

HPAs & BEAVER DAM MANAGEMENT



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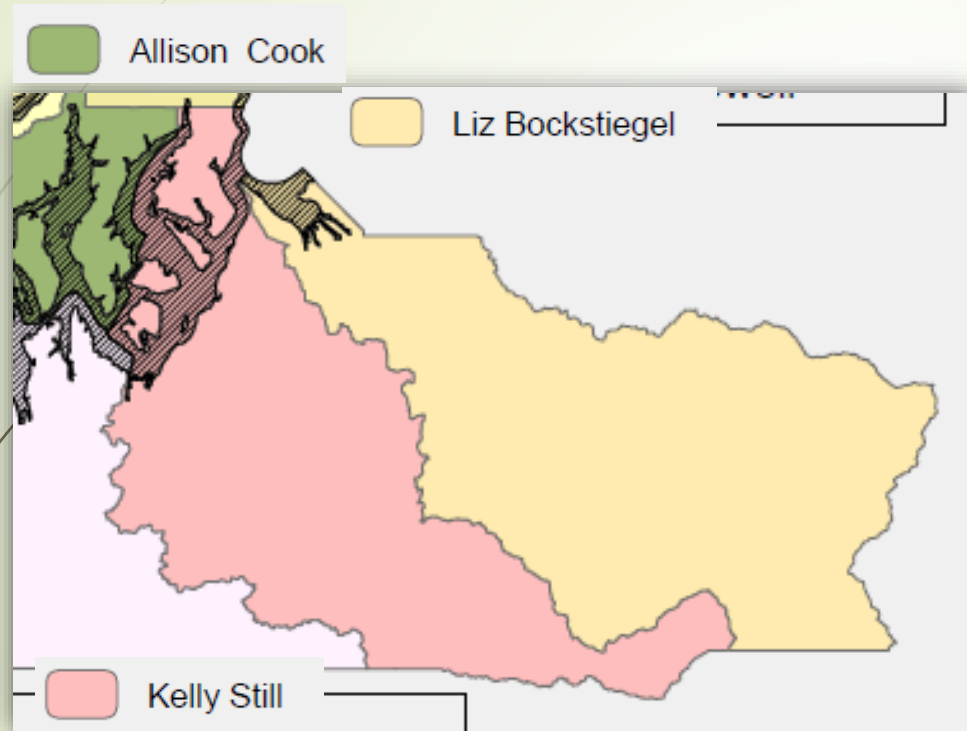
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Presentation Outline

- ✓ How do I prevent beaver conflicts?
- ✓ How do I resolve beaver conflicts?
- ✓ HPA Permitting
- ✓ Questions?



Call a WDFW Habitat Bio for a site visit!



- **Kelly Still** – Nisqually Watershed within Pierce County, Chambers-Clover Watershed, Gig Harbor Peninsula and Islands
- **Liz Bockstiegel** – Puyallup Watershed within Pierce County
- **Allison Cook** – Key Peninsula



Question: I have a beaver issue, what do I do?

BE CERTAIN

- Assess objectively
- Does situation require control?
- What is being flooded or plugged?
-

PROPER SIZED CROSSINGS

WATER LEVELERS

DECEIVERS

Question: How do I prevent beaver-human conflicts?

AVOID WATER

PLANT CAREFULLY

INSTALL BARRIERS

REPELLENTS

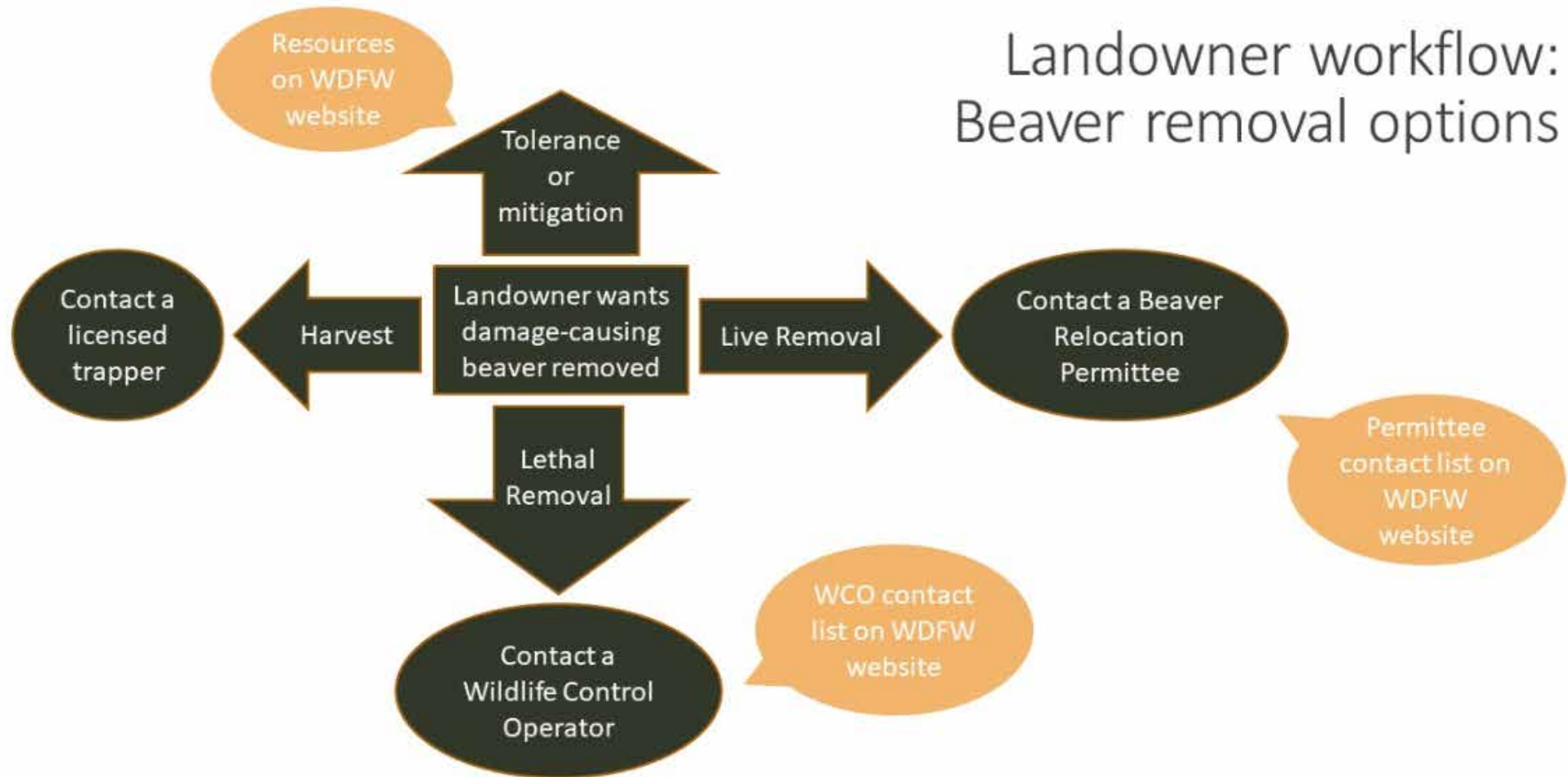
PLANT

- Sitka spruce
- Elderberry
- Cascara
- Osoberry (Indian plum)
- Ninebark



Note: All actions beyond prevention require some type of permit from WDFW and potentially other agencies.

Beaver Management – Preventing Conflict



Beaver Dam Management Regulations

- Any modification to a beaver dam requires Hydraulic Project Approval (HPA) from WDFW.
 - This includes notching or removing dams,
 - Installing beaver deceivers/pond levelers, or
 - Constructing Beaver Dam Analogs.



Apply for a HPA - Standard



- ✓ Develop a thorough description of the beaver management actions, include all components and when and where you plan to do the work.
- ✓ Identify and produce required documents:
 - ✓ General site map.
 - ✓ Complete plans and specifications for proper fish protection.
 - ✓ Demonstrated compliance with the State Environmental Policy Act (SEPA).
- ✓ Check in with the local government planning services for SEPA.
- ✓ Submit your application through APPS online or mail a hard copy of the JARPA form.
- ✓ Up to 5 year timeframe.



HPA - Expedited

- The department may issue an expedited written permit in those instances where normal permit processing would result in significant hardship for the applicant or unacceptable damage to the environment. – WDFW Habitat Bio makes the call.
- Expedited permit requests require a complete written application and must be issued within fifteen calendar days after a complete application is received.
- Approval of an expedited permit is valid for up to sixty days from the date of issuance – **all work must be completed within 60 days**
- No SEPA required.



HPA - Emergency

- The department, the county legislative authority, or the governor may declare and continue an emergency.
- **The department shall issue immediately, upon request, verbal approval for a stream crossing, or work to remove any obstructions, repair existing structures, restore stream banks, protect fish life, or protect property threatened by the stream or a change in the streamflow.** Conditions of the emergency verbal permit must be reduced to writing within thirty days and complied with as provided for in this chapter.
- **Call the habitat bio or the Emergency Hotline**
- No SEPA required.
- Site visit within ten calendar days of the date the emergency HPA was issued. The Habitat Biologist will meet onsite to identify impacts that resulted from the emergency work that must be mitigated. Require a mitigation plan and a memorandum of agreement if the mitigation actions will exceed the statutory time limitation of the HPA.



HPA – WAC 220-660-230

Beaver Dam Management


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.

Breaching, notching, or removing a dam can negatively affect fish life and habitat by

- dewatering the upstream pond,
- stranding fish life, and
- releasing large volumes of water and sediment downstream.

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.



WAC 220-660-230(3)

Removing or breaching a beaver dam

- Beaver dams may be removed or modified without mitigation only when:
 - It poses an imminent threat to water crossing structures, other structures or improvements of value, private and public land, or in some rare cases, the environment; and
 - The beaver dam has been in existence for less than one year. Removal of older dams will be considered on a site-specific basis.
- WDFW decides if mitigation is required to offset habitat loss caused by removing or breaching any beaver dam older than one year.
- Beaver dam management activities must take place when the work will cause the least impact to fish life. Except for an emergency or expedited, all work must occur when spawning or incubating fish are less likely to be present.
- Whenever feasible, remove or notch beaver dams by hand or with hand-held tools and hand-operated or motorized winches.



WAC 220-660-230(4)

Construction

- 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.
 - Lower by 2 inches per hour, or more slowly if erosion, fish stranding occurs.
- When notching, the notch must not extend below the height of the accumulated sediment.
- The breach in the beaver dam must not be wider than the original stream channel. WDFW may approve larger breaches on a case-by-case basis.
- The department will specify the sequence in which to breach or remove a series of dams to avoid severe flooding and damage to habitat.
- Leave large woody material embedded in the stream bed or banks undisturbed.
- 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. Equipment: Nets, buckets



WAC 220-660-230(5)(6)


Pond Levelers & Beaver Exclusion Devices

Water level control device installation design and construction

- 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.
- 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.
- 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.
- Maintain the water level control device to ensure it functions as designed.

Beaver exclusion devices design and construction

- Design, install, and maintain the beaver exclusion device to provide unimpeded fish passage and to prevent beavers from plugging water crossings.



What are the common problems people are seeing?

- What are people in the watershed saying about beavers?
- How can we increase tolerance for beavers?
- More effective management options?
- Other?

QUESTIONS?

