

Updated Habitat Program Cost Elements Summary

Habitat Enhancement Program - Mainstem Floodplain Restoration Elements				
Program Element	Recommended Funding Level ¹ (\$/millions)	Geographic Area	Improvements	Comments
Tier I – Ready to Proceed	\$42.9	Gap to Gap: from Selah Gap to Union Gap	Restore 3 miles new side channels	
			Modify WWTP outfall, bridges, Wapato dam and diversion headgates	
			Restore 60 acres riparian habitat	
			Restore 6.5 miles instream habitat	
			Protect 121+ acres through conservation easement and acquisition	
			Setback 3.7 miles of levees and dikes	
	\$7.5	Umptanum Rd. Bridge to Ringer Rd	Upper Ellensburg Floodplain levee setback and channel restoration, floodplain restoration and property acquisition (Schaake)	Washington Department of Fish and Wildlife (WDFW) boat launch; includes the Schaake property.
	\$15.3	Lower Naches: from SR 12 Twin Bridges to confluence with Yakima	Excavate Ranney Well/lower Cowiche/Fruitvale and Old Union Diversions	Includes Lower Cowiche, Eschbach area, upstream levees, Yonker and Glead diversions. Connected to Wapatox project.
			Modify Nelson Dam	
			Restore 21 acres riparian habitat	
			Open side channel to improve instream habitat	
			Protect agricultural lands through easements	

¹ Provide for flexibility in allocating funding to additional project sponsors beyond Reclamation to leverage existing implementation capacities.

Habitat Enhancement Program - Mainstem Floodplain Restoration Elements

Program Element	Recommended Funding Level ¹ (\$/millions)	Geographic Area	Improvements	Comments
Tier I – Ready to Proceed	\$20.0	Naches: from confluence with Tieton River to SR 12 Twin Bridges	Restore 2.5 miles new side channels	
			Restore 324 acres riparian habitat	
			Restore 2 miles instream habitat	
			Protect 1,000 acres through conservation easement and acquisition	
			Setback 1.25 miles of levees and dikes	
Tier II – Existing planning efforts underway ²	\$44.4	Cle Elum: from Kachess River to Teanaway River	Modify 190 bridges and Teanaway Bridge	
			Restore 4 miles instream habitat	
			Protect 500 acres through acquisition	
			Setback 1.5 miles of levees and dikes	
	\$39.9	Kittitas: from Thorp to Canyon, excluding Schaake	Reconnect up to 4 miles new side channels	
			Modify undersized bridge, railroad crossing, and headworks	
			Restore 60 acres riparian habitat	
			Restore 5 miles instream habitat and add channel complexity	
			Protect 1,200 acres through conservation easement and acquisition	
			Setback 1.5 miles of levees and dikes	

² Projects within this tier move forward based upon integration with Integrated Package water projects, and land use and land availability opportunities.

Habitat Enhancement Program - Mainstem Floodplain Restoration Elements

Program Element	Recommended Funding Level¹ (\$/millions)	Geographic Area	Improvements	Comments
Tier II – Existing planning efforts underway ²	\$65.0	Wapato: from Union Gap to Mabton	Restore several miles of side channel	
			Modify three bridges	
			Restore 990 acres riparian habitat	
			Restore 25 miles instream habitat	
			Protect 5,100 acres through conservation easement and acquisition	
			Setback 10 miles of levees and dikes	
\$23.1	Easton: from Easton to Teanaway River confluence	Modify WSDOT I 90, bridges, and railroad river crossing		
		Restore 1 mile instream habitat		
		Protect 112 acres through conservation easement and acquisition		
		Setback 0.75 miles of levees and dikes		
\$2.2	Selah	Modify gravel pits outlet structure to improve water temperature		
		Restore 34 acres riparian habitat		
		Protect side channels through conservation easement		
		Setback 0.25 mile of levee		
Tier III ³	\$9.4	Lower Yakima: from Prosser to the mouth	Connect wetlands with river	
			Restore 1 mile riparian habitat	
			Improve instream habitat complexity with engineered logjams	
			Protect 400 acres through conservation easement and acquisition	

³ Need to have program flexibility as some Tier III projects could move up and Tier II could move back in time, depending upon priorities, readiness to proceed, and new information developed over time.

Habitat Enhancement Program - Mainstem Floodplain Restoration Elements

Program Element	Recommended Funding Level ¹ (\$/millions)	Geographic Area	Improvements	Comments
Program Management ⁴	\$10 (or \$0.50/yr for 20 years)		N/A	Increased capacity for project management and oversight, preliminary and final design, and administration.
Total	\$279.7			

⁴ Assumes reach assessments are completed as part of Yakima River Basin Study (2010).

Habitat Enhancement Program - Tributaries Restoration Elements⁵

Program Element	Recommended Funding Level (\$/millions)	Geographic Areas and Improvements	Comments
Passage & Screening Projects	\$4.41	Upper Yakima	
	\$4.1	Middle Yakima	
Subtotal	\$8.5		
Habitat Restoration & Enhancement (below reservoirs)	\$7.75	Upper Yakima – Habitat restoration: (e.g., fencing plantings, large woody debris, side-channel/ floodplain, nutrient enhancement, instream flow enhancement.	
	\$5.8	Middle Yakima – Habitat restoration (e.g., Fencing plantings, large woody debris, side-channel/ floodplain, nutrient enhancement, instream flow enhancement.	
Subtotal	\$14.45		
Wilson/Naneum (includes following tributaries: Wilson, Naneum, Coleman, Cherry, Cooke, Caribou, and Parke Creeks)– Passage/Screening	\$27.7	Confirm water management plan/Capital Improvement Plan (CIP), upgrade and consolidate diversions, provide fish passage and instream flow improvements. Provide for four (4) KRD Northbranch canal and creek crossings	Links to supply fixes (storage and operational improvements and exchanging TWSA for tributary water). Involves Kittitas Reclamation District (KRD), Ellensburg Water Company, and Cascade Irrigation District along with landowners.
Wilson/Naneum – Habitat	\$1	Instream and riparian habitat improvements, floodplain restoration, and conservation easements.	
Subtotal	\$28.7		
Headwaters Restoration (Above Reclamation Reservoirs)	\$3.75	Headwaters restoration and passage above reservoirs and on USFS lands: roads, culverts, channel improvements, LWD and other habitat improvements	Bull trout and anadromous fish emphases
	\$2.5	South Fork Tieton River (primarily new bridge; reroute the South Fork to, or near, its historic channel at the mouth)	Bull trout emphasis
	\$2 (\$0.1/yr)	Seasonal task force passage	Bull trout emphasis

⁵ Provide for flexibility in allocating funding to additional project sponsors beyond Reclamation to leverage existing implementation capacities.

Habitat Enhancement Program - Tributaries Restoration Elements⁵

Program Element	Recommended Funding Level (\$/millions)	Geographic Areas and Improvements	Comments
		projects ⁶ to ensure unimpeded passage into spawning tributaries above the storage reservoirs.	
	\$2	Gold Creek hydrogeology report and restoration design, and two miles restoration	Bull trout emphasis
	\$2	Lake trout removal	Bull trout emphasis
	\$2 (\$0.1/yr)	Bull trout reintroduction	
Subtotal	\$14.25		
YN Reservation Screening/Passage/Restoration	\$80	Implement Toppenish Creek Corridor program, and	Based on Yakama Nation restoration and capital improvement plan
	\$20	Improve Satus Creek: screening, passage, riparian restoration	
Emergent Needs Fund: Acquisition/ Conservation Easement Opportunities	\$15 (\$5 upfront [Year 1], then \$0.5/yr)	Basin-wide – tributaries	<p>Guidelines</p> <ul style="list-style-type: none"> • For projects that either fall outside other programs, or are particularly time sensitive • Expect use for acquisitions (fee simple and easement), that need to be completed rapidly • Connected to identified fish benefit/riparian, or water right acquisition • Leverage mitigation benefit/project opportunity • Seed money for studies would be administrated by an organization (not yet identified)
Subtotal	\$115		
TOTAL TRIBUTARIES HABITAT	\$180		
GRAND TOTAL (Mainstem and Tributaries)	\$459.7		

⁶ The function of the task force is to remove recreational dams and to install/remove temporary passage facilities to allow bull trout passage from the reservoirs into the tributaries in low water years.

Attachment B-1 (from November 2009 Habitat Subcommittee Recommendations)

******AMENDED OCTOBER 19, 2010******

David Child

YRBWEP Habitat Sub-Committee

September 29, 2009

Re: Kittitas County Conservation District, unmet funding for main stem and tributary passage, restoration and protection programs.

Habitat Sub-Committee,

The following information is provided in response to your request to the Kittitas County Conservation District (KCCD). I'm following the format established by the North Yakima Conservation District (NYCD). As with NYCD's request, the following request from the KCCD includes screening, passage, and habitat needs. We seek to integrate our project work with many of the items (seven) that the Yakima River Basin Water Enhancement Program is dealing with, such as water conservation. Because of our individual entities unique abilities we can also be called upon to assist in many implementation activities that will be identified in YRBWEP's package.

The following is a list of KCCD tributaries and unmet funding needs. They are numbered. The number 1 item is for near term known needs, those that can be implemented within 1-3 years. The number 2 item is for out year estimated needs. Although the notations below refer to Passage and Screening, it should be noted that irrigation system delivery and application (pipes and sprinklers) are included in the cost estimates. The hydrology of the Kittitas Valley is complicated by the interactions between the canals and streams. In order to correct barriers or cost effectively remedy unscreened diversions, the irrigation water systems must be addressed. Item 3 is listed separately and is a near-term (1-3 year) need for habitat measures. These measures include in-stream improvements (including flow), restoration, bank enhancement, floodplain development and the use of conservation easements.

Wilson Creek Watershed

(includes Wilson, Naneum, Coleman, Cherry, Cooke, Caribou, and Parke Creeks and Badger/Wipple Wasteway)

1. Passage and Screening – \$3,200,000
2. Passage and Screening – \$14,500,000
3. Habitat – \$ 1,000,000.00 (Instream improvements, riparian habitat, floodplain functionality, conservation easements)

Reecer Creek (including Currier Creek) Watershed

1. Passage and Screening – \$750,000.00
2. Passage and Screening – \$200,000.00
3. Habitat – \$ 1,000,000

Dry Creek Watershed

1. Passage and Screening – \$450,000.00
2. Passage and Screening – \$10,000.00
3. Habitat – \$250,000.00

Manastash Creek Watershed

1. Passage and Screening – \$1,175,000 (completion of consolidated diversion pipeline, and removal of the three decommissioned irrigation withdrawals)
2. Passage and Screening – \$0
3. Habitat – \$3,000,000.00 (primarily projects to secure additional in-stream flow in Manastash Creek)

Tanuem Creek

1. Passage and Screening – \$0
2. Passage and Screening – \$0
3. Habitat – \$ no figure at this time.

Swauk Creek Watershed

1. Passage and Screening – \$0
2. Passage and Screening – \$250,000
3. Habitat – \$500,000

Teanaway River Watershed

1. Passage and Screening – \$750,000
2. Passage and Screening – \$0
3. Habitat – \$2,500,000 (primarily instream habitat work to address erosion, riparian habitat, and floodplain function).

Mainstem Yakima River (and Side Channels)

1. Passage and Screening – \$0
2. Passage and Screening – \$250,000
3. Habitat – \$500,000

Thank you for the opportunity for the KCCD to provide this list as part of our YTAHP unmet funding needs to your sub-committee process. If you have any questions, please contact me at 509-925-8585 ext 4.

Please remember as you continue to work within the YRBWEP overall process that Conservation Districts are capable of assisting with many other activities. Don't hesitate to call upon us.

Respectfully,

Anna Lael, District Manager

Attachment B-2 (from November 2009 Habitat Subcommittee Recommendations)

Summary of Kittitas Conservation District Habitat Enhancement Funding Estimates⁷ for the Upper Yakima River			
Geographic Area	Passage and Screening (millions of dollars)	Habitat (millions of dollars)	Assumptions
Wilson/Naneum/Coleman /Cherry/Cooke/Parke/Caribou	Included in other table		
			Assumed habitat value
Reecer	1.00	1.00	
Dry	0.46	0.25	
Manastash	1.20	3.00	
Taneum	0.50	0.00	Assumed values
			Assumed habitat value, including stream flow enhancement
Swauk	0.25	0.5	
Teaway	0.75	2.50	
Mainstem Yakima/Sides	0.25	0.50	
Totals	\$4.41	\$7.75	

⁷ Stream-specific estimates were used to arrive at programmatic level funding requests and should not be restricted to restoration budget needs for individual streams. Funding should be allocated at the programmatic level and on a prioritized, annual basis.