

**FINDING OF NO SIGNIFICANT IMPACT AND DECISION RECORD**  
**REPAIR, REPLACEMENT, AND RENOVATION OF**  
**HAMMOND BAY BIOLOGICAL STATION**  
**U.S. GEOLOGICAL SURVEY**  
**HAMMOND BAY BIOLOGICAL STATION**  
**MILLERSBURG, MICHIGAN**

The significance of environmental impacts must be considered in terms of context and intensity. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human and national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. In the case of a site-specific action, significance usually depends upon the effects in the locale rather than in the world as a whole. Intensity refers to the severity or degree of impact. (40 CFR 1508.27)

## **CONTEXT**

The Hammond Bay Biological Station is located at 11188 Ray Road, along the southern shore of Lake Huron, approximately twenty-four miles southeast of Cheboygan, Michigan, and approximately twelve miles northwest of Rogers City, Michigan. The Hammond Bay Biological Station research laboratory lies within a 59.5-acre campus consisting of 13 buildings used for offices, laboratories, shops, garages and storage. The majority of the property is not developed and remains a natural wooded parcel along the shore line of Lake Huron.

The Hammond Bay Biological Station is a unit of the Great Lakes Science Center of the USGS, operated in accordance with a Memorandum of Understanding with the Great Lakes Fishery Commission. Hammond Bay Biological Station conducts integrated research to fulfill the Department of the Interior's responsibilities to the nation's natural resources, including the specific need for scientific information for protecting, restoring, enhancing, and managing living resources and their habitats in the Great Lakes basin ecosystem.

The Hammond Bay Biological Station has been a center for research and development on the parasitic sea lamprey, the most deleterious invasive species in the history of the Great Lakes and perhaps the nation. Hammond Bay Biological Station's success in providing research support for control of sea lampreys uniquely positions the station for future work on other aquatic invasive species, a rapidly increasing environmental problem.

The purpose of the proposed project is:

- (1) To improve facility conditions by bringing the facility into compliance with current standards, increasing energy efficiency, and improving staff environment while minimizing any project implementation impacts to ongoing science research programs; and

- (2) To update and expand the facility to accommodate the projected needs for research concerning aquatic invasive species.

The proposed project will allow USGS to safely and effectively fulfill its mission.

## INTENSITY

The intensity of effects was considered in terms of the following:

1. **Impacts may be both beneficial and adverse. A significant effect may exist even if the Bureau believes that, on balance, the effect will be beneficial.** Consideration of the intensity of environmental effects is not biased by beneficial effects of the action.
2. **The degree to which the proposed action affects public health or safety.** There will be no significant adverse effects on public health and safety because the proposed actions will be taken in compliance with appropriate health and safety regulations. The proposed project will improve public health and safety by bringing the facilities into compliance with public health and safety regulations. (See EA Section 2.0 Purpose and Need for Action)
3. **Unique characteristics of the geographic area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.** There will be no significant effects on unique characteristics of the area. (See EA Sections 5.1 Earth Resources, 5.2 Biologic Resources, 5.3 Water Resources, and 5.5 Cultural Resources). Negligible areas of wetlands and shorefront will have minor and temporary impacts, which will be mitigated. (See EA Section 6.0 Environmental Effects)
4. **The degree to which the effects on the quality of the human environment are likely to be highly controversial.** The effects on the quality of the human environment are not likely to be highly controversial. There is no known credible scientific controversy over the impacts of the proposed action. (See EA Section 3.0 Scoping and Issues)
5. **The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** The Bureau has considerable experience with actions like the one proposed. The analysis shows the effects are not uncertain, and do not involve unique or unknown risk. (See EA Section 6.0 Environmental Effects)
6. **The degree to which the action may establish a precedent for future actions with significant effects, or represents a decision in principle about a future consideration.** The action is not likely to establish a precedent for future actions with significant effects, because the proposed action does not have significant effects and the minor potential effects will be mitigated. (See EA Section 6.0 Environmental Effects)
7. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.** The cumulative impacts are not significant. The effects of the action are limited to the local area and there are no other effects in the vicinity of the proposed action that would be additive to that proposed action. The minor impacts of the proposed project will be mitigated. (See EA Section 6.0 Environmental Effects)

8. **The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed , or eligible for listing, in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.** The action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, because the facilities that will be affected are not eligible for listing in the National Register of Historic Places, as the State Historic Preservation Office concurs. (See EA Section 5.5 Cultural Resources)
9. **The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.** The action will have short-term and localized adverse effects on a threatened plant called houghton's goldenrod. The USGS has coordinated a mitigation strategy with the US Fish and Wildlife Service to ensure the plant is not jeopardized through the proposed action. (See EA Section 5.2 Biological Resources)
10. **Whether the action threatens to violate Federal, State, or local law or requirements imposed for the protection of the environment.** The action will not violate Federal, State, and local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the EA (see EA Appendix A Compliance with Environmental Statutes)

After considering the effects of the actions analyzed, in terms of context and intensity, I have determined that these actions will not have a significant effect on the quality of the human environment. Therefore, an environmental impact statement will not be prepared.

## DECISION

Based upon my review of the Repair, Replacement and Renovation of Hammond Bay Biological Station Environmental Assessment (EA), I have decided to implement the Preferred Alternatives:

- Alternative A4: New Laboratory Primarily in Previously Disturbed Area,
- Alternative B2: New Water Line and Tank, and
- Alternative C2: Upper Lab Renovation.

## DECISION RATIONALE

The proposed action will meet the purpose and need by bringing the facility into compliance with current standards, increasing energy efficiency and improving the staff environment, while updating and expanding the facility to accommodate projected needs for research concerning aquatic invasive species. The proposed project will allow USGS to safely and effectively fulfill its mission.

The Preferred Alternatives were chosen as those that most cost-effectively achieved the purpose and fulfilled the needs for the project.

- The No-Action alternatives (Alternatives A1, B1, and C1) did not satisfy the purpose and need.

- Main Laboratory Alternative A2, New Laboratory in Existing Footprint, would have been disruptive to ongoing research operations and unnecessarily burden the new design with legacy issues.
- Main Laboratory Alternative A3, New Laboratory in Previously Disturbed Area, addressed concerns about minimizing disruption to ongoing research, but the area available for the footprint of the building and associated utilities was too constrained to allow the design to address the anticipated increased needs for water intake, flow, and discharge through the research facilities with an energy efficient design that would meet projected research needs.
- The Preferred Alternative for the Main Laboratory, Alternative A4, New Laboratory Primarily in Previously Disturbed Area, incorporated a footprint that was unhampered by site constraints so that the design team was able to most cost-effectively create a design that will most thoroughly address projected needs. The environmental effects of Alternative A4 were analyzed and found to be not significant.
- The Preferred Alternatives B2: New Water Line and Tank, and C2: Upper Lab Renovation, will fulfill the project needs. The environmental effects of these two alternatives were analyzed and found to be not significant.

The Repair, Replacement, and Renovation of Hammond Bay Biological Station EA documents the environmental analysis and conclusions upon which this decision is based.

## **PUBLIC INVOLVEMENT**

This action was originally listed as a proposal and updated periodically during the analysis. People were invited to review and comment on the proposal through notices sent to print, television, and radio media organizations. An ad was run in the local newspaper and is included in Appendix C of the EA. Direct mailings were made to landowners in the vicinity of the proposed project. The EA lists agencies and people consulted and responses to comments received in Appendix B: Agency Coordination.

## **FINDINGS REQUIRED BY OTHER LAWS AND REGULATIONS**

This decision is consistent with the Great Lakes Science Center's Management Plan. The project was designed in conformance with the Hammond Bay Biological Station Management Plan. In addition to the consultation conducted in conjunction with the EA (e.g., SHPO, threatened and endangered species), permits, and approvals will be secured from the appropriate agencies, as needed, before work commences.

A Finding of No Significant Impact (FONSI) and EA were considered. I determined these actions will not have a significant effect on the quality of the human environment within the meaning of NEPA of 1969, and an Environmental Impact Statement (EIS) will not be prepared.

## IMPLEMENTATION DATE

The initial phases of construction proposed for the repair, replacement, and renovation of the Hammond Bay Biological Station will begin in spring 2015. Future phasing will proceed as funding becomes available.

## CONTACT

For additional information concerning this decision, contact: Russell Strach, Director, Great Lakes Science Center, 1451 Green Road, Ann Arbor, Michigan 48105

*Leon Carl*

*3-31-15*

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Dr Leon Carl

Date

Regional Director

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