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Streams face bacteria crisis

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Work is under way or about to begin to correct water-quality problems in several small, rural streams that flow into Totten, Eld and Little Skookum inlets in South Sound.

Nine streams have levels of coliform bacteria that violate state water-quality standards and indicate that feces from humans, livestock and wildlife are entering the streams, according to a state Department of Ecology report.

"It poses a risk to people using the water recreationally," Ecology project manager Christime Hempleman said.

The unacceptable bacterial contamination also threatens commercial and recreational shellfish harvesting in the waters where the streams empty.

The streams in question are McLane, Swift, Kennedy, Pierre, Burns, Perry, Schneider, Hurley and Skookum creeks in Thurston and Mason counties.

Skookum Creek at times also is too warm to meet state water-quality standards for temperature, primarily due to lack of vegetation along the stream to provide shade. When the water gets too hot, it is harmful to salmon and other aquatic species.

With the help of residents, government agencies and the Squaxin Island Tribe, the state Department of Ecology has developed a water-quality improvement plan that calls for technical and financial assistance to landowners to help them operate, maintain or repair their on-site septic systems. Failing septic systems are a common cause of coliform pollution.

The Thurston and Mason Conservation districts also will work with landowners to ensure their pastures and livestock are properly managed to keep manure out of streams.

And the state Department of Transportation will work on projects to keep contaminated stormwater runoff from U.S. Highway 101 from entering the streams and the three South Sound inlets.

Problem area

A case in point is a \$50,000, federally funded project scheduled on U.S. 101 near Schneider Creek and the Thurston-Mason County line in late October, according to DOT landscape architect Bob Barnes.

The problem area is a portion of highway shoulder about 1 acre in size that drains across the paddocks of an adjoining horse stable, picking up additional contaminants before the stormwater enters the creek.

Crews and community volunteers will spread yard waste compost and mulch on the state highway right-of-way and replant it with trees and vegetation. The combination of compost and plantings should absorb and reduce the flow of stormwater, which also will be redirected so it doesn't flow across the horse paddocks, Barnes said.

This week, the Squaxin Island Tribe will continue its work to cool off Skookum Creek with stream-side plantings and placement of large woody debris in the stream to create shade and pools of water for fall chum and coho salmon, the tribe's environmental program manager John Konovsky, said.

About a half-mile of in-stream work has occurred on tribal reservation lands near the Little Creek Casino, he said.

In addition, the tribe is negotiating for the purchase of a 3-mile stretch of stream-side property in the Skookum Valley to further its creek-restoration work, aided by a \$953,000 grant awarded this year by the state's Wildlife and Recreation Program.

The tribe also has a \$100,000 grant from the federal Bureau of Indian Affairs to work with private property owners along the stream to plant trees, Konovsky said.

The Ecology plan, based on 10 years of data collected by the state agency, tribe and two counties, indicates that some stretches of Skookum Creek need twice the shade they currently have to meet water-quality standards for temperature.

And the amount of coliform bacteria entering the streams at certain points needs to be reduced anywhere from 35 percent to 99 percent to achieve water-quality standards, according to the Ecology plan.

"The intention is to help landowners to voluntarily change practices that can degrade water quality," the Ecology plan states. "However, if voluntary efforts are not successful, enforcement may be used."

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