

Chuckanut Community Forest Restoration Priorities

Values of Chuckanut Community Forest for conservation, ecological function, recreation, and education would be enhanced by diverse kinds of restoration. Some restoration needs pre-date transfer of CCF to public ownership, other needs correspond to increasing public use, and still other needs will coincide with implementation of a park master plan. Below is a draft list of restoration needs to consider.

(1) Trail removal. Many existing trails need to be removed to eliminate trail redundancy, reduce visitor confusion, restore habitat, reduce wetland impacts, and achieve conditions in the park master plan. Trail removal should involve restoring uncompacted soil structure, planting native vegetation, and implementing measures to deter future use of removed trails.

(2) Trail realignment and mitigation. Some trails or trail segments should be realigned to reduce trail-induced soil erosion, wetland impacts, dangerously steep trail segments, and circumvent muddy areas. Trail system revision in the park master plan will require some trail realignment. Other trail conflicts could be resolved by elevating short trail segments with bridges or boardwalks.

(3) Restore hydrologic connections. Some historic legacies impede surface and subsurface flows between wetlands. These legacies include trails and old logging roads. Compacted soils in these areas should be aerated and trails should be either removed or mitigated with bridges or boardwalks. Barriers to hydrologic flows are especially problematic between wetlands JJ and KK and between wetlands KK and CC. These and other hydrologic connections were identified in the U.S. Army Corps of Engineers letter regarding status of wetlands in the proposed Fairhaven Highlands development.

(4) Vegetation restoration. Much CCF area now is covered with compacted soils devoid of vegetation. Of particular concern are unnecessarily wide trails and large open areas where multiple trails converge. In these areas, soil structure and native vegetation should be restored.

(5) Invasive plant removal. Invasive plants are well-established in some parts of CCF and have begun to colonize other areas. These invasive plants should be replaced with suitable native species.

(6) Trash removal. Some CCF visitors and COB Parks staff have performed a valuable public service by removing considerable volumes of trash left in CCF. Like many popular public places, trash removal from CC likely will be a recurring need.

(7) Fill the drainage ditch. Sometime during the late 20th century, a ditch was excavated to drain the northwestern arm of wetland JJ. Conveyance of water through the ditch reduces water storage in that part of the wetland, curtails wetland functions there, and has reduced wetland extent over time. Filling the ditch would address each of these impacts.

(8) Restore beaver habitat in wetland JJ. In appropriate locations, beavers perform valuable ecological functions, including wetland creation and maintenance, water storage, streamflow regulation, aquifer recharge, water filtration, and fish and wildlife habitat creation. Quality and quantity of these functions in wetland JJ decreased substantially when beavers disappeared from the area approximately 20 years ago. A beaver dam near the outlet of wetland JJ maintained permanent flow from Hoag Creek to Chuckanut Creek. Without beavers, Hoag Creek flow now ceases during the summer-autumn dry season. Loss of summer flow also decreases discharge of clear and cold water into Chuckanut Creek, when such discharge is most important. The water table in wetland JJ has fallen substantially in the absence of beavers. Sea-run cutthroat trout formerly spawned in wetland JJ, but spawning ceased after the water table dropped and creek flow decreased. Hydrologic impacts to wetlands, creeks, and fish are expected to increase as climate change proceeds. These impacts to Hoag and Chuckanut creeks could be mitigated if beavers reoccupied wetland JJ. Although most characteristics of the wetland are suitable for beavers, it lacks sufficient ponded water to provide secure beaver habitat. Successful beaver colonization of the site would be more likely if ponded water was restored by placing a beaver dam analog (BDA) at the wetland outlet into Hoag Creek. BDAs have been installed in many restoration projects in the western US. Results of those projects could inform successful BDA design and installation in wetland JJ.