



What landowners can or cannot do with streams, ponds, and wetlands and the permitting involved

Most natural and man-made water features in Wyoming are regulated, and landowners need to be aware of when and whom to contact before altering these features.

Natural streams, over decades, establish a meander pattern in equilibrium with the local slope, annual discharge or flow patterns, sediment load transported by the stream, and the local soils. Any disturbance of the system, like drastically altering vegetation, straightening a meander, constricting the stream and flood plain at a bridge or crossing, can throw the system into disequilibrium and it will react by trying to correct the situation.

Breaching a meander can cause “headcutting,” down-cutting in the upstream direction causing the stream to be deeply incised and dewatering shallow groundwater systems. Removing vegetation may cause excess bank erosion, which will force the stream to widen, warming the waters and reducing fish habitat quality. Stream restoration professionals often talk of a stream system “unraveling” if there is a major disturbance like an oxbow being breached.

Water in natural as well as artificial systems is either in some sort of natural balance or have been carefully planned by qualified engineers. Any disturbance of these systems is probably discouraged and likely regulated.

What can landowners do to maintain healthy water ways?

Maintain a buffer zone - A buffer zone or riparian buffer is a vegetated area along a stream, usually willows and grasses, which helps provide shade, prevent bank erosion, and generally protects and improves water quality. Protecting and maintaining a buffer zone along a stream is key to keeping the stream functioning in a healthy manner.

Maintaining a healthy buffer zone on smaller properties with livestock means controlling both grazing on plants within the buffer zone and access to streams and stream banks. This can be accomplished by installing permanent or electric fencing to limit time spent by animals on banks and in the channel.

If you think some water-related featured needs to be changed on your property, you will likely need to apply for a permit.

Some activities which require a permit:

- Straightening or altering a stream channel
- Excavating in a pond or wetland
- Impounding water or creating reservoirs
- Modifying or armoring banks
- Diverting water from streams or flow-through ditches
- Draining wetlands

Who issues permits and what types are available?

The State Engineer's Office (SEO) is essentially responsible for regulating and administering surface waters in Wyoming. These include streams, irrigation ditches, ponds, and lakes. Water is managed for beneficial uses, including irrigation, livestock watering, domestic and municipal drinking water, and power generation. Ponds are also considered a consumption of water and are regulated by the SEO.

SEO permits are all about the water itself – the quantity and for what it is used.

The SEO has four types of permit applications germane to smaller private property application:

SW-1 permits are for ditches, pipelines, and water hauling. This includes new diversions from streams by ditches, pipelines, and water hauling.

SW-2 permits are for enlarging an existing SW-1 facility to allow the diversion of more water by adding more uses, points of use, or more land to the existing facility.

SW-3 permits are for permitting new reservoirs or ponds, or enlarging existing reservoirs or ponds.

SW-4 permits are for reservoir facilities that are for stock use only with dams less than 20-foot high and capacity less than 20 acre-feet.

Forms can be found online (seo.wyo.gov/applications-forms) and applications typically range from \$25 to \$50.

The United States Army Corps of Engineers regulate any work including construction, digging, minor dredging or filling activities on banks and in channels in "Waters of the United States," which is a very broad category. Bottom line: Corps permits are required when dredging and filling. Even riprapping (adding large rocks to cover soil and reduce erosion on a stream bank) is subject to Corps permitting, as well as installing bridges on private property, as these may alter or impede the flow of water in the channel.

U.S. Army Corps of Engineers permits

The Corps employs a "Nationwide Permit Program" to cover some of the activities listed above and many more activities related to our waterways – natural and man-made. A current and comprehensive list of permits and summaries is at bit.ly/permitsbytype.

Some permits germane to landowners reading this article include: #2 Structures in Artificial Canals; #13 Bank Stabilization; #14 Linear Transportation Projects (roads and bridges) ; #27 Aquatic Habitat Restoration or Enhancement; and #45 Repair of Uplands Damaged by Discreet Events.

There are 54 categories of permits, and many of those are for industrial or agricultural practices,

but some are related to construction, recreation, and residences.

Many activities related to irrigation ditch or diversion maintenance related to agriculture are exempt activities but still warrant giving the Corps a phone call first to make that determination.

Well before starting a project that may require Corps permitting, call the Cheyenne Regulatory Office at (307) 772-2300 to verify whether a permit is needed and if so, which kind.

The Wyoming regulatory office website is bit.ly/wyoregoffice with more detailed information, but again a phone call is recommended. Sometimes a project may be small enough the full-blown application and notification are not warranted, and a discussion with a project manager is the quickest way to make that determination.

A more thorough discussion of these issues can be found at barnyardsandbackyards.com under News for the Seasons: *Water – Not a Dry Subject in Wyoming*, and then in Water under Treasure Trove of Resources: Water Rights and Law, Water Quality, and Irrigation.

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