

Outdoor Heritage Fund Outcomes Development: A Process to Define Outcomes and Impacts

Summary Project Results and Recommendations
July 31, 2017



Project Goal

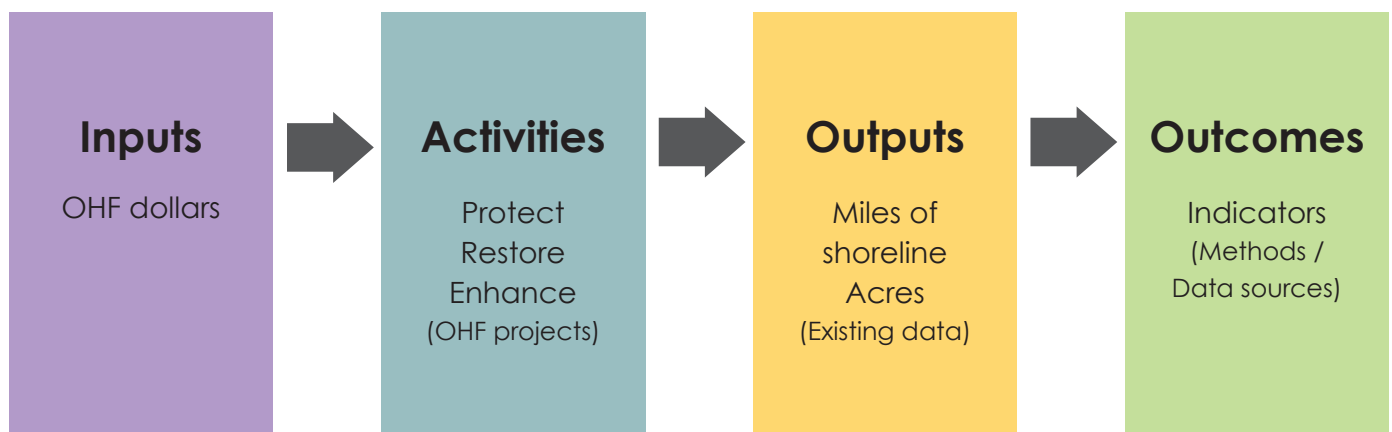
Develop recommended outcome metrics for the Outdoor Heritage Fund (the Fund, OHF), as required by Minnesota State Statute 97A.056, that support the demonstration of public benefit and accountability for the use of public money. Building on prior efforts, these metrics will be used to report the aggregate impact and accomplishments of the Outdoor Heritage Fund.

Process Overview

Between April and July of 2017, Environmental Initiative convened a Work Group of thought leaders, including representatives from state and federal agencies, local governments, and conservation nonprofits to develop recommended outcome metrics for the Outdoor Heritage Fund. Technical support was provided by Houston Engineering, Inc. staff, several additional state and federal agency staff, and conservation leaders.

Connecting Projects to Outcomes

The recommended outcome metrics tie back to and build upon output reporting by Fund recipients and ultimately help provide accountability to tax payers that the Fund’s investments result in public benefit for Minnesotans.



Key Messages / Themes

Consistent with the constitutional directive of the Outdoor Heritage Fund, outcome metrics emphasize primarily providing healthy habitat for Minnesota fish, game, and wildlife species, and outdoor recreation opportunities. Secondarily the outcomes highlight other economic, social, and ecological benefits of the Fund.

This is important work as broad indicators and outcomes that support a long-term vision can provide a more robust and meaningful way of reporting on the Outdoor Heritage Fund's impact.

- These outcome statements and supporting indicators build on the work originally completed in 2010 by the Lessard-Sams Outdoor Heritage Council (LSOHC): *A 25-year framework: Minnesota's conservation estate, historic conservation investments and future opportunities*, specifically the results management framework found in Appendix C.
- Methods and data sets to measure the indicators are challenging to define, as outcomes accrue over long periods of time and can rarely be tied to single actions or sets of actions.
- The recommendations are a starting point for further work that should continue to adapt over time and incorporate the best available science and new or emerging methods of measurement. The Council should seek opportunities to support the development of methods to measure the recommended indicators.

Habitat outcomes and species abundance are influenced by external factors outside of the control of the LSOHC and Fund recipients, and consequently the larger context should be considered and communicated when reporting the Fund's impact.

Different types of reporting will help to communicate the results of the OHF investments to key audiences:

- **Aggregate Impact**—Cumulative effects of numerous projects that provide greater accountability for the Fund overall.
 - Outcome statements, supporting indicators that demonstrate progress toward the outcomes, and potential methods and data sources to measure the indicators can be used to report the Fund's impact over time.
 - Adapting the message of the Fund's aggregate impact for the five LSOHC planning regions can also help in better relaying the impacts of the OHF to key audiences.
- **Case Studies**—Examples that showcase local or regional projects or stories and the impacts that can be realized when monies are focused on strategic actions in particular focal areas.

Audience, scale and context (temporal, geographic, etc.) are imperative to consider when relaying the Fund's impact and deciding when to use case studies in addition to aggregate impact reporting.

Currently available data sources and methods that can be used to report on the aggregate impact of the Fund are limited. Both measured and modeled data that could be used to measure progress toward outcomes have benefits and limitations in their potential uses and applications.

Working with the best information available today, the recommended indicators have potential to meaningfully measure progress toward the stated outcomes. By highlighting these indicators, the LSOHC can focus existing or new work on further developing potential methods and data sources in the future.

Recommended Outcomes, Indicators, and Potential Methods and Data Sources

Primary Outcomes

Recommended Outcome Statement

Recommended Indicator

Potential Methods / Data Sources

Fish Habitat

Lakes, rivers, and streams are strategically protected, restored or enhanced to provide healthy habitat for Minnesota fish species.

Abundance of selected fish species, representative of Minnesota's diverse aquatic habitats

InVEST data models, DNR surveys

Biodiversity/species diversity

Fish models based on predictor variables, Index of Biological Integrity (IBI)

Connectivity of high-quality habitat for desired species

DNR Watershed Health Assessment Framework

Wildlife / Game Habitat

Forests, prairies, and wetlands are strategically protected, restored or enhanced to provide healthy habitat for Minnesota wildlife and game species.

Changes to high-quality habitat complexes and risk of loss

Land cover maps, InVEST data models

Habitat suitability for forest, grassland or wetland wildlife

Land cover maps, HAPET models

Abundance of selected wildlife, game, and pollinator species, representative of Minnesota's diverse terrestrial habitats

InVEST data models, Site-specific sampling data, Thunderstorm maps

Connectivity of high-quality habitat

DNR Watershed Health Assessment Framework, Biological survey data

Outdoor Recreation

Minnesotans have more opportunities to enjoy fish, wildlife, and game related outdoor recreation.

Public access to habitat

Public lands mapping, walk-in access acres, conservation holdings maps, National Conservation Easement Database (NCED)

Public access for hunting and fishing

Public lands mapping, walk-in access acres, MN DNR trout stream maps with population map overlay

OHF project sites within a certain radius of population centers

OHF project sites map with population map overlay

Recommended Outcomes, Indicators, and Potential Methods and Data Sources

Secondary Outcome

Recommended Outcome Statement

Benefits to People

Economic, social, and ecological outcomes provide benefits to people that go beyond habitat (fish, game and wildlife) and outdoor recreation.

Recommended Indicator

Potential Methods / Data Sources

Total economic contribution of the OHF to the state and local economy

Dollars spent on 'personnel' and 'contracts' collected through IMPLAN

Other funds leveraged

OHF projects

Participation in outdoor recreation / tourism

InVEST data models, social media based visitation data, ebird

Wellhead protection

Combined mapping to show vulnerable areas and LSOHC sites, DNR Watershed Health Assessment

Soil loss reduction

InVEST sediment delivery ratio, HSPF, SAMS, SWAT, PTMAApp, ELINK

Water quality (nutrient retention and sediment reduction)

InVEST nutrient delivery ratio model, HSPF, SAMS, SWAT, PTMAApp, ELINK

Carbon storage and sequestration

InVEST data models, Land change modeling

Water retention and flood storage

Acre feet of storage model

Next Steps

Further development of the methods and data sources associated with the recommended indicators is needed. This process was envisioned as the first phase of a multi-phase effort. The Work Group believes this work is valuable and should be continued to further evaluate and explore the potential application and limitations of existing or emerging methods and data sources that could be used to communicate the aggregate impact of the Outdoor Heritage Fund. In addition, it will be helpful to draw on site-specific case studies to showcase local or regional success stories when communicating the impact of the Outdoor Heritage Fund.

Process convened by:



211 North First Street, Suite 250, Minneapolis, MN 55401
(612) 334-3388

www.environmental-initiative.org