

P2 Bridge Preservation - Scour Repair

2009-11 Bien Priority Array

(Sorted by Priority#)



09-11 #	Bridge Number	Bridge Name	Mile post	Width	Length	Region	Bridge Item\$'s
2	142/13	SPRING CR	29.92	23.5	22	Southwest	\$75,500
5	503/155.25	DOG CREEK CULVERT	35.85	0.0	10	Southwest	\$220,500
16	97/22	KUSSHI CR	32.78	28.0	60	Southwest	\$60,000
Total Number of Bridges = 3					Total of Bridge Item\$ =		\$356,000



Bridge Foundation Scour Repair

Southwest Region

Bridge ID: 0003015A	Bridge Number: 97/22	Bridge Name: KUSSHI CR	State Route: 97 Mile Post: 32.78	Southwest Cnty: Klickitat
Year Built: 1945 Rebuilt:	Span Type: CTB	ADT: 3596 ADT Truck Pct: 26 %	Structure Length: 60 ft. Width: 28 ft.	main span 2 aprch: 0 Detour Length: 39 miles
Substructure Stability: Code: 2 Spread footing, continuous spans.	Streambed Material: 3 Gravel	Scour History: Code: U Scour history is unknown.	Last Scour repair Project Yr: C#:	
Scour Code: 2	Scour Rating Description:	Bridge is scour critical; field review indicates that extensive scour has occurred at bridge foundations. Immediate action is required to provide scour countermeasures.	Substr Code: 7	sufficiency_rating: 69.6



Deficiencies:

Pier 3 (North Abutment) has exposed footing for full length. Sill exposed up to 1.5' along East half of P3. Heavy riprap placed on the NW bank. Debris is building up on the abutment. Footings are 2 feet thick with no seals. Plans indicate footings may be on bedrock.

First Noted: 4/18/2000

BPO Repair List Priority: 1

Funding - P2 or M: P2

07-09 Priority Rank: 5

09-11 Priority Rank: 16

Recommended Action:

BPO - Repair riprap at Pier 3.
Bridge Management Unit - Prioritize against other statewide scour needs in the 2009-11 biennium.

PIN: 409705S

Bridge\$ Est: \$60,000

Total\$ Est: \$447,000

Bridge Foundation Scour Repair

Southwest Region

Bridge ID: 000000BE	Bridge Number: 142/13	Bridge Name: SPRING CR	State Route: 142 Mile Post: 29.92	Southwest Cnty: Klickitat
Year Built: 1950 Rebuilt:	Span Type: SB	ADT: 1125 ADT Truck Pct: 15 %	Structure Length: 22 ft. Width: 23.5 ft.	main span 1 aprch: 0 Detour Length: 6 miles
Substructure Stability: Code: 1 Spread footing, simple spans.	Streambed Material: 2 Sediment	Scour History: Code: N No history of scour.	Last Scour repair Project Yr: C#:	
Scour Code: 2	Scour Rating Description:	Bridge is scour critical; field review indicates that extensive scour has occurred at bridge foundations. Immediate action is required to provide scour countermeasures.	Substr Code: 6	sufficiency_rating: 73.97



Deficiencies:

Stream flows against both abutments. Heavy silt deposition 2' thick at west abutment. Abutments are Stone & mortar wall. Unknown foundation depth. Mortar has been eroded by the stream action. Bridge has contraction scour problem and needs as much hydraulic opening as possible.

First Noted: 6/6/2006

BPO Repair List Priority: 1

Funding - P2 or M: P2

07-09 Priority Rank:

09-11 Priority Rank: 2

Recommended Action:

BPO - Place well graded light loose riprap, two to three layers deep (1' thick min.) along both stone & mortar abutment walls, tapering out at a 2:1 slope, blending into the existing groundline and banks. Repair modified 6/6/06 to priority 1 due to undermining of the east abutment per JHL/DCC.
Bridge Management Unit - Prioritize against other statewide scour needs in the 2009-11 biennium.

PIN:

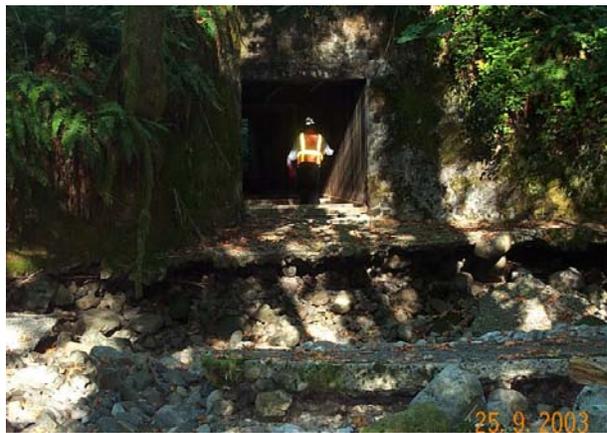
Bridge\$ Est: \$76,000

Total\$ Est: \$432,000

Bridge Foundation Scour Repair

Southwest Region

Bridge ID: 00000BDJ	Bridge Number: 503/155.25	Bridge Name: DOG CREEK CULVERT	State Route: 503 Mile Post: 35.85	Southwest Cnty: Cowlitz
Year Built: 1945 Rebuilt:	Span Type: TCulv	ADT: 800 ADT Truck Pct: 12 %	Structure Length: 10 ft. Width: 0 ft.	main span 1 aprch: 0 Detour Length: 99 miles
Substructure Stability: Unknown, simple spans.	Code: 7	Streambed Material: 9 Unknown	Scour History: Code: C Current scour problems.	Last Scour repair Project Yr: C#:
Scour Code: 4	Scour Rating Description:	Bridge foundations determined stable for calculated scour condition: field review indicates action is required to protect exposed foundations from effects of additional erosion.		Substr Code: 9 sufficiency_rating: 86.45



Deficiencies:

A large scour hole downstream of the structure. Half of the downstream concrete apron has broken off and is laying 20' downstream. The stream drops down 3' off the remaining apron which is undermined 4'. The upstream scour needs further mitigation.

First Noted: 8/16/1999

BPO Repair List Priority: 1

Funding - P2 or M: P2

07-09 Priority Rank: 43

09-11 Priority Rank: 5

Recommended Action:

BPO - Correct for erosion and repair the concrete apron at the downstream end. Erosion has undermined the apron approx 4ft. and the NE masonry wingwall.
Bridge Management Unit - Prioritize against other statewide scour needs in the 2009-11 bien.

PIN:

Bridge\$ Est: \$221,000

Total\$ Est: \$814,000