

## APPENDIX C

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# Planned Projects that Benefit Species Other Than Chinook Salmon and Bull Trout

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Some pages in this document have been purposefully skipped or blank pages inserted so that this document will copy correctly when duplexed.

## Planned Projects that Benefit Other Species

This appendix presents information about projects that a variety of sponsors plan to construct in the watershed between now and 2005. These projects benefit species other than chinook salmon and bull trout.

### Upper Green Subwatershed

<b>Project Name</b>	<b>Project Description</b>	<b>Benefit to Salmon</b>	<b>Factors of Decline Addressed</b>	<b>Strategy Element Addressed</b>	<b>Sponsor and Partners</b>
Page Mill Pond and Creek	Create 3 beaded ponds by blasting; regrade western outlet channel of Page Mill Pond and place log weirs for fish access; place large woody debris; place inundation tolerant plants; redesign lower Page Mill Creek channel, and create spawning and rearing pools	Overwintering habitat for coho	Riparian condition, hydro-modification	Rehabilitate habitat along tributaries	Tacoma Habitat Conservation Plan and the Additional Water Storage Project
Upper reservoir sub-impoundment	Store water to create an emergent marsh	None; benefits amphibians and wildlife	None	None	Tacoma Habitat Conservation Plan and the Additional Water Storage Project

**Middle Green Subwatershed**

<b>Project Name</b>	<b>Project Description</b>	<b>Benefit to Salmon</b>	<b>Factors of Decline Addressed</b>	<b>Strategy Element Addressed</b>	<b>Sponsor and Partners</b>
Tacoma Pipeline	Culvert replacement for pipeline 5 at Rock Creek	Opens up previously unavailable habitat	Fish passage	Restore access within tributaries	Black Diamond, City of Tacoma
Wild steelhead capture	Capture 40 to 50 adult fish, transport them to Keta Creek Hatchery where tribal members spawn and incubate fish.	Ensures the spawning success of steelhead trout	None	None	Trout Unlimited
Smolt trap on north fork Newaukum Creek	Annually monitor coho smolts and resident cutthroat heading downstream in spring	Provide data to managers to aid decisions	None; fills data gap	None; fills data gap	Mid-Sound Fisheries Enhancement Group (lead), Trout Unlimited, and local volunteers
Lake Meridian outlet	Construct new stream channel, plant 100-foot buffer, create stream habitat amenities and a new connection to Soos Creek	Improves habitat quality for cutthroat trout	Water quality, riparian condition, hydro-modification	Rehabilitate aquatic habitat in the tributaries	Green/Duwanish Ecosystem Restoration Project
Meridian Valley Creek	Remove creek from concrete flume and provide a reconstructed natural channel connected to Soos Creek	Increase habitat complexity and quality for sockeye, coho, chum, pink, cutthroat?	Hydro-modification	Rehabilitate aquatic habitat in the tributaries	Green/Duwanish Ecosystem Restoration Project
Burns Creek	Reduce sediment delivery from Bell Ravine into the creek, plant along the toes of the slides in the ravine to help stabilize them, place large woody debris, fence off livestock, control invasive species, and plant riparian habitat	Protects water quality and increases habitat quality for coho, chinook, chum, and winter steelhead	Riparian condition, water quality, sediment transport	Enhance habitat within the tributaries	Green/Duwanish Ecosystem Restoration Project

## Lower Green Subwatershed

<b>Project Name</b>	<b>Project Description</b>	<b>Benefit to Salmon</b>	<b>Factors of Decline Addressed</b>	<b>Strategy Element Addressed</b>	<b>Sponsor and Partners</b>
Mill Creek Tributary 0053 culvert replacement	Replacement of possible fish passage blockage (Note: another blockage downstream will need to be removed to realize fish passage value)	Opens up habitat	Fish passage	Restore access within tributaries	Auburn
Auburn south central sub-basin improvement	Sub-basin conveyance, water quality, and infiltration facilities for flood relief and environmental benefits	Protects flows and water quality	Water quality, hydrology	Rehabilitate water quality	Auburn
Academy outfall sedimentation basin	Keep sediment out of unnamed tributary in 10 acre landslide area basin	Improves water quality	Water quality	Rehabilitate water quality	Auburn
Sub-basin P water quality wet pond	Map the flood plain and determine how to manage future development	Improves water quality	Hydrology, water quality	Rehabilitate water quality	Auburn
Mill/Garrison/Springbrook Creek base flow restoration	Develop groundwater sources to augment summer low flows in the stream systems	Provides additional water	Hydrology	Rehabilitate water quality	Kent
Riparian planting	Plant the sides of both the existing and widened channels of Springbrook Creek	Provides shade, nutrients, and large woody debris for coho and cutthroat trout	Riparian condition	Rehabilitate aquatic habitat in the tributaries	Renton
S. 126 <sup>th</sup> St./38 <sup>th</sup> Ave. S	Replacement and enlargement of S. 126 <sup>th</sup> cross culvert on Southgate Creek	Opens up habitat	Fish Passage	Restore access to tributaries	Tukwila

<b>Project Name</b>	<b>Project Description</b>	<b>Benefit to Salmon</b>	<b>Factors of Decline Addressed</b>	<b>Strategy Element Addressed</b>	<b>Sponsor and Partners</b>
Gilliam Creek Regional Detention	Construction of 27.5 acre-feet detention facility	Improves water quality	Sediment transport, water quality	Rehabilitate water quality	Tukwila
Tukwila International Blvd high flow bypass	Construction of high flow bypass to divert peak storm flows from Southgate and Riverton Creeks into Duwamish	Improves water quality	Sediment transport, water quality	Rehabilitate water quality	Tukwila
Southgate Creek above 133rd	Restoration of 300 feet of creek, installation of check dams and plantings	Improves water quality	Riparian condition, water quality, sediment transport	Rehabilitate water quality	Tukwila
42 <sup>nd</sup> Ave. / S. 155 <sup>th</sup> (Southgate Creek)	Restoration of 200 feet of creek, removal of concrete and accumulated sediment, installation of check dams and plantings	Improves water quality	Riparian condition, water quality, sediment transport	Rehabilitate water quality	Tukwila
134 <sup>th</sup> culvert replacements	Replacement of 5 driveway culverts within Southgate Creek to allow for fish passage and increased channel length	Opens up habitat	Fish passage	Restore access to tributaries	Tukwila
133 <sup>rd</sup> culvert replacement	Replacement of S. 133 <sup>rd</sup> cross culvert to allow for fish passage.	Opens up habitat	Fish passage	Restore access to tributaries	Tukwila
SHADOW	Acquisition of key parcels of bog/wetland around Shadow Lake. Restoration and education are planned at the site.	Protects water quality for coho, cutthroat trout	Water quality, hydrology, non-native species, riparian condition	Rehabilitate water quality	SHADOW, Rainier Audubon, local schools, scouts, Friends of Soos Creek, SCAR, Cascade Land Conservancy

<b>Project Name</b>	<b>Project Description</b>	<b>Benefit to Salmon</b>	<b>Factors of Decline Addressed</b>	<b>Strategy Element Addressed</b>	<b>Sponsor and Partners</b>
Mill Creek, Goedeke Reach	Construct stream system with instream wood, riparian plantings and a realigned, contoured channel.	Improves habitat quality for coho and cutthroat trout	Hydromodification, sediment transport, riparian condition, water quality	Rehabilitate water quality	Green/Duwamish Ecosystem Restoration Project
Olson Creek	Restore the lower 1500 feet of the stream by placing large wood in the channel, restoring the riparian corridor, and removing upstream fish passage barriers. Modification of the culvert at the mouth may also be included.	Improves habitat quality and access for coho and cutthroat and steelhead trout	Hydromodification, riparian condition, fish passage	Restore access to tributaries and rehabilitate habitat in tributaries	Green/Duwamish Ecosystem Restoration Project
Upper and lower Springbrook Creek/ Garrison Creek	Add riparian plantings, relocate stream segments and place large woody debris.	Improves habitat quality for coho and cutthroat trout	Hydromodification, riparian condition	Rehabilitate habitat in tributaries	Green/Duwamish Ecosystem Restoration Project

### **Duwamish Subwatershed**

All projects planned for the Duwamish subwatershed provide benefit for chinook salmon and bull trout.

**Nearshore Subwatershed**

<b>Project Name</b>	<b>Project Description</b>	<b>Benefit to Salmon</b>	<b>Factors of Decline Addressed</b>	<b>Strategy Element Addressed</b>	<b>Sponsor and Partners</b>
16 <sup>th</sup> Avenue slide project	Replacing felled 4-foot by 6-foot culvert with bottomless 12-foot span arch culvert.	Opens up habitat for coho, coastal cutthroat, steelhead	Fish passage	Restore access within and to tributaries	Des Moines
Marine View Drive Bridge Phase I	Replace culvert under Marine View Drive with a bridge	Opens up habitat for coho, coastal cutthroat, steelhead	Fish passage	Restore access within and to tributaries	Des Moines, Washington State Department of Transportation, Seattle Public Utilities, Midway Sewer District
Marine View Drive Bridge Phase II	Excavate road embankment, build Des Moines Creek trail under bridge, connecting sewer outfall, daylight 250 feet of Des Moines Creek	Opens up habitat for coho, coastal cutthroat, steelhead	Water quality	Restore access within and to tributaries	Des Moines, SeaTac, Washington State Department of Transportation, Port of Seattle, King County
10 <sup>th</sup> Avenue culvert Replacement	Replace culvert on Massey Creek with two bridges to open up fish habitat	Opens up habitat for coho, coastal cutthroat, steelhead	Fish passage	Restore access within and to tributaries	Des Moines

<b>Project Name</b>	<b>Project Description</b>	<b>Benefit to Salmon</b>	<b>Factors of Decline Addressed</b>	<b>Strategy Element Addressed</b>	<b>Sponsor and Partners</b>
Barnes Creek Detention Facility and culvert replacement project	Replace badly degraded wetland with forested wetlands, emergent marshes, open water areas, and upland buffer areas to improve habitat. Increase wetland area by 150% to 1.8 acres. Create wetland biofiltration facility. Replace culvert downstream of wetlands with larger box culvert. Daylight approximately 150 feet of Barnes Creek.	Improves water quality, creates stream habitat for coho, coastal cutthroat, steelhead (?)	Fish passage, water quality, riparian condition	Restore access within and to tributaries	Des Moines
Barnes Creek and Kent-Des Moines Rd Culvert Replacement	Replace existing culvert with larger culvert to open up fish habitat	Opens up habitat for coho, coastal cutthroat, steelhead (?)	Fish passage	Restore access within and to tributaries	Des Moines