Lower Miller River Floodplain Restoration Project

RCO Project 22-1149: South Fork Skykomish, WRIA 7

Denise Di Santo and Todd Hurley, King County

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Project location

Alternatives Analysis and Preliminary Design

- Project Sponsor: King County Water and Land Resources Division (WLRD)
- Project Manager: Ecosystem Restoration Engineering Section (ERES)
- Partners: Rivers and Floodplain Management Section, Roads (DLS)
- Planning metrics:
 - 60-165 acres
 - 1.7 miles of channel



PSAR Funding Request

Alternatives Analysis and Pre-Design

- \$150,000 funding request
- \$99,000 match (from existing SWM allocation)
- Requests for additional funding:
 - Cooperative Watershed Management \$100,000 (2022-2025)
 - KC SWM \$500,000 (2023/2024)



2013 Feasibility Study Area



RESTORATION OPPORTUNITY REPORT

SOUTH FORK SKYKOMISH RIVER BASIN RESTORATION FEASIBILITY PROJECT



King County Pepartment of Natural Resources and Part Weter and Land Resources Division





2021 Feasibility Update



Habitat Limiting Factors and Recovery Planning



Habitat Limiting Factors and Recovery Planning



 Off-channel rearing habitat is limited, particularly in the left bank floodplain

Habitat Limiting Factors and Recovery Planning



- High priority restoration for WRIA 7 in King County.
- Targets:

80 acres offchannel habitat, 5.5 miles of edge habitat (KC 2011).

Habitat Limiting Factors and Species Recovery Planning

 Restoration of the lower Miller
River is a high priority within the Skykomish
River Watershed due to process
impairment
(USFS 2009).



Fish Use in Miller River

- Summer/fall Chinook salmon (Oncorhynchus tshawytscha)
- Coho salmon (O. kisutch)
- Odd-year pink salmon (O. gorbuscha)
- Summer steelhead and rainbow trout (O. mykiss)
- Bull trout/Dolly Varden (Salvelinus confluentus/S. malma malma)
- Cutthroat trout (O. clarki clarki) (King County 2011; WDFW 2012a, 2012b).
- Fall chum salmon (O. keta) in the South Fork at confluence with the Miller River, not in the Miller River itself.

















Zone 3 Site Conditions

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Zone 3 Site Conditions

Zone 4 Site Conditions

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Anticipated Project Elements: Old Cascade HWY Road and Bridge Removal

Anticipated Project Elements: Remove Old Cascade HWY Infrastructure

Anticipated Project Elements: Right Bank Protection Removal

Anticipated Project Elements: Left Bank Levee and Revetment Removal and Side Channel Connection

Anticipated Project Elements: Floodplain Re-Connection

Potential Process Based Habitat Improvements

- > Improved Edge habitat
- Sustained Increase in Floodplain
 - Connection
- Improved Off-Channel Habitat Complexity
- Increased Large Wood Recruitment
- Increased Large Wood trapping

Potential Impacts and Risks

- Railroad
- Utilities
- Miller River Road
- Private Properties in "New Berlin"
- Private Quarry and Railroad spur
- Recreational Users

PSAR Funding Request

Alternatives Analysis Q2 2023

Pre-Design Q4 2024

- \$150,000 funding request
- \$99,000 match (from existing SWM allocation)
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 - Cooperative Watershed Management \$100,000 (2022-2025)
 - KC SWM \$500,000 (2023/2024)

Thank you

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