

## **Washington Department of Ecology Proposes New Requirements That Impact Our City**

Washington Department of Ecology (“Ecology”) proposes to implement new requirements to control the discharge of nutrients into the Spokane River. These requirements are the outcome of Ecology’s water quality model called the Dissolved Oxygen Total Maximum Daily Load (TMDL). Ecology’s public comment period closed on October 30, 2009; submitted comments can be viewed at:

[http://www.ecy.wa.gov/programs/wq/tmdl/spokaneriver/dissolved\\_oxygen/2009PublicCommentsReceived.pdf](http://www.ecy.wa.gov/programs/wq/tmdl/spokaneriver/dissolved_oxygen/2009PublicCommentsReceived.pdf)

The “Total Maximum Daily Load” is the total pounds of nutrients that will protect acceptable dissolved oxygen levels in Long Lake reservoir (Lake Spokane). Ecology has calculated this allowable load by using a mathematical model (computer simulation).

Q: What is Dissolved Oxygen?

A: Oxygen gets into water by diffusion from the surrounding air, by aeration, and from aquatic plants which create oxygen as a product of photosynthesis. Adequate dissolved oxygen is necessary for good water quality and aquatic life.

Q: What is the Washington Dissolved Oxygen TMDL?

A: The Washington Dissolved Oxygen TMDL is modeling conducted by Washington Department of Ecology (“Ecology”) and the U.S. Environmental Protection Agency (EPA) to determine how to meet the water quality standard for dissolved oxygen in Long Lake reservoir.

Q: Why is Ecology doing the modeling?

A: Dissolved oxygen in Long Lake reservoir is too low to support fish in the deeper locations of Long Lake reservoir and does not meet Ecology’s water quality standards. Ecology has determined that this condition is caused by 1) impounding the river behind Long Lake Dam, and 2) by excess nutrients that enter the Spokane River and reservoir. These nutrients include mostly phosphorus but also ammonia and organic matter. These nutrients come from municipal and industrial wastewater treatment plants, and from “nonpoint sources” including groundwater and storm runoff from forests, farms, cities, and other lands. Nutrients are needed by plants, including algae in the reservoir, to grow and multiply. Because algae blooms have been excessive and a nuisance in the reservoir at times, there is a need to reduce the nutrients getting into the reservoir.

Q: How can phosphorus and other nutrients be reduced?

A: The amount nutrients can be reduced by implementing stricter agricultural practices and implementing new technology to wastewater treatment plants. The public can reduce the amount of phosphorus they put into sewer systems by using low phosphorus dish and laundry detergents.

Q: What does the modeling recommend?

A: It recommends developing and implementing plans to reduce nutrients from nonpoint sources and installation of new equipment in wastewater plants to prevent more than 99% of the phosphorus in the community sewers from getting into the river.

Q: How will the model impact Idaho?

A: If the TMDL model is approved by the EPA, wastewater treatment plants will be required to add new equipment to meet the new phosphorus restrictions. Complying with these proposed new requirements will be very difficult to implement and very costly.

Q: How will the model impact Post Falls?

A: Post Falls will be required to add additional filtration at the treatment facilities. The equipment necessary to meet these requirements is cutting edge technology and may not meet the standard on a consistent basis. This new equipment and operations will result in increased cost to the rate payers.

Q: How has the City responded to the TMDL?

A: Post Falls has responded to Washington Department of Ecology "Draft" TMDL on dissolved oxygen by asking for clarification and the data backing up the model. The City is now waiting for Ecology to respond to all the comments. The comment letters can be viewed on the Ecology website:

[http://www.ecy.wa.gov/programs/wq/tmdl/spokaneriver/dissolved\\_oxygen/2009PublicCommentsReceived.pdf](http://www.ecy.wa.gov/programs/wq/tmdl/spokaneriver/dissolved_oxygen/2009PublicCommentsReceived.pdf)