CK-2099
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FLORENCE LAKE 13.8km

2020 Inspection

CBR iPad Offline Ver 0.33

BRITISH COLUMBIA

CBR Data

Latitude	Longitude
49°19'21.69"	-122°20'16"

Crossing Name	Con Creek
FSR #	8648
Branch #	1
Road Name	FLORENCE LAKE
User km	13.8
Previous Load Rating (tonnes)	68
Structure Class	Permanent Bridge
Portable	N
Superstructure	Steel I-beam
Deck Type	Concrete Composite
Abutment Left	Steel Pipe and Precast Pad
Abutment Right	Steel Pipe and Precast Pad
Spans	1
Total Length (m)	21.5
Deck Width (m)	4.8

Updated Data

Latitude	Longitude

L75 or 68 tonnes

Inspection

Date of Inspection	2020-05-26 9:41:06 AM
Inspector Name	Tyson Miller
Recommended Next Inspection Year	2021
Inspection Company	FLNRORD

Inspector Comments

The footings are not exposed and the bridge is currently stable, however future high flows may scour the riprap further putting the structure at risk.

P.Eng Comments

The riprap at both abutments has been scoured, I recommend repairing both abutment ripap prior to the fall rain events. There are logs embedded into the stream which appear to be holding the stream substrate in place, I recommend leaving those logs in place and placing large riprap throughout the stream and around the logs to help stabilize it. The right bank ballast wall is damaged and requires repair consistent with the Concrete Repair Guide for Concrete Bridge Components (MoFLNRO, 2017). Replace the guardrail, risers and blocks. Replace the missing concrete bull noses at the left approach. Brush approaches. Until the riprap has been repaired monitor its condition, and monitor the condition of the steel components. The current load rating of L75 or 68 tonnes to continue.

2020-06-02

P.Eng Seal

Approach

Alignment	Fair	HC and VC both approaches
Bridge Ahead Signs Missing	(•) 0 ( ) 1 ( ) 2	
Brushing Required	Y	
Delineator Missing Left	(•) 0 ( ) 1 ( ) 2	
Delineator Missing Right	(•) 0 ( ) 1 ( ) 2	
Fender Condition	Fair	Missing bullnoses at left approach
Posted Load Rating		Not posted
Road Surface	Fair	

Abutment

Log/Timber Cribs		
Tie Backs		
Bin Wall		
Pier		
Concrete		
Caps or Sills		
Piles or Posts	Good	
Ballast Wall	Poor	Rebar exposed and broke at right bank
Wing Wall		
Bracing	Good	
Hardware		
Fill	Good	
Riprap	Poor	Heavily scoured at right bank and starting to scour at left bank
Bearings	Good	
Corrosion Protection	Good	

Deck

Running Surface	Fair	
Running Planks		
Sub Deck		
Ties		
Nails		
Deck to Girder Bolts		
Concrete Deck	Good	
Grout Pockets	Fair	
Deck Joints	Fair	Evidence that water is getting through
Steel Deck Plate		
Gravel Surface		
Curb Rail/Blocks/Posts	Poor	Approximately 50% of risers and blocks damaged and/or rotten
Hand Rails/Walkouts		
Hardware	Poor	Loose rail bolts
Overall Deck Condition	Poor	Due to rail condition
Gravel Depth (mm)		
Pier Deck		

Steel/Concrete

Girders	Fair	Minor corrosion noted on flanges and web at right bank and at deck joints
Diaphragms	Fair	5 bolted bays, minor corrosion noted
Bracing	Fair	Minor corrosion noted
Under Trussing		
Hardware	Good	
Welded/grouted shear connectors		

Log

Log Curbs	
Needle Beam	
Needle Lashing/ Shimming	

Needle Beam to Crib (m)

Needle Diameter (mm)

Stringer Number	Species	Peeled	Diameter (mm)	Rot Depth (mm)	Condition	Comment

Hazards

Estimated Present Water Level Depth (m)	0.3	High Water	☐	Debris	☐
Estimated Present Water Level Width (m)	5.0	Aggradation	☐	Scour	☒
Estimated High Water Level Clearance (m)	3.0	Ice	☐		

Comments: Suspect that when CK-2100 plugged excess water came down road/ditch at left approach and added to heavy flows causing significant riprap erosion at both abutments

Repairs and Monitoring

	Repair Item	Repair Description
1	Substructure. Ballast wall/ retaining wall maintenance. m. Priority:High	Repair damage to right bank ballast wall
2	Structure. Full Curb Replacement. . Priority:Medium	Replace guardrail, risers and blocks
3	Approach. Area/sight line brushing. m². Priority:Medium	Brush approaches
4	Approach. Approach fenders (install). # of units. Priority:Low	Replace missing bullnoses at left approach
5	Miscellaneous. Other (specify in comments). # of items. Priority:High	Repair both banks riprap
6		
7		

Item	Monitor Description	Frequency
1	Riprap scour and bridge stability	Anually
2	Corrosion of steel components	Routine Inspection
3		

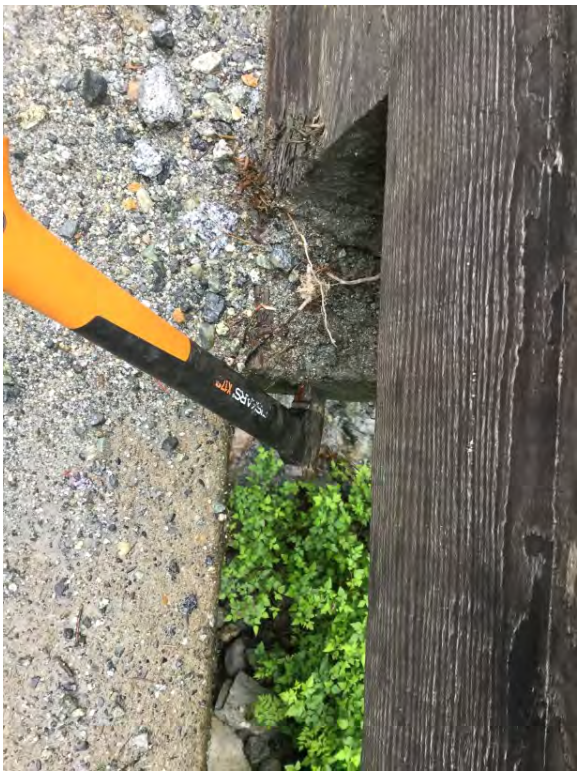
Approach from Left Bank when facing downstream

Missing both bull noses at left approach

Upstream left approach ditch scour

Deck

Guard Rail



Guard Rail

Guard Rail

Guard Rail

Downstream right bank ballast wall condition

Right Bank Abutment when facing downstream

Approach from Right Bank when facing downstream

Right Bank Abutment when facing downstream

Right Bank Abutment when facing downstream

Downstream left bank scour

Left Bank Abutment when facing downstream

Superstructure

Corrosion noted at deck joints

Riprap at both banks founded on organics

Corrosion noted at right bank