

featured partner

Department of Environmental Quality's Nonpoint Source Program

By Jennifer Zygmunt

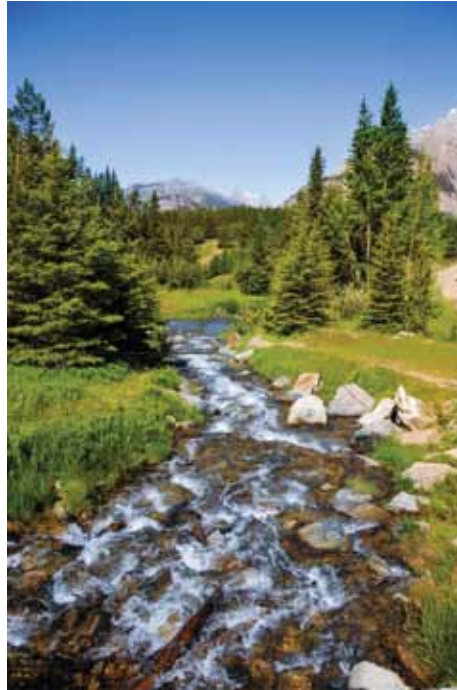
Wyoming has seen a significant increase in the number of small-acreage landowners in recent years.

Proper knowledge and skills are needed by landowners to responsibly manage these parcels to prevent environmental degradation, including contamination of our surface and ground water from nonpoint sources of pollution.

The Wyoming Department of Environmental Quality (WDEQ), through a grant from the Environmental Protection Agency (EPA), is providing funding to the University of Wyoming Cooperative Extension Service (UW CES) and its partners in the Barnyards and Backyards effort to help inform and educate small-acreage and new-to-the-land landowners about proper land management to help prevent and reduce water pollution from nonpoint sources.

This ties directly into WDEQ's mission: "To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations."

The Water Quality Division is one of seven divisions of the WDEQ. Within this division, the Watershed Management Section is responsible for a variety of planning and water-quality project implementation activities. The Nonpoint Source Program is one of the programs under watershed management.



What is nonpoint source pollution?

Unlike point source pollution, which can be traced back to a single, defined source, nonpoint source pollution is caused by surface water runoff diffuse in nature and often widespread, making it difficult to assess the source of the problem. Nonpoint source pollution occurs when runoff from rainfall or snow-melt travels over and/or percolates through the ground and picks up contaminants. These contaminants are deposited into streams, lakes, rivers, and groundwater. Nonpoint source pollution is generally associated with human land-disturbing activities such as urban development, construction,

agriculture, recreation, silviculture (the care of forest trees), and mineral exploration.

Common nonpoint source contaminants include fertilizers and pesticides from agricultural and residential activity; oil, grease, and toxic chemicals from urban runoff; sediment from construction activity or stream bank erosion; and bacteria and nutrients from livestock and pet waste or failing septic systems.

Common nonpoint source contaminants from small-acreage properties include sediment due to soil erosion caused by overgrazing, nutrients and bacteria from animal waste that has not been properly managed, pesticides and fertilizers from croplands, and nutrients and bacteria from failing septic systems.

What is the Wyoming Nonpoint Source Program?

Because nonpoint source pollution is a serious impediment to meeting the goals of the federal Clean Water Act (CWA) and because more focus was needed in this area, Congress amended the CWA in 1987 to include Section 319 Nonpoint Source Management Programs, thus providing the legal basis for the implementation of the Wyoming Nonpoint Source Program. Funds can be made available to state and local agencies, nonprofit organizations, and private individuals meeting CWA requirements. Those who can deliver a product having outcomes and

targets that reduce the impacts of nonpoint source pollution and improving water quality are eligible.

Nonpoint source pollution control funds are available each year on a competitive basis. Funds are awarded as reimbursement grants after proof of expenditure on eligible costs. All proposals submitted must provide at least 40 percent of the total project cost as non-federal cash or in-kind services match. The vision for the Wyoming Nonpoint Source Program is to sponsor projects that reduce or eliminate nonpoint source pollution in threatened, impaired waters and to maintain high-quality waters of the state.

Why do Section 319 funds support this publication?

One of the overarching principles of the Wyoming Nonpoint Source Program is to implement a proactive information and education program to enhance the public's knowledge of nonpoint source pollution.

Thus, information and education projects are eligible for some of the Section 319 funds available each year in Wyoming. The UW CES has received two Section 319 grants for information and education projects: the publication of the *Barnyards & Backyards* magazine has been a component of these projects. An important goal has been to increase small-acreage and new-to-the-land landowners' awareness of how their land management practices affect water quality and the health of the land.

Other partners in the Small Acreage Issue Team can be found under the *Barnyards & Backyards* banner on the table of contents page of this magazine.



What can I do to reduce nonpoint source pollution?

Nonpoint source pollution comes from a variety of sources, and there are many ways each of us can help reduce it. Activities or practices owners of rural properties can do include:

- Using the minimal amount of fertilizers, pesticides, or other lawn/garden/crop chemicals necessary. Read label directions carefully.
- Ensuring pesticide and other chemical containers are stored and disposed of properly.
- Making certain household chemicals (paints, cleaners), or vehicle/farm equipment products (brake fluid, antifreeze, used oil) are disposed of properly.
- Ensuring proper installation and maintenance of septic tanks and leach fields. Have septic systems pumped and inspected regularly by a licensed septic tank service contractor.
- Properly managing livestock operations to keep clean runoff from mixing with animal waste.
- Picking up pet waste.

- Using appropriate grazing best management practices (BMPs), such as fencing and water development, to minimize sediment, nutrient, and bacteria pollution.
- Utilizing conservation practices and BMPs that reduce soil erosion.
- Preventing riparian (streamside) area degradation.

WDEQ is always seeking projects that will address nonpoint sources of pollution and create awareness of Wyoming's important clean water resources.

While individuals can apply for Section 319 funds, many conservation districts have already received Section 319 funds and offer landowners cost-share programs for implementation of practices that will improve water quality; check with your local conservation district for cost-share opportunities.

Examples of eligible practices that promote improved water quality include: rehabilitating failing septic systems; fencing to control livestock access to riparian areas or to develop rotational grazing systems; developing off-channel water supplies to ease pressure on riparian areas; relocating animal feeding operations or corrals; increasing irrigation efficiency; and many others. These practices can improve a landowner's property quality and operations as well as water quality.

Additional information on the Wyoming Nonpoint Source Program and instructions about applying for Section 319 funds are at <http://deq.state.wy.us/wqd/watershed/index.asp>. Information regarding BMPs can also be found there.

The EPA's Nonpoint Source Web site also offers a variety of information regarding nonpoint source pollution: www.epa.gov/owow/NPS.

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