

Final Environmental Assessment
for the proposed Silver Creek Bridge Replacement
in Carlton County, Minnesota

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1.0 Summary

Jay Cooke State Park, located in Carlton County, MN, encompasses nearly 9,000 acres along the St. Louis River. The park, which receives more than 300,000 visitors each year, is an important component of the Minnesota State Park system. Jay Cooke State Park visitors take advantage of a variety of recreational activities, including hiking, cross country skiing, snowmobiling, snowshoeing, fishing, biking (mountain and tour), horseback riding, picnicking, wildlife viewing, bird watching, geocaching, backpacking, and camping. The park provides over 50 miles of hiking and cross-country ski trails and several scenic overlooks for visitors to enjoy.

Severe flooding throughout Northern Minnesota in June 2012 damaged portions of Jay Cooke State Park and its trail system, including an existing foot bridge crossing Silver Creek along the North Country/Superior Hiking Trail. The 40 year-old Silver Creek Bridge, which was deteriorating before the flood, is now unstable and unsafe due to erosion around its abutments and approaches and a deteriorated wood decking. Hikers are no longer able to cross the bridge which allows access to three backpack sites and 12 miles of hiking and ski trails in the southeast part of the park. The trail segment is part of the long-distance 296-mile Superior Hiking Trail and 4,000-plus mile (when fully completed) North Country Scenic Trail that connects New York to North Dakota.

Using NOAA provided funds from Section 306A of the Coastal Zone Management Act, the project partners (Minnesota Department of Natural Resources (DNR) Lake Superior Coastal Management Program, working in partnership with Minnesota DNR's Parks and Trails Office's Jay Cooke State Park, and the Conservation Corps of Minnesota), propose to replace this damaged bridge with a new bridge to provide hikers safe passage over Silver Creek (See Section 8, Figures 1 and 2). The bridge replacement will restore visitor experience by reconnecting miles of hiking trails on either side of the creek. NOAA has the authority to fund or not fund this bridge replacement project selected by the Lake Superior Coastal Program. We do not have the ability to negotiate other projects, different from that put forward by Lake Superior Coastal Management Program for NOAA funding.

2.0 Purpose and Need

NOAA has received a request for funding from the Minnesota Department of Natural Resources (DNR), Lake Superior Coastal Management Program. The Lake Superior Coastal Management Program requested the funds to replace a footbridge along the North Country/Superior Hiking Trail in Jay Cooke State Park. Under Section 306A of the Coastal Zone Management Act, NOAA must respond to this request for funding.

3.0 Description of Proposed Actions and Alternatives

NOAA is proposing to provide funds to the Lake Superior Coastal Management Program which will then provide this financial assistance to the Minnesota Department of Natural Resources Parks and Trails Division to fund the removal and replacement of an old dilapidated footbridge crossing Silver Creek

along the North Country/Superior Hiking Trail in Jay Cooke State Park. The project will also restore vegetation at the project site. The property is owned by the State of Minnesota.

NOAA has the authority to either approve funding for this project (alternative 1) or decide not to fund this project (alternative 2). After evaluating these alternatives, NOAA identified funding the proposed bridge replacement as the preferred alternative based on minimal environmental impacts, public benefit, project cost-effectiveness, and overall value to Jay Cooke State Park.

3.1 *Alternative 1 (Preferred Option): Provide Funding for the Replacement of a 60 foot bridge*

The proposed action would fund the replacement of a 40-year old, dilapidated corten steel footbridge with wooden decking with a 60-foot steel bridge with corten steel decking. The old bridge was deemed unsafe for passage after June 2012 flooding due to erosion around its abutments and approachments and deteriorated wood decking. The new bridge will enable the park's 300,000 annual visitors, including more than 30,000 overnight visitors, to access 12 miles of hiking and three backpacking sites across the river in the park as well as continue hiking along the long-distance North Country/Superior Hiking Trail that extends well beyond the park's boundary. The Superior Hiking Trail traverses 296 miles generally paralleling Lake Superior and is part of the even longer North Country Trail that will meander over 4,000 miles from New York to North Dakota when fully complete.¹ The Superior Hiking Trail is one of four priority trails the state has targeted for development and enhancement.²

The project that NOAA proposes to fund includes the removal of the old bridge abutments, steel structure, and wooden decking. New concrete abutments would be poured and a new 60-foot long by 12-foot wide steel bridge would be constructed on site and installed. The project would include the use of Class II type riprap to stabilize the bank directly under and bordering the bridge and protect the abutments from future erosion (see Section 8.0, Figures 1-6). The existing approaches would be graded 250 feet back from both sides of the bridge and little additional grading would be necessary for the project. In addition, vegetation at the construction site will be restored by seeding with native plants to improve stability of the creek bank and reduce sediment erosion. The project partners would use the State of Minnesota Stormwater Northeast Blend 33-361 seed mix which includes a variety of native grasses, sedges, rushes, and forbs.³

The project partners have requested funding to enlarge the bridge from 40 feet to 60-feet long to better accommodate the creek at the crossing site which has widened over the past 40 years due to beaver activity and erosion.

The bridge replacement aligns with the Minnesota Department of Natural Resources Division of Parks and Trails vision "to create unforgettable park, trail, and water recreation experiences that inspire people to pass along the love for the outdoors to current and future generations" and accompanying strategy to "accelerate investment in capital asset management projects that reinvest in existing

¹ National Park Service. U.S. Department of the Interior. 2004. North Country National Scenic Trail, Northeast Minnesota Route Assessment and Environmental Assessment.

² Minnesota Department of Natural Resources. 2011. Parks and Trails Legacy Plan, Parks and Trails of State and Regional Significance, A 25-year Long-range Plan for Minnesota. http://www.legacy.leg.mn/sites/default/files/resources/parks_trails_legacy_plan_0.pdf

³ See Standard Seed Mixtures for Minnesota: http://www.bwsr.state.mn.us/native_vegetation/state_seed_mixes.pdf

infrastructure to ensure high-quality and safe experiences.”⁴ The project is also consistent with the Parks and Trails Legacy Plan that calls for the development and acquisition of four priority hiking trails, including the Superior Trail which the project site is located along.⁵

3.2 *Alternative 2 (Non-Preferred): No Action*

Under the No Action Alternative, no funding for the replacement of the old, dilapidated bridge would be provided. This alternative costs the least because no action would be taken. However, the damaged bridge would remain.

3.3 *Alternatives Considered but Rejected by the Project Partners*

Project partners initially considered replacing the bridge with a narrower and/or shorter bridge than proposed for funding but they later determined that it would not be feasible. A narrower bridge would not provide suitable access for trail grooming, mowing, and emergency equipment. The trail is a popular cross-country ski trail in the winter that is groomed. A narrower bridge would require the grooming equipment to go around the bridge and across the frozen streambed to access the trail on the other side. The project partners selected the 60-foot by 12-foot bridge to put forward for NOAA funding as it provided the greatest public benefit and still has relatively minor and temporary environmental impacts (as discussed below). The Superior Hiking Trail Association, a non-profit organization that builds, maintains, and manages the 296 mile Superior Hiking Trail which this segment is part of, also supports the preferred option. The association provided a letter of support for the preferred bridge replacement project, noting that the new bridge will be an asset to the North Country National Scenic Trail and the Superior Hiking Trail and will allow for “continued use long into the future.”⁶

4.0 **Affected Environment**

This chapter presents a description of the relevant components of the environment (specifically the physical, biological, and cultural environment) of the proposed project site as required by NEPA (42 U.S.C. Section 4321, et seq.). The bridge replacement will occur along the North Country/Superior Hiking Trail over Silver Creek. The entirety of the State Park includes nearly 9,000 acres of land.

As noted in the National Park Service’s Environmental Assessment for the North Country National Scenic Trail (which is hereby incorporated by reference), the Superior Hiking Trail is a long-distance trail modeled after the Appalachian Trail, which crosses a rich variety of terrain along the North Shore of Lake Superior and has a reputation as an exceptional trail. The North Country Trail, which the project segment is part of, connects significant scenic, historic, natural, and cultural features and provides

⁴ Minnesota Department of Natural Resources. *Division of Parks and Trails Strategic Plan 2012-2022*. February 2012. http://files.dnr.state.mn.us/input/mgmtplans/parks/strategic/0212_pat_strategic_plan.pdf

⁵ Minnesota Department of Natural Resources. 2011. Parks and Trails Legacy Plan, Parks and Trails of State and Regional Significance, A 25-year Long-range Plan for Minnesota.

⁶ November 11, 2011 letter from Gayle Coyer, Executive Director, Superior Hiking Trail Association to Eunice Luektke, then Manager, Jay Cooke State Park.

special recreational opportunity.⁷ When complete, the North Country Trail will extend more than 4,000 miles from New York to North Dakota.

4.1 *Physical Environment*

The Jay Cooke State Park topography has steep valleys and massive rock formations. The St. Louis River, Lake Superior's largest tributary, and its accompanying eroded-gorge are prominent features running through the park. Several creeks, including Silver Creek, feed into the river. Soils are largely red clay/silt over slate and greywacke, leaving exposed rock outcroppings in some places.

The project site is roughly three miles by hiking trail across the St. Louis River from the park visitor center. Mixed hardwood and conifer overstory opens up slightly across a roughly 75-foot wide sandy/loam floodplain along the banks of Silver Creek. At the bridge crossing, the creek is approximately 40 feet wide and normally three feet deep in the center channel. The creek's meandering current flows over a cobble bottom and sandy loam banks extend five feet above the creek. There are no wetlands at the project site.

The project site area experienced significant disturbance June 2012 due to severe flooding in the region. During the flood, the St. Louis River set record flow levels, reaching 55,000 cubic feet per second (cfs), breaking the previous 1950 record of 42,000 cfs.⁸ Water levels remained high through the rest of June. The flood caused significant damage throughout the park, washing out an entrance road, multiple trail segments, and other foot bridges.

4.2 *Biological Environment*

Jay Cooke State Park is within the Laurentian Mixed Forest Province as defined by the Ecological Classification System (ECS). The park is at the convergence of three ECS Sections and Subsections: the Glacial Lake Superior Plain Subsection in the Southern Superior Uplands Section, the Mille Lacs Uplands Subsection in the Western Superior Uplands Section, and the North Shore Highlands Subsection in the Northern Superior Uplands Section. About 83% of Jay Cooke is within the Glacial Lake Superior Plain Subsection, 11% in Mille Lacs Uplands, and 6% in North Shore Highlands.⁹

The park is comprised of a mixed hardwood and conifer forest, dominated by birch and aspen. Alder is found along the Silver Creek bottomlands. Current vegetation is secondary growth as the project area south of Silver Creek used to be open meadow from agricultural use.¹⁰ For a more in-depth discussion of the plant communities within the park, see *Native Plant Communities of Jay Cooke State Park*, prepared by the Minnesota Department of Natural Resources, October 2003.

⁷ National Park Service. U.S. Department of the Interior. North Country National Scenic Trail, Northeastern Minnesota Route Assessment and Environmental Assessment. 2004.

⁸ Jay Cooke State Park. June 20, 2012: A Day of Damage Across Northeastern Minnesota. (short summary describing flood damage)

⁹ Minnesota Department of Natural Resources. 2003. Native Plant Communities of Jay Cooke State Park. County Biological Survey, Division of Ecological Services, Minnesota Department of Natural Resources.

¹⁰ Gonsoir, L. and D. Radford. 2012. Cultural Resource Reconnaissance Survey for a Silver Creek Bridge Replacement Project, Jay Cooke State Park, Carlton County, Minnesota. Minnesota State Parks and Trails Cultural Resource Management Program.

Jay Cooke State Park is home to 46 animal species, including white-tailed deer, black bear, timber wolves, coyotes, and the threatened Canada lynx. Over 173 species of birds nest and feed in the park, including the pileated woodpecker, marsh hawk, and great blue heron. In addition, 16 species of reptiles and amphibians are found in the park. Brook, brown, and rainbow trout as well as minnows, white sucker, long-nose dace, creek chub, mottled sculpin, and several other small fish species inhabit Silver Creek.^{11,12}

4.3 *Cultural Environment*

Jay Cook State Park receives over 300,000 visitors and nearly 35,000 overnight visitors annually. The park offers a variety of recreational activities for visitors, including hiking, cross country skiing, snowmobiling, snowshoeing, fishing, biking (mountain and tour), horseback riding, picnicking, wildlife viewing, bird watching, geocaching, backpacking, and camping. The park provides over 50 miles of hiking and cross-country ski trails and several scenic overlooks for visitors to enjoy.¹³

The current bridge is unsafe so the trail is closed at Silver Creek, preventing park visitors from accessing 12 miles of trails and three backpacking sites in the southeast corner of the park from the North Country/Superior Hiking Trail and continuing on to the long-distance trails that extend well beyond the park boundary. Replacing the bridge would restore trail access, allowing hikers and cross-country skiers to once again easily access this part of the park again. It would also make it much easier for trail maintenance crews and emergency search and rescue teams to access these trails as well. Therefore the bridge replacement would enhance and restore recreational opportunities at the park.

The park is located along the St. Louis River and is the site of a canoe portage used by Native Americans, Europeans explorers, fur traders, and missionaries in the 1700 and 1800s. During the 1930s, a Civilian Conservation Corps (CCC) camp was stationed at the park and built several structures and picnic areas throughout the park. Three districts of the state park are in the National Register of Historic Places but none encompass the project site. The project site is located less than one mile from the Jay Cooke State Park CCC/Rustic Style Historic District but is not visible from the project area. The only structure in the project area is the existing 1970s footbridge slated for replacement which has no historical significance.^{14, 15}

The Minnesota State Parks and Trails Cultural Resource Management Program of the Minnesota Historical Society completed a field review of the project area on October 28, 2011. Shovel tests near the bridge did not reveal any archeological materials or items of cultural significance.¹⁶

¹¹ Jay Cooke State Park website: http://www.dnr.state.mn.us/state_parks/jay_cooke/narrative.html

¹² Personal communication, Gary Hoeft, Park Manager, Jay Cooke State Park, June 18, 2013.

¹³ Jay Cooke State Park website: http://www.dnr.state.mn.us/state_parks/jay_cooke/narrative.html

¹⁴ Jay Cooke State Park website: http://www.dnr.state.mn.us/state_parks/jay_cooke/narrative.html

¹⁵ Gonsoir, L. and D. Radford. 2012. Cultural Resource Reconnaissance Survey for a Silver Creek Bridge Replacement Project, Jay Cooke State Park, Carlton County, Minnesota. Minnesota State Parks and Trails Cultural Resource Management Program.

¹⁶ Gonsoir, L. and D. Radford. 2012. Cultural Resource Reconnaissance Survey for a Silver Creek Bridge Replacement Project, Jay Cooke State Park, Carlton County, Minnesota. Minnesota State Parks and Trails Cultural Resource Management Program.

5.0 Consequences

This chapter outlines likely consequences of the proposed footbridge replacement and planned mitigation measures. All consequences of the project are expected to be minor. This aligns with the NOAA Restoration Center's earlier analysis of trail projects designed to achieve similar goals of erosion reduction and public access enhancement.¹⁷

5.1 Physical Environment

The project will involve some disruption to soils at the site and minor impacts to the floodplain and creek hydrology due to grading the existing approaches along each side of the bridge, and placing riprap under and bordering the bridge. However, the project employs construction best management practices (BMPs) such as filter logs, flotation silt curtains, erosion control blanket, and permanent BMPs such as riprap and seeding with native plants to control sediment-laden runoff during construction and permanently stabilize the banks.

Alternatives Comparison Table: Anticipated Environmental Consequences to Physical Resources

Physical Resource	Alternative I Preferred	Alternative II No Action
Floodplain/Hydrology	Minor impacts to floodplain and creek hydrology during construction and over long-term with installation of new abutment and riprap erosion protection.	No impacts.
Soils	Some disruption expected during construction phase but BMPs will be used to control sediment-laden runoff and will be permanently stabilized with seeding.	No impacts.

5.2 Biological Environment

The Canada lynx (*Lynx canadensis*) is the only federally endangered or threatened species within the project area. No Canada lynx critical habitat has been designated in Carlton County. The project will be planned to avoid construction during the peak lynx denning period and will not result in any long-term increase in the presence of humans in the project area. The project applicant consulted with the Minnesota Department of Natural Resources Endangered Species Coordinator who concluded that the Silver Creek Trail Bridge replacement may affect, but is not likely to adversely affect the Canada lynx.¹⁸ NOAA also consulted with the U.S. Fish and Wildlife Service which concurred with this assessment.¹⁹

To help mitigate other potential impacts to wildlife, the bridge design calls for including a critter

¹⁷ NOAA, June 2006. Supplemental Programmatic Environmental Assessment of NOAA Fisheries' Implementation Plan for the Community-based Restoration Program, A Process for Habitat Restoration Grants.

¹⁸ March 19, 2013, email from Richard Baker, Minnesota Endangered Species Coordinator, to Amber Westerbur, Minnesota Lake Superior Coastal Program.

¹⁹ May 16, 2013, letter from Tony Sullins, Field Supervisor, U.S. Fish and Wildlife Service Twin Cities Field Office, to Allison Castellan, National Oceanic and Atmospheric Administration.

crossing with a two-foot wide bench indented into the riprap to allow animals to easily cross under the bridge parallel to the creek (See Figure 2).

Due to construction activities described above in Section 5.1 (Physical Environment), minor, temporary impacts will occur to aquatic habitat and surrounding vegetation. Mitigation measures such a reseeding with native plants and various BMPs to reduce sediment laden runoff to the creek will be ensure impacts are not significant.

Alternatives Comparison Table: Anticipated Environmental Consequences to Biological Resources

Biological Resource	Alternative I Preferred	Alternative II No Action
Aquatic Habitat	Minor, temporary impacts during construction.	No impacts.
Wildlife	Potential minor impacts but mitigation measures, including critter crossings and avoiding lynx denning seasons are in place to minimize.	No impacts.
Vegetation	Minor, temporary impacts during construction.	No impacts.

5.3 Cultural Environment

There are no historical or culturally significant properties on the site. The Minnesota State Parks and Trails Cultural Resource Management Program of the Minnesota Historical Society also completed a field review of the project area on October 28, 2011. Shovel tests near the bridge did not reveal any archeological materials or items of cultural significance.²⁰

Alternatives Comparison Table: Anticipated Environmental Consequences to Cultural Resources

Cultural Resource	Alternative I Preferred	Alternative II No Action
Artifacts	No impacts anticipated.	No impacts.
Cultural and Historic Resources	No impacts anticipated to cultural and historically significant areas of the Park.	No impacts.

5.4 Public Health and Safety

Replacing the bridge would allow trail users to once again be able to cross Silver Creek, gaining continual and easy access to miles of trails and campsites across Silver Creek, enhancing their park experience. The longer 60 foot bridge will increase the bridge's resilience to future high-water events since the creek is sensitive to runoff from heavy precipitation and snow melt. The wider 12-foot bridge will allow groomers and mowing equipment to use the bridge, saving time and fuel by allowing direct access to trails across Silver Creek. Currently equipment has to be trailered to another trailhead to access the trails on the southeast side and groomers, that groom the cross-country ski trail during the winter season, have to across through the frozen streambed to continue grooming the trail on the

²⁰ Gonsoir, L. and D. Radford. 2012. Cultural Resource Reconnaissance Survey for a Silver Creek Bridge Replacement Project, Jay Cooke State Park, Carlton County, Minnesota. Minnesota State Parks and Trails Cultural Resource Management Program.

other side. In addition, the wider space will enable emergency vehicles to cross the bridge during remote search and rescue operations.

Not replacing the bridge does not align with the Minnesota Department of Natural Resources Division of Parks and Trails strategic plan since its vision is to create unforgettable park and trail experiences²¹ or its Parks and Trails 25-year Legacy Plan which notes that development and acquisition of priority trails, including the Superior Hiking Trail, as a goal.²²

Public Health and Safety	Alternative I Preferred	Alternative II No Action
Emergency Response	Beneficial impact due to better emergency response capabilities.	Negative impact because bridge would remain closed and emergency vehicles would not be able to pass.
Bridge resilience/safety	Beneficial impact due to improved bridge resilience to flood events and increased safety.	Negative impact because bridge would remain closed due to safety concerns.
Recreational Uses	Beneficial impact from replacement of the bridge.	Negative impact because trail would remain closed at Silver Creek.

5.5 Discussion of Other Environmental Consequences

This project is designed to replace a hiking bridge to restore and enhance public access and visitor experience to the park. During construction, however, there will likely be minor environmental consequences associated with equipment use, earth moving, noise and other minor disruptions. These consequences are outlined below and would apply to Alternative 1.

Air Quality Impacts

Minor increases in the amounts of carbon monoxide and other pollutants associated with the use of heavy machinery may be temporarily associated with the proposed activities on-site during the construction phase. Construction activities should have no long-term air quality impacts on the site or surrounding environment.

Water Quality Impacts

²¹ Minnesota Department of Natural Resources. *Division of Parks and Trails Strategic Plan 2012-2022*. February 2012. http://files.dnr.state.mn.us/input/mgmtplans/parks/strategic/0212_pat_strategic_plan.pdf

²² Minnesota Department of Natural Resources. 2011. Parks and Trails Legacy Plan, Parks and Trails of State and Regional Significance, A 25-year Long-range Plan for Minnesota. http://www.legacy.leg.mn/sites/default/files/resources/parks_trails_legacy_plan_0.pdf

A temporary increase in turbidity to the creek on site would be expected during bridge removal and construction. However, the construction site will be protected using a variety of sediment and erosion control and nonpoint source pollution best management practices to protect water quality during construction. Best management practices that will be used include: filter logs with wood fiber netting along the perimeter of the site; flotation silt curtains paralleling the construction area along both sides of the creek; erosion control blankets on all disturbed areas requiring turf stabilization; riprap as permanent erosion control at the base of each abutment; self-contained concrete wash-outs for all concrete work; and vegetation replanting to permanently stabilize all disturbed areas.

This project is anticipated to have no long-term negative water quality impacts.

Aesthetics Impacts

A 40-foot, damaged corten steel bridge with wooden footbridge currently exists at the site. Replacing it with a slightly larger (60-foot by 12-foot wide) steel bridge with corten steel decking would only create minor additional impacts to aesthetic or scenic resources and would likely improve aesthetics since it will be replacing a damaged bridge.

Noise Impacts

There would be a minor increase in noise levels at the project site during the construction phase of this project. These impacts are expected to be short-term and limited to active periods of construction between sunrise and sunset. The project will be planned to avoid construction during the peak Canada lynx (*Lynx canadensis*) denning period (May-July). The Canada lynx is the only federally listed endangered or threatened species within the project area. No Canada lynx critical habitat has been designated in Carlton County.

Cumulative Impacts

The proposed bridge replacement sets no precedent for future actions that would significantly affect the quality of the environment. The site has had a bridge at this location since the 1970s. While there are a few other similar hiking bridges scattered throughout the park, they are spread out and the replacement of the Silver Creek bridge is not likely to have additional cumulative impacts. Two additional footbridges in the park are also being replaced because they were also damaged during the flood event. However, they do not cross Silver Creek. Because the footbridges are spread out throughout the park, and impacts from these bridge replacements are also largely temporary and minor, cumulative impacts from these activities are not anticipated.

6.0 Compliance with Other Environmental and Administrative Review Requirements

Anadromous Fish Conservation Act

The Anadromous Fish Conservation Act (16 U.S.C. § 757a, *et seq.*) provides authority to conserve, develop, and enhance anadromous fishery resources.

Compliance: The preferred alternative will have no impact on anadromous fishery resources.

Clean Air Act

The Clean Air Act (42 U.S.C. § 7401, *et seq.*) directs EPA to set limits on air emissions to ensure basic protection of health and the environment. The fundamental goal is the nationwide attainment and maintenance of the National Ambient Air Quality Standards (NAAQS). Primary NAAQS are designed to protect human health. Secondary NAAQS are designed to protect the public welfare (for example, to prevent damage to soils, crops, vegetation, water, visibility and property).

Compliance: All construction activity will be done with conventional equipment in compliance with all state rules and local ordinances.

Clean Water Act

The Clean Water Act (33 U.S.C. § 1251, *et seq.*) is the principal law governing pollution control and water quality of the Nation's waterways. Section 404 of the law authorizes a permit program for the beneficial uses of dredged or fill material in navigable waters. The U.S. Army Corps of Engineers (USACE) administers the program.

Compliance: The project has obtained permits from the U.S. Army Corps of Engineers and the Minnesota Department of Natural Resources Division of Ecological & Water Resources for replacing the bridge. All construction activity will be done in compliance with state and federal law.

Coastal Zone Management Act

The goal of the federal Coastal Zone Management Act (CZMA) (16 U.S.C. § 1451, *et seq.*, 15 C.F.R. Part 923) is to preserve, protect, develop and, where possible, restore and enhance the Nation's coastal resources. The federal government provides grants to states with federally approved coastal management programs. The State of Minnesota has a federally approved program. Section 1456 of the CZMA requires any federal action inside or outside of the coastal zone that affects any land or water use or natural resources of the coastal zone to be consistent, to the maximum extent practicable, with the enforceable policies of approved state management programs. It states that no federal license or permit may be granted without giving the State the opportunity to concur that the project is consistent with the State's coastal policies. The regulations (15 C.F.R. 930) outline the consistency procedures.

Compliance: The bridge replacement will be consistent with Minnesota's coastal zone policies. The issuance of State permits provides consistency in Minnesota and the project will be in full compliance with this Act.

The Coastal Barrier Resources Act (CBRA)

Originally passed in 1982 and reauthorized in 2005 (16 U.S.C. § 3501 *et seq.*; 12 U.S.C. § 1441 *et seq.*), CBRA was enacted to protect coastal barrier islands and their resources. Under CBRA, there are limitations on federal expenditures in designated CBRA units, however there are certain project specific allowances on a project by project basis.

Compliance: The project is not within a designated CBRA area and does not involve development activities inconsistent with CBRA.

Endangered Species Act

The federal Endangered Species Act (16 U.S.C. § 1531, *et seq.*, 50 C.F.R. Parts 17, 222, 224) directs all federal agencies to conserve endangered and threatened species and their habitats and encourages such agencies to utilize their authority to further these purposes. Under the Act, NOAA National Marine Fisheries Service (NMFS) and USFWS publish lists of endangered and threatened species. Section 7 of the Act requires that federal agencies consult with these two agencies to minimize the effects of federal actions on endangered and threatened species.

Compliance: The USFWS consultations are complete (see attachment). The USFWS concurred that the project may affect, but is not likely to adversely affect the Canada lynx. There are no NOAA trust resources at the project site.

Estuaries Protection Act

The Estuary Protection Act (16 U.S.C. § 1221-1226) highlights the values of estuaries and the need to conserve natural resources. It authorizes the Secretary of the Interior, in cooperation with other federal agencies and the states, to study and inventory estuaries of the United States, to determine whether such areas should be acquired by the federal government for protection, to assess impacts of commercial and industrial developments on estuaries, to enter into cost-sharing agreements with states and subdivisions for permanent management of estuarine areas in their possession, and to encourage state and local governments to consider the importance of estuaries in their planning activities related to federal natural resource grants.

Compliance: The bridge replacement is located outside of the St. Louis River estuary, a freshwater estuary to Lake Superior, and will not have a significant impact on the estuary.

Fish and Wildlife Conservation Act

The Fish and Wildlife Conservation Act of 1980 (16 U.S.C. § 2901 and 50 C.F.R. § 83) provides for the consideration of impacts on wetlands, protected habitats and fisheries.

Compliance: The project partners do not believe the project will have a significant impact on fish or wildlife and have included measures to mitigate any potential minor impacts.

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801, *et seq.*) as amended and reauthorized by the Sustainable Fisheries Act (Public Law 104297), established a program to promote the protection of essential fish habitat (EFH) in the review of projects conducted under federal permits, licenses, or other authorities that affect or have the potential to affect such habitat. After EFH has been described and identified in fishery management plans by the regional fishery management councils, federal agencies are obligated to consult with the Secretary of the U.S. Department of Commerce with respect to any action authorized, funded, or undertaken or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any EFH.

Compliance: The project site is not designated essential fish habitat.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 U.S.C. § 715, *et seq.*) provides for the protection of migratory birds. The Act does not specifically protect the habitat of these birds but may be used to consider time of year restrictions for remedial activities on sites where it is likely migratory birds may be nesting and/or to stipulate maintenance schedules that would avoid the nesting seasons of migratory birds.

Compliance: Consultation with the USFWS constitutes compliance with this Act. USFWS did not note any concerns about impacts to migratory birds (see attached).

Preservation of Historic and Archeological Data Act

The purpose of the Preservation of Historic and Archeological Data Act of 1974, as amended, 16 U.S.C. § 469, *et seq.*) is to provide for the preservation of historic American sites, buildings, objects and antiquities of national significance, and for other purposes by specifically providing for the preservation of historical of archeological data which might otherwise be lost or destroyed.

Compliance: The Minnesota State Historic Preservation Office was consulted under NHPA Section 106. The office did not provide NOAA any comments within 30 days of receiving our letter so their concurrence is presumed. This aligns with the response the office provided the state following the state's consultation; the office had determined the project will have no adverse effects to historic properties. The project is in full compliance. (see appendix D)

Rivers and Harbors Act

The federal Rivers and Harbors Act (RHA; 33 U.S.C. § 401, *et seq.*) regulates development and use of the Nation's navigable waterways. Section 10 of the Act prohibits unauthorized obstruction or alteration of navigable waters and vests the USACE with authority to regulate discharges of fill and other materials into such waters.

Compliance: The project has obtained permits from the U.S. Army Corps of Engineers and the Minnesota Department of Natural Resources Division of Ecological & Water Resources for replacing the bridge. All construction activity will be done in compliance with state and federal law. (see appendix B)

Executive Order 11990 Protection of Wetlands

Executive Order 11990 (40 C.F.R. § 6392 (a) and Appendix A) requires federal agencies to avoid the adverse impacts associated with the destruction or loss of wetlands, to avoid new construction in wetlands if alternatives exist, and to develop mitigative measures if adverse impacts are unavoidable.

Compliance: No wetlands will be adversely impacted by the preferred alternative.

Executive Order 12898 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations and Executive Order 12948 Amendment to Executive Order No. 12898

Executive Orders 12898 and 12948 require each federal agency to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority and low-income populations.

Compliance: No low income or ethnic minority communities would be adversely affected by the preferred alternative.

Executive Order Number 13112 Invasive Species

The purpose of Executive Order 13112 is to prevent the introduction of invasive species and provide for their control, and to minimize the economic, ecological, and human health impacts that invasive species cause.

Compliance: The preferred alternative will have no impact.

7.0 CONCLUSION: FINDING OF NO SIGNIFICANT IMPACT

The National Oceanic and Atmospheric Administration proposes to fund the replacement of a footbridge over Silver Creek along the North Country/Superior Hiking Trail in Jay Cooke State Park (see Section 8.0, Figures 1&2) to allow access to 12 miles of hiking and cross-country skiing trails and three backpacking sites in the southeast corner of the park. Several alternatives were considered for the proposed project: replacement of existing bridge with new 60-foot by 12-foot bridge (preferred alternative); replace the bridge with a narrower and/or shorter bridge; and a no-action alternative.

Significant individual and/or cumulative environmental effects would not result from implementation of the preferred alternative, and preparation of a Finding of No Significant Impact (FONSI) is warranted.

NOAA Administrative Order (NAO) 216-6 (revised June 20, 1999) provides eleven criteria for determining the significance of the impacts of a proposed action. These criteria are discussed below as they relate to the proposed project.

a. Has the agency considered both beneficial and adverse effects? (A significant effect may exist even if the Federal agency believes on balance the effect will be beneficial)

The agency has considered both beneficial and adverse effects and no significant effects are anticipated. Beneficial effects include restoring recreational use to 12 miles of trails and three backpacking sites in the southeast corner of the park, making it easier for trail crews to access that area with equipment to maintain the trails and for emergency search and rescue teams to reach that section of the park as well.

Adverse effects were assessed and include impacts to a small number of plants and animals and during the construction phase of the project and permanent impacts to the stream bed/bank directly under and adjacent to the bridge. Mitigation measures are in place to address anticipated adverse effects, and none of these effects are considered significant. In addition, individual effects will not be cumulatively significant.

b. To what degree would the proposed action affect public health and safety?

The proposed bridge replacement would have a minor beneficial impact on public health and safety as it would remove the existing, damaged bridge which is unsafe and replace it with a new bridge that provides park visitors with a safe way to cross the creek.

c. To what degree would the proposed action affect unique characteristics of the geographic area in which the proposed action is to take place?

The proposed project would result in minor short-term impacts on the geographic area during construction. The project would also have minor long-term impacts to creek hydrology due to stabilizing the creek bank with riprap. The riprap also provides a long-term benefit by protecting the

bridge abutments from erosion to prolong the life and safety of the bridge and reducing bank erosion and sedimentation into the creek.

d. To what degree would the proposed action have effects on the human environment that are likely to be highly controversial?

None. The project replaces an existing bridge that was damaged and unsafe to use, restoring public access to many trails and several backpacking sites in the park.

e. What is the degree to which effects are highly uncertain or involve unique or unknown risks?

None. There have been other bridge replacement projects conducted within the Minnesota State Park system. It is thus expected that the proposed action will have minimal adverse impacts and presents a very low likelihood of unique or unknown risks.

f. What is the degree to which the action establishes a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

None. The proposed bridge replacement sets no precedents for future actions of a type that would significantly affect the quality of the human environment. The proposed bridge would replace an existing bridge in the same location and therefore does not establish a precedent.

g. Does the proposed action have individually insignificant but cumulatively significant impacts?

No. The proposed action is site specific and not expected to produce any cumulative impacts. While there are a few other similar hiking bridges scattered throughout the park, they are spread out and the replacement of the Silver Creek bridge is not likely to have additional cumulative impacts. There are no other projects occurring that could affect the creek.

h. What is the degree to which the action adversely affects entities listed in or eligible for listing in the National Register of Historic Places, or may cause loss or destruction of significant scientific, cultural, or historic resources?

None. NOAA determined that the Proposed Action would have no adverse effect on historic properties, and submitted this finding to the Minnesota State Historic Preservation Office (SHPO). The Minnesota SHPO concurred with this determination by not providing any comments to our consultation letter within 30 days of receipt. In addition, the Historic Preservation Office notified the state, after the state consulted with them about this project, that the project will have no adverse effects to historic properties. (see Appendix D).

i. What is the degree to which endangered or threatened species, or their critical habitat as defined under the Endangered Species Act of 1973, are adversely affected?

As confirmed by the Minnesota Department of Natural Resources Endangered Species Coordinator and the U.S. Fish and Wildlife Service (see Appendix D), the project may affect but is not likely to adversely affect the Canada lynx (*Lynx canadensis*), the only Federally-listed threatened or endangered species in the project area.

j. Does the proposed action have a potential to violate Federal, state, or local law for environmental protection?

No. The proper permits have been secured from the Minnesota Department of Environment and the United States Army Corps of Engineers. The proposed action is in compliance with all of the federal statutes noted in Chapter 6 of the Environmental Assessment. The project has been reviewed at the state level and no violation of state law for environmental protection is threatened.

k. Will the proposed action result in the introduction or spread of a nonindigenous species?

No. This project will not result in the introduction or spread of a nonindigenous species because it will not involve or require plant materials from outside of the local area.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Silver Spring, Maryland 20910

**Finding of No Significant Impact
Environmental Assessment
Silver Creek Bridge Replacement**

NOAA has prepared the attached Environmental Assessment (EA) for the Coastal Zone Management Program, which conforms to the procedural and technical requirements set forth in NOAA Administrative Order 216-6, Environmental Review Procedures for Implementing the National Environmental Policy Act (NEPA), and NEPA. The proposed action is replacing a footbridge over Silver Creek along the North County/Superior Hiking Trail in Jay Cooke State Park, allowing visitors to access 12 miles of hiking and cross-country skiing trails and three backpacking sites in the southeast corner of the park. The EA assesses the potential environmental impacts of the bridge replacement, the preferred alternative for NOAA and the Minnesota Department of Natural Resources. Having reviewed the EA, I have determined that the project assessed within will not have a significant impact on the quality of the human environment. Therefore, the preparation of an Environmental Impact Statement for the proposed action is not required by Section 102(2)(c) of the National Environmental Policy Act or its implementing regulations.

for

W. Russell Collins

Holly A. Bamford, Ph.D.
Assistant Administrator for
Ocean Services and Coastal Zone Management

8/28/13

Date



8.0 Figures and Tables

Figure 1: Site Map

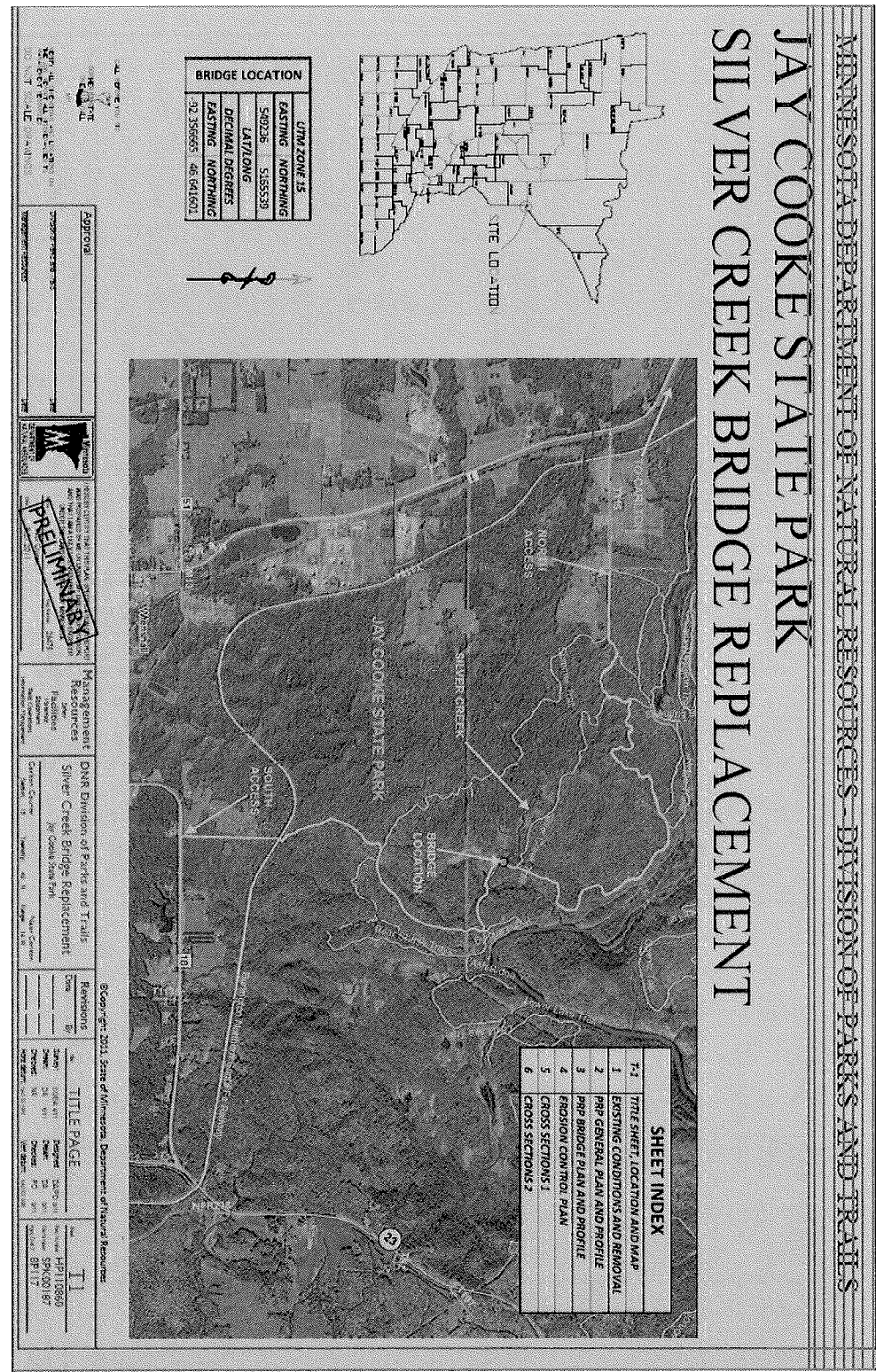
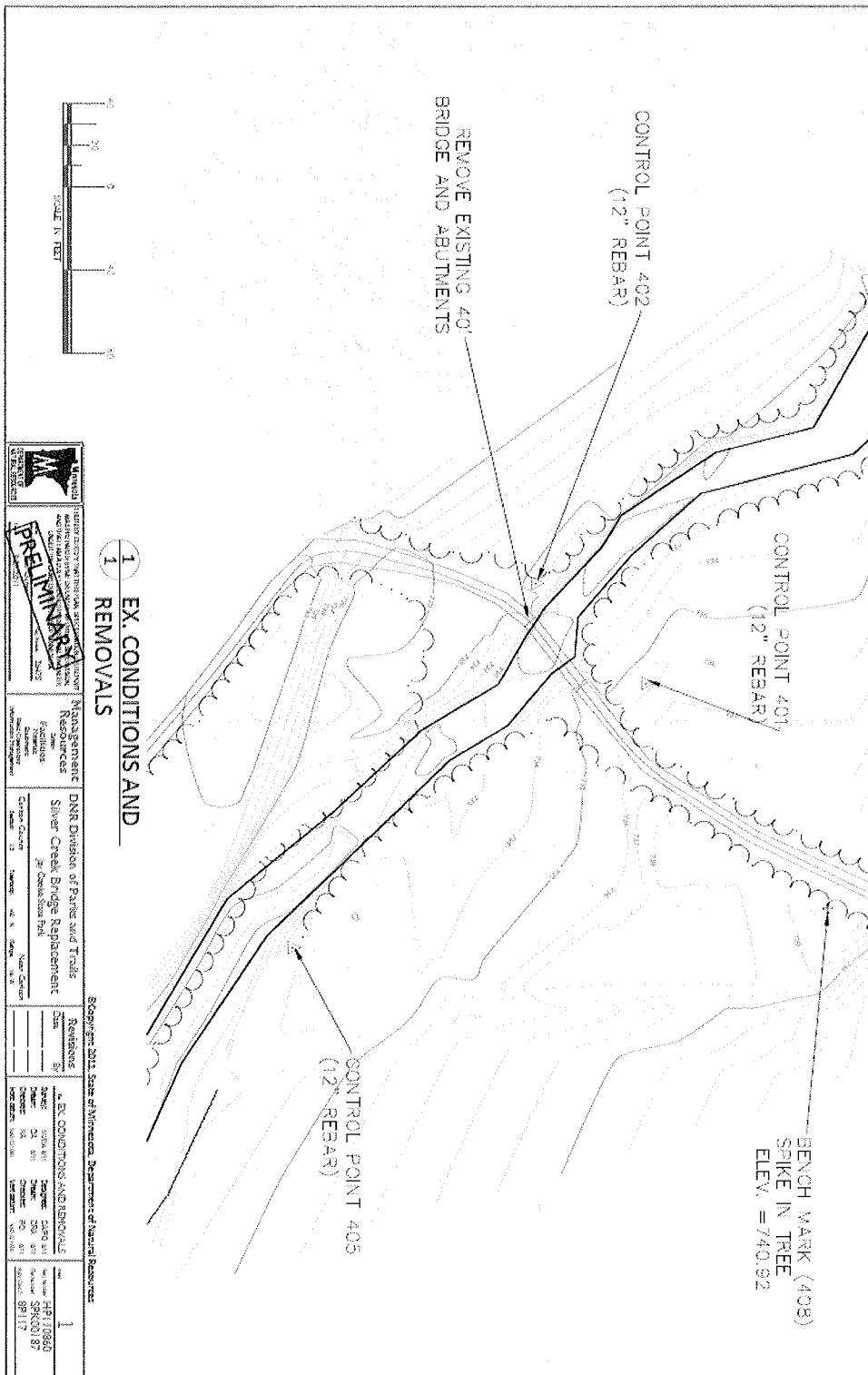
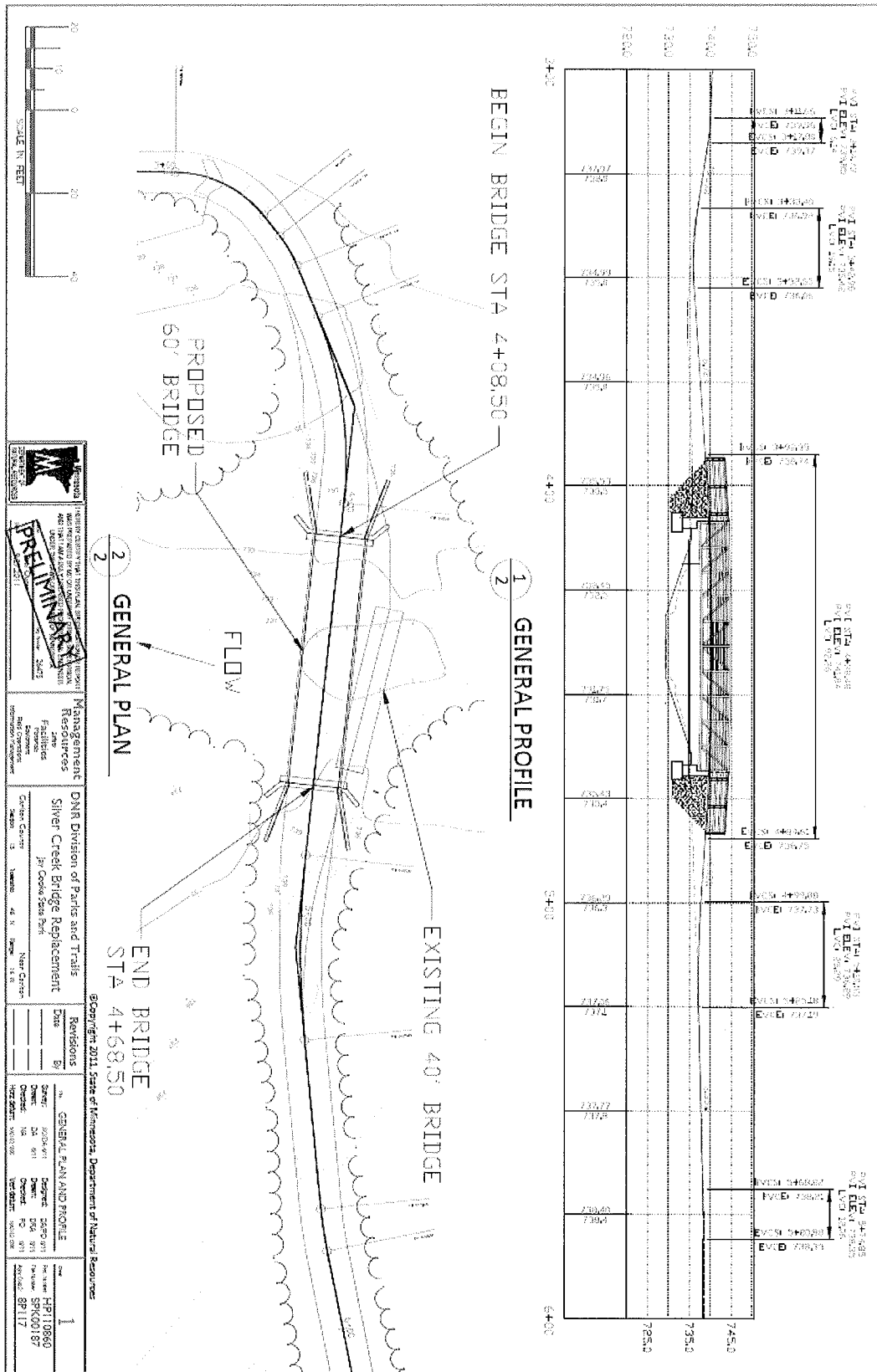


Figure 2: Site Plans

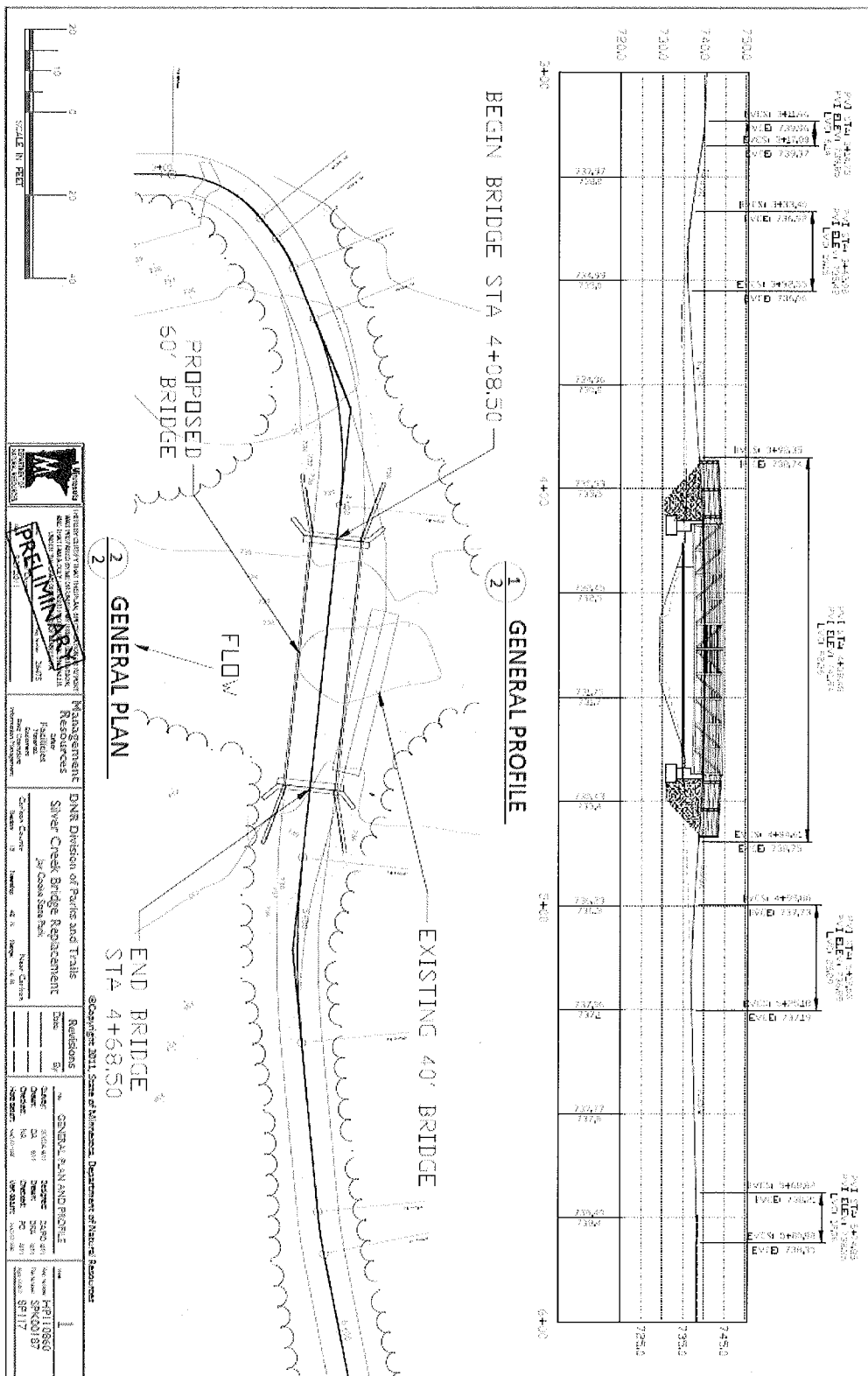
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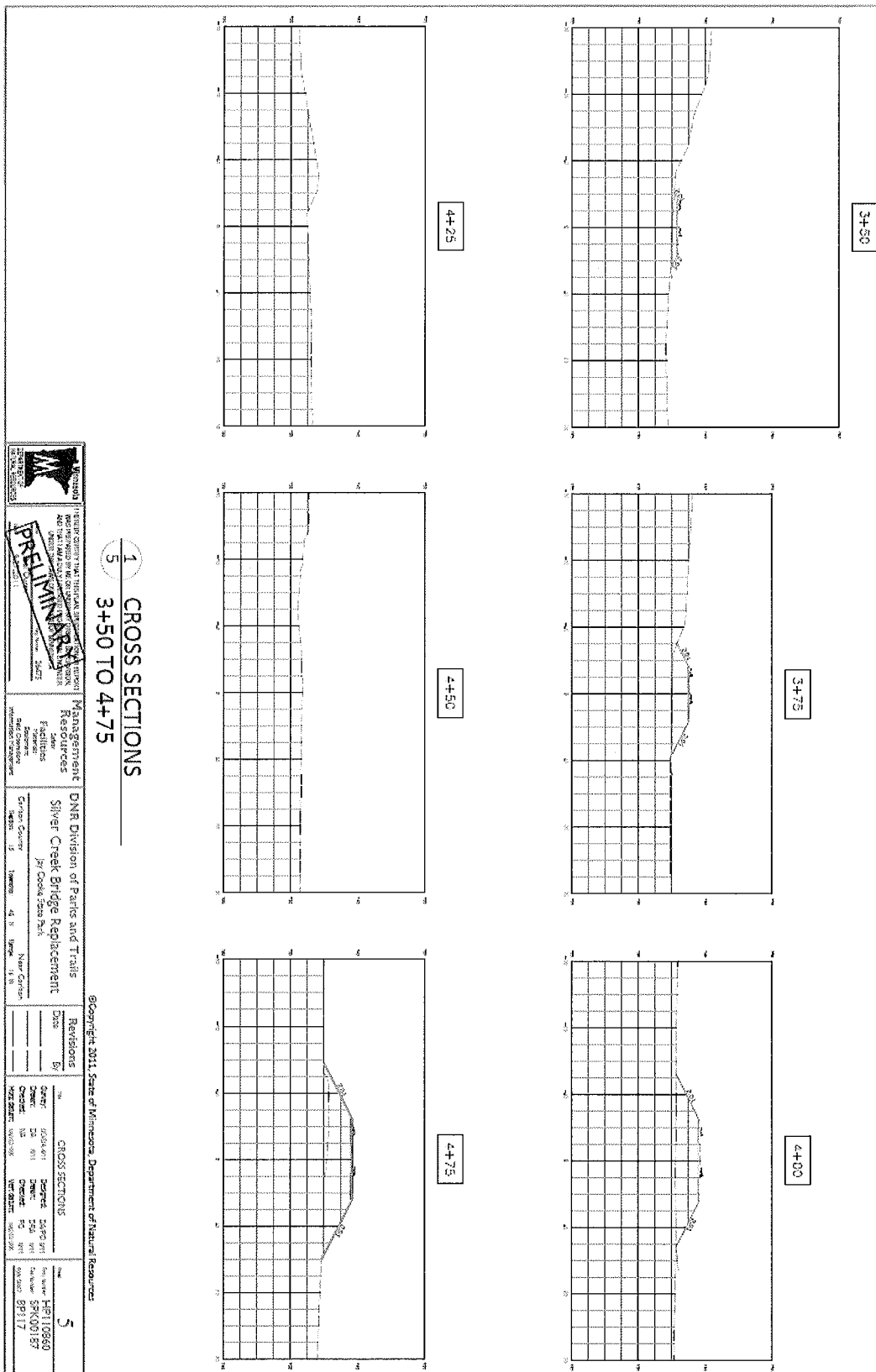
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2c.

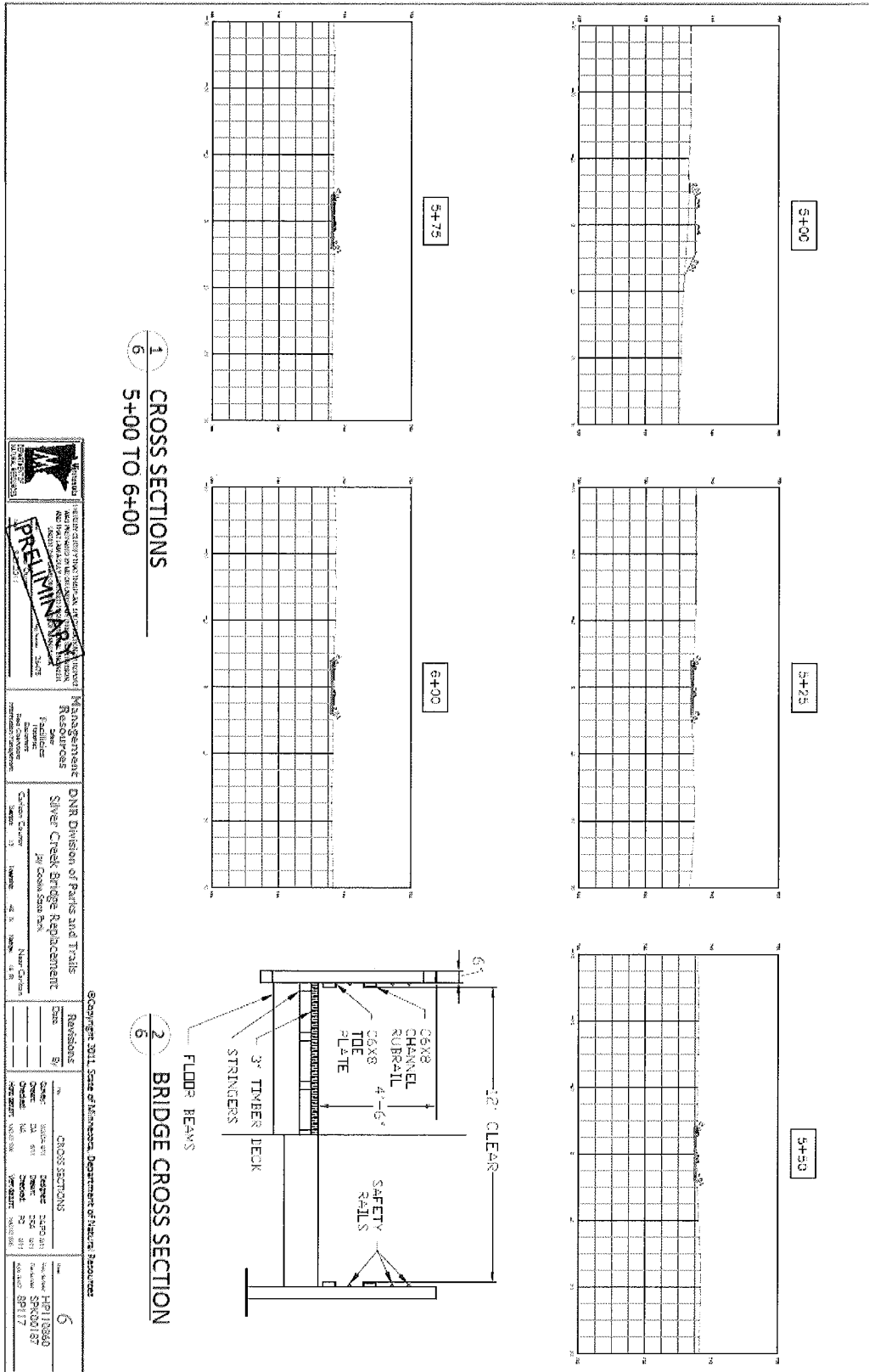


2d.



1 CROSS SECTIONS
5 3+50 TO 4+75

		Management Resources Silver Creek Bridge Replacement for Cook Park Near Carleton Place		Revisions Date: 10/10/11 By: [Signature] Checked: [Signature] Date: 10/10/11		CROSS SECTIONS Date: 10/10/11 By: [Signature] Checked: [Signature] Date: 10/10/11		Drawn Date: 10/10/11 By: [Signature] Checked: [Signature] Date: 10/10/11	
PRELIMINARY NOT FOR CONSTRUCTION		DNR Division of Parks and Trails Silver Creek Bridge Replacement for Cook Park Near Carleton Place		Date: 10/10/11 By: [Signature] Checked: [Signature] Date: 10/10/11		Date: 10/10/11 By: [Signature] Checked: [Signature] Date: 10/10/11		Date: 10/10/11 By: [Signature] Checked: [Signature] Date: 10/10/11	



9.0 References

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APPENDICES

a. List of Preparers

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b. Permits Required

- Minnesota Department of Natural Resources water permit (attached, pg. 1-3)
- U.S. Army Corps of Engineers Clean Water Act Section 404 permit (attached, pg. 4-6)
- NEPA Clearance (this EA)

c. Federal Consistency Determination

The Minnesota Department of Natural Resources has indicated that the preferred bridge replacement will be consistent with Minnesota's coastal zone policies.

d. List of Persons and Agencies Consulted

- Minnesota SHPO Clearance (attached, NOAA letter, pg. 7)
- Minnesota SHPO Clearance (attached, Response to State consultation, pg. 8)

- Minnesota State Parks and Trails Cultural Resources Management Program, Cultural Resources Reconnaissance Survey for a Silver Creek Bridge Replacement Project, Jay Cooke State Park, Carlton County, MN (attached, pg. 9-16)
- USFWS Consultation (attached, NOAA letter, pg. 17-18)
- USFWS Consultation (attached, USFWS letter, pg. 19)
- Minnesota Department of Natural Resources Endangered Species Coordinator (attached, email, pg. 20)

e. Public Comment on the Proposed Action

- Letter of Support from Superior Hiking Trail Association (attached, pg. 21)