

LOWER BOARDMAN RIVER RESTORATION: BOARDMAN, SABIN AND UNION STREET DAMS DRAFT FINDING OF NO SIGNIFICANT IMPACT

PROPOSED ACTION

Boardman, Sabin and Union Street dams are aging structures that are damaging the ecosystem function on the lower Boardman River, located in Grand Traverse County, Michigan. The proposed action considered in this Environmental Assessment (EA) is to restore coldwater aquatic habitat in the lower eight miles of the Boardman River and its associated bottomlands by removal of Boardman and Sabin dams, and modification of Union Street Dam. The proposed action will increase habitat continuity and restore the thermal and hydrologic regime of the lower Boardman River to be consistent with a coldwater river.

ALTERNATIVES CONSIDERED

Alternatives considered included the No Action (Alternative 1), Modify the Union Street Dam and Remove the Sabin and Boardman dams (Alternative 5), and Remove Sabin Dam (Alternative 6).

- Alternative 1 - No Action. Keep the dams, powerhouses, ponds, etc.
- Alternative 5 - Modify Union Street Dam and remove the Sabin and Boardman dams. Modify Union Street to allow lake sturgeon passage upstream via trap and transfer, modify the existing fish ladder to pass lake sturgeon downstream, continue to block sea lamprey upstream passage, and remove Sabin and Boardman dam, associated powerhouses, ponds, and restore historic river channel, and manage sediment.
- Alternative 6 - Remove Sabin Dam. Remove Sabin Dam, powerhouse, pond and restore historic river channel and manage sediment.

SELECTED ALTERNATIVE

For the reasons briefly presented below and based on an evaluation of the information contained in the supporting reference listed below, I have determined that funding Alternative 5, Modify Union Street Dam and remove the Sabin and Boardman dams in Grand Traverse County, MI and its accompanying restoration measures and sediment management, and is not a major Federal action that would significantly affect the quality of the human environment within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969. An Environmental Impact Statement will accordingly, not be prepared.

Reasons:

1. Union Street Dam stays in place to prevent upstream passage of sea lamprey. A trap and transfer operation will be created to transport desirable fish species (lake sturgeon, etc.) upstream, and the existing fish ladder will be modified to pass adult lake sturgeon downstream.
2. State, tribal and federal natural resource agencies have concluded that one of the most effective means of restoring fish passage and natural habitat and hydrologic function in the Boardman River is to remove the Sabin and Boardman dams and promote Boardman River restoration and its associated bottomlands. The proposed action increases habitat continuity and restores the thermal and hydrologic regime of the Boardman River to be consistent with a coldwater river.

3. The presence of Sabin and Boardman dams artificially segments the Boardman River. Removal of the dams will restore aquatic connectivity to the Boardman River by eliminating the source of habitat fragmentation and restoring the opportunity for brook trout, dace, other coldwater fish, and aquatic organism's movement within the river.
4. Sabin and Boardman dam removal restores the natural downstream transport of woody debris, sediment and plant propagules critical to sustaining healthy populations of fish and invertebrate species.
5. Flood discharge rates or flood elevations within the Boardman River will not be significantly altered by the removal of the Sabin and Boardman dams and associated river restoration. Removal of the dams will improve flood resiliency and capacity by restoring the natural flow patterns of the river and natural groundwater flow and discharge characteristics.
6. Sabin and Boardman dam removal, coupled with sediment management and river restoration activities, effectively restores the natural sediment transport processes of the Boardman River. The newly created river channel has a cross section and profile that will minimize adverse sediment transport to downstream areas, and is capable of conveying natural flows (and associated sediment transport) of the Boardman River. Potential adverse impacts of sediment remobilization and transport are mitigated through sediment management measures (controlled breaching, excavation, sediment traps, soil and erosion control methods, etc.). Potential elevated contaminant levels (arsenic) in sediments are below the applicable non-residential Michigan Department of Environmental Quality (MDEQ) Direct Contact Criteria. However, additional sampling may be required to verify contaminant levels are below MDEQ-specified limits. The contaminant levels will be managed, as necessary to minimize exposure to users and protect human health.
7. As a result of the aforementioned habitat fragmentation and its hydrologic alterations, habitats within the Boardman River and its associated bottomlands have been modified and degraded, resulting in adverse impacts on aquatic species mix, diversity, and populations. Removal of Sabin and Boardman dams addresses this habitat degradation. Restoration of a coldwater thermal regime and naturalization of river aquatic biotic communities offsets the loss of the warmwater fish community and associated habitats.
8. Restoration of bottomland habitats will be accomplished through long-term successional development that offset impacts associated with the displacement of resident water-dependent species.
9. Sensitive water dependent wildlife species will be displaced to other habitats in the region as a result of habitat conversion. However, these effects are offset by potential restoration of habitats suitable to sensitive species such as wood turtle, eastern massasauga (candidate species under Endangered Species Act) and other species. Potential effects to wetlands are offset by an estimated net gain of approximately 36.83 acres of wetlands due to hydrologic alteration and bottomland restoration.
10. Dam removal and its associated ecosystem restoration have the effect of positive economic benefits due to increased recreational use, such as fishing and paddling.
11. There are no historical or archaeologically significant properties impacted by the project.
12. Alteration of visual landscapes due to removal of powerhouse and pond, are offset by progressive replacement of unsightly exposed bottomlands with a vegetated and restored ecosystem.

13. Removal of Sabin and Boardman dams and associated structures eliminates liability associated with the aging structures.

Supporting References:

1. Feasibility Study for the Boardman River, Grand Traverse County, Michigan. Environmental Assessment, Great Lakes Fisheries and Ecosystem Restoration Program. June 2014. U.S. Army Engineer District, Detroit, 477 Michigan Avenue, Detroit, MI 48226-2523.
2. Feasibility Study for the Boardman River, City of Traverse City and Grand Traverse County, Michigan. Great Lakes Fisheries and Ecosystem Restoration Program. Addendum to the Detailed Project Report and Environmental Assessment. December 2014 as revised June 2015. U.S. Army Engineer District, Detroit, 477 Michigan Avenue, Detroit, MI 48226-2523.
3. To All Interested Agencies, Public Groups, and Citizens: RE: Boardman River Restoration Project, Grand Traverse County, Michigan. Sabin Dam revised river channel and powerhouse removal. January 23, 2017. Department of the Army, Detroit District, 477 Michigan Avenue, Detroit, MI 48226-2550.

CONCLUSION

The selected alternative does not constitute an action that normally requires preparation of an Environmental Impact Statement (EIS). The selected alternative will not have a significant effect on the human environment. Negative environmental impacts that could occur are minor or moderate in intensity. There are no significant impacts on public health, public safety, threatened or endangered species, or other unique characteristics of the region. There are no unmitigated adverse impacts on sites or districts listed in or eligible for listing in the National Register of Historic Places. No uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any Federal, State, Tribal or local environmental protection law.

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Approved:

Midwest Regional Director, USFWS,