



## **BROCHURE # 34** **STREAMS**

### **A KITSAP COUNTY CRITICAL AREAS ORDINANCE FACT SHEET**

The Kitsap County Critical Areas Ordinance (CAO) regulates development affecting wetlands, fish and wildlife habitat conservation areas, streams, aquifer recharge areas, and frequently flooded and geologically hazardous areas. This CAO fact sheet is one in a series which describes the above types of environmentally critical areas protected by Kitsap County under the *Critical Areas Ordinance*, Title 19, Kitsap County Code. This has been provided to you as general information and is not intended as a substitute for the actual codes and regulations. For more information, contact the Kitsap County Department of Community Development at (360) 337-5777 or visit our website at [www.kitsapgov.com/dcd](http://www.kitsapgov.com/dcd).

#### **What is a Stream?**

A stream is an area where the surface water flow is sufficient to produce a defined channel or bed. A defined channel or bed is an area that demonstrates clear evidence of the passage of water and includes, but is not limited to, bedrock channels, gravel beds, sand and silt beds and defined-channel swales. The channel or bed need not contain water throughout the year.

This definition is not meant to include irrigation ditches, canals, storm or surface water runoff infrastructure or other artificial water courses, unless used by salmon, or if it was a natural stream that was straightened or relocated during construction.

#### **Why are streams so important?**

Streams benefit the environmental and economic well-being of Kitsap County. Streams provide numerous values and functions, such as:

- Helping maintain water quality
- Storing and conveying storm water and floodwater by acting as natural storm water management facilities
- Groundwater recharge
- Providing important fish and wildlife habitat and food, both in stream and within their corridors
- Offering areas for recreation, education, scientific study, and general aesthetic appreciation

#### **Stream classification**

Throughout the State, water bodies (including stream segments) have been classified by the Department of Natural Resources based on flow volume and importance to fish and wildlife, domestic

use, and public recreation. There are four classifications of streams in Kitsap County:

**Type S** – *Shoreline*

**Type F** – *Fish bearing*

**Type NP** – *Non Fish-bearing Perennial*

**Type NS** – *Non Fish-bearing Seasonal*

Type S streams normally have the largest flow volumes (at least 20 cubic feet per second) and provide important fish and wildlife protection. Examples in Kitsap County include segments of Big Beef Creek, Blackjack Creek, Burley Creek, and Chico Creek.

At the other end of the spectrum, type N streams tend to be very small – seasonal streams and are not typically named.

#### **How does development impact a stream corridor?**

Unless properly engineered, development can degrade a stream's wildlife habitat and water quality, undermining its values and functions.

Poorly designed development can:

- Increase storm water runoff and flooding which leads to increased sediment erosion
- Erosion creates stream turbidity (cloudy appearance from sediment) that can reduce the light and oxygen necessary for plant and animal life
- Contribute toxic chemicals and organic pollutants
- Remove vegetation along stream banks, a stream component crucial to maintaining water temperature, bank stabilization and pollutant filtering capabilities

## **BUFFERS AND BUILDING SETBACKS**

As with streams, most critical areas are provided a buffer of native vegetation to protect them from human activities. No clearing or grading is allowed within this buffer or within the critical area itself. In addition, structures and impervious surfaces must be kept outside a 15 foot building setback that extends beyond the buffer. In most cases, existing structures within a stream buffer may be remodeled, reconstructed, or replaced.

Standard buffer width requirements depend on the stream type. These are minimum requirements and may be increased to protect a stream. The buffer requirements are as follows:

- **Type S – 200 feet**
- **Type F – 150 feet**
- **Type NP – 50 feet**
- **Type NS – 50 feet**

Buffers begin at the “ordinary high water mark” (OHWM) of the stream channel and extend in either direction.

The OHWM is typically placed at the line most often found on the stream bank which is the average extent of high water.

Alternatively, the OHWM may be placed at the top of the bank when the line is not visible, or where the vegetation changes to an upland type.

Buffer widths are increased if there are streamside wetlands that provide overflow storage for stormwater. Wetlands feed water back to the stream during low flows and provide shelter and food for fish.

In consultation with the Washington Department of Fish and Wildlife, Kitsap County has the administrative flexibility to reduce buffers on existing platted lots.

Alteration of a stream or its buffer may require a mitigation plan with the County. The applicant must also meet the requirements of other jurisdictions, such as the Department of Fish and Wildlife’s Hydraulic Project Approval (HPA).

## **Streams in ravines**

For streams in ravines with ravine sides 10 feet or greater in height, the minimum buffer width must be the minimum buffer required for the stream type, or a buffer width which extends 25 feet beyond the top of the slope, whichever is greater.

## **Stream crossings**

Bridges or bottomless culverts are required for all Type S and F streams, which support salmonids, unless it can be demonstrated to the County that impacts to salmon habitat can be mitigated.

To obtain a stream crossing permit (HPA) contact the Department of Fish and Wildlife at (360) 249-6522.

## **Livestock restrictions**

In areas that would allow livestock to access streams, damage should be avoided by:

- Fencing along a stream’s outer buffer edge.
- Implementing to the satisfaction of the Kitsap Conservation District a farm conservation plan that would protect and enhance stream quality.

## **Other restrictions and provisions**

Examples of activities that are subject to the standards contained in the CAO and other applicable federal, state, and local ordinances include:

- Forest practices, Class IV General and Conversion Option Harvest Plans (COHPs)
- Land division and land use permits
- Road construction