



MUCKLESHOOT INDIAN TRIBE

Fisheries Division

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October 13, 2017

Jocelyn Jones
Department of Ecology
Lead – Reclaimed Water Rule
PO Box 47600
Olympia, WA. 98504-7600

RE: Reclaimed Water Rule, Chapter 173-219 WAC Comments

Dear Ms. Jones,

We have reviewed the proposed Reclaimed Water Rule; WAC 173-219 and would like to provide these comments. We also met with Ecology and submitted comments on the pre-draft Rule in 2010 (see our May 25, 2010 and June 25, 2010 letters) and participated on the Water Rights Impairment Committee, and also commented on the draft rule in 2015. We are pleased that the statutory definition of water rights impairment has been removed from the current rule language; however, other concerns remain which are addressed below.

WAC 173-219-200 Plan review and review standards.

RCW 90.46.120 requires that a permit for recovery of reclaimed water from aquifer storage must be reviewed under the standards established under RCW 90.03.370(2) for aquifer storage and recovery projects. The standards established under RCW 90.03.370(2) for aquifer storage and recovery projects are described in Chapter 173-157 WAC. The reclaimed water rule and the Reclaimed Water Facility Manual (purple book) do not contain standards or guidance that are equivalent to those described in Chapter 173-157. For example, Chapter 173-157-120 describes requirements for the hydrogeologic system description. There is nothing in the reclaimed water rule or the purple book that is equivalent. Chapter 173-157-130 describes requirements for the project operation plan, Chapter 173-157-150 describes requirements for the environmental assessment and analysis, and Chapter 173-157-170 includes requirements for the project monitoring plan. Again, there is nothing in the reclaimed water rule or the purple book that is equivalent.

The “use-based performance standards” listed in Table 3 for recovery of reclaimed water from Chapter 173-219 are wholly inadequate for meeting the requirements of 90.46.120 and 90.03.370(2), as is the guidance included in Section 12.3 of the purple book. The list of topics provided under items 2(u) and 2(v) in 173-219-210 are not equivalent to the standards established under RCW 90.03.370(2) for aquifer storage and recovery projects under 173-157.

Given that recovery from ASR projects and recovery from reclaimed water projects must be reviewed under the same set of standards established under RCW 90.03.370(2), these standards must be equivalent.

To make them equivalent, the reclaimed water rule should either incorporate the standards described in Chapter 173-157 by reference or the rule should explicitly copy those same standards into the 173-219.

WAC 173-219-210 Engineering report.

Streamflow augmentation

The direct discharge of either Class A or B reclaimed water may aggravate existing impairments in some situations depending on the difference in temperature or nitrogen and phosphorus concentrations between the discharge and receiving water. The safeguard against this kind of impairment in the name of streamflow augmentation is not clear in the rule. Although discharges to ground and surface water are allowed under the current statute for reclaimed water, we believe that a cautionary approach is warranted especially in light of the issues with emerging contaminants, including endocrine disrupters, personal care products, and other pollutants. Many questions remain about the fate and transport of these contaminants which are not fully removed from reclaimed water or wastewater under current treatment technology. Until more is known about emerging contaminants in the scientific community, reclaimed water for streamflow augmentation, artificial groundwater recharge, and conveyance in streams should be **very** limited. RCW 90.46 does not preclude that augmentation projects be limited to pilot studies with a phased approach. Much more has been learned about emerging contaminants since RCW 90.46 was adopted in 1995 and climate change impacts were also not as well understood as they are today. We recommend that such a cautious course be taken and we oppose the use of reclaimed water for streamflow augmentation for all but pilot projects.

We are opposed to the use of reclaimed water as mitigation to meet an instream flow rule that would otherwise be impaired. Use of reclaimed water to augment streamflow's may have significant adverse environmental impacts on fishery and water resources that have not been properly evaluated. Even with the high quality of water that can be achieved with reclaimed water, it still cannot substitute for clean, cold ground or surface waters that fish need.

Conveyance in waters of the state

In addition to our concerns stated above, temperature effects may be an important component of water resource protection if surface waters are used to convey reclaimed water. These effects may not be included in typical NPDES permits for point discharges because they usually don't address temperature. Adding warmer water to streams that are fed primarily by cool groundwater may exacerbate conditions for salmon, which need cool water.

We suggest adding this requirement to both streamflow augmentation and to conveyance in waters of the state: The volume of water discharged and conveyed must not raise the temperature in the intervening surface water body above background levels.

Groundwater/aquifer recharge

Indirect augmentation of surface water via groundwater should be held to the combined requirements of both direct streamflow augmentation and groundwater recharge, including all NPDES permit requirements. The lead agency should ensure that all NPDES permit requirements are required if indirect augmentation is used. Additional guidance on defining when indirect augmentation of surface water occurs should be provided. This term could be defined in terms of an expected travel time or a travel

distance between the recharge location and the surface water feature. Requirements should also utilize the best available science on emerging contaminant and impacts on aquatic life.

We also suggest that the approach used in stormwater infiltration should be considered for reclaimed water. Under this approach, a minimum separation distance is required between the recharge elevation and the water table. For systems that do not meet this minimum separation, additional treatment (i.e., reverse osmosis) should be required.

WAC 173-219-090 Water rights protection.

Subsection (6) specifies that Ecology and the applicant will jointly notify and consult with affected tribes and WDFW before a final determination is made. However, the Muckleshoot Tribe desires to meet and consult solely with Ecology and/or WDFW on a government to government basis. A joint meeting with the applicant could occur later or if the Tribe agrees, could be invited to the first meeting. Also, tribal staff would like to be notified early and be involved early on in the permit review process, especially for the impairment analysis.

WAC 173-219-270 Reclaimed water permit terms and conditions. Subsection (11):

Water Rights Impairment. It is stated here that “the permit must require proof of continuing compliance with RCW 90.46.130 . . . “. We suggest inserting “and applicable case law” after RCW 90.46.130.

Thank you for the opportunity to comments on the Reclaimed Water Rule and please contact me at 253-876-3127 or carla.carlson@muckleshoot.nsn.us if you any questions or concerns.

Sincerely,



Carla Carlson
Water Resources Analyst