



# Habitat Conservation Areas - Rivers and Streams

Critical Areas Ordinance

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## What are rivers and streams?

Rivers and streams are areas where there is enough surface water flow to produce a defined channel or bed that shows clear evidence of the passage of water. Defined channels or beds can include bedrock channels, gravel beds, sand and silt beds, or defined channel swales.

Streams include drainage ditches or other artificial watercourses where natural streams existed prior to human alteration. They also include waterways that are used by salmonid or other fish populations, or that flow directly into Shellfish Habitat Conservation Areas. A channel or bed does not need to contain water year-round to be considered a stream.

## Why are rivers and streams important?

Rivers and streams essentially function as a drainage system that transports water, sediment and dissolved nutrients across the land's surface to the ocean. They also provide important habitat elements for fish and wildlife species.

Rivers and streams perform a variety of beneficial functions that are important to the environmental and economic well being of Whatcom County, including:

- Groundwater recharge and discharge
- Flood and storm water storage
- Fish and wildlife habitat
- Recreation, education, scientific, and aesthetic values.

## How does development impact river and stream corridors?

Many factors, including development activities, can affect the function and characteristics of a river or stream system, including: precipitation patterns, geology, topography, and human activities such as construction of dikes or dams, gravel extraction, and removal of riparian vegetation.

Development activities can impact river and stream systems by:

- Increasing stormwater runoff and flooding;
- Increasing sedimentation and erosion;
- Increasing chemical and pollutant levels;
- Decreasing available light and dissolved oxygen for aquatic plant and animal life;
- Increasing water temperature; and
- Reducing riparian vegetation and buffers.

## Why are rivers and streams regulated?

Rivers and streams are regulated under the Whatcom County Critical Areas Ordinance (WCC, Chapter 16.16 – Articles 4 & 7) for the general purposes of:

- Protecting rivers, streams and their associated riparian areas, and the ecosystem processes that they depend on.
- Maintaining fish and wildlife populations through protection and conservation of the natural distribution, connectivity, and quality of valuable fish and wildlife habitat.
- Reducing flood risk to life and safety, public facilities, and public and private property while protecting and maintaining beneficial

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ecological functions of frequently flooded areas.

- Maintaining floodplain or floodway capacity to convey and store floodwaters.

### **Protective Buffers**

Designation and establishment of protective buffers are intended to protect and minimize impacts to rivers and streams by providing naturally vegetated separation between riparian systems and development activities.

The following standard buffers are to be measured on a horizontal plane landward from the ordinary high water mark or the edge of the channel migration zone of a river or stream, as applicable:

- Shoreline streams - 150 feet
- Fish bearing streams - 100 feet
- Non-fish bearing streams - 50 feet

Under certain conditions, the County may allow modification of standard buffer requirements by granting agreements for buffer averaging or buffer reduction. The County may also require larger buffer widths when necessary to protect a river or stream's functions.

### **What is the review process for my project?**

Review and approval for a proposed development within a river, stream or associated buffer area may be initiated through any project permit or land use application in Whatcom County. The County will use the following review procedure:

- The County will determine if the proposed activity is located in a river, stream or its associated buffer area through map evaluation, site inspection and/or other appropriate means.

- A Critical Areas Assessment Report and/or a Habitat Management Plan (HMP) may be required when any part of an activity may impact a regulated critical area.
- The recommendations and conclusions of an approved report or plan will be used to assist the County in making a final decision regarding critical area boundaries and appropriate protective and/or mitigation measures.

### **Habitat Management Plans**

A Habitat Management Plan (HMP) will be required when a proposed development activity will have an adverse impact on a river, stream and/or its buffer. An HMP must address the ecological conditions of the river or stream area, potential adverse impacts of the development on the habitat and species dependent on the habitat, and conservation/mitigation measures to offset unavoidable adverse impacts.

### **Fees**

Please refer to the current Whatcom County Unified Fee Schedule.

### **Information**

Protecting rivers and streams and riparian areas requires public education, involvement, and cooperation. Due to the administrative complexity of these regulations, it is best to consult with or contact a Natural Resource Specialist to answer any additional questions.

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