

Ruffe control plan – next steps



- Great Lakes Panel agreed with USFWS recommendation to archive the plan (Realistic given resource limitation and their lower perceived risk *vs. Grass Carp, Red Swamp Crayfish, Marble Crayfish, Bigheaded Carps, Tench, Sea Lamprey*).
- But priority Ruffe management and research needs remain.

These priorities included:

- Developing control tools that target Ruffe life history vulnerabilities
- Confirming that management practices for ballast and bait pathways are effectively preventing transport and release of Ruffe
- Confirm what constitutes a major range expansion that would warrant response to prevent establishment
- Clarify the risks and determine whether development of Ruffe-specific management tools and future control actions is warranted.
 - Impact studies and Food web models.

Research to clarify impacts of Ruffe invasion

- Impacts of Ruffe are perceived to be less critical than other invasive species the focus of existing response efforts or control programs in the basin
- Concern that this perception may be biased due to a lack of accurate information regarding distribution and impacts within their current range
- Uncertainty surrounding how Ruffe may respond to future or novel environmental conditions as their range expands.
- Goal of research recommendation is to clarify the risks and determine whether development of Ruffe-specific management tools and future control actions is warranted.
 - Impact studies. Current studies of Ruffe within the invaded range to better quantify actual impacts.
 - Food web models. Food web models for at-risk and high priority locations to inform management should a major range expansion occur



Remaining ruffe to do's.



1. Communicate recommendations to relevant fish committees
1. Define high risk locations to inform potential ruffe response actions
 - Major range expansion within the Great Lakes. Assumption is that any expansion outside the Great Lakes basin should be deemed a major range expansion.
 - Identify high risk locations. Identify high risk locations within the Great Lakes basin where Ruffe establishment is highly undesirable due to potential for impacts or potential for spread outside of the basin. These are locations where detection should trigger response actions.



(Possible role for Research or management committees, and Interjurisdictional EDRR group).

Outreach Coordination Committee

- ✓ Committee Charge
 - Completed
- ✓ Interjurisdictional project brainstorming
 - Ongoing
- ✓ Promoting new outreach programs/activities through member updates
 - Ongoing
- ✓ Assisting in priority setting for the 2025-2028 GLP Work Plan

Research Coordination Committee

- ✓ Paper on IAP Research Agenda published
- ✓ Participate in project team for control of est. species project
 - Ongoing
 - Priority animal literature reviews complete with expert feedback
- ✓ Participate in development and review process for standing committee charge
 - Ongoing
- ✓ Discussion and brainstorming for new interjurisdictional projects
 - Ongoing

Management Coordination Committee

- ✓ Committee Charge/ scoping
Committee focus
 - Ongoing
- ✓ Committee name change
 - Initiated and set
- ✓ Leadership update
 - New Committee Vice Chair
- Determining next steps for reducing the risk of diploid grass carp
 - Topic for Dec 18 meeting
- Interjurisdictional project brainstorming
 - Topic for Dec 18 meeting

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1. *Mechanisms for achieving desired objectives*

The Great Lakes Panel suggests the following mechanisms to achieve objectives:

- Support for Ruffe management actions. States and Native Nations are not precluded from implementing Ruffe management, research, and response activities with or without an overarching Ruffe Control Program. USFWS has indicated they would encourage all jurisdictions to continue Ruffe management efforts as resources allow. The Great Lakes Panel supports this effort.
- General aquatic invasive species (AIS) management actions. Management of general pathways for the introduction and spread of AIS by Great Lakes agencies will continue to offer some protection from the spread and introduction of Ruffe.
- Research to clarify impacts of Ruffe invasion. Impacts of Ruffe are perceived to be less critical than impacts from other invasive species that are the focus of existing response efforts or control programs across the basin (e.g., Grass Carp, Red Swamp Crayfish, Marble Crayfish, Bigheaded Carps, Tench, and Sea Lamprey). However, there is concern within the Great Lakes Panel that this perception may be biased due to a lack of accurate information regarding distribution and impacts within their current range and uncertainty surrounding how Ruffe may respond to future or novel environmental conditions as their range expands. There was general agreement by the Great Lakes Panel that research should be supported to clarify the risks and determine whether development of Ruffe-specific management tools and future control actions is warranted. Specifically, we recommend development and support of:
 - Impact studies. Current studies of Ruffe within the invaded range to better quantify actual impacts.
 - Food web models. Food web models for at-risk and high priority locations to inform management decisions should a major range expansion occur.

1. Existing Ruffe Control Program objectives

Great Lakes Panel members felt that many of the existing control program objectives continue to be relevant. In general, improved fisheries management practices could decrease risk and impacts of Ruffe with respect to some current objectives, but research and adaptive management focused specifically on Ruffe is more likely to result in optimal Ruffe management outcomes. The two highest priority current objectives are:

- RCP – Objective 1: Developing control tools that target Ruffe life history vulnerabilities
- RCP – Objective 7: Confirming that management practices for ballast and bait pathways are effectively preventing transport and release of Ruffe

1. New Ruffe management and control objectives

The Great Lakes Panel agreed a new objective was needed to guide appropriate responses to a “major range expansion” of Ruffe. Two subobjectives were identified to alleviate the uncertainty regarding when and how to respond to new range expansions:

- Define major range expansion. Define what constitutes a major range expansion within the Great Lakes. Any expansion outside the Great Lakes basin should be deemed a major range expansion.
- Identify high risk locations. Identify high risk locations within the Great Lakes basin where Ruffe establishment is highly undesirable due to potential for impacts or potential for spread outside of the basin. These are locations where detection should trigger response actions.