85	-	-
Notes:					

Parameter	Receiving Stream Dilution (Q_R/Q_E) (See Note a.)	Units	Average Monthly	Average Weekly	Daily Maximum
a.) The dilution value is equal to the maximum daily receiving stream flow (Q_R-MGD) divided by the maximum daily effluent flow (Q_E-MGD).					

3.3 Water Quality-Based Effluent Limit Development

40 CFR 122.44(d) requires that permits include limitations more stringent than technology-based requirements where necessary to meet water quality standards. Water quality-based effluent limits may be in the form of a wasteload allocation required as part of a Total Maximum Daily Load (TMDL). They may also be required if a site-specific analysis indicates the discharge has the reasonable potential to cause or contribute to an exceedance of a water quality criterion. DEQ establishes effluent limits for pollutants that have a reasonable potential to exceed a criterion. The analyses are discussed below.

3.3.1 Designated Beneficial Uses

NPDES permits issued by DEQ must protect the following designated beneficial uses of the Upper East Fork Hood River. These uses are listed in OAR-340-041-0160 for the Mid Columbia/Hood Basin.

- Public and private domestic water supply
- Industrial water supply
- Irrigation and livestock watering
- Fish and aquatic life (including salmonid rearing, migration and spawning)
- Wildlife and hunting
- Fishing
- Boating
- Water contact recreation
- Aesthetic quality, and
- Hydro Power

3.3.2 303(d) Listed Parameters and Total Maximum Daily Loads

The following table lists the parameters that are on the 2022 303(d) list (Category 5) within the discharge's stream reach This category constitutes the Section 303(d) list that EPA will approve or disapprove under the Clean Water Act. The table also lists any parameters with an TMDL wasteload allocation assigned to the facility (Category 4).

Table 3-7: 303(d) and TMDL Parameters

Water Quality Limited Parameters (Category 5)	
AU ID:	OR_WS_170701050501_02_101996

AU Name:	Upper East Fork Hood River
AU Status:	Impaired (See Note a.)
Year Listed	2002
Year Last Assessed	2022
Category 5 Parameters	Temperature – Year-round, Zinc – Aquatic Life Toxics
TMDL Parameters	
Temperature	
Notes: a.) The impaired status designation is for the Upper East Fork Hood River assessment unit.	

The Zinc-Aquatic Life Toxics impairment listing is from data collected in other drainages in the watershed that are several miles downstream of the Mount Hood Meadows WTP. In general, the Mount Hood Meadows WTP only receives and treats wastewater from domestic sources within the ski resort. Such minor domestic sources of sanitary wastewater are considered by the USEPA to be de minimis sources of zinc and is therefore not considered a pollutant of concern for the facility. As such, the Mount Hood Meadows WTP is not considered to be a contributing factor to the zinc impairment in the watershed.

3.3.3 TMDL Wasteload Allocations

Although the Upper East Fork Hood River is not currently listed as impaired for temperature, other drainages in the Hood River Valley are listed. As such, a Total Maximum Daily Load (TMDL)[1] for temperature in the Western Hood Subbasin (WHS) was developed by DEQ in 2001 and approved by USEPA in 2002. The 2001 TMDL was revised by DEQ in 2018 and approved by USEPA in 2018. A TMDL can be thought of as an estimate of the total amount of pollution a waterbody can assimilate without exceeding water quality standards.

The TMDL addresses the temperature listing for the Western Hood Subbasin which includes the Upper East Fork Hood River. The 2018 TMDL specifies a waste load allocation (WLA) for temperature for the Mount Hood Meadows WTP. A discussion of the temperature issues associated with the discharge and the relationship to the 2018 WHS TMDL is presented in Section 2.8.7.

3.3.4 Pollutants of Concern

To ensure that a permit is protecting water quality, DEQ must identify pollutants of concern. These are pollutants that are expected to be present in the effluent at concentrations that could adversely impact water quality. DEQ uses the following information to identify pollutants of concern:

- Effluent monitoring data.

[1] Section 303(d) of the Clean Water Act requires each state to develop a list (the "303(d)" list) of water bodies that do not meet state surface water quality standards after implementation of technology-based controls. Each state is then required to complete a Total Maximum Daily Load (TMDL) for water bodies on the 303(d) list. The TMDL must address water quality on a basin-wide scale to ensure overall water quality standards will be met. The Western Hood Subbasin TMDL is available online at: https://www.oregon.gov/deq/wq/tmdls/Pages/midcolumbiahood.aspx

- Knowledge about the permittee's processes.
- Knowledge about the receiving stream water quality.
- Pollutants identified by applicable federal effluent limitation guidelines.

Based on EPA's NPDES permit application requirements, toxic pollutants of concern for domestic facilities are listed in the following table.

Table 3-8: Domestic Toxic Pollutants of Concern

Flow Rate	Pollutants
< 0.1 mgd	Total Residual Chlorine
≥ 0.1 mgd and < 1.0 mgd	Total Residual Chlorine, Total Ammonia Nitrogen

Total Residual Chlorine is not a pollutant of concern for the Mount Hood Meadows WTP because the facility uses ultraviolet (UV) light for disinfection. Based upon effluent monitoring in the existing permit term, the DEQ has identified the following pollutants of concern for this facility:

Table 3-9: Pollutants of Concern

Pollutant	How was pollutant identified?
pH	Effluent Monitoring
Temperature	Effluent Monitoring
E. coli	Effluent Monitoring
Total Ammonia Nitrogen	Effluent Monitoring

The sections below discuss the analyses that were conducted for the pollutants of concern to determine if water quality based effluent limits are needed to meet water quality standards.

3.3.5 Regulatory Mixing Zone

The proposed permit contains a mixing zone as allowed per OAR 340-041-0053. The regulatory mixing zone from the existing permit is described as:

The mixing zone is defined as 50 percent of the East Fork Hood River flow and no more than 100 feet downstream from the outfall. The zone of initial dilution is defined as 10 percent of the East Fork Hood River flow and no more than 10 feet downstream from the outlet into the river.

The proposed permit contains the same regulatory mixing zone boundaries which is described below. The description was updated to including current description conventions.

The Regulatory Mixing Zone (RMZ) is defined as 50 percent of the East Fork Hood River flow and no more than 100 feet downstream from the outfall. The Zone of Initial Dilution (ZID) is defined as 10 percent of the East Fork Hood River flow and no more than 10 feet downstream from the outlet into the river.

The outfall is located at 45.321084, -121.652172 (WGS 1984) and was located during a 2009 outfall survey by DEQ.

Figure 3-1: Outfall Location

The dilution factors at the edge of the Regulatory Mixing Zone and Zone of Initial Dilution are shown in Table 3-10. These dilutions are based on a September 4, 2024 mixing zone study by DEQ which is part of the administrative record. For this memo, the flow data from June 1, 2020 through July 31, 2024 collected by the permittee at an upstream flow gauge was used to determine the 1Q10, 7Q10, and 30Q5 at the outfall. The low flow statistics were determined using USGS Hydrologic Toolbox 1.1.0.[2] The dilution was calculated using the most stringent effluent flow limit, and the percentage of stream flow from the mixing zone description. The formula for calculating the dilution is

$$Dilution\ Factor\ = \frac{(Percentage\ of\ Stream\ Flow)(Qa) + Qe}{Qe}$$

Where Qa is the appropriate ambient flow statistic, and Qe is the appropriate effluent flow.

[2] Barlow, P.M., McHugh, A.R., Kiang, J.E., Zhai, T., Hummel, P., Duda, P., and Hinz, S., 2022, U.S. Geological Survey Hydrologic Toolbox — A graphical and mapping interface for analysis of hydrologic data: U.S. Geological Survey Techniques and Methods, book 4, chap. D3, 23 p., https://doi.org/10.3133/tm4D3.

Table 3-10: Outfall 001 Dilution Summary

Dilution Summary – Outfall 001 - 05-01 to 10-31 (Dry Weather)						
Water Quality Standard	**Stream Flow (cfs)**		**Effluent Flow (mgd)**		**Dilution Factor**	**Location**
	Statistic	**Flow**	**Statistic**	**Flow**		
Aquatic Life, Acute	1Q10	1.34	☐ ADWDF x PF ☐ Max Daily Avg ☒ Other: Flow limit	0.01875	5.6	ZID (10%)
Aquatic Life, Chronic	7Q10	1.34	☐ ADWDF ☐ Max Monthly Avg ☒ Other	0.01875	24	RMZ (50%)
Human Health, Non-Carcinogen	30Q5	1.83	☐ ADWDF ☐ Max Monthly Avg ☒ Other	0.01875	33	RMZ (50%)
ADWDF = Average dry weather design flow *PF = Peaking factor (1.5)*						
Comments: The Aquatic Life, 30-day Chronic criteria is used in the Ammonia RPA analysis. The statistics used to calculate dilutions follow the same guidance as for Human Health, non-carcinogen criteria in the Regulatory Mixing Zone IMD, Part 2.						

Dilution Summary – Outfall 001 - 11-01 to 04-30 (Wet Weather)						
Water Quality Standard	**Stream Flow (cfs)**		**Effluent Flow (mgd)**		**Dilution Factor**	**Location**
	Statistic	**Flow**	**Statistic**	**Flow**		
Aquatic Life, Acute	1Q10	2.65	☐ ADWDF x PF ☐ Max Daily Avg ☒ Other: Flow limit	0.0375	5.6	ZID (10%)
Aquatic Life, Chronic	7Q10	3.14	☐ ADWDF ☐ Max Monthly Avg ☒ Other	0.0375	28	RMZ (50%)
Human Health, Non-Carcinogen	30Q5	5.69	☐ ADWDF ☐ Max Monthly Avg ☒ Other	0.0375	50	RMZ (50%)
ADWDF = Average dry weather design flow *PF = Peaking factor (1.5)*						
Comments: The Aquatic Life, 30-day Chronic criteria is used in the Ammonia RPA analysis. The statistics used to calculate dilutions follow the same guidance as for Human Health, non-carcinogen criteria in the Regulatory Mixing Zone IMD, Part 2.						

3.3.6 pH

The pH criterion for this basin is 6.5 – 8.5 per OAR 340-041-0165. Using the existing permit limits of 6.0 – 9.0, DEQ determined there is reasonable potential for the discharge to exceed the pH criterion at the edge of the mixing zone. As such, the proposed permit modifies the existing pH limits from 6.0 to 9.0 S.U. to 6.2 to 9.0 S.U. The lower limit of 6.2 is a WQBEL and the upper limit of 9.0 is a TBEL. The permittee has indicated that their facility will have no issues in meeting the more stringent pH limits. In addition, a review of effluent data during the existing permit term showed that the permittee will be able to meet the revised lower pH limit upon permit issuance. As such, no compliance schedule is required. The following table provides a summary of the data used for the analysis.

Table 3-11: pH Reasonable Potential Analysis

INPUT	Lower pH Criteria	Upper pH Criteria
1. Dilution at mixing zone boundary	24	24
2. Upstream characteristics		
a. Temperature (deg C)	14.2	2.9
b. pH	6.8	7.0
c. Alkalinity (mg CaCO3/L)	34.6	34.6
3. Effluent characteristics		
a. Temperature (°C)	16.3	9.3
b. pH (S.U.)	6.0	9.0
c. Alkalinity (mg CaCO3/L)	345.2	345.2
4. Applicable pH criteria	6.5	8.5
pH at mixing zone boundary	**6.4**	**7.2**
Is there reasonable potential?	**Yes**	**No**
Proposed effluent limits	**6.2**	**9.0**
Effluent data source: Mt. Hood Meadows WTP Discharge Monitoring Reports June 2020 through July 2024. Alkalinity and temperature data from January 2022 through December 2023.		
Ambient data source: Mt Hood Meadows WTP Discharge Monitoring Reports June 2020 through July 2024. Facility monitors receiving stream (East Fork Hood River).		

3.3.7 Temperature

3.3.7.1 Temperature Criteria OAR 340-041-0028

The following table summarizes the temperature criteria that apply at the discharge location along with whether the receiving stream is water quality-limited for temperature and whether a TMDL wasteload allocation has been assigned. Using this information, DEQ performed several analyses to determine if effluent limits were needed to comply with the temperature criteria.

Table 3-12: Temperature Criteria Information

Applicable Temperature Criterion	Rearing/Migration 18ºC (OAR 340-041-0028(4)(c)
Applicable dates: Year-round	
Salmon/Steelhead Spawning 13 °C? OAR 340-041-0028(4)(a)	☐Yes ☒No
Applicable dates: N/A	
WQ-limited?	☐Yes ☒No
TMDL wasteload allocation assigned?	☒Yes ☐No
Applicable dates: May 1 – September 30	
TMDL based on natural conditions criterion?	☐Yes ☒No
Cold water summer protection criterion applies?	☐Yes ☒No
Cold water spawning protection applies?	☐Yes ☒No
Comments: The section of the Upper East Fork Hood River into which the facility discharges is not designated for salmon/steelhead spawning. Designated salmon and steelhead spawning areas begin approximately 0.70 mile downstream of facility discharge (below Hwy 35 bridge).	

3.3.7.2 Temperature Criteria Analysis

During the development of the 2018 Western Hood Sub-basin TMDL, DEQ conducted a reasonable potential analysis for temperature based upon the salmon rearing and migration criterion of 18° C. Based upon the result of this analysis, the TMDL gave the Mt. Hood Meadows WTP a waste load allocation (WLA) of 3.0 gigacalories per day (Gcals/day) during the critical period of May 1 – September 30. Outside of this critical period (October 1 to April 30), the TMDL concluded that there was no reasonable potential for the temperature criteria to be exceeded, and the facility was assigned its current WLA which is included in the existing permit as an Excess Thermal Load Limit (ETTL).

In 2023, the fish use designation for the Upper East Fork Hood River was revised within Oregon Administrative Rules to core cold-water habitat with a criterion of 16° C. This criterion is applicable year-round. This change to the beneficial use is still awaiting EPA approval. However, since this use has been identified as an existing use, it is considered in this assessment

as required under DEQ's antidegradation rule and DEQ conducted a temperature reasonable potential analysis for the core cold water criterion. The analysis used the maximum effluent temperature (19.7 °C) reported by the WTP from June 2020 through July 2024. The results of this analysis indicate that there is no potential for the facility's discharge to exceed the core cold water temperature standard (see Appendix B – Attachment B-1).

While the segment of the river where the discharge occurs is not designated for spawning use, an analysis was completed to ensure the discharge will not lead to exceedances of the spawning criterion in the downstream segment where spawning is a listed beneficial use (Oct 1 – June 15). The applicable temperature criterion is 13 ºC. Since this section of the Upper East Fork Hood River is not listed as impaired for temperature during the spawning season, the analysis is based on ensuring that applicable criterion is met downstream where spawning occurs. The effluent temperature value used in this analysis is 18 °C which was recorded in June 2021. This value represents the maximum effluent temperature recorded on the facility's DMRs during the spawning seasons from 2020 through 2024. The results of this RPA indicate that there is no potential for the facility's discharge to exceed the 13 ºC criterion during the spawning season (see Appendix B – Attachment B-2).

3.3.7.3 Other Existing Permit Temperature Limitations

The existing permit includes several discharge prohibitions should effluent temperatures and ambient receiving stream temperatures exceed certain thresholds. For example, no effluent discharges are permitted at any time of the year should effluent temperatures exceed 20 °C. Two discharge prohibitions related to ambient stream temperatures apply from October 1 through April 30, which is the portion of the year when the WLA does not apply. These limitations prohibit discharge if ambient river temperatures exceed 17.8 °C from October 1 - December 31 and 12.8 °C from January 1 – April 30. Due to anti-backsliding concerns, these prohibitions will be retained in the proposed permit.

3.3.7.4 Proposed Temperature Effluent Limits

Based upon the results of analyses summarized above, the proposed permit will retain the TMDL WLA of 3.0 Gcal/day. The WLA will be expressed as an Excess Thermal Load Limit (ETLL) of 3.0 million kcal/day (which is equivalent to 3.0 Gcal/day) that is applicable from May 1 through September 30. This is a static limit based upon fixed critical effluent and ambient receiving stream flows.

The TMDL also allows for a flow-based WLA[3] which is also applicable during the critical period of May 1-September 30. This equation is presented below.

$$WLA = (HUA_{PS})(Q_E + Q_R)(C_F)$$

Where,

[3] The flow-based WLA is presented as Equation 3 on Page 41 in Section 7.1 (Wasteload Allocations) of the *Western Hood Sub-basin Total Maximum Daily Load (Revision to the 2001 Western Hood Subbasin TMDL)*. Oregon Department of Environmental Quality. February 2018.

HUA_{PS} = Human Use Allowance - 0.18°C
Q_E = effluent flow (cfs)
Q_R = upstream river flow (cfs)
C_F = conversion factor for calculating Gcals/day from °C-ft^3: (2.44665 Gcal-s/°C-ft3-day)

These WLAs are expressed as Excess Thermal Load Limits in the permit. As noted above, the TMDL included two implementation options for determining the applicable ETL Limit. The first option is a static limit based on critical river and effluent flows. The second option is based on the actual (measured) river and effluent flows. These two options are included in the proposed permit and are listed in the table below. (The flow-based equation has been modified to use effluent flow values in million gallons per day [mgd] and river flow values in cubic feet per second [cfs]).

The proposed permit will also retain the existing discharge prohibitions for certain effluent and ambient receiving stream thresholds. Proposed temperature limitations are presented below:

Table 3-13: Temperature Limits

Effluent limit needed? ☒Yes ☐No
TMDL Static WLA Limit (Option A): 3.0 million kcal/day as a 7-day rolling average (See note a.)
Applicable time period: May 1 – September 30
TMDL Flow-based WLA Limit (Option B): ETL Limit (ETLL) = (0.18)*(Q_E + Q_R *0.646) * 3.785 million kcal/day as a 7-day rolling average (See notes a., b. and c.).
Applicable time period: May 1 – September 30
Effluent Temperature Limit: 20 °C
Applicable time period: Year-Round
Ambient Temperature Discharge Prohibitions and Applicable Time Periods:
17.8 °C: October 1 – December 31 (No Discharge Permitted) (See note d.)
12.8 °C: January 1 – April 30 (No Discharge Permitted) (See note d.)
Notes: a.) The seven-day rolling average for any specific day is the average of the daily values for that day and the preceding six days. b.) Q_E = Daily Mean Effluent Flow (mgd); Q_R= Daily Mean River Flow (cfs) as recorded by permittee at facility. c.) This option is also applied as a seven-day rolling average ETL limit for each day that Option B limit is selected by the permittee. d.) Ambient temperatures as measured at the downstream edge of the mixing zone.

The TMDL WLA limit will be expressed as an ETTL in Schedule A of the permit. The permittee will be required to use the following formula for calculating the facility's ETL to determine compliance with the ETLL. Schedule B provides the permittee with instructions for reporting compliance with the ETL limit.

$$ETL = 3.785 * Q_E * \Delta T$$

Where:

Q_E = Daily Average Effluent Flow (MGD)
ΔT = Daily Maximum Effluent Temperature (°C) minus the ambient criterion from the TMDL (18 °C)

3.3.7.5 Thermal Plume OAR 340-041-0053(2)(d)

In addition to compliance with the temperature criteria, OAR 340-041-0053(2)(d) contains thermal plume limitation provisions designed to prevent or minimize adverse effects to salmonids that may result from thermal plumes. The discharge was evaluated for compliance with these provisions as follows:

- OAR 340-041-0053(2)(d)(A): Impairment of an active salmonid spawning area where spawning redds are located or likely to be located. This adverse effect is prevented or minimized by limiting potential fish exposure to temperatures of 13 ºC or more for salmon and steelhead, and 9 ºC or more for bull trout.

  Mt. Hood Meadows Discharge: Based on the Hood Basin fish use and salmonid spawning use map contained in OAR 340-041-0028 Figure 160B, this segment of the Upper East Fork Hood River is not designated as spawning habitat. The nearest river segment designated as salmonid spawning habitat is approximately 0.7 miles downstream from the facility's point of discharge. Therefore, the discharge will not cause impairment of an active salmonid spawning area.

- OAR 340-041-0053(2)(d)(B): Acute impairment or instantaneous lethality is prevented or minimized by limiting potential fish exposure to temperatures of 32 ºC or more to less than 2 seconds.

  Mt. Hood Meadows Discharge: Based on a review of effluent temperatures recorded from June 2020 through July 2024, the maximum effluent temperature at Outfall 001 was 19.7 ºC in August 2020. Thus, anticipated peak temperatures are expected to be well below 32 ºC and are not expected to cause an acute impairment or instantaneous lethality due to the thermal plume.

- OAR 340-041-0053(2)(d)(C): Thermal shock caused by a sudden increase in water temperature is prevented or minimized by limiting potential fish exposure to temperatures of 25 ºC or more to less than 5% of the cross-section of 100% of the 7Q10 flow of the water body.

  Mt. Hood Meadows Discharge: Based on a review of effluent temperatures recorded from June 2020 through July 2024, the maximum effluent temperature at Outfall 001 was 19.7 ºC in August 2020. Thus, anticipated peak temperatures are expected to be below 25 ºC which will prevent or minimize thermal shock due to the thermal plume.

- OAR 340-041-0053(2)(d)(D): Unless ambient temperature is 21 ºC or greater, migration blockage is prevented or minimized by limiting potential fish exposure to temperatures of 21 ºC or more to less than 25% of the cross-section of 100% of the 7Q10 flow of the water body.

  Mt. Hood Meadows Discharge: Discharge monitoring reports from June 2020 through July 2024, reported a maximum effluent temperature of 19.7 ºC. Since the maximum effluent temperature is below 21 ºC, migration blockage caused by the discharges from Outfall 001 is prevented or minimized.

  In summary, the analysis indicates that the discharge from the Mt. Hood Meadows WTP meets the temperature thermal plume limits in OAR 340-041-0053(2)(d).

3.3.8 Bacteria

OAR 340-041-0009(6)(b) requires discharges of bacteria into freshwaters meet a monthly geometric mean of 126 E. coli per 100 mL, with no single sample exceeding 406 E. coli per 100 mL. If a single sample exceeds 406 E. coli per 100 mL, then the permittee may take five consecutive re-samples. If the geometric mean of the five re-samples is less than or equal to 126, a violation is not triggered. The re-sampling must be taken at four-hour intervals beginning within 28 hours after the original sample was taken. The following table includes the proposed permit limits and apply year-round.

Table 3-14: Proposed E. coli Limits

E. coli (#/100 ml)	Geometric Mean	Maximum
Existing Limit	126	406
Proposed Limit	126	406

3.3.9 Toxic Pollutants

DEQ typically performs the reasonable potential analysis for toxics according to EPA guidance provided in the Technical Support Document for Water Quality-Based Toxics Control (TSD) (Office of Water Enforcement and Permits, U.S. EPA, March 1991). The factors incorporated into this analysis include:

1. Effluent concentrations and variability
2. Water quality criteria for aquatic life and human health
3. Receiving water concentrations
4. Receiving water dilution (if applicable)

DEQ performs these analyses using spreadsheets that incorporate EPA's statistical methodology. The following sections describe the analyses for various toxic pollutants below.

3.3.9.1 Total Ammonia Nitrogen

DEQ's ammonia criteria vary with changes in pH and temperature. DEQ performed a reasonable potential analysis that accounts for changes in the effluent and receiving water pH and temperature to determine the appropriate ammonia criteria. The analysis utilized effluent and receiving stream monitoring data reported by the facility in their monthly discharge monitoring reports from June 2020 through July 2024. The analysis indicated that the facility's discharge has no reasonable potential to exceed water quality criteria for ammonia and a limit for ammonia is not currently required for the discharge. The following table provides a summary of the data used for the ammonia analysis and the results of the analysis.

Table 3-15: Ammonia Analysis Information – Year-Round

	Acute	Chronic	
		4-day	30-day
Dilution	5.6	24	33
Ammonia Criteria	14.0	6.5	2.6
Effluent Data Used			
Ammonia (mg/L)	1.0	1.0	
pH (SU)	8.4	8.4	
Temperature (ºC)	18.6	18.6	
Alkalinity (mg/L CaCO3)	345.2	345.2	
Receiving Stream Data Used			
Ammonia (mg/L)	0.1	0.1	
pH (SU)	7.0	7.0	
Temperature (ºC)	14.2	14.2	
Alkalinity (mg/L CaCO3)	34.4	34.4	
Ammonia Limit Needed?	**No**		
Calculated Limits	AML	MDL	
Ammonia (mg/L)	N/A	N/A	
Effluent data source			
Mt. Hood Meadows WTP Discharge Monitoring Reports June 2020 through July 2024.			
Ambient data source			
Discharge Monitoring Reports June 2020 through July 2024. Facility monitors ambient stream conditions. Ammonia and alkalinity data monitoring from January to December 2022.			

3.3.9.2 Mercury – Human Health Criterion

DEQ determined that this facility is not a likely source of mercury. Therefore, no additional controls or monitoring will be required.

3.4 Antibacksliding

The proposed permit complies with the antibacksliding provisions of CWA sections 402(o) and 303(d)(4) and 40 CFR 122.44(l). The proposed limits are the same or more stringent than the existing permit or were prepared in accordance with Hood River Sub-basin TMDL so the antibacksliding provision is satisfied.

3.5 Antidegradation

DEQ must ensure the permit complies with Oregon's antidegradation policy found in OAR 340-041-0004. This policy is designed to protect water quality by limiting unnecessary degradation from new or increased sources of pollution.

DEQ has performed an antidegradation review for this discharge. The proposed permit contains the same or more stringent discharge loadings as the existing permit. The proposed permit also includes an excess thermal load limit that is consistent with the Western Hood Sub-basin TMDL. Permit renewals with the same or more stringent discharge loadings as the previous permit are not considered to lower water quality from the existing condition. DEQ is not aware of any information that existing limits are not protecting the receiving stream's designated beneficial uses. DEQ is also not aware of any existing uses present within the water body that are not currently protected by standards developed to protect the designated uses. Therefore, DEQ has determined that the proposed discharge complies with DEQ's antidegradation policy. DEQ's antidegradation worksheet for this permit renewal is available upon request.

3.6 Whole Effluent Toxicity

DEQ does not require whole effluent toxicity testing (WET) for minor domestic facilities because concentrations of toxics are typically very low and WET testing is not warranted.

3.7 Groundwater

The treatment facility does not have any basins, ponds or lagoons that have the potential to leach into the groundwater if adequately maintained. No groundwater monitoring or limits are required.

4. Schedule A: Other Limitations

4.1 Mixing Zone

Schedule A describes the regulatory mixing zone as discussed above in Section 3.

4.2 Biosolids

The permittee currently produces Class B biosolids for land application by distribution or sale and anticipates continuing to do so. Schedule A of the permit requires the facility to apply biosolids according to their biosolids management plan. In addition, Schedule A requires the following:

- Apply at or below agronomic rates
- The permittee must have written site authorization for each location from DEQ before land applying and abide by the restrictions for each site
- Prior to application, the permittee must ensure that biosolids meet one of the pathogen reduction standards under 40 CFR 503.32
- The permittee must not apply biosolids containing pollutants in excess of the ceiling concentrations for the nine metals shown in Schedule A of the permit

4.3 Recycled Water

The permittee does not currently operate a recycled water program nor anticipates initiating a recycled water program during the next permit cycle.

4.4 Chlorine Usage

Schedule A of the permit prohibits the permittee from using chlorine or chlorine compounds for effluent disinfection purposes.

5. Schedule B: Monitoring and Reporting Requirements

Schedule B of the permit describes the minimum monitoring and reporting necessary to demonstrate compliance with the proposed effluent limits. In addition, monitoring for other parameters is required to better characterize the effluent quality and the receiving stream. This data will be used during the next permit renewal. Detailed monitoring frequency and reporting requirements are in Schedule B of the proposed permit. The required monitoring, reporting and frequency for many of the parameters are based on DEQ's monitoring and reporting matrix guidelines, permit writer judgment, and to ensure the needed data is available for the next permit renewal.

6. Schedule C: Compliance Schedule

The permittee is expected to meet all effluent limits once the permit becomes effective and therefore a compliance schedule is not needed.

7. Schedule D: Special Conditions

The proposed permit contains the following special conditions:

7.1 Receiving Water Flow Monitoring Plan

A requirement for the permittee to develop a plan that describes the methods and standard operating procedures to measure stream flow in the Upper East Fork Hood River near the point of discharge.

7.2 Emergency Response and Public Notification Plan

A requirement to develop and submit an emergency and spill response plan or ensure the existing one is current per General Condition B.8 in Schedule F.

7.3 Exempt Wastewater Reuse at the Treatment System

A condition that exempts the permittee from the recycled water requirements in OAR 340-055, when recycled water is used for landscape irrigation at the treatment facility or for in-plant processes, such as in plant maintenance activities.

7.4 Biosolids Management Plan

A requirement to manage all biosolids in accordance with a DEQ-approved biosolids management plan and land application plan. The biosolids management plan and the land application plan must meet the requirements in OAR 340-050-0031 and describe where and how the land application of biosolids is managed to protect public health and the environment. The permittee will be required to update the biosolids management plan in the next permit term.

7.5 Wastewater Solids Transfers

A condition that allows the facility to transfer treated or untreated wastewater solids to other in-state or out-of-state facilities that are permitted to accept the wastewater solids.

7.6 Hauled Waste Control Plan

A condition that allows the acceptance of hauled waste according to a DEQ-approved hauled waste plan. The hauled waste plan ensures waste is not accepted that could negatively impact the treatment capabilities of the facility.

7.7 Hauled Waste Annual Report

A condition requiring submittal of an annual hauled waste report that summarizes hauled waste accepted at the facility during the previous year.

7.8 Operator Certification

The permittee is required to have a certified operator consistent with the size and type of treatment plant covered by the permit per OAR 340-049-0005. This special condition describes the requirements relating to operator certification.

7.9 Outfall Inspection

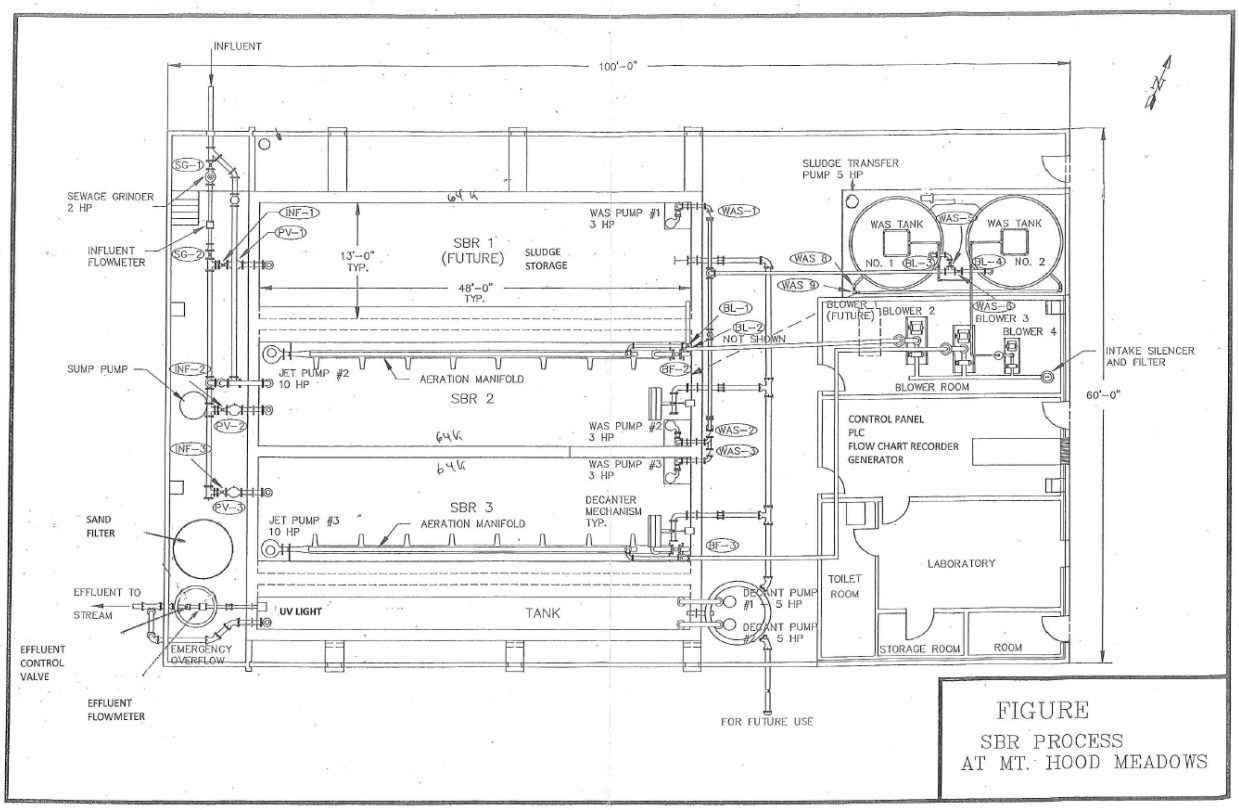
A condition that requires the permittee to inspect the outfall and submit a report regarding its condition.

8. Schedule F: NPDES General Conditions

Schedule F contains the following general conditions that apply to all NPDES permittees. These conditions are reviewed by EPA on a regular basis.

- Section A. Standard Conditions
- Section B. Operation and Maintenance of Pollution Controls
- Section C. Monitoring and Records
- Section D. Reporting Requirements
- Section E. Definitions

Appendix A: Facility Treatment Process Diagram



Appendix B: Reasonable Potential Analysis – Temperature

Facility Name: Mt. Hood Meadows **Date:** 12/17/2024

Applicable Criterion and Season: Spawning Season October 1 - June 15: Analysis of impact of effluent on spawning criterion, at downstream location where spawning is listed as a beneficial use (0.7 miles downstream of discharge). The analysis is conservative since it doesn't consider additional ambient flows and resulting dilutions that may occur between discharge and spawning use

Enter data into white cells below:

			Data Metric/Source
Percent Mix for Analysis =	100		Effluent plume is expected to be at 100% mix at spawning
7Q10 or other critical ambient flow =	1.34	cfs	MZ study - 7Q10 value
Effluent Flow =	0.0375	mgd	Max. daily effluent flow
Applicable Ambient Temperature =	13	°C	Spawning Criterion
Effluent Temperature =	18	°C	DMRs -June 2020 - July 2024; max. spawning season effluent temp June 2021
Allowable increase =	0.3	°C	

Dilution at 100 % of Stream Flow = **24** dilution = (Qr * % mix)/Qe + 1

ΔT at 100 % of stream flow	0.2	°C	No Reasonable Potential

Thermal Load Limit =	N/A	Million Kcals (7-day Rolling Avg.)

Equation used to calculate ΔT at edge of MZ

$$\Delta T_{mz} = \frac{T_e + (S-1)T_a}{S} - T_a$$

Equation used to calculate thermal load limit

$$TLL = 3.7854 Q_e S \Delta T_{all} C_p \rho$$

Where:

- Qe = Effluent Flow in mgd
- S = Dilution
- ΔT_{all} = Allowable temperature increase at edge of MZ (°C)
- Cp = Specific Heat of Water (1 cal/g °C)
- ρ = Density of Water (1 g/cm^3)
- 3785.41 = Flow conversion from mgd to m^3/day

Stream Meets Water Quality Criterion (OAR 340-041-0028(4))

For situations where the criterion is met (the waterbody is not listed as impaired for temperature) - Analysis at Edge of Mixing Zone Section 5.4 of the Temperature IMD

Facility Name: Mt. Hood Meadows WTP **Date:** 10/7/2024

Applicable Criterion and Season: Core cold-water habitat: Year-Round - 16 C criterion

Enter data into white cells below:

			Data Metric/Source
Mixing Zone Dilution =	24		MZ Study
Ambient Temperature =	15.9	°C	Temp set 0.1 C below criterion
Effluent Temperature =	19.7	°C	DMRs from June 2020 - July 2024: max. effluent temp in August 2020
Applicable Temperature Criterion =	16	°C	
Effluent Flow =	0.0375	mgd	Max. daily effluent flow

ΔT at MZ edge=	0.2	°C	No Reasonable Potential
Temperature at MZ edge=	16.1	°C	

Thermal Load Limit =	N/A	Million Kcals (7-day Rolling Avg.)
(relative to the ambient temperature used above)		

Note
This thermal load limit is the excess thermal load needed to increase the ambient temperature up to the criterion temperature. However, if the ambient temperature is less than 0.3°C below the criterion, then the thermal load limit is calculated as the excess thermal load necessary to increase the ambient temperature by 0.3°c (as directed by the IMD). Since the Thermal Load Limit above is the excess thermal load above the ambient temperature, compliance is evaluated using the usual equation to determine the actual load discharged, but using the ambient temperature as opposed to the criterion: ETL discharged = (T_e - T_a)*Qe*3.78541, where T_e is effluent temperature and T_a is the ambient temperature used above.

Equation used to calculate ΔT at edge of MZ

$$\Delta T_{mz} = \frac{T_e + (S-1)T_a}{S} - T_a$$

Equation used to calculate thermal load limit

$$TLL = 3.7854 Q_e S \Delta T_{all} C_p \rho$$

Where:

- Qe = Effluent Flow in mgd
- S = Dilution
- ΔT_{all} = Allowable temperature increase at edge of MZ (°C)
- Cp = Specific Heat of Water (1 cal/g °C)
- ρ = Density of Water (1 g/cm^3)
- 3785.41 = Flow conversion from mgd to m^3/day

Rule Citation - OAR 340-041-0028

(4) Biologically Based Numeric Criteria. Unless superseded by the natural conditions criteria described in section (8) of this rule, or by subsequently adopted site-specific criteria approved by EPA, the temperature criteria for State waters supporting salmonid fishes are as follows:

(a) The seven-day-average maximum temperature of a stream identified as having salmon and steelhead spawning use on subbasin maps and tables set out in OAR 340-041-0101 to 340-041-0340: Tables 101B, and 121B, and Figures 130B, 151B, 160B, 170B, 220B, 230B, 271B, 286B, 300B, 310B, 320B, and 340B, may not exceed 13.0 degrees Celsius (55.4 degrees Fahrenheit) at the

(b) The seven-day-average maximum temperature of a stream identified as having core cold water habitat use on subbasin maps set out in OAR 340-041-101 to 340-041-340: Figures 130A, 151A, 160A, 170A, 180A, 201A, 220A, 230A, 271A, 286A, 300A, 310A, 320A, and 340A, may not exceed

(c) The seven-day-average maximum temperature of a stream identified as having salmon and trout rearing and migration use on subbasin maps set out at OAR 340-041-0101 to 340-041-0340: Figures 130A, 151A, 160A, 170A, 220A, 230A, 271A, 286A, 300A, 310A, 320A, and 340A, may not

(d) The seven-day-average maximum temperature of a stream identified as having a migration corridor use on subbasin maps and tables OAR 340-041-0101 to 340-041-0340: Tables 101B, and 121B, and Figures 151A, 170A, 300A, and 340A, may not exceed 20.0 degrees Celsius (68.0 degrees Fahrenheit). In addition, these water bodies must have cold water refugia that are sufficiently distributed so as to allow salmon and steelhead migration without significant adverse effects from higher water temperatures elsewhere in the water body. Finally, the seasonal thermal pattern in Columbia and Snake Rivers must reflect the natural seasonal thermal pattern;

(e) The seven-day-average maximum temperature of a stream identified as having Lahontan cutthroat trout or redband trout use on subbasin maps and tables set out in OAR 340-041-0101 to 340-041-0340: Tables 121B, 140B, 150B, and 250B, and Figures 180A, 201A, 260A and 310A may

(f) The seven-day-average maximum temperature of a stream identified as having bull trout spawning and juvenile rearing use on subbasin maps set out at OAR 340-041-0101 to 340-041-0340: Figures 130B, 151B, 160B, 170B, 180A, 201A, 260A, 310B, and 340B, may not exceed 12.0 degrees Celsius (53.6 degrees Fahrenheit). From August 15 through May 15, in bull trout spawning waters below Clear Creek and Mehlhorn reservoirs on Upper Clear Creek (Pine Subbasin), below Laurance Lake on the Middle Fork Hood River, and below Carmen reservoir on the Upper McKenzie River, there may be no more than a 0.3 degrees Celsius (0.5 Fahrenheit) increase between the water temperature immediately upstream of the reservoir and the water temperature immediately downstream of the spillway when the ambient seven-day-average maximum stream temperature is 9.0 degrees Celsius (48 degrees Fahrenheit) or greater, and no more than a 1.0 degree Celsius (1.8