

2014 Water Quality Assessment Submittal to EPA
4b Analysis for Total Dissolved Gas (TDG) Impairments Addressed by
Federal Energy Regulatory Commission (FERC) licenses
September 2015

The Washington Department of Ecology (Ecology) Integrated Report (IR) proposes to exclude six listings for TDG from the 303(d) list and place these segments into category 4b. The specific listings are:

- 15183, 15184—Spokane River
- 6532, 6542—Lewis River
- 6533—Swift Creek #2
- 6535—Swift #2 Tailrace, Lewis River

All of the listings were in category 5 of the 2012 IR. Ecology's basis for excluding these waterbodies from the 303(d) list is outlined in this evaluation.

Identification of Segment and Statement of Problem Causing Impairment

Segments 15283 and 15184 are located in the Spokane River downstream of Avista's Long Lake Dam. Segment 6532 is located downstream of Pacificorp's Yale Project, 6542 is located downstream of Pacificorp's Swift #1 Project, and 6533 and 6535 are located downstream of Pacificorp's Swift #2 Project, all in the Lewis River. Impairments in these segments are caused by exceedance of Washington's TDG criterion, which requires that TDG shall not exceed 110 percent of saturation at any point of sample collection. The TDG exceedances at these locations are caused by spill from the dams.

Description of Pollution Controls and How They Will Achieve Water Quality Standards

Under section 401(a)(1) of the Clean Water Act (CWA), the Federal Energy Regulatory Commission may not issue a license for a hydroelectric project unless the state water quality certifying agency has issued a water quality certification for the project or has waived certification by failing to act within a reasonable period of time, not to exceed one year. Section 401(d) of the CWA provides that state certification shall become a condition of any federal license that authorizes construction or operation of the project.

The FERC license for Long Lake Dam was issued June 18, 2009, and is available here:

<http://www.ferc.gov/whats-new/comm-meet/2009/061809/H-2.pdf>

The FERC licenses for the Yale, Swift #1, and Swift #2 Projects were issued June 26, 2008, and are available here: <http://www.ferc.gov/industries/hydropower/gen-info/licensing/issued-licenses.asp>. To access these licenses, click on 2008, then for Yale, choose P-2071; for Swift #1, choose P-2111; and for Swift #2, choose P2213.

For all three of these FERC licenses, the Department of Ecology has issued a CWA 401 Certification that requires compliance with state water quality standards for TDG. The 401 certifications are attachments to the FERC licenses.

All of the 401 Certifications contain the following requirements: (1) compliance with all state water quality standards approved by the EPA; (2) compliance with sediment quality standards; (3) prohibition of discharge of any solid or liquid waste to the waters of Washington; and (4) reservation of Washington Ecology's authority.

Estimate or Projection of Time When Water Quality Standards Will be Met

Compliance with water quality standards should be achieved by 2018 for the Yale, Swift #1, and Swift #2 Projects; and by 2019 for the Long Lake Project.

Schedule for Implementing Pollution Controls

Pollution controls are presently in place for all three projects, as required by the FERC licenses.

Monitoring Plan to Track Effectiveness of Pollution Controls

The FERC license holders are required to monitor TDG and to implement control and attainment measures. They are also required to develop and implement a TDG attainment plan if monitoring indicates that TDG exceeds 110 percent saturation. Reductions in TDG will improve water quality for aquatic organisms, specifically fish species, inhabiting the project area.

Commitment to Revise Pollution Controls as Necessary

If gas abatement plans are required, and if monitoring to test the effectiveness of the gas abatement controls implemented through the plans shows that the TDG abatement measures identified in the plans and subsequently employed are not successful in meeting the water quality criterion within the first ten (10) years of discovery of TDG criterion exceedances caused by spill, Ecology will require further activities to meet the water quality criterion. Significant structural or operational revisions that may impose potentially unreasonable costs or create potentially unreasonable societal effects may be evaluated as part of a formal Use Attainability Analysis consistent with the federal and state water quality regulations after the ten year compliance period has ended.