

Q&A - Delineating wetlands on or near road prisms



Which wetlands do I include in the Wetland and Stream Assessment Report?

Delineate and **include all biological wetlands** in the Wetland and Stream Assessment Report (WSAR). Biological wetlands are, “areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” regardless of whether they are jurisdictional.

Some biological wetlands commonly found in our study areas might not meet the full state definition of a wetland as defined in RCW 36.70A.030(48). These include wetlands in ditches and stormwater ponds intentionally created in uplands, and wetlands that unintentionally formed on top of road fill placed after July 1, 1990. Still document these wetlands in the WSAR with a little extra information in the wetland summary table as described below.

Discuss with your Washington State Department of Ecology (Ecology) liaison whether Ecology will require compensatory mitigation for impacts to wetlands that you think don't meet the state definition. Ecology may or may not require compensatory mitigation for these wetlands.

Review city and county municipal codes and critical areas ordinances for regulations that may differ from federal and state jurisdiction as we must abide by local regulations as well.

How do I document wetlands in ditches?

Delineate and document all biological wetlands in ditches in the WSAR. Address the following questions in your notes to include in the WSAR wetland summary table:

- Was the ditch excavated in a wetland or upland?
- Is all or only part of the wetland on top of fill? Did your shovel hit a restrictive layer and at what depth?
- Is groundwater a hydrology source or is the wetland only receiving inputs from stormwater and precipitation?
- Is it a cut slope wetland?

What is a cut slope wetland?

A **cut slope wetland** forms where road-building activities create a cut that intersects a water table bringing groundwater to the surface (Figure 1). The cut inadvertently creates a slope wetland on a previously upland hillside. These wetlands are often referred to as hillside, groundwater-discharge, seep, or slope wetlands.

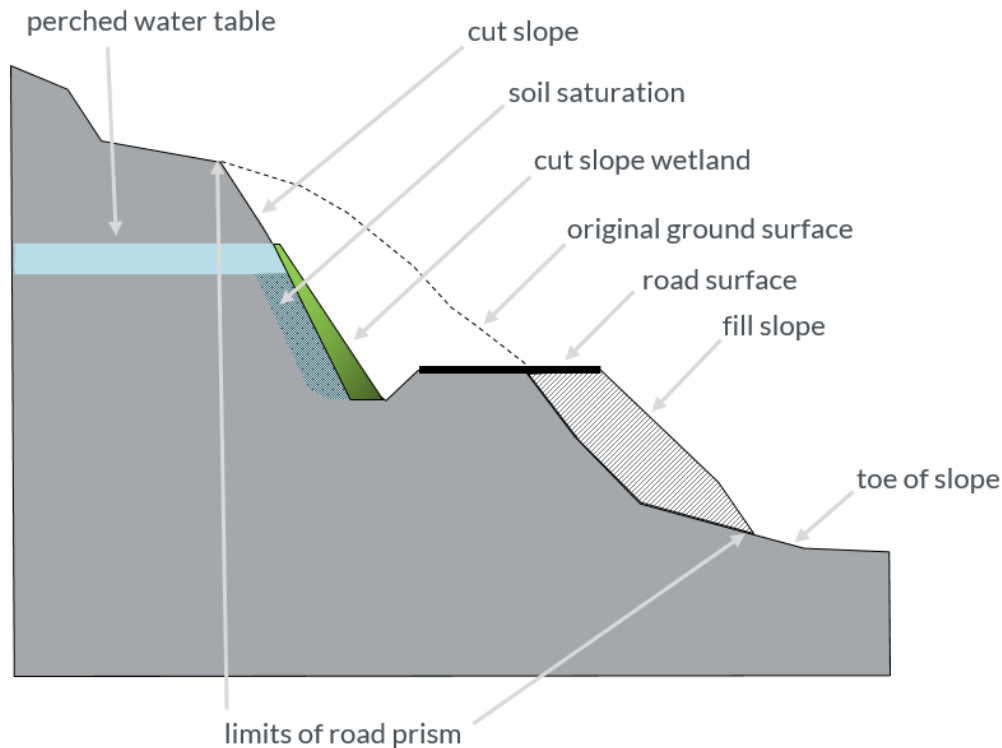


Figure 1. Cut slope wetland.

Ecology regulates cut slope wetlands regardless of when the road was constructed. Treat cut slope wetlands the same as naturally occurring slope wetlands.

Slope and cut slope wetlands typically have wetland hydrology in the form of soil saturation. This is either a direct result of a water table intersecting the slope, or indirect result from that same water table seeping down the slope subsurface.

The regional supplements typically require that soil saturation be directly above a water table to use Indicator A3: Saturation. However, in slope wetlands, the water table is often above the saturated slope. Indicator A3: Saturation is likely the most appropriate indicator to document the saturated soil conditions common to slope wetlands. Consider adding language to the hydrology remarks section of the wetland determination data form documenting why, in the typical slope wetland, saturation is not observed directly above the water table.

Figure 2 shows a plan view of a cut slope wetland (A) adjacent to a ditch. If the ditch meets wetland criteria, delineate that section of ditch directly adjacent to the wetland (B) as part of the cut slope wetland. Include the area down gradient from the wetland ditch section (C) in the wetland delineation when wetland criteria are present.

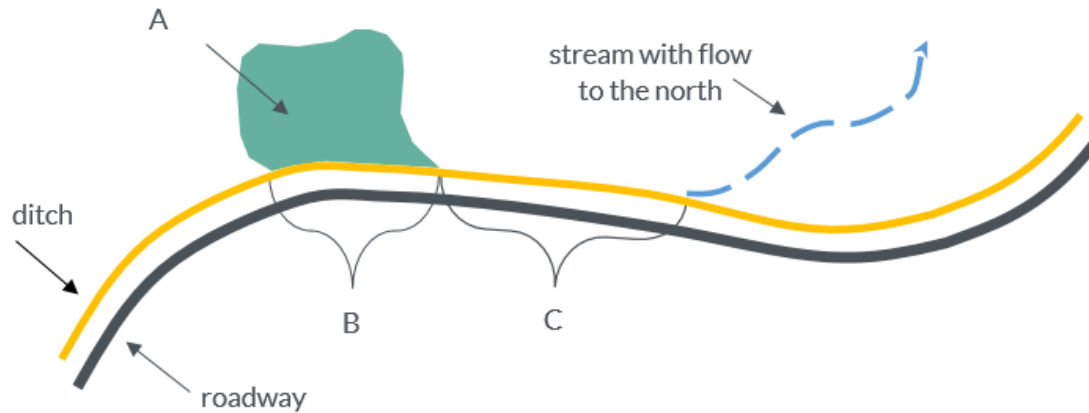


Figure 2. Cut slope wetland adjacent to a ditch that connects to a stream.

Alternately, section C may be a jurisdictional stream if ordinary high water mark indicators are present and wetland vegetation isn't. Use best professional judgement to determine where to break the wetland unit for section C.

How do I document wetlands within intentionally constructed stormwater treatment BMPs?

If it's not an obvious constructed stormwater treatment Best Management Practice (BMP) that the project office would already know about (like a fenced detention pond), delineate and document the wetland in the WSAR. Describe that the wetland is within a stormwater BMP in the WSAR and whether the BMP is actively being maintained.

How do I document wetlands occurring on top of road fill?

Delineate and include all biological wetlands formed on top of road fill in the WSAR along with information to address these questions:

- Is all or only part of the wetland on top of fill? Did your shovel hit a restrictive layer and at what depth?
- Was the fill placed after July 1, 1990? If it matters for the impact assessment, answer this question by including as-built or as-constructed plan sheets or aerial photos that answer this question in the permit application.

Contact your Ecology liaison to discuss.

What is a road prism & where might I find road fill?

A **road prism** includes the road surface and subsurface fill, cut slope, and fill slope (Figure 3).

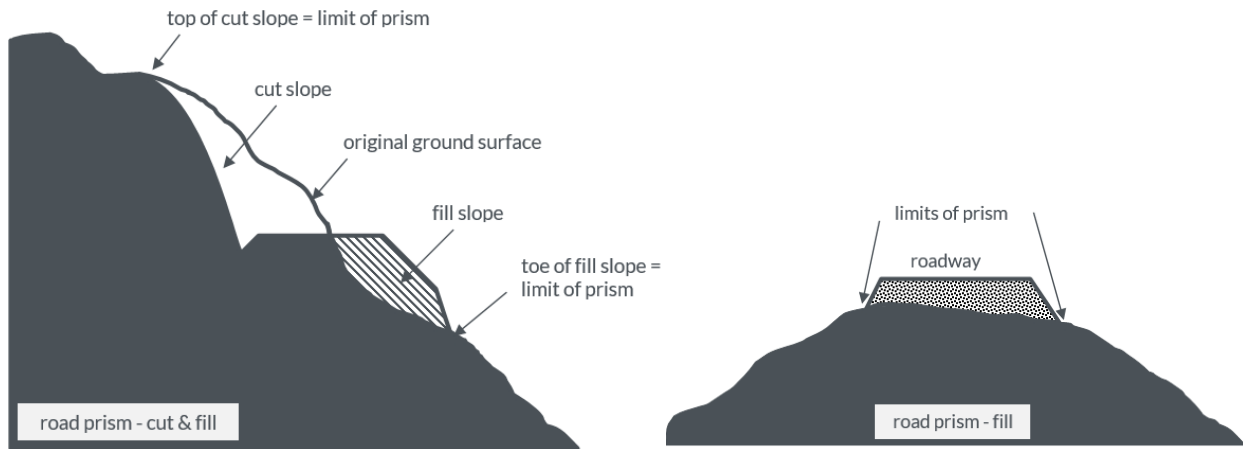


Figure 3. Road prism

An **elevated median** is constructed of fill material deposited between the lanes of a divided highway, raising the grade above the original ground surface (Figure 4). They are part of the road prism. Not all medians are elevated or contain fill material.

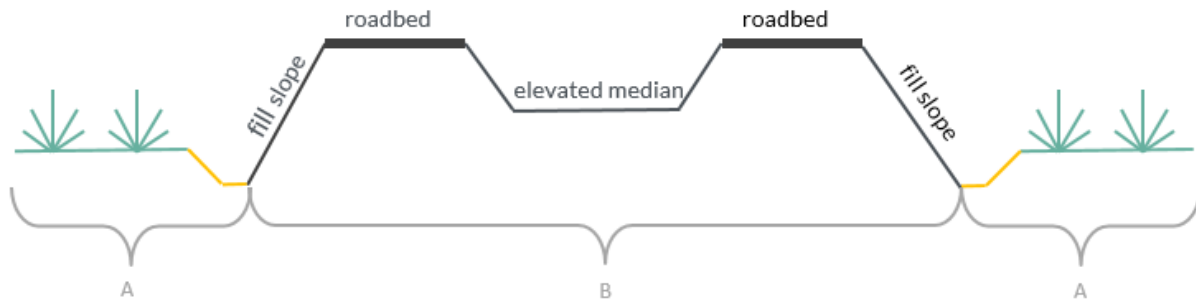


Figure 4. Elevated median

What if part of the study area isn't safe to access?

Stop! Safety is our number one priority. Discuss with your team and the regulatory liaisons.

Photograph and describe the area if you can see it from a safe area. Estimate the wetland boundaries based on a desk-top reconnaissance and note your methods in the WSAR.

If you can later access the area with additional traffic control or other appropriate safety measures, you can field verify the wetlands then and amend the WSAR.