

Why Regulate?

The Bridge Creek Watershed Protection District rules are designed to protect the water quality of the City's drinking water supply. These provisions benefit the public health, safety, and welfare of the residents of the City of Homer and other customers of the city's water system by restricting land use activities that would impair the water quality, or increase the cost for treatment.

The soils and native vegetation on lands surrounding Bridge Creek act to absorb, collect and filter rainfall and snowmelt on their way to Bridge Creek and the reservoir. However, the natural capacity of the land to absorb and filter these waters is reduced when land is cleared, and soils are compacted. As more buildings like houses and garages are built, less undisturbed land is left to absorb and filter the water. Surprisingly, it does not take very much development before there is a measurable impact on water quality. That's why the rules in Bridge Creek are stringent: its better to avoid the problem that try to fix it after the fact.

Without enough vegetated land, and resulting water absorption, the runoff from roofs and driveways increases in both volume and speed, becoming a flood that collects sediments, nutrients, and pollutants that ends up in the City's water supply. Therefore, the BCWD rules control development activities that would increase sedimentation or pollution that could affect the water quality of Homer's only drinking water source.



The Usual Questions

What Gives the City the right to regulate the whole watershed?

The Borough gave the city extraterritorial land use powers over the watershed, in 1999, for the purpose of protecting the drinking water supply. In 2003, the City enacted the current rules.

Where is the watershed?

The rules apply to all lands north of Skyline Drive, and south of Crossman Ridge Road.

Where can I get more information?

Planning staff is here to help! We are happy to talk to you about what other land owners have done, and what the options are. Come see us!

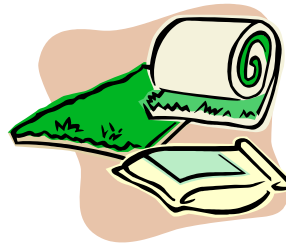
What are the fees?

Mitigation plan: Free

Zoning permit in the City: \$180

Outside the city: Free

You will probably need a driveway permit as well. Planning staff can tell you who to contact (could be a city, borough or state permit office).



City of Homer Planning and Zoning

Tel: 907-235-3106

491 E Pioneer Ave
Homer AK 99603
Planning.ci.homer.ak.us

Phone: 907-235-3106
Fax: 907-235-3118
E-mail:
planning@ci.homer.ak.us

Building in the Bridge Creek Watershed

This pamphlet is intended to provide information for people planning to build single family homes within the Bridge Creek Watershed Protection District.



City of Homer Planning and Zoning
Tel: 907-235-3106



Land owners may **develop** up to **4.2% of their land**, including the **house footprint**, **driveways, decks and parking pads**. On **small lots**, this takes some **extra planning**, and possibly, **a mitigation plan**.

Allow yourself plenty of **time** to get your zoning permit. A normal permit takes about two weeks; a mitigation plan and permit can take a **month or more**.

MITIGATION PLANS

Lots under 2.5 acres within the watershed are eligible for increased impervious coverage, up to 6.4%, with an approved mitigation plan. The Homer Advisory Planning Commission approves or denies these mitigation plans.

THE GOAL

The goal of a mitigation plan is to lessen the impact of development on water flow and ground cover. Generally speaking, this means having surface water absorb into the soil, instead of running down a driveway into the ditch system, and also keeping as many native plants in place as possible.

DEFINITIONS

"Impervious Coverage" (also referred to as "Coverage") means an area of ground, which, by reason of its physical characteristics or the characteristics of materials covering it, does not absorb rain or surface water. All parking areas, driveways, roads, sidewalks and walkways, whether paved or not, and any areas covered by buildings or structures, concrete, asphalt, brick, stone, wood, ceramic tile or metal shall be considered to be or have impervious coverage.

"Mitigation Plan" means a plan designed to mitigate the effect of impervious cover on water flow and loss of ground cover, and may include systems of water impoundment, settling ponds, grease & sand traps, and leach fields among others.

"Sedimentation" an undesirable buildup of loose sand, dirt and gravel.

What Works ?

The most common request from landowners is to increase their allowable impervious area from 4.2% to 6.4%. The following ideas have resulted in approved plans.

Commonly used approaches:

- Construct the foundation drain and gutter drain pipe to end in a drain field lined with filter fabric and covered by drain rock.
- Retain as much natural vegetation as possible. Buffers of undisturbed or minimally altered trees and shrubs are recommended.
- Disturb as little of the soil as possible. Areas disturbed by construction shall be planted or seeded as soon as possible to reduce sedimentation.

Other ideas:

- Create an interception ditch along each side of the driveway, lined with drain rock and filter fabric.
- Build the driveway using 1 ½ inch gravel with 2 inches of clean crushed rock.
- Create a pond or rainwater catchment basin, which allows the water to slowly soak back into the ground.
- Retain natural vegetation between any lawn or landscaped area and all drainage ditches. Keep your lawn fertilizer and chemicals on your property and out of the drinking water supply!
- Use silt fencing during construction to slow or stop runoff on steep sites. Straw bale barriers may also be used.

What else can I do?

- Keep driveways short. A long driveway covers a lot of area and creates a lot of impervious coverage.
- Build up instead of out.

Build



How do I apply for a Mitigation Plan?

Write a letter and draw a plan!

1. Write a letter to the Homer Advisory Planning Commission, requesting an increase in the allowable coverage from 4.2% up to the amount you need—max is 6.4%. Describe the property, your project, why you need to develop more of your lot, and all mitigation you are going to do.

2. Draw a site plan, or multiple plans, showing the property, to scale. You'll need to do this for a zoning permit anyway! A hand drawn plan on graph paper with dark pencil works just fine. Show all the things you talk about in the letter. Sketches and photographs help!

Planning staff can give you a copy of pervious plans that have been approved.

Anything else?

Mitigating driveways

Also allowed, but rarely used, is a provision in the rules that would allow some of the driveway and walkways to be counted as less than 100% impervious.

There are materials like GEOBLOCK, that can be used to build a driveway or pathway that allow grass and plants to grow up through it, and water to soak into the ground. Think of it as a plastic milk crate, laid flat in squares, that will support the weight cars and trucks, but allows water to flow freely through it. A local example of its use is on the new Caribou Lake trail. These materials usually have some information from the manufacturer that state how impervious they are – do they allow 80% of water to pass through, 70%, etc. Using this information from the manufacturer, you may apply for a mitigation plan that would reduce the impervious calculation of the driveway area. Other ways to reduce impervious coverage of a driveway could include a narrower driveway, or a solution designed by an engineer.