

Kingsbury Bay-Grassy Point Habitat Restoration: A Health Impact Assessment

About HIAs

A health impact assessment (HIA) is a systematic process that uses data, analytical methods, and input from stakeholders to determine the potential effects of a proposed policy, plan, program, or project on the health of a population. The HIA examines who will be impacted and provides recommendations for monitoring and managing those effects.

About the Kingsbury Bay-Grassy Point HIA

This U.S. Environmental Protection Agency (EPA)-led HIA was performed on a Great Lakes Area of Concern (AOC) habitat restoration project being implemented by the Minnesota Department of Natural Resources (MNDNR) at two sites in the St. Louis River AOC – Kingsbury Bay and Grassy Point. The purpose of this HIA was to provide information about the potential public health impacts of the proposed MNDNR habitat restoration work itself and the subsequent park improvement activities to be carried out at these sites by the City of Duluth and to provide recommendations aimed at managing the potential public health impacts of the project.

The HIA Process

This HIA used the systematic six step process: screening, scoping, assessment, recommendations, reporting, and monitoring and evaluation. A mixed-method approach was used in this HIA, including analysis of pre-existing and publicly-available data, mapping and spatial analyses, literature review, modeling and ecosystem services mapping, stakeholder engagement and participatory mapping, statistical and graphical analysis, and measurable (quantitative) and relative (qualitative) characterization of impacts.

Based on input from stakeholders, including community members, scientific experts, and decision-makers, the HIA Project Team identified pathways through which the proposed project could potentially impact health: Water Habitat and Quality; Equipment Operation, Traffic, and Transport; Air Quality; Noise and Light Pollution; Crime and Personal Safety; Recreation, Aesthetics, and Engagement with Nature; and Social and Cultural.



St. Louis River

Main HIA Findings and Recommendations

The HIA demonstrated that the proposed habitat restoration and park improvements work could have both positive and negative impacts on health through a number of health determinants (i.e., factors known to impact human health directly or indirectly; Figure 1).

The majority of the potential negative health impacts associated with the project are expected to be of short duration; these include air quality, noise, and traffic impacts from equipment operation, traffic, and transport, as well as reduced access or impaired user experiences at the sites or nearby recreational sites during the construction phases of the project.

In the long-term, there is the potential for increased traffic as a result of this work and other park improvements in the area, which could increase exposure to traffic-related accidents and air quality impacts; however, **the habitat restoration and park improvements projects are expected to have a net positive impact on public health and community well-being overall** through improved water quality and aquatic habitat, reductions in crime as a result of the beautification and maintenance of the created green spaces, increased opportunity for recreation and physical activity, and space for engagement with nature, social interaction, spiritual reflection, and access to cultural resources (such as wild rice).

Recommendations for enhancing the potential positive health impacts and reducing the potential negative health impacts of the Kingsbury Bay-Grassy Point Habitat Restoration Project were provided for consideration by MNDNR and the City of Duluth.

The Impact of the HIA

This HIA brought together the community, stakeholders, and decision-makers at the local, state, regional, and federal levels to promote health, equity, and sustainability.

Where to Learn More

The *Kingsbury Bay-Grassy Point HIA Report and Summary Report* are located at <https://www.epa.gov/health-research/epa-health-impact-assessment-case-studies>.

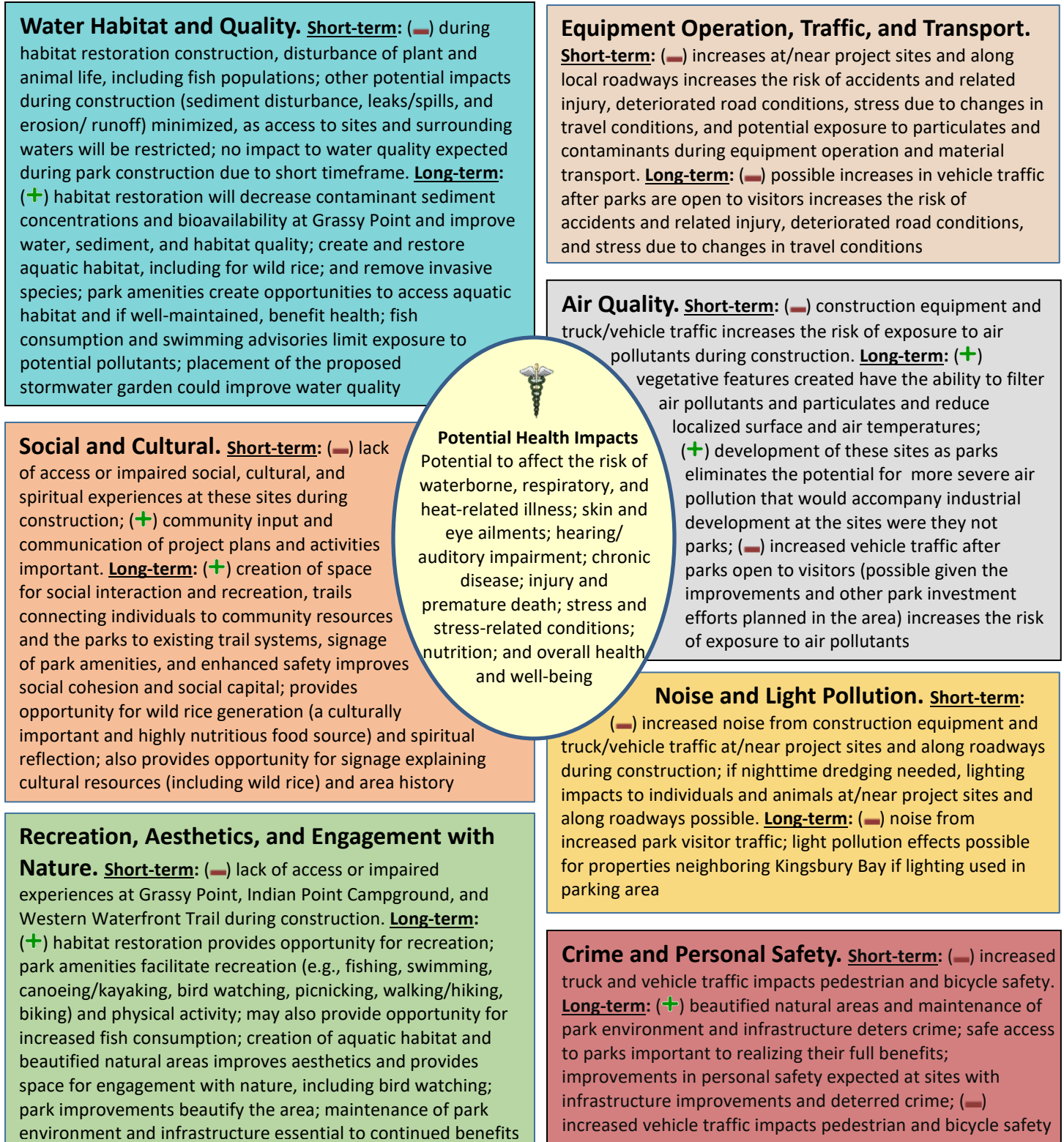


Figure 1. Potential public health impacts of habitation restoration and subsequent park improvements.

CONTACT: Joel Hoffman, hoffman.joel@epa.gov
U.S. EPA Office of Research and Development
(218) 529-5000