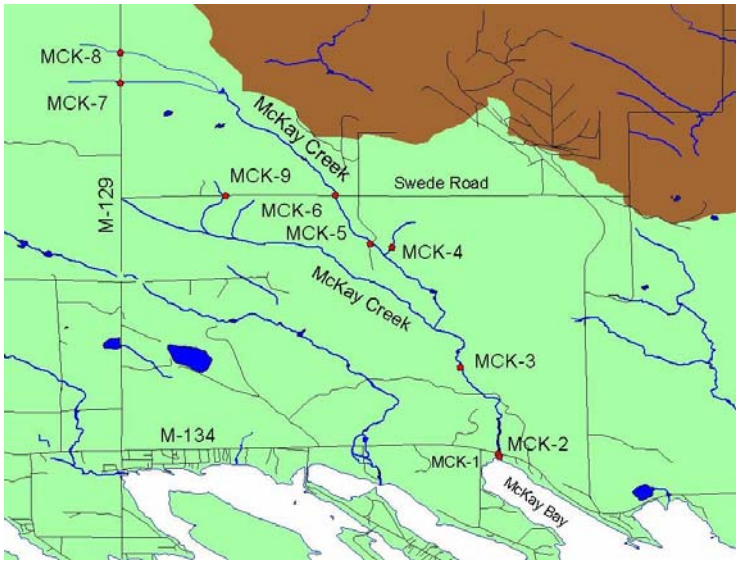
McKay Creek

At Snowmobile Trail
MCK-3



Upstream

Downstream

McKay Creek

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McKay Creek at Snowmobile Trail

Site I.D.:	MCK-3	
GPS Coordinates:	N 45.01361 W 84.30468	
Township:	Clark	
County:	Mackinac	
Adjacent Landowners:	Private	

Road Information

Jurisdiction:	Private	
Surface:	Sand	
Width at Crossing:	12 feet	
Maintenance:	Seasonal	
Low point:	At stream	
Drainage Control Features:	None	
Approach Length:	Left: Right:	120 feet 0 mile
Slope:	Left: Right:	1-5 percent 1-5 percent
Ditch/shoulder vegetation:	Left: Right:	Heavy Heavy
Average Width of Grade:	20 feet	
Runoff Path:	Roadway	

Stream Characteristics

Average Width:	Upstream: Downstream:	15 feet 15 feet
Average Depth:	Upstream: Downstream:	6 inches 6 inches
Average Current:	Upstream: Downstream:	Fast Fast
Substrate Type:	Upstream: Downstream:	Sand/muck Sand/muck
Adjacent Wetlands:	No	
Visible Down Cutting:	No	

Culvert Information

Culvert Type:	Bridge	
Length:	N/A	
Diameter:	N/A	
Material:	Wood	
Condition:	Good	
Culvert Flow:	Clear	
Fish Passage Problem:	No	
Fill Depth:	Inlet: Outlet:	N/A N/A
Embankment Slopes:	Inlet: Outlet:	>2:1 >2:1

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Conditions and Treatment

Erosion Conditions
- Embankment erosion
- Sand/soil over bridge

Recommended Treatment
- Lengthen and raise bridge
- Raise approaches
- Stabilize embankments
- Install runoff diversions

Erosion Severity Rating: Moderate (25)

Overall Condition Rating: Moderate

Cost: See BMP Cost Tables

Comments: The snowmobile trail bridge above McKay Creek needs to be improved to eliminate its impact on the creek during high spring, summer, and rain event flows. The bridge needs to be lengthened which will also raise it above the creek surface. This improvement should be designed to accommodate high spring water levels. The embankments then should be armored to eliminate erosion at the foot of the bridge. Both approaches should be supplied with runoff diversions to redirect runoff off the road into vegetated ditches to protect the creek from sediment-laden runoff. Estimated sediment load = (12 ft long x 1 ft high x .03 ft/yr. x 0.055 = .0198 tons/yr.