

FEDERAL HIGHWAY ADMINISTRATION, Federal Lands Highway DAMAGE SURVEY REPORT				Sheet No: <u>8</u> of <u>15</u>		
(Title 23, Federal-Aid System/Federal Domain)				DSR No: MORA-Rte. 102-3		
Applicant: Mount Rainier National Park		County: Pierce	State: WA	Disaster No: WA2007-1NPS		
				Inspection Date: 01/23/2007		
Route 102 - Carbon River road MP 3.6 to MP 3.7 (Chenuis Falls)				ADT:		
Bridge Data:		Road Data:	Classification:		Photograph #:	
Type:	Traveled Way Width: 18 ft		Surface Type: gravel	Thickness: 4"-6"		
ID#:	Shoulder Width:		Surface Type:			
Description and Cause of Damage: Flood flows of November 6 and 7, 2006 eroded river banks, resulting in flood flows overtopping riverbanks and flowing down the Carbon River road. Significant portions of the road were severely eroded and damaged.			Scope/Description of Repair: MP 3.6 - 3.7 Repair eroded fill and surface scour			
COST ESTIMATE for EMERGENCY REPAIRS*						
Quantity	Unit	Item Description		Unit Price	Cost	
Proposed:		Force Account	Contract	Total Emergency Repairs		
				\$0		
COST ESTIMATE for PERMANENT REPAIRS*						
Quantity	Unit	Item Description		Unit Price	Cost	
1	LS	Mobilization, survey, testing, etc.		\$1,000.00	\$1,000	
50	CY	select borrow		\$25.00	\$1,250	
130	CY	roadway aggregate surfacing (5/8-in minus)		\$50.00	\$6,500	
1	LS	Revegetation (5%)		\$300.00	\$300	
Subtotal Permanent Repairs (continuation sheet)						
Proposed:		Force Account	X Contract	Total Permanent Repairs		
				\$9,050		
Identify Betterment, if any, and provide justification*: Install 4-inch minus angular or Class III riprap as an erosion resistant cap over fill as recommended in the 1996 hydraulic report from WFLHD. With this cap only the 5/8 inch minus aggregate surfacing would need to be replaced following future flooding events.			Preliminary Engineering 15%		\$1,358	
			Construction Engineering 10%		\$905	
			Right-of-Way			
			Other: Compliance (5%)		\$453	
			TOTAL ESTIMATED COST		\$11,765	
			(Emergency and Permanent Repairs)			
Submitted By: (Name and Title) Eric Walkinshaw, Park Engineer			Signature: /s/ Eric Walkinshaw		2/13/2007	
Reviewed By: (Name and Title) David F. Kruse, PWR ERFO Coordinator		Eligible X	Ineligible	Signature: /s/ David F. Kruse		Date: 2/16/07
Recommended By: (Name and Title)		Eligible	Ineligible	Signature:		Date:

*Attach Supplemental Sheets if necessary