

# OREGON DEPARTMENT OF STATE LANDS

## Flood-Related Responses Involving Removal-Fill Activities in Waters of the State

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The Department of State Lands (DSL) has jurisdiction over removal-fill activities in “waters of the state” including all tidal and non-tidal bays, perennial and intermittent streams, lakes, wetlands and other navigable and non-navigable waters, including the Territorial Sea.

Oregon’s Removal-Fill Law requires people who will remove or fill any amount of material in streams designated as Essential Salmon Habitat or in a State Scenic Waterway to obtain a permit from DSL. (Maps of ESH streams and SSWs are located on the DSL Web site – [www.oregonstatelands.us](http://www.oregonstatelands.us) - click on Removal-Fill Permits). In all other waters of the state, permits are required for the removal or filling of 50 cubic yards or more of material. Waters of the state include streams, lakes, wetlands and other bodies of water. The law applies to both privately and publicly owned land. Removal volumes are per calendar year and do not include organic materials. Fill volumes are cumulative and include any material.

This fact sheet is designed to walk you through the common requirements for dealing with flood damage and debris removal from Oregon’s streams, rivers and other waterways.

In general, stabilizing a streambank, removing gravel or other material, modifying or restoring a stream channel, and most other alteration of materials in a waterway will require an authorization from the Oregon Department of State Lands. This determination is project specific.

A project may also require authorization from the Oregon Department of Environmental Quality (DEQ), Oregon Department of Fish and Wildlife (ODFW), and various other local, state and federal agencies including the U.S. Army Corps of Engineers (Corps).

The purpose of this document is to help ensure a positive outcome and limit the amount of time and effort spent obtaining an authorization. It is best to contact the agencies involved and discuss any specific options before proceeding with work.

Please note that dredging or removing sediments in waters that are tidally influenced often provides little or no flood reduction benefit for the cost and effort expended, and may cause significant damage to fishery resources and worse flooding damage downstream.

The best way to avoid the red tape associated with permitting for flood-related work in waters of the state is to limit the work or repair to only those actions necessary to restore the serviceability of the structure or alleviate the emergency situation. When additional activities, including extra fortifying or stabilizing efforts, are performed beyond what existed prior to flooding – or when actions are undertaken to solve long-term problems beyond those required to address the immediate situation – additional permitting requirements may apply.

### **Overall Process**

The Department of State Lands has an expedited approval process – an Emergency Authorization – that can be used for rapid response to an emergency-related flood repair project. The definition of an emergency under law “is a natural or human-caused circumstance that poses an immediate threat to public health, safety or substantial property including crop or farmland.” The Emergency Authorization process gives DSL the ability to verbally approve projects that constitute an emergency.

This approval can be made during an initial phone call, e-mail or other form of communication, or after discussion and information gathering. In most cases the authorization is made quickly – the same day if not within a few hours – rather than the normal processing time of a few months.

These authorizations are good for up to 60 days and are for the minimum amount of work necessary to alleviate the immediate emergency-related circumstances. Frequently, projects authorized under the Emergency Authorization must later be removed, modified or otherwise permitted by DSL by the end of the applicable in-water work period set by ODFW.

To undertake work beyond that authorized under an Emergency Authorization or covered by an exemption, additional permitting is likely required from DSL and the Corps of Engineers. This may involve a General Authorization from DSL with a 40-day review and approval timeline, or an Individual Permit for more extensive projects that has a permitting review and approval timeline of 120 days. Please contact the Corps to determine their requirements.

### **Damage to Roads, Driveways, Bridges, Culverts and Similar Structures**

For emergency repair to roads, bridges and other transportation-related structures caused by flood events, DSL does not require a permit for work limited to the minimum amount necessary to restore the serviceability of the structure. This allows roads and highways to be reconstructed quickly to reestablish the transportation routes of the state.

Additional work beyond the scope of what is necessary to restore that service will likely require a permit. However, work to maintain the structure is allowed up to 20 percent beyond the original footprint without obtaining an authorization from DSL. Typically, as long as the repair work is completed within the original footprint and uses similar materials, and the structure is used for the same function as before, the work will not need a permit from DSL.

The Department recommends that repairs be conducted from upland sites and not from within waterways, as activity in the water itself may require a permit. DSL further recommends implementing any measures that can be done to minimize disturbance to the waterway – such as use of an excavator instead of a bulldozer to shape and move material. If you are repairing or replacing a culvert or other structure in fish bearing waters, ODFW fish passage requirements must be met.

Frequently, in flooding situations, culverts and small bridges will get clogged with debris. If done correctly, removing this debris can be done without a permit. Removal of debris including rock and other material from inside a culvert is exempt, provided the material is disposed of on an upland site.

Removing material from the inlet and outlet of the culvert requires a permit unless done under specific conditions. Material may be removed from the inlet and outlet without a permit provided the material is removed from an area extending on either side that is no greater than 20 percent of the footprint of the culvert. If this work can be performed using an excavator operating from outside of the waterway – and no material is disposed of or filled in the waterway – removal of this material will not require a permit from DSL. Further, where materials are blocking fish passage through a culvert, up to 50 cubic yards of the material may be removed to restore fish passage functions of the structure. Material removed must be disposed of in an upland location.

### **Damage to Ditches and Dikes**

As with most other types of repairs to structures damaged during flooding, work to repair damage to ditches and dikes may be done without a DSL permit under certain circumstances. The work must be to restore the function of the structure to what existed before the damage, be confined to the original footprint of the structure, and use similar material to what existed previously.

As with repairs to roads and similar structures, it is also advisable to work from upland sites and not within the waterways, as this may require a permit. Anything that can be done to minimize disturbance to the waterway such as using an excavator, instead of a bulldozer, is recommended.

Please note that relocating or otherwise altering a stream channel to perform this work is not considered maintenance and requires a permit. The distinction between exempt maintenance on ditches and work in streams or other waterways which are not exempt

is often complicated and fact-specific to the location. Please contact DSL for project-specific information and guidance.

### **Damage to Streambanks**

One of the most common occurrences during a flood is for a stream to move from side to side, causing erosion. Often, this occurs on the outside curve of a stream where the stream's energy naturally cuts away at the outside bend of the bank while depositing material on the inside of the bend. Streams meander in this way, releasing the energy held by the flow of water.

After flooding, landowners often want to stabilize these areas to protect their property and prevent future loss of land. However, if not done correctly, such projects can make erosion or flooding problems worse while also harming fish and wildlife that depend on healthy stream banks. For this reason, any proposed bank stabilization work requires a permit.

When rock or other hard materials are used to stabilize the streambank ("streambank stabilization"), the stream's energy gets deflected further downstream – often in greater force. This can exacerbate stream bank erosion and flooding on across-stream and downstream properties. Fixing the streambank in place with rock or other hard surfaces may also destroy streamside or riparian vegetation important to fish and wildlife, and may warm the water which can also have a negative impact on fish.

There are effective ways of controlling bank erosion that don't involve creating hard surfaces. Design options that use shrubs, trees and wood to effectively control bank erosion, commonly referred to as "bioengineering," emulate natural elements to reduce erosion and redirect stream energy.

Bioengineering involves using native shrubs and trees, sometimes in combination with large woody debris and/or selective use of rock, in ways that the plant roots and stems provide slope protection. Vegetation is planted to provide soil reinforcement and erosion control. When properly designed and constructed, bank stabilization projects incorporating bioengineering methods can provide equally effective and longer-term control compared with rock-only treatments.

Stream bank stabilization projects are regulated very carefully because of the potential damage that stabilization projects can cause to adjacent and downstream properties as well as to fish, wildlife and water quality. In cases where there is an immediate threat to public health or property damage, an "emergency" as defined above, DSL can issue an

Emergency Authorization for rock or other hardened structures to be used to address the situation. However, in most cases that material will either have to be removed, modified or otherwise permitted by the Department before the end of the next in-water work period.

## **Removal of Large Wood from a Waterway**

A common occurrence during flooding events is the relocation of trees and brush that are carried down and deposited by high waters. Logs and trees play a vital role in streams and are important for providing fish habitat for native fish including salmon and steelhead. Because of their importance, removal should only be for an immediate threat to health, safety or substantial property including farmland. Woody debris posing a threat to the failure of a stream-crossing structure or causing flooding of buildings or other property are examples of situations where it is appropriate to remove woody debris.

The removal of organic material (e.g. wood and brush) is not regulated by DSL provided the equipment used does not operate within wetlands or waterways, the removal does not cause the disturbance of any streambed or bank materials, and any removed wood is placed on uplands – not wetlands. The Army Corps of Engineers may regulate this activity, and should be contacted to determine their requirements.

- Removal of organic materials can be accomplished by use of excavator, other similar equipment that can lift the wood, or by cutting (bucking) the wood so the material can move downstream or be placed above the water level.
- Wood imbedded in the streambed or bank may be cut off at the bed or bank and then removed.
- If wood can be pulled out without disturbance of the bed or bank material, a permit is not required. However, it is often difficult to anticipate what remains under the bed, so it is recommended that either the wood be cut off above the streambed or bank, or a permit be obtained from DSL.

Please note redistributing, moving or otherwise placing wood in streams typically requires a permit. Therefore, any wood that is removed must be placed on an upland site until a permit can be obtained to place the wood back in the stream in an approved manner.

## **Removal of Debris (garbage, building material, etc.)**

An unfortunate side effect of flooding is that building materials, household goods and other waste products are collected by floodwaters and transported into the stream channel and deposited. As a matter of practice the Department does not regulate the removal of this “trash” as it is beneficial to the waterway to have it removed. However, if removal of this material requires the disturbance, excavation or alteration of the streambed or banks, it may require a DSL permit.

The Department realizes the importance of removing this contamination and will typically issue an Emergency Authorization to get it removed. Any removal of materials that may appear to be hazardous, including containers that may have hazardous

materials within them, should be done under supervision of appropriate federal, state or local emergency response personnel (see contact numbers below).

### **Emergency Contact Numbers:**

Oregon Office of Emergency Management: 800-452-0311; 24 hours.

Department of State Lands: 8:00 am - 5:00 pm, Monday through Friday:

- West of the Cascades – 503-986-5200
- East of the Cascades – 541-388-6112

On weekends and evenings – contact the Office of Emergency Management at the number listed above.

The **DSL Web site** provides information on Emergency Authorizations and application forms: [www.oregonstatelands.us](http://www.oregonstatelands.us).

### **Other Agency Resources:**

U.S. Army Corps of Engineers: [www.nwp.usace.army.mil/](http://www.nwp.usace.army.mil/); 503-808-4373 (Portland)

Oregon Department of Fish and Wildlife: [www.dfw.state.or.us](http://www.dfw.state.or.us); 503-947-6000; 800-720-6339 (Salem headquarters)

Oregon Department of Environmental Quality: [www.oregon.gov/DEQ](http://www.oregon.gov/DEQ); 503-229-5696; 800-452-4011 (Portland headquarters)

