

WAC 220-660-230 Beaver dam management. (1) **Description:**

(a) A person may need to remove, breach, or modify a beaver dam to prevent damage to private and public land, structures, or other improvements of value from flooding. Beaver dams are normally removed using hand tools or equipment such as backhoes.

(b) An alternative to frequent dam removal is installing a beaver exclusion device. These devices prevent beavers from building a dam that blocks water flow at the mouth or inside of culverts.

(c) Installing a water level (flow) control device may be a preferred alternative to removing or breaching an established dam that maintains a beaver wetland; however, fish passage must be maintained. A person can install a water level control device to maintain a desirable beaver wetland. These devices are installed at the intended depth, extending upstream and downstream of the dam. This preserves the pond's habitat benefits.

(2) Fish life concerns:

(a) Beavers play an important ecological role in creating and maintaining ponds and wetlands for fish and wildlife habitat. Ponds also provide surface water storage that improves summer flows, as well as improving water quality through retaining sediment.

(b) Breaching, notching, or removing a dam can negatively affect fish life and the habitat that supports fish life by dewatering the upstream pond, stranding fish life, and releasing large volumes of water (that can be devoid of oxygen) and sediment downstream. Releasing sediment can affect downstream spawning areas. Breaching or removing a beaver dam may not prevent future beaver activity in the area. Persistent breaching or removing a beaver dam can increase the risk of negative impacts to habitat. In these instances, the department may recommend that a person consider other beaver management techniques.

(c) Beaver exclusion devices and water level control devices can create a design challenge for fish passage and the devices can decrease the likelihood for long-term fish passage.

(3) Removal or breaching a beaver dam:

(a) Beaver dams may be removed or modified without compensatory mitigation only when:

(i) The continued existence of the beaver dam poses an imminent threat to the integrity of water crossing structures, other structures or improvements of value, private and public land, or in some rare cases, the environment; and

(ii) The beaver dam has been in existence for less than one year. Removal of older dams will be considered on a site-specific basis.

(b) The department will decide if compensatory mitigation is required to offset habitat loss caused by removing or breaching any beaver dam older than one year.

(c) The department may allow the use of explosives to remove a beaver dam if the department determines that the use of explosives has fewer impacts than other alternatives.

(d) Beaver dam management activities must take place when the work will cause the least impact to fish life. Except for an emergency or imminent danger, all work must occur when spawning or incubating fish are less likely to be present.

(e) Whenever feasible, remove or notch beaver dams by hand or with hand-held tools and hand-operated or motorized winches.

(4) Removal or breaching a beaver dam construction:

(a) Before starting work, install effective sediment and erosion control measures to prevent sediment from entering waters of the

state. Inspect the sediment and erosion control measures regularly during construction and make all needed repairs if any damage occurs.

(b) Remove the dam gradually to allow the water to release slowly and prevent the downstream release of accumulated sediment at the bottom of the pond, or cause damage or erosion to the stream bed and banks. The department may specify in the HPA the rate water can be released.

(c) When notching, the notch must not extend below the height of the accumulated sediment.

(d) To prevent bank erosion and flooding of adjacent properties, the breach in the beaver dam must not be wider than the original stream channel as measured by the department. The department may approve larger breaches on a case-by-case basis.

(e) The department will specify the sequence in which to breach or remove a series of dams to avoid severe flooding and damage to habitat.

(f) Leave large woody material embedded in the stream bed or banks undisturbed.

(g) During and immediately after removal, monitor upstream and downstream for stranded fish in isolated pools. Capture and safely move all stranded or isolated fish to the nearest free-flowing water.

(5) Water level control device installation design and construction:

(a) Design and install water level control devices so that during low flows (when beavers are more actively increasing dam height), the flow passes through the device and maintains fish passage.

(b) Design and install water level control devices so that during low flows, the device will convey enough flow over and around the dam to pass fish; or design and install a water control device that also functions as a fish ladder.

(c) Install water level control devices in beaver ponds with pool depth of four feet or more. If the water level control device is installed in water shallower than four feet, the design must have an enclosure to protect the water intake from beaver activity.

(d) Maintain the water level control device to ensure it functions as designed.

(6) Beaver exclusion devices design and construction: Design, install, and maintain guards, grates, grills, fences, and other beaver exclusion devices to provide unimpeded fish passage and to prevent beavers from plugging a culvert or other water crossing structures such as low bridge crossings.

[Statutory Authority: RCW 77.04.012, 77.04.020, and 77.12.047. WSR 15-02-029 (Order 14-353), § 220-660-230, filed 12/30/14, effective 7/1/15.]