

Petition to Amend a Rule

Oregon Department of Environmental Quality

In the matter of the Amendment)	PETITION TO AMEND
of OAR 340-041-0350, amending)	OAR 340-041-0350
the Three Basin Rule.)	(Three Basin Rule)

1. Petitioner is Marion County, 555 Court St. NE, Suite 5232, Salem, OR 97301.
2. The 2020 Beachie Creek and Lionshead wildfires devastated the communities of Mill City, Gates, Detroit, and Idanha in the basin of the North Santiam River. These cities are home to several thousand Oregon residents and draw more than 100,000 visitors every year. Rebuilding and economic recovery efforts in these communities have been paralyzed by the lack of modern municipal wastewater systems. As the DEQ noted in its presentation to the EQC on May 19, 2023, the 2020 wildfires destroyed approximately 4,000 structures and impacted 1,700 septic systems, many of which were concentrated in the North Santiam Basin. Often these properties are too small to accommodate new septic systems under current code. Since 2020, Petitioner has been working on the design and permitting of new municipal sewer systems (the “Facilities”) to serve Mill City, Gates, Detroit, and Idanha, and is relying on ARPA funding via the state to construct and commission these systems.
3. Petitioner has incurred significant expenses toward the design and permitting of the Facilities, which would create important ecological, environmental, and societal benefits, consistent with the goals of the Three Basin Rule:
 - a. The Facilities are necessary to allow communities that were devastated by wildfires to rebuild and recover from those fires;
 - b. The Facilities would replace outdated septic systems with state-of-the-science wastewater treatment systems that will improve water quality in the North Santiam River Basin; and
 - c. The Facilities would allow Oregon residents and visitors to continue enjoying a popular and precious recreational and conservation destination that creates important economic benefits to the region.
4. The Three Basin Rule was adopted in 1976 by the Environmental Quality Commission (“EQC”) to protect the Santiam, Clackamas, and McKenzie River basins in Oregon. In its current form, the Three Basin Rule prohibits the issuance of new NPDES permits in those basins, and instead directs the Oregon Department of Environmental Quality (“DEQ”) to rely on its Water Pollution Control Facilities (“WPCF”) program to permit discharges. Consequently, direct discharge to surface waters is strictly prohibited under the Three Basin Rule, necessitating the use of ground infiltration for the disposal of treated municipal wastewater effluent. Since the adoption of the Three Basin Rule almost 50

years ago, significant advances have been made in wastewater treatment technologies, which allows new wastewater treatment facilities to treat wastewater effluent to a very high level not easily attainable in 1976. As such, the current Three Basin Rule prohibition on the issuance of new NPDES permits for municipal wastewater treatment systems is restrictive, burdensome, and places barriers against the adoption of new treatment technologies to replace legacy systems. Petitioner’s proposed amendment would modernize the Three Basin Rule while bolstering the original purpose and intent of the Rule. The proposed amendment would allow communities living in the Three Basins to recover from the devastating impacts of the fires, would allow for the replacement of hundreds of existing septic systems with highly regulated municipal wastewater treatment systems, and would allow municipalities to provide new sewer services to Three Basin communities. Whereas the existing Three Basin Rule seeks to avoid added impacts to the Three Basins, the proposed amendment establishes a means by which existing impacts may be reduced.

5. On April 23, 2020, the U.S. Supreme Court held in *County of Maui v. Hawaii Wildlife Fund*, 590 U.S. ____ (2020) (the “Maui Decision”), that discharges to groundwater are subject to the Clean Water Act (“CWA”) and require a National Pollutant Discharge Elimination System (“NPDES”) permit if the discharge is the “functional equivalent of a direct discharge to surface waters.” In November 2023, the Environmental Protection Agency (“EPA”) published guidance on the topic confirming that certain groundwater discharges require NPDES permits if deemed to be the functional equivalent of a direct discharge to surface waters. The Supreme Court decision, and following EPA guidance, adopt a vague test to determine whether a groundwater discharge is the functional equivalent of a direct discharge to surface waters, focusing on a non-exhaustive list of seven factors, with (1) distance and (2) time of groundwater travel between the point of ground infiltration and the surface water being the two most important factors. The Maui Decision places the Three Basin Rule in diametric opposition to the Clean Water Act when groundwater serves as the functional equivalent to a direct discharge.
6. The conflict between the Clean Water Act and Three Basin Rule created by the Maui Decision is untenable and warrants a timely resolution. Petitioner’s proposed amendment would not weaken the Three Basin Rule. Rather, it would simultaneously resolve the conflict created by the Maui Decision and bolster the original purpose and intent of the Three Basin Rule by:
 - a. Authorizing DEQ to issue NPDES permits within the Three Basins only for new, publicly owned municipal wastewater treatment facilities and only when a WPCF permit cannot be issued because ground infiltration constitutes discharge that is functionally equivalent to a direct discharge,
 - b. Invokes minimum NPDES regulatory standards and distance between the point of ground infiltration and surface waters that are far more stringent than WPCF standards,
 - c. Mandates that new NPDES-permitted facilities must maintain or improve water quality, and

- d. Includes a clearly stated requirement of groundwater discharge rather than direct discharges to surface waters within the Three Basins.
7. The Facilities are designed to discharge wastewater via ground infiltration in compliance with DEQ's WPCF permit standards. The Maui Decision and subsequent EPA guidance indicate that such discharges may be deemed the "functional equivalent of a direct discharge to surface waters" under the ambiguous test adopted by the Supreme Court due to the proximity of the Facilities to surface waters. This legal and regulatory landscape places the cities for whom Petitioner is developing the Facilities in a precarious position for lack of a defined permitting pathway. This peril would be alleviated by defining the permitting pathway when ground infiltration is determined to be the functional equivalent to a direct discharge. Otherwise, communities devastated by the 2020 wildfires are barred from large scale wildfire recovery due to this regulatory dead end.
8. Petitioner proposes that OAR 340-041-0350 be amended to grant DEQ the authority to issue new NPDES permits for domestic sewage treatment facilities in the Clackamas, McKenzie (above RM 15) & North Santiam Basin if DEQ finds that: (1) groundwater discharge of treated municipal wastewater effluent from the facility is the functional equivalent to a direct discharge to waters of the state (the "Maui component"); and (2) the new domestic sewage treatment facility will help preserve or improve the existing high quality water for municipal water supplies, recreation, and preservation of aquatic life after considering several factors introduced in this Petition to Amend (the "Three Basin Rule component").

As per OAR 137-001-0070(2), Petitioner requests amendments to existing rules:

This Petition requests that the Commission add rule language to OAR 340-041-0350 and to revise certain rule language. The Petition does not dispute the continued need for the existing rules. Rather the Petition seeks to reconcile the Three Basin Rule with recent Supreme Court case law and to revise the Three Basin Rule to take into account the important progress that has been made in wastewater treatment technology since the adoption of the Three Basin Rule, and by doing so to allow communities devastated by the 2020 wildfires to rebuild. The existing rules fulfill state responsibilities under the Federal Clean Water Act and are consistent with federal regulations.

As per OAR 137-001-0070(2)(a), options to reduce negative economic impact on business:

The tourism economy of Marion County relies heavily on the North Santiam Basin, and many municipalities rely on the North Santiam Basin's high water quality for drinking water. The Petition would ensure that the high water quality is maintained in the Basin by adopting strong water quality standards for new NPDES permits, and would allow communities that were devastated by the 2020 wildfires and that are an integral part of Marion County's tourism and recreational economy to rebuild. Therefore, adopting this Petition will provide positive economic impacts.

As per OAR 137-001-0070(2)(b), continued need for the existing rules:

The existing rules aim to protect the high water quality of the Three Basins, and the Petition is consistent with that goal. As recently as July 2024, the Oregon Health Authority has issued health advisories due to algal cyanotoxins in the North Santiam River, and the City of Salem has had to invest significant capital into ozonolysis treatment to safeguard its water supply. Such incidents only highlight the importance of employing the best available technologies to remove nitrogen and other algae nutrients from any potential waste stream via a Rule update that affords these rivers the protections of the Clean Water Act and permits the construction of professionally designed and operated treatment facilities.

As per OAR 137-001-0070(2)(c), complexity of the existing rules:

While the existing rules are not overly complex, they currently conflict with Supreme Court precedent. The Petition would reconcile the existing rules with such precedent by allowing the issuance of an NPDES permit in cases where such a permit is compelled by the Clean Water Act under the circumstances outlined in the decisions of the Supreme Court.

As per OAR 137-001-0070(2)(d), extent to which the existing rules overlap, duplicate, or conflict with other state or federal rules and with local government regulations:

The existing rules conflict with Supreme Court precedent and could prevent certain communities from complying with state and federal regulations by prohibiting the issuance of new NPDES permits. The notable ambiguity of defining the “functional equivalent of a direct discharge” under the Supreme Court decision creates substantial risk for communities operating with any form of groundwater discharge without an NPDES permit.

As per OAR 137-001-0070(2)(e), degree to which technology, economic conditions, and other factors have changed in the subject area:

Wastewater treatment technology has dramatically improved over the last 50 years and now allow wastewater treatment plants to treat wastewater in a way that would preserve the high quality water in the Three Basins. At the time of the original Rule adoption, common treatment processes such as facultative lagoons offered little improvement in contaminant removal beyond conventional septic systems. Industry-standard secondary treatment process such as membrane bioreactors and sequencing batch reactors, and tertiary treatment mechanisms such as ultraviolet disinfection, have become the norm for projects permitted under NPDES. These technologies can reduce the levels of chemical and biological contaminants to orders of magnitude lower than was possible in 1976.

Wildfire recovery and population growth in the Three Basins are also adding pressure on existing wastewater plants that may not be able to continue serving communities adequately. The Petition would allow DEQ to issue new NPDES permits and give the agency discretion to require high treatment standards that would remain consistent with the goals of the Three Basin Rule. The Petitioner has submitted the Draft Mill City/Gates Wastewater Facility Planning Study (Keller Associates, 2023) so that the proposed Facilities serve as example of the current industry

standard treatment and groundwater discharge of high-quality effluent, consistent with the intent of this proposed Rule amendment to preserve and improve the high water quality of the River.

9. OAR 340-041-0350 as petitioner proposes to amend it would read as follows:

OAR 340-041-0350. The Three Basin Rule: Clackamas, McKenzie (above RM 15) & the North Santiam

(1) In order to preserve or improve the existing high quality water for municipal water supplies, recreation, and preservation of aquatic life, new or increased waste discharges must be prohibited, except as provided by this rule, to the waters of:

(a) The Clackamas River Subbasin;

(b) The McKenzie River Subbasin above the Hayden Bridge (river mile 15);

(c) The North Santiam River Subbasin.

(2) Except as otherwise provided for in this rule, this rule becomes effective and applies to all permits pending or applied for after the date of filing with the Secretary of State.

(3) Special Definitions. The following special definitions apply to this rule:

(a) “Waste Discharges” are defined to mean any discharge that requires and NPDES permit, WPCF permit, or 401 Certification. Individual on-site sewage disposal systems subject to issuance of a construction-installation permit; domestic sewage facilities that discharge less than 5,000 gallons per day under WPCF permit; biosolids land applied within agronomic loading rates pursuant to OAR 340-050; and reclaimed domestic waste water land applied at agronomic rates pursuant to OAR 340-055 are excluded from this definition.

(b) “Existing Discharges” are defined as those discharges from point sources which existed prior to January 28, 1994;

(c) “Existing Facilities” are defined as those for which construction started prior to January 28, 1994. Where existing facilities are exempted from requirements placed on new facilities, the exemption applies only to the specific permit(s) addressed in the subsection which allows the exemption;

(d) “New” NPDES and WPCF permits are defined to include permits for potential or existing discharges which did not previously have a permit, and existing discharges which have a permit, but request an increased load limitation;

(e) “Agronomic Loading Rate” means the application of biosolids or reclaimed effluent to the land at a rate which is designed to:

(A) Provide the quantity of plant nutrients, usually nitrogen, needed by a food crop, feed crop, fiber crop, cover crop or other vegetation grown on the land; and

(B) Minimize the quantity of nitrogen or other nutrients from land applied materials that pass below the root zone of the crop or vegetation grown on the land to groundwater.

(f) “Biosolids” means solids derived from primary, secondary, or advanced treatment of domestic wastewater which have been treated through one or more controlled processes that significantly reduce pathogens and reduce volatile solids or chemical stabilize solids to the extent that they do not attract vectors. This term refers to domestic wastewater treatment facility solids that have undergone adequate treatment to permit their land application;

(g) “Reclaimed Wastewater” means treated effluent from a domestic wastewater treatment system which, as a result of treatment, is suitable for a direct beneficial purpose or a controlled use that could not otherwise occur.

(h) “Groundwater Discharge” means the disposal, deposit, or placement of treated wastewater effluent or other fluid below the ground surface or the disposal, deposit, or placement of treated wastewater effluent or other fluid to the ground surface in a manner and location where it is reasonably assumed the treated wastewater effluent or other fluid will infiltrate the ground surface and impact the groundwater resources of the state.

(4) To respond to emergencies or to otherwise avoid imminent serious danger to public health or welfare, the Director or designee may allow lower water quality on a short-term basis.

(5) The Director or a designee may renew or transfer NPDES and WPCF permits for existing facilities. Existing facilities with NPDES permits may not be granted increases in their permitted mass load limitations. The following restrictions and exceptions apply:

(a) The Department may conduct an inspection prior to permit renewal. Existing sources with general permits that are found not to qualify for a general permit, and who wish to continue discharging, must apply for an individual permit;

(b) Fish hatcheries (General Permit 300) and log ponds (General Permit 400) are required to apply for an individual permit at the time of permit renewal;

(c) Additional industrial, confined animal feeding operations, or domestic waste loads that are irrigated on land at agronomic rates or that otherwise meet the conditions of section (78) of this rule is not be considered to be an increase in the permitted wasteload.

(6) The Director or a designee may issue the following General Permits or Certifications subject to the conditions of the Permit or Certification:

(a) Stormwater construction activities (General Permits 1200C and 1200CA);

(b) Underground storage tank cleanups using best available treatment technology (General Permit 1500);

(c) Non-contact cooling water (General Permit 100);

- (d) Filter backwash (General Permit 200);
- (e) Boiler blowdown water (General Permit 500);
- (f) Suction dredging (General Permit 700) only in portions of the basins that are not designated as Scenic Waterways under ORS 390.805 (Definitions for ORS 390.805 to 390.925) to 390.925 (Enforcement);
- (g) Federal Clean Water Act Section 401 water quality certifications.

(7) The Department may issue a new NPDES permit for a new publicly owned treatment works utilizing groundwater discharge if the Department finds that:

(a) Groundwater discharge of treated municipal sewage effluent from the publicly owned treatment works is or is likely to be the functional equivalent to a direct discharge from a point source into navigable waters;

(b) The new publicly owned treatment works meets discharge requirements that will result in the best practicable treatment or control of the discharge necessary to maintain or improve water quality consistent with the authorized beneficial uses identified in OAR 340-041-0340 Table 340A;

(c) The new publicly owned treatment works treats the wastewater discharge to equivalent to secondary treatment standards or higher;

(d) All relevant statutory and regulatory requirements for all new point source discharges and all reasonable best management practices for nonpoint source control are achieved;

(e) The groundwater discharge, as regulated under the NPDES permit program, will preserve or improve the existing high quality water for municipal water supplies, recreation, and preservation of aquatic life in the Clackamas, McKenzie, and North Santiam basins. DEQ may consider emerging contaminants in making this finding.

(f) Any bypass or upset from the publicly owned treatment works that results in untreated wastewater effluent shall be contained, transported offsite, or directed to the groundwater discharge location. Untreated wastewater shall not be directly discharged to any surface water body; and

(g) The groundwater discharge is located a sufficient distance from the rivers described in Section (1) of this Rule in order to provide reasonable additional protection above and beyond that required by the NPDES Permit. The factors to be considered include increased travel time, groundwater dilution, and attenuation of the discharge. In no event shall the groundwater discharge be located closer than 500 feet from the nearest ordinary high water mark of any water body covered under Section (1) of this Rule.

(7-8) Long-term general and individual stormwater permits may be allowed as required by State and/or Federal law. The following requirements apply:

(a) New stormwater discharge permit holders must maintain a monitoring and water quality evaluation program that is effective in evaluation of the in-stream water quality impacts of the discharge; and

(b) When sufficient data is available to do so, the Department will assess the water quality impacts of stormwater discharges. Within a subbasin, if the proportion of total degradation that is contributed by the stormwater is determined to be significant compared to that of other permitted sources, or if the Department determines that reducing degradation due to stormwater is cost-effective when compared to other available pollution control options, the Department may institute regulatory mechanisms or modify permit conditions to require control technologies and/or practices that result in protection that is greater than that required Statewide.

(89) Industrial waste discharge sources, confined animal feeding operations, and domestic sewage treatment facilities must meet the following conditions:

(a) No NPDES permits for new industrial or new confined animal feeding operation waste discharges, or new domestic sewage treatment facilities may be issued, except as allowed under sections (3), (4), (5), ~~and~~ (6), and (7) of this rule;

(b) The Department may issue WPCF permits for new industrial or confined animal feeding operation waste discharges provided:

(A) There is no waste discharge to surface water; and

(B) All groundwater quality protection requirements of OAR 340-040-0030 (Permitted Operations) are met. Neither the Department nor the Commission may grant a concentration limit variance as provided in OAR 340-040-0030 (Permitted Operations), unless the Commission finds that all appropriate groundwater quality protection requirements and compliance monitoring are met and there will be no measurable change in the water quality of the surface water that would be potentially affected by the proposed facility. For any variance request, a public hearing must be held prior to Commission action on the request.

(c) The Department may issue WPCF permits for new domestic sewage treatment facilities provided there is no waste discharge to surface water and provided:

(A) All groundwater quality protection requirements of OAR 340-040-0030 (Permitted Operations) are met. Neither the Department nor the Commission may grant a concentration limit variance as provided in OAR 340-040-0030 (Permitted Operations), unless the Commission finds that all appropriate groundwater quality protection requirements and compliance monitoring are met and there will be no measurable change in the water quality of the surface water that would be potentially affected by the proposed facility. For any variance request, a public hearing must be held and the permit application will be evaluated according to paragraphs (B) and (C) of this subsection;

(B) The Commission finds that the proposed new domestic sewage treatment facility provides a preferable means of sewage collection, treatment and disposal as compared to

individual on-site sewage disposal systems. To be preferable, the Commission must find that one of the following criteria applies:

(i) The new sewage treatment facility will eliminate a significant number of failing individual on-site sewage disposal systems that cannot be otherwise reliably and cost-effectively repaired; or

(ii) The new sewage treatment facility will treat domestic sewage that would otherwise be treated by individual on-site sewage disposal systems, from which the cumulative impact to groundwater is projected to be greater than that from the new facility; or

(iii) If an individual on-site sewage disposal system, or several such systems, would not normally be utilized, a new sewage treatment facility may be allowed if the Commission finds that the social and economic benefits of the discharge outweigh the possible environmental impacts.

(C) Applicants for domestic wastewater WPCF permits must meet the following requirements:

(i) Application must be for an individual permit; and

(ii) The proposed discharge must not include wastes that incapacitate the treatment system; and

(iii) The facility must be operated or supervised by a certified wastewater treatment plant operator as required in OAR 340-049-0015 (General Requirements), except as exempted by ORS 448.430 (Certification exception); and

(iv) An annual written certification of proper treatment and disposal system operation must be obtained from a qualified Registered Sanitarian, Professional Engineer, or certified wastewater treatment system operator.

~~(9)10~~ The Environmental Quality Commission may investigate, together with any other affected State agencies, the means of maintaining at least existing minimum flow during the summer low flow period.

10. Petitioner has no knowledge of any person who may have a particular interest in the proposed amendment of OAR 340-041-0350.
11. The rule as amended would not overlap, duplicate, or conflict with any state, federal or local regulation that petitioner has identified.
12. Since the rule was first adopted, the Supreme Court decision in *Maui* and EPA guidance has made the rule prohibition on NPDES permits for domestic sewage treatment facilities unworkable and threatens the ecology of the Three Basins and the livelihood of the communities that live there.

13. The proposed rule amendment is necessary to rebuild the communities impacted by the Beachie Creek and Lionshead wildfires and to preserve or improve the existing high quality water for municipal water supplies, recreation, and preservation of aquatic life, in the Clackamas, McKenzie (above RM 15) & North Santiam Basin.

Dated August 30, 2024

Marion County



By Brian Nicholas, Director
Marion County Public Works Department