

APPENDIX L

Revisions Resulting from the proposed Pierce County Rivers Flood Hazard Management Plan

**Nisqually and Mashel River, Mainstem
Decision Matrix for Moving Draft NRBP Projects to Draft FHMP**

ID CODE	PROJECT NAME	DESCRIPTION OF THE PROJECT	DECISION TO MOVE PROJECTS			RATIONALE
			STAYS IN NRBP	MOVED TO FHMP	BOTH FHMP and NRBP	
PRG11-01 (a)	Lower Nisqually River Flood Mitigation Program Part A. Update Emergency Response Plan	Update Emergency Response Plan to...			SEE NOTE	Taken out of Nisqually Plan, but included in the Pierce County Hazard Mitigation Plan. Roy and McKenna are included in the Region 5 Hazard Mitigation Plan.
(b)	Part B. Nisqually River Hydrologic Study	Nisqually River Hydrologic Study		Yes		Already being recommended in the flood plan
(c)	Revise Flood Hazard Maps-Nisqually River, Mckenna Reach	Revised flood hazard maps - Nisqually river McKenna Reach		Yes		Already being recommended in the flood plan
(d)	Elevation Survey for Flood-Prone Structures in Mckenna	Potential mitigation measures, including raising structures and property acquisition will be developed.		Yes		The Flood Hazard Plan will discuss this mitigation measure at length.
(e)	Mckenna Flood Mitigation Alternatives Analysis and Community Involvement.	Community and stakeholder involvement is crucial to the success of a flood mitigation projects, and should be initiated during early planning stages.		Yes		The Flood Hazard Plan will discuss this mitigation measure at length.
(f)	Revise Flood Hazard Maps-Nisqually River, Wilcox Flats Reach	A ground survey should be conducted to obtain cross-sections within the main steam of the Nisqually River. Additional efforts to update the maps would also be done.			Yes	The Flood Hazard Plan will discuss this mitigation measure at length.
ST11-NIS-ST01	Mainstem Nisqually River LWD Assessment and Restoration Plan	The Nisqually River has been noted for a lack of LWD and further studies to look at LWD loading needs to be done.	Yes			Under the scope of the FHMP
ST11-NIS-ST02	Channel Migration Zone Study for Lower Nisqually River			Yes		Channel Migration Study
ST19-NIS-ST01	Flood Hazard Mapping and Hydraulic Analysis-Upper Nisqually River	Building on the upper Nisqually River CMZ study, re-map the floodplain, develop base flood elevations, and map floodway.		Yes		Under the scope of the FHMP
ST19-NIS-ST02	Upper Nisqually River Sediment and Floodplain Mapping Analysis	Sediment and LWD are moving off the mountain, which changes the entire dynamics of the river. Analysis needs to be done.		Yes		Already begun in the USGS Phase 2
ST20-LMR-ST01	Little Mashel Restoration Assessment	A habitat assessment needs to be done	Yes			No major flooding issues
CIP11--NIS-FLD01	McKenna Flood Mitigation Projects	McKenna has a history of flooding and for the most part is in the floodplain. Mitigation needs to take place.		Yes		Flooding , life and safety needs to be addressed. Listed as a problem in the P. C. Rivers Flood Hazard Management Plan.
CIP20MAL-RSTO1	Mashel Eatonville Reach Restoration Phase II	A decline in the habitat diversity, pool habitat, and habitat suitable for spawning needs attention.	Yes			Habitat project, non flooding problem.
CIP11-NIS-AC04	Wilcox Flats Repetitive Loss Property Acquisition	FEMA has identified a repetitive loss property near the end of 41st Avenue South.	Yes			Habitat project, non flooding problem.

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CIP20-MAL-VCO1	Mashel Eatonville Reach Riparian Revegetation	There are remaining areas along the Mashel River that are devoid of vegetation and need to be planted over during the next 5 years.	Yes			Not a flooding problem
CIP 11 NIS RST01	Nisqually River Wilcox Side Channel Restoration	Due to floodplain restrictions by large channel-redirecting riprap levees, there is a lack of side-channels and off-channel wetlands.			Yes	Flooding and habitat problem
CIP20 MAL-AC01	Mashel River Property Acquisition	Acquisition only for major habitat improvements and alterations.	Yes			Not a flooding problem
CIP11 NIS RST03	Mainstem Off Channel Restoration	Off channel habitat modifications have led to a reduction in habitat diversity.	Yes			Not a flooding problem
CIP11-NIS RST02	Wilcox Flats off Channel Restoration	Wilcox Flats needs habitat restoration between RM 28 and 29.5 through revegetation projects.			Yes	In both plans because there is a significant flooding history and needs habitat restoration. Listed as problem in P.C. Rivers Flood Hazard Management Plan
CIP20 MAL-AC02		Shoreline buffers need to be restored to stabilize and enhance habitat.	Yes			Little if no floodplain exists on the property in need of restoration. Also much of the development has occurred on lots located in the City of Eatonville.
CIP11-NIS-AC01	Nisqually River Mainstem Acquisition Phase 1	Important parcel of land approximately 100 acres in size along the Nisqually River needed for preservation of riparian habitat within the Channel Migration zone.		Yes		Preservation of CMZ
CIP11-NIS-ACO2 (Renumbered to AC01)	Nisqually River Mainstem Acquisition Phase 2	Important parcel of land approximately 100 acres in size along the Nisqually River needed for preservation of riparian habitat within the Channel Migration zone.	Yes			Mostly a high quality habitat restoration project
CIP11-NIS-ACO3 (Renumbered to AC02)	Nisqually River Mainstem Acquisition Phase 3	Important parcel of land approximately 100 acres in size along the Nisqually River needed for preservation of riparian habitat within the Channel Migration Zone.	Yes			Mostly a high quality habitat restoration project
CIP20-MAL-ACO3	Mashel Small Properties Acquisition	Development has impacted the most productive habitat portions next to the Mashel River within the Eatonville area. These need to be purchased for restoration purposes	Yes			Mostly a high quality habitat restoration project

Revised June 8, 2011

SUMMARY OF CHANGES TO NISQUALLY RIVER BASIN PLAN

PROJECTS REMOVED FROM NRBP¹			
	Project(s)Removed	Priority	Cost of Project Removed from Plan
Programs	PRG11-01 (portions)	High	270,000
Capital Improvement Projects	CIP11-NIS-AC01	Medium	1,060, 800
	CIP11-NIS-FLD01	High	10,200,000
Studies	ST11-NIS-ST02	Not Ranked	378,000
	ST19-NIS-ST01	Not Ranked	100,000
	ST19-NIS-ST02	Not Ranked	300,000

BEFORE AND AFTER TOTALS			
	Before	Cost of Projects Removed from Plan	After
Programs	5,612,500	270,000	5,342,500
Capital Improvement Projects	30,350,680	11,260,800	19,089,880
Studies	2,141,500	778,000	1,363,500
TOTAL	38,104,680	12,308,800	25,795,880

¹ Mainstem flooding projects were moved from the NRBP to the Pierce County Rivers Flood Hazard Management Plan.

CHANGES TO PROJECT COSTS BY PRIORITY

Priority	Before	Cost of Projects Removed from Plan	After
High	16,851,170	10,470,000	6,381,170
Medium	14,396,410	1,060,800	13,335,610
Low	4,715,600	None	4,715,600