

**Rhonda Whiting**  
Chair  
Montana

**Bruce A. Measure**  
Montana

**James A. Yost**  
Idaho

**W. Bill Booth**  
Idaho



**Bill Bradbury**  
Vice-Chair  
Oregon

**Henry Lorenzen**  
Oregon

**Tom Karier**  
Washington

**Phil Rockefeller**  
Washington

January 8, 2013

## MEMORANDUM

**TO:** Fish and Wildlife Committee Members

**FROM:** Tony Grover, Fish and Wildlife Division Director

**SUBJECT:** Decision to support approval of Independent Economic Analysis Board Task 201: Follow-up Study for Economic Risk Associated with the Potential Establishment of Zebra and Quagga Mussel Populations and Allocation of Prevention Costs

The invasive zebra and quagga mussels (*Dreissena* species) pose a substantial threat to the Columbia River Basin. The IEAB developed a report that detailed the available information regarding the risks and potential costs of invasive mussel colonization for the Columbia River Basin.<sup>1</sup> Since the 2010 report, additional research has been accomplished, and an update of the findings in the 2010 report may be justified. There have been initiatives to expand state efforts to prevent invasive species introductions into the Columbia basin, and initiatives to fully integrate efforts at the local, State and federal level, and among federal agencies, have been proposed.

This task will include three components: 1) update, expand, review and summarize current information about potential costs associated with mussel damages; 2) identify prevention, containment and control techniques and their costs; and 3) estimate a range of prevention cost shares for defined economic groups. The scope of this effort will be expanded to include the Columbia River basin in British Columbia, Canada.

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<sup>1</sup> IEAB 2010. Economic Risk Associated with the Potential Establishment of Zebra and Quagga Mussels in the Columbia River Basin. Independent Economic Analysis Board . Task Number 159. Document IEAB 2010-1. July 14.

## Independent Economic Analysis Board

### Task 201

#### Follow-up Study for Economic Risk Associated with the Potential Establishment of Zebra and Quagga Mussel Populations and Allocation of Prevention Costs

December 2012

#### BACKGROUND

The invasive zebra and quagga mussels (*Dreissena* species) pose a substantial threat to the Columbia River Basin. The IEAB developed a report that detailed the available information regarding the risks and potential costs of invasive mussel colonization for the Columbia River Basin.<sup>1</sup> Since the 2010 report, additional research has been accomplished, and an update of the findings in the 2010 report may be justified. There have been initiatives to expand state efforts to prevent invasive species introductions into the Columbia basin, and initiatives to fully integrate efforts at the local, State and federal level, and among federal agencies, have been proposed.

#### STATEMENT OF WORK

This task will include three components: 1) update, expand, review and summarize current information about potential costs associated with mussel damages; 2) identify prevention, containment and control techniques and their costs; and 3) estimate a range of prevention cost shares for defined economic groups. The scope of this effort will be expanded to include the Columbia River basin in British Columbia, Canada.

First, the current state of the science regarding potential effects and scope of Dreissenid mussel invasion will be reviewed. The IEAB will review recent information about the Great Lakes and Lake Mead (Colorado River) experiences with quagga mussels.

Second, potential economic risk will be characterized as a range of potential costs for these categories:

- FCRPS project facilities costs
- Columbia basin ecosystem services and fishery damage costs
- Municipal water supply systems
- Irrigation water supply systems
- Other non-federal utilities, including the mid-Columbia PUDs, Idaho Power, Avista, BC Hydro, and Seattle Power and Light
- Industrial water users, and

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<sup>1</sup> IEAB 2010. Economic Risk Associated with the Potential Establishment of Zebra and Quagga Mussels in the Columbia River Basin. Independent Economic Analysis Board . Task Number 159. Document IEAB 2010-1. July 14.

- Boaters and recreationists

Third, the IEAB will assist the Council, PNWER and others to develop cost estimates for a range of potential prevention approaches, including expanded boat inspections, education, initiatives involving States that have contaminated waters, new legislation to increase penalties for transporting uninspected boats across state lines, and expanded enforcement of the Lacey Act.

Fourth, based on the cost estimates, the IEAB will assist the Council to identify and implement potential approaches to estimate a range of prevention cost shares for defined economic groups. The cost shares will be based primarily on shares of potential economic damages and costs caused by mussels.

Finally, with the ISAB, potential ecosystem and fisheries impacts will be scoped in more detail.

The IEAB will work closely with Tony Grover and Jim Ruff, Director and staff member of the Fish and Wildlife Division, respectively. A number of other parties will need to be consulted to assist with this updated economic analysis.

## **DELIVERABLES**

The results of the investigation will be documented in a report. The report will highlight updated information, the range of potential infestation costs by sector, new and revised prevention cost estimates, and potential economic costs of ecosystem and fishery impacts developed with the ISRP.

## **LEVEL OF EFFORT**

### Budget

Labor: 150 hours IEAB members time @ \$90/hour	\$13,500
Total	\$13,500