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Reducing phosphorus levels in rivers is community effort

In 1998, the total maximum daily load allocation for sediment and bacteria was completed for the lower Boise River. The load allocation described how certain pollutants needed to be reduced in the Boise River to maintain our beneficial uses of the river for fishing, recreation and consumption.

Since then, the good news is that initial analyses by the state indicated that phosphorus, a type of nutrient that causes water quality problems like algae blooms, is not at high enough concentrations to create problems for the lower Boise River.

The bad news is at the Snake River — Hells Canyon load allocation was completed last fall, and phosphorus is a problem for the Snake River. All the tributaries to the Snake River will be required to reduce phosphorus to help the Snake River meet its beneficial uses. For the lower Boise River, that's a reduction of more than 75 percent.

In our watershed, phosphorus to our rivers and creeks comes from a variety of sources, including animal and human waste, disturbed soils on farms and construction sites, some industries, and fertilizer runoff from urban storm drains and agricultural lands. The entire Boise River watershed contributes to the phosphorus problem, and it will take a watershed-wide approach to solve it.

The Lower Boise River Water Quality Plan is the state-designated watershed advisory group for our basin. Group meetings are open to the public. The advisory group is composed of volunteer representatives from agriculture, municipalities, county governments and industry. The group helped the Idaho Department of Environmental Quality to come up with the initial load allocation for the lower Boise River.

Now, the group and DEQ are seeking a fair and equitable way to achieve phosphorus reductions. They are hosting two free public workshops to figure this out.

- On Thursday, workshop participants will discuss potential allocation scenarios and case studies to figure out what will work here.

- On May 19, participants will take an in-depth look at the preferred allocation scenario.

Both workshops will be held from 9 a.m. to noon at the University of Idaho's Caldwell Research and Extension Center at South 10th Avenue and Homedale Road.

Why is all of this important? Excessive phosphorus concentrations can cause algae to grow out of control, leading to nuisance conditions that can limit recreational uses. In addition, as the algae complete their life cycle and die, bacteria decomposition of algae depletes the available oxygen in the river. Trout and salmon in particular need well-oxygenated water to survive.

Because phosphorus comes from such a variety of sources, it is difficult to decide who needs to reduce their contributions and by how much to achieve water-quality goals. For the urban portion of the watershed, our municipal wastewater treatment plants will need to install more advanced technologies. In addition, controlling runoff from construction sites and building wetlands to treat stormwater before it reaches to river are both viable options. Homeowners can help by applying only the fertilizers they need or by using mulched lawn clippings instead of fertilizer.

In the agricultural arena, farmers can reduce phosphorus by controlling runoff, constructing buffer areas near return ditches and streams, building sediment ponds, and changing irrigation and plowing practices.

The purpose of the workshops is to bring interested parties to the table to discuss how we can collectively address the need to reduce phosphorus in our watershed. For more information about the workshops and Boise River water quality, see our Web site at www.lbrwqp.boise.id.us.

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