

Terms of Reference

National Risk Assessment Methods Workshop

June 21-23, 2006 Burlington, Ontario

Chairperson: Nicholas Mandrak; Facilitator: Peter Chapman

Background

Many of the science issues facing Fisheries and Oceans Canada (DFO) are associated with significant knowledge gaps and uncertainties. This, however, does not relieve the department of the need to make decisions on these issues. Under these conditions, decisions must balance the risks and uncertainties while ensuring the sustainability of Canada's aquatic ecosystems. Risk assessment is the process of estimating the risk presented by a hazard, in either qualitative or quantitative terms, to aquatic ecosystems, fisheries resources, fish habitat, and aquaculture that DFO is mandated to manage and protect. DFO currently faces hazards from aquatic invasive species (AIS), climate change, and fish habitat alteration, with the potential for any or all of these hazards to impact species at risk (SAR), biodiversity, aquaculture, or fisheries resources. AIS are now considered one of the lead threats to native biodiversity (Sala *et al.* 2000, Dextrase and Mandrak 2006).

The *National Code on Introductions and Transfers of Aquatic Organisms* identifies risk assessment as central to the process of assessing proposals to move aquatic organisms. The *Canadian Action Plan to Address the Threat of Aquatic Invasive Species* identifies risk assessment as one of the implementation strategies to deal with the threat of AIS. However, DFO lacks the widespread expertise to develop the risk assessment tools and methods needed to provide science advice with a consistent national approach. By forming the Centre of Expertise for Aquatic Risk Assessment (CEARA), DFO can take the first steps toward developing the necessary expertise in risk assessment across the country, building on expertise developed in Burlington at the Great Lakes Laboratory for Fisheries and Aquatic Sciences, and providing a concentration of experts necessary to stimulate the spread of expertise to other regions. To this end, one of the mandates and objectives of CEARA is to conduct a national workshop to educate DFO Science staff on the risk assessment process.

Objectives

The objectives for the workshop are:

1. To educate DFO Science staff on the risk assessment process and to discuss a variety of risk assessment methods used by various governmental agencies.

2. To give all participants the opportunity to critically review the risk assessment methods used by various agencies towards providing input in the future development of a scientifically defensible national framework for conducting biological risk assessments of aquatic invasive species.

The workshop will generate a proceedings report summarizing the presentations given and the deliberations of the workshop attendees through break-out sessions. This will be published as part of the CSAS Proceedings Series. Research documents are also possible to document the relevant technical details submitted at the meeting.

Using information provided by this workshop, the CEARA Directorate will work towards the development of a draft national framework for conducting risk assessments of aquatic invasive species. This framework will have to be peer-reviewed at a later step following the CSAS national process.

Location and Date

Travelodge, Burlington on the Lake, Burlington, Ontario, June 21 (9:00-5:00), June 22 (9:00-5:00), and June 23 (8:30-11:30am).

Participants

Participants will include the CEARA Directorate and its National Executive Committee, invited speakers, DFO Science staff and other individuals with relevant expertise in assessing the biological risk of aquatic invasive species.

Timetable

- April-June, 2006 – Finalize workshop details and speakers' presentations
- June 12 – Send materials to workshop participants.
- June 21-23 – Conduct workshop.
- July – Send draft proceedings of the workshop to participants for review and comments.
- September – finalize workshop proceedings, submit to CSAS.

References Cited

Dextrase, A. and N.E. Mandrak. 2006. Impacts of invasive alien species on freshwater fauna at risk in Canada. *Biological Invasions*. 8:13-24.

Sala, O. and 18 others. 2000. Biodiversity-global diversity scenarios for the year 2100. *Science*. 287: 1770-1774.