

WQ Criteria

Total Dissolved Gas





Washington Administrative Code

Chapter 173-201A-200(1)(f)

Total dissolved gas shall not exceed 110 percent of saturation at any point of sample collection.

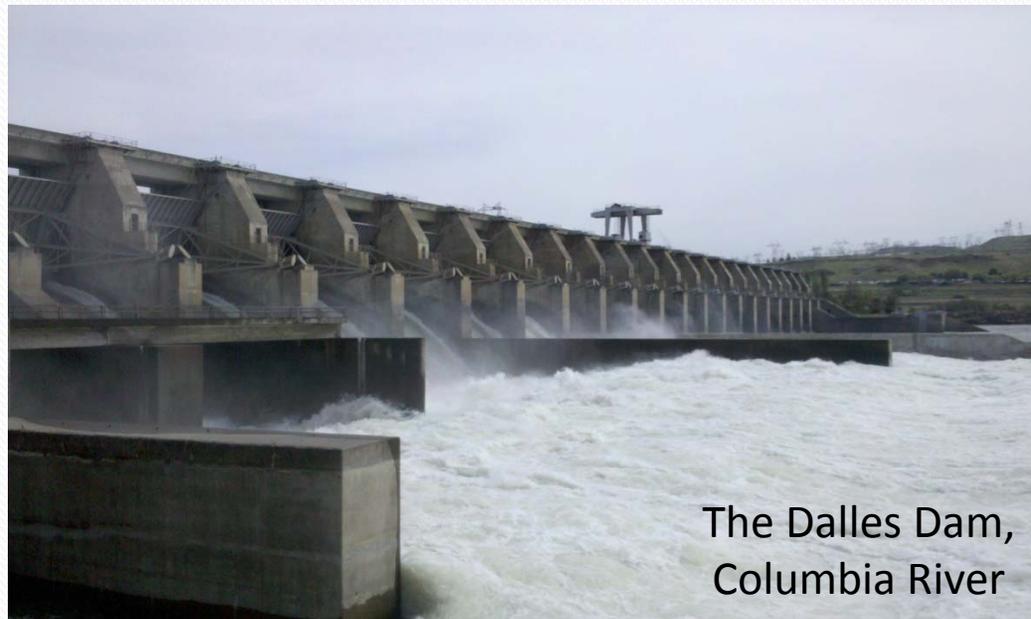
- **Exemptions:**

- TDG shall not apply when the stream flow exceeds the seven-day, ten-year frequency flood (7Q10 high flows)
- The TDG criteria may be adjusted to aid fish passage over hydroelectric dams when consistent with a department approved gas abatement plan.

Fish Passage Exemption

Purpose:

- The elevated TDG levels are intended to allow increased fish passage without causing more harm to fish populations than caused by turbine fish passage.



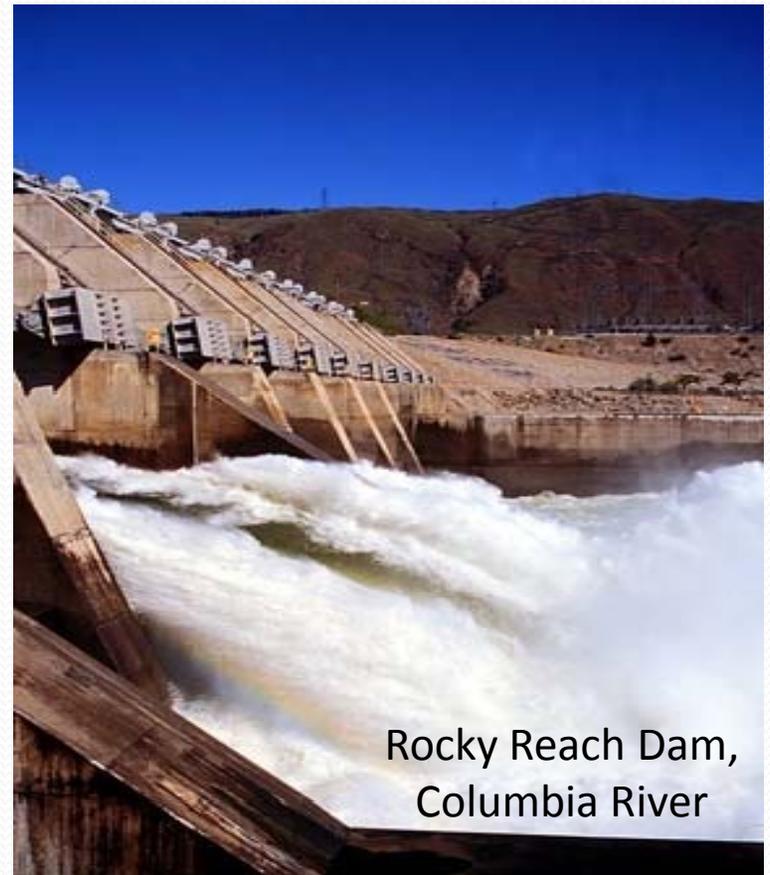
Fish Passage Exemption

Exemption Criteria: 115/120/125 %

- TDG must not exceed an average of **one hundred fifteen percent** as measured in the forebay of the next downstream dam and must not exceed an average of **one hundred twenty percent** as measured in the tailrace of each dam (these averages are measured as an average of the twelve highest consecutive hourly readings in any one day, relative to atmospheric pressure).
- A maximum TDG one hour average of **one hundred twenty-five percent** must not be exceeded during spillage for fish passage.

Gas Abatement Planning

- The Fish Spill Exemption for TDG requires a gas abatement plan for the dam to reduce gas in the long-term:
 - Gas Abatement Plan (federal dams)
 - Through a compliance schedule in the 401 Cert (PUDs).



Biological Monitoring

- The Gas Abatement Plan must be submitted to Ecology for approval and must be accompanied by fisheries management and physical and biological monitoring plans.





Changing a Water Quality Standard

- When new data and information suggest the standards need to be updated:
 - **Triennial Review** Process – Winter 2010
 - **Use Attainability Analysis (UAA)** to change the uses being protected.
 - **Petition** the department to change a standard or criteria...agency must respond within 60 days.
- EPA Approval is needed, including ESA Consultation if it has potential to impact listed species.



Petition and Current Lawsuit

- Ecology was petitioned by Save Our Wild Salmon (SOWS) to remove the downstream forebay 115 percent criterion.
 - June 2009 – Ecology denied the petition
 - March 2010 – Ecology again denied the petition
 - June 2010 – Lawsuit then filed with Thurston County Superior Court.
 - Court is currently reviewing arguments to decide whether Ecology was in violation of the Administrative Procedures Act.



Regulatory Issues & TDG

**For further information
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