

# Focus on Wilson Creek Sub-basin

from Ecology's Water Quality Program

# Fecal coliform bacteria cleanup under way

Over the last three years, the Washington Department of Ecology (Ecology) has received assistance from citizens and local government to help solve water quality problems in the Wilson Creek sub-basin. A cleanup plan that outlines strategies to lessen bacteria concerns in the watershed has been approved by the US Environmental Protection Agency (EPA).

The Wilson Creek sub-basin includes Wilson Creek and all its tributaries, which drain into the Yakima River in Kittitas County. The cities of Ellensburg and Kittitas also lie in the Wilson Creek sub-basin.

Water quality data collected throughout the sub-basin show that levels of fecal coliform bacteria frequently violate state water quality standards. Data have been collected over the years by Ecology, the Kittitas County Water Purveyors, the Kittitas County Conservation District, and the U.S. Geological Survey, among others.

Because of these high numbers of fecal coliform bacteria, the Wilson Creek sub-basin has been identified as a priority for study and cleanup. It will take voluntary help from many who live and work in the community to clean up these waters for current and future generations.

# Why are fecal coliform bacteria a concern?

- Fecal coliform bacteria are an "indicator species" showing that disease-causing or pathogenic organisms may be present in a stream or lake.
- People who come in contact with contaminated water could contract the diseases associated with fecal coliform bacteria.
- Federal law requires the state to protect the "most sensitive" beneficial uses found in water bodies, including the ability to wade, swim, and fish in the state's lakes, rivers, and streams.

#### What have we found in the Wilson Creek sub-basin?

In many areas of the Wilson Creek sub-basin, fecal coliform bacteria numbers are much greater than the maximum allowed under state water quality standards, and those numbers are significantly higher between April and October than during the rest of the year.

#### What are the sources of fecal coliform bacteria?

The presence of fecal coliform bacteria indicates that human and/or animal waste is entering the water. In the Wilson Creek sub-basin, sources that have been identified include failing septic systems, livestock, wildlife (birds, rodents, and others), and pets.

# 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 in order to achieve clean water. Using this information, Ecology and local interests are developing strategies for

achieving the necessary reduction of fecal coliform bacteria pollution. The result is an assessment and a water cleanup plan or Total Maximum Daily Load (TMDL). The TMDL provides target levels and an implementation plan for reducing fecal coliform bacteria in the Wilson Creek sub-basin.

# What actions can help reduce fecal coliform bacteria?

Ecology staff are working cooperatively with the residents of the Wilson Creek sub-basin and other interested groups and individuals to develop the most reasonable and effective strategies to reduce the amount of fecal coliform bacteria. The approaches being considered include:

- Identify and renovate failing septic systems
- Modify livestock management practices to reduce animal contact with water bodies
- Modify irrigation practices to reduce transport of bacteria into adjacent water bodies
- Public education regarding pet management

# How can you participate?

You can review a copy of the TMDL document on Ecology's website: http://www.ecy.wa.gov/biblio/0510041.html

To receive a printed copy of the TMDL plan, or for more information or comments, please contact Jane Creech at 509-925-2557 or <u>jton461@ecy.wa.gov</u>.

# **Next steps**

Information gathered from interested citizens and local governments will be used to develop a final detailed water cleanup strategy. The strategy identifies how, when, where, and what activities can be implemented in the Wilson Creek sub-basin to reduce fecal coliform pollution and comply with the state's water quality standards.