

Pre-Workshop Survey Results Summary

Great Lakes Fisheries and Ecosystem Services Valuation Virtual Workshop April 12 – 14, 2021

Artifacts/Data: 18 anonymous survey responses collected via MS Forms

Survey Duration: Responses were collected for 11 days (March 25th until April 4th 2021)

Q1. In your personal or professional opinion, in what ways are Great Lakes fisheries and aquatic ecosystem services valuable to you and/or society at large? (open ended)

All 18 survey respondents provided feedback to this question. Reviewing the responses, groupings were made by general theme and included the following:

- Food
- Recreation
- Economy
- Water (clean, drinking, safe)
- Navigation
- Socio-cultural
- Human health and well-being

Q2. In your personal or professional opinion, who are the most important audiences for communicating the value of Great Lakes fisheries and aquatic ecosystem services?

All 18 survey respondents provided responses to this question. Overall, results demonstrated that the general public was seen by most respondents as the most important audience, followed by government, which was mentioned in various forms e.g., government in general to specific mention of government bodies or managers. There were also several singular responses which included audiences such as investors, academia, industry and consumers to name a few. The following word cloud depicts by text size the frequency of all the gathered responses.



Q3. Audiences: What are some metrics to effectively communicate the values of Great Lakes fisheries and aquatic ecosystem services to the key audiences (e.g., jobs, water treatment costs, hospital visits)?

17 of the survey respondents provided feedback on this question. The metrics were grouped by general theme and included the following:

- Economic
- Human health and well-being
- Great Lakes Health
- Cultural
- Sustainability
- Individual

Some of the responses provided firm suggestions of metrics such as GDP, jobs, certain types of costs and values etc. whereas some were mentioned more as a category that would be nice to see metrics for e.g., sustainability and resilience. There was mention of the importance to think broadly and more than just economic metrics, with a couple of mentions of the need to consider cultural and non-monetized benefits.

Q4. Research Gaps: In your personal or professional opinion, what are the most critical gaps and/or priority areas of research for understanding and communicating the values of Great Lakes fisheries?

17 of the survey respondents provided feedback on this question. Responses were grouped by theme and included:

- Range of impacts e.g., habitat loss, fluctuating water levels, forest management practices, aquatic invasive species, clean water
- Type of valuations e.g., commercial, subsistence, food provisioning, food supply chains
- Groups considered and included e.g., indigenous knowledge, seafood consumers
- Linkages e.g. between ecological and socio-economic impacts, including human dependency on ecosystems and how ecosystems benefit people
- Human dimensions (including societal views)
- Social well-being
- Participation
- Economic impacts of commercial fishing
- Costs related to recreational stocking and aquaculture

There were also several mentions of gaps that spoke more to challenges faced, which centered around a general lack of needed data, difficulty collecting data and with sharing data and knowledge.

Q5. Research Gaps: In your personal or professional opinion, what are the most critical gaps and/or priority areas of research for understanding and communicating the values of Great Lakes aquatic ecosystems?

17 of the survey respondents provided feedback on this question. Responses were grouped by theme and included:

- Type of valuations e.g., economic, intrinsic, protection versus restoration
- Human ecosystem connections e.g., human impacts and benefits; co-benefits of ecosystems to society; and the need for coupled studies.
- Inventory of ecosystem services
- Guidance and methods
- Social values
- The need to consider the basin holistically
- Environmental damage assessments
- Cost benefit analysis of commercial fisheries

As with fisheries, there were also several mentions of gaps that spoke more to challenges faced which centered around a general lack of needed data, difficulty collecting data and with sharing data and knowledge. Additional challenges noted included the need for standardized approaches and the potential for biases and misconceptions.

Q6. Communication Tools and Approaches: What tools and approaches have you found useful to understand the value of socio-economic research and to communicate the results to key audiences?

17 of the survey respondents provided feedback on this question. The tools and approaches were grouped by general theme and included the following:

- Bibliographies
- Comparisons e.g., methods comparison, comparison with other activities
- Frameworks

- Quantitative approaches e.g., IMPLAN, meta-analyses, contingent valuation, coupled socio-ecological studies
- Qualitative approaches e.g., surveys, focus group, interviews
- Outreach e.g., newsletters; workshops
- Style e.g., share numbers and percentages, benefit of journal publications, mapping

Q7. Annotated Bibliography: As you review the draft annotated bibliography, what additional studies (including current and/or non-peer-reviewed studies) or literature references would you add?

12 additional sources were added to the annotated bibliography. Of these 12 sources, 7 were concerning ecosystem services and the remaining 5 were fisheries focused.

Q8. Closing remarks: Please provide any additional considerations or comments, in advance of the workshop. (open ended)

Closing remarks were received from 13 of the survey respondents. The type of remarks fell into the following general themes:

- Positive sentiment about the workshop – looking forward to the workshop and discussions.
- Workshop outputs – Focused on building consensus and providing actionable items moving forward.
- Methods – consideration of types and expression of need to better understand the methods used.
- Needs – Social science work, more information around the theme of supply chains and equitable access to local seafood.
- Research/ next step suggestions – mention of distinguishing between research vs implementation gaps; expanding the literature review beyond the Great Lakes and comprehensive studies to gather values.
- Workshop suggestions – more networking opportunities!