

Focus on Fecal Coliform Bacteria in Wenatchee River Watershed

from Ecology's Central Regional Office Water Quality Program

Fecal Coliform bacteria cleanup under way

Three creeks in the Wenatchee River watershed have too many fecal coliform bacteria in the water. Stream samples from Mission Creek, Brender Creek, and Chumstick Creek show bacteria levels that are higher than Washington State allows in our waters.

Over the last several years, the Washington Department of Ecology (Ecology) has received help from citizens and local government in solving water quality problems in the Wenatchee River watershed. Because of the high numbers of fecal coliform bacteria, Mission, Brender, and Chumstick creeks are a priority for cleanup. It will take help from many area residents to reduce these bacteria levels and meet state water quality standards. We all need to work together to fix this problem.



Why are fecal coliform bacteria a concern?

- Fecal coliform bacteria are an indicator species, showing that (1) human or animal waste (feces) is entering the water and (2) disease-causing or pathogenic organisms may be present in a stream or lake.
- People who are exposed to contaminated water can contract the diseases associated with fecal coliform pollution. These diseases can range from mild gastroenteritis to more serious conditions such as cholera, dysentery, and hepatitis.
- Federal law requires the state to keep waters clean so people can safely wade, swim, and fish in the state's streams, rivers, and lakes.

What have we found in the Wenatchee River watershed?

Fecal coliform bacteria numbers in Mission, Brender, and Chumstick creeks are greater than the maximum allowed under state water quality standards. In addition, the bacteria data show that all three creeks had higher fecal coliform bacteria concentrations and loads during the low-flow period (dry season) when there was less dilution. This indicates that most of the fecal coliform bacteria was not washed into the creeks by surface runoff water, but was instead deposited into the creeks in other ways.

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What are the sources of fecal coliform bacteria?



The presence of fecal coliform bacteria shows that human or animal waste (feces) is entering the water. In the Wenatchee River watershed, potential fecal coliform sources include failing septic systems, livestock, wildlife, and pets. Additionally, data indicate that the bacteria in these creeks is usually either deposited directly in these waters by animals or introduced by discharge from wastewater treatment plants and sewer systems. Some bacteria may also be washed into the creeks by stormwater and other runoff.

Federal law requires cleanup of polluted waters

Federal law requires all states to (1) identify sources of pollution in waters that do not meet water quality standards and (2) determine how much pollution needs to be reduced to achieve clean water. Using this information, Ecology and local interests are developing specific strategies for achieving the necessary reduction of fecal coliform bacteria pollution. The result will be a water quality implementation plan, which will outline specific actions that will help Mission, Brender, and Chumstick creeks meet water quality standards for fecal coliform bacteria.

Next steps

Ecology is working cooperatively with Wenatchee River watershed residents to develop reasonable and effective strategies to reduce pollution from fecal coliform bacteria. Information gathered from interested citizens and local governments will be used to help develop the water quality implementation plan. This plan will describe how, when, where, and what activities can be carried out in the Wenatchee River watershed to reduce fecal coliform pollution and comply with the state's water quality standards.

How can you participate?

Cleaning up Mission, Brender, and Chumstick creeks will require work by many people. If you would like to be on a mailing list to learn more about this work, please contact Jane Creech at 509-925-2557 or <u>iton461@ecy.wa.gov</u>

What can you do to help?

- Check your onsite septic system. Make sure yours is working right; test and pump it regularly (at least every 3 years).
- Encourage owners of large sewage collection systems to check all sewage collection lines for leaks, and then fix leaks where needed.
- Keep livestock out of creeks. Make sure that livestock waste cannot enter creek.
- Use proper disposal methods for pet waste.
 Bag and put pet waste in the garbage.
- Avoid feeding wild ducks and geese in area creeks.

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