

**Summary Minutes**  
**U.S. Environmental Protection Agency**  
**Science Advisory Board**  
**Great Lakes Restoration Initiative Action Plan Review Panel**

**Panel Members:** See Roster – Attachment A

**Date and Time:** Friday, September 16, 2011, 1:00-4:30 PM (Eastern Time)

**Location:** Meeting conducted via teleconference

**Purpose:** To discuss substantive comments on the SAB report, *Draft (8-29-2011) Review of Great Lakes Restoration Initiative Action Plan*

**Attendees:**

Panel Chair: Dr. James Sanders

Members:	Dr. Joel Baker	Dr. James Oris
	Dr. Tracy Collier	Dr. David Sample
	Dr. Robert Diaz	Dr. Donald Scavia
	Dr. Kirk Havens	Dr. Paul Sibley
	Dr. Joseph Koonce	Dr. Ron Thom
	Dr. Thomas Leschine	Dr. Judith Weis

SAB Staff Office: Mr. Thomas Carpenter, Designated Federal Officer

Others Present:

Mr. Cameron Davis, US EPA, Senior  
Advisor to the Administrator

Mr. Paul Horvatin, US EPA, Great Lakes  
National Program Office

Mr. Todd Nettesheim, GLNPO

Mr. David Cowgill, GLNPO

Mr. Michael Russ, GLNPO

Mr. Edwin Smith, GLNPO

Ms. Karen Rodriguez, GLNPO

Mr. Dan O'Riordan, GLNPO

Ms. Judy Beck, GLNPO

Ms. Marcia Damato, GLNPO

Ms. Rita Cestaric, GLNPO

Dr. Jean Rhodes, Promerus, LLC

Judy Schofield, CSC

Kate Hagemann, Product Stewardship  
Institute

Dr. Janet R. Keough, USEPA, Office of  
Research Development

Dr. Charles H. Perry, U.S. Forest Service

Mr. Dale K. Phenicie, Environmental  
Affairs Consulting

Ms. Amy McGovern, U.S. Fish & Wildlife  
Service

Erica Martinson, Inside EPA's Water Policy  
Report

Ms. Linda M. Wilson, New York State  
Office of the Attorney General

Ms. Rebecca Held, National Oceanic  
Atmospheric Administration

Martin Lowenfish, USDA Natural  
Resources Conservation Service

Jerrilyn L Thompson, University of  
Minnesota

Dr. Russell G. Kreis, Jr., EPA ORD

**Meeting Materials:** All meeting materials are available on the SAB Web site at:  
<http://yosemite.epa.gov/sab/sabproduct.nsf/MeetingCal/7FBB08940DC52B86852578E700737610?OpenDocument>

### **Convene Meeting**

The meeting was announced in the Federal Register<sup>1</sup> and proceeded according to the meeting agenda, as revised. Mr. Thomas Carpenter, Designated Federal Officer (DFO) for the SAB Great Lake Restoration Initiative Action Plan Review Panel convened the meeting at 1:00 p.m. on September 16, 2011. He stated that the EPA Science Advisory Board (SAB) was a chartered federal advisory committee and reviewed Federal Advisory Committee Act (FACA) requirements. He noted the Panel members are in compliance with ethics requirements. Mr. Carpenter stated that as DFO, he would be present during the Panel's business and deliberations. He stated that summary minutes of the meeting would be prepared and certified by the Chair. He stated that for this review, the SAB Staff Office had convened an ad-hoc panel with the invited experts<sup>2</sup>.

### **Introduction of Members, Purpose of Meeting, and Review of the Agenda**

Dr. James Sanders, Chair of the SAB Great Lake Restoration Initiative Action Plan Review Panel, hereafter referred to as the Panel, provided introductory remarks.

Dr. Sanders stated that the teleconference was convened to review the *Draft Review of the Great Lakes Restoration Initiative Action Plan (August 29, 2011)*<sup>3</sup>, (hereafter referred to as the Advisory Report) and provided a brief overview. The organization of the draft advisory report directly responds to the Charge<sup>4</sup> to the SAB.

Dr. Sanders reviewed the meeting agenda<sup>5</sup> and provided an overview of how the Panel would develop a consensus advisory report providing advice in response to the charge questions. He noted that after the Panel discussed the report a new draft, reflecting the discussions, would be distributed to the Panel to review and provide consensus. The Chartered SAB would conduct a Quality Review of the Advisory Report by December 2011. Following that review, the SAB would approve the report, approve with minor changes, or ask the Panel to revise the report based on the Quality Review.

Dr. Sanders noted that EPA would provide some brief remarks on the Draft Advisory Report and then lead reviewers and the Panel members would discuss the specific sections and their comments on the report.

### **Remarks from EPA**

Mr. Cameron Davis, Senior Advisor to the Administrator, provided a brief statement to the Panel<sup>6</sup>. He outlined recommendations in the draft Advisory Report that the GLRI was already initiating, provided some clarifications to the Charge to the SAB and requested that the Panel amplify or further explain specific recommendations to help the Agency better understand them. EPA hoped the Panel could address these issues in the next draft of the report.

- EPA would like the Panel to clarify the composition and function of the proposed "standing science panel."

- EPA recognizes that a science plan could serve as a useful adaptive management framework for evaluating the effects of restoration projects and as a means to focus on the synthesis and integration of the restoration results of funded activities. Does the Panel have any specific recommendations on a limited number of appropriate ecosystem integrative measures?
- Can the Panel clarify what it means by an accountability system that provides transparency?

### **Public Comments**

Mr. Dale Phenecie provided a summary of his written statement<sup>7</sup> on behalf of the Council of Great Lakes Industries. The Council agreed with the recommendations for a science plan, science panel, increased transparency and accountability and the identification of stressors. The Council sought clarification and further discussion on the recommendations for restoration of habitats, wildlife populations, and accounting for human activities and sustainable resource utilization. Mr. Phenecie expressed concern on the use of approaches to address contaminants of emerging concern (Muir and Howard, Brooks and Ankley 2006) noting that these approaches were the subject of peer review and the peer review should be acknowledged.

### **Discussion of Questions 1, 2 and 3: Framework, Scientific Consistency, Accountability Systems and Clarity of the Action Plan**

Dr. Scavia led the discussion and provided an overview of this section. Members of the Panel noted that the GLRI is a large restoration program with almost \$700 million invested and hope that the program continues to be sustainable showing progress at all scales. Members identified development and implementation of adaptive management, a science plan, and robust monitoring as important elements the GLRI should consider to better achieve the goals of the Action Plan. Member also noted the GLRI may have difficulty applying an integrated approach across the focus areas and should consider shifting toward a lake management approach to avoid the silos that may result from the stressor-based approach in the focus areas of the Action Plan. The Panel agreed that Lake Management Plans are a good launching point for the GLRI to consider a more integrated approach to restoration.

Panel members noted that the Great Lakes Accountability System (GLAS) currently reports funding and progress at the project level for the GLRI. Members discussed the need for an integrated accountability system to provide greater transparency. To provide that transparency, the accountability system should provide information to evaluate progress across focus areas as well as tie metrics and indicators to individual project results to show progress.

The Panel discussed developing a science plan and science panel for the GLRI. Members noted that there are several such panels and plans to serve as models for the GLRI. The Puget Sound and Chesapeake Bay regions provide large-scale restoration and management examples. Members noted that the Lake Tahoe area, although a smaller scale, should also be evaluated by the GLRI to identify elements appropriate for the GLRI. Members recognized that the Agency requested more detail about the function and composition of a panel and noted that the level of effort to develop an approach requires more detailed information than provided in the Action Plan and discussions conducted by the Panel. The GLRI will have unique requirements for

elements such as the scope, advisory or review role, science panel composition and membership. Members noted that each of these elements and the degree of independence from the GLRI Interagency Task Force (IATF) will depend on the issues and subsequent decisions a science panel and science plan will be asked to address by the IATF. Members agreed to update this section of the report based on the discussion and clarify the possible elements and uses of a science plan and science panel.

### **Discussion of Toxic Substances and Areas of Concerns**

Dr. Joel Baker led the discussion and provided an overview of this section. Members agreed that the Advisory Report captured the Panel discussions. They noted that there is a need to identify more biologically based indicators for this focus area and language to that effect should be added to the report. Members also noted that there was little discussion of international cooperation in the Action Plan and future versions should address US Canadian efforts.

Based on the discussion, Panel members identified minor changes to this section of the Advisory Report for incorporation.

### **Discussion of Invasive Species**

Dr. Weis led the discussion and provided an overview of this section. Members agreed that the Panel's July discussions were captured in this draft. Members noted that the discussion of metrics to measure progress was difficult to link to actions and seemed disjointed. Members also agreed that climate change should be discussed in this section of the report and amplified in the next draft. They identified the changing habitat, shifting ranges of invasive and indigenous species, water quality and water quantity as items to include in the next draft.

Panel members agreed to add language to clarify the measures of progress and amplify the climate change section. They also identified minor changes to this section of the draft report for incorporation.

### **Discussion of Nearshore Health and Nonpoint Source Pollution**

Dr. Diaz led the discussion of and provided an overview of this section. Members agreed that the Panel's previous discussions were captured in this draft of the review. Members pointed out that there is confusion in this section on pollutants, stressors, and processes that are being discussed. For example, soil erosion, pollutants, soluble reactive phosphorus, *Cladophora* biomass are all identified as primary stressors that create a mixture of causes and ecological effects. Several members noted that soil erosion attributes to soluble reactive phosphorus, which is a pollutant that in turn is a cause of increased *Cladophora* biomass. The section should be clarified to identify the pollutants and stressors that may create ecological effects.

Members identified minor editorial changes to this section of the report. They noted that the discussion of adaptive management, climate change, and the stressor approach discussions support the Panel's responses to charge questions 1 and 3 and should be reviewed for continuity and clarity.

### **Discussion of Habitat, Wildlife Protection and Restorations**

Dr. Thom led the discussion and provided an overview of the section. Members of the Panel agreed that this section captures most of the Panel's July discussion. Members agreed with the Advisory Report's discussion of resiliency and ecological elements that should be considered when restoring habitat and protecting wildlife. Members note that this section has identified and provides examples for several key elements that are discussed in other sections (i.e., developing a science plan, consideration of climate change) and should be reviewed for consistency.

Members also discussed and agreed that the list of elements to consider in developing habitat restoration projects provided in this section be summarized and the bulleted lists moved to an appendix referenced in the body of the report. Other minor changes were identified for incorporation into the next draft.

### **Discussion of Accountability, Education, Monitoring, Evaluation, Communication and Partnerships**

Dr. Jim Oris led the discussion and provided an overview of the section. Members noted that there is overlap between the recommendations provided in response to charge questions 1, 2 and 3 and those recommendation included in this section. Members discussed the need to provide a clear recommendation of how EPA and the GLRI should collect monitoring data, conduct evaluations at the project, focus area, and across focus areas, to implement an adaptive management framework. Members agreed to compare language from these sections and ensure consistent recommendations as appropriate.

Members discussed the use of NSF peer review guidelines cited in this section. They noted that they are targeted toward educational projects and may be applicable to all GLRI projects. Members agreed to expand the discussion of these elements to all GLRI projects. Other minor changes were identified for incorporation into the next draft.

### **Discussion of Executive Summary and the Letter to the Administrator**

Members agreed that the key issues and recommendations were captured in the Executive Summary and the Letter to the Administrator. However, some members felt that additional recommendations should be included. The Chair and DFO suggested that writing teams identify additional issues and recommendations from their respective sections for inclusion for the next draft. The Chair noted that both the letter to the Administrator and Executive Summary were longer than usually found in SAB reviews and all the Panel's recommendation are in the body of the report.

### **Discussion of Next Steps**

Dr. Sanders reviewed the points that Panel members identified as key issues and asked the Panel for any additional thoughts. Panel members agreed that the key issues were identified and did not identify additional issues. Dr. Sanders asked the DFO to summarize the next step for Panel members to develop the Advisory Report

Mr. Carpenter stated that writing teams would edit sections of the draft Advisory Report based on comments provided, discussed and agreed upon by the Panel. The DFO and Chair would develop a new version of the report and send it to the Panel by October 7. The Panel was

requested to review the draft Advisory Report and provide their consensus on the Advisory Report to the DFO by October 13. A Quality Review by the Chartered SAB will be scheduled for late November/early December. Dr. Sanders asked the Panel for any questions or clarifications. Hearing no request from the Panel, he then called upon the DFO to adjourn the meeting

The Designated Federal Officer adjourned the meeting at 3:15 p.m.

Respectfully Submitted:

Certified as Accurate:

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Mr. Thomas Carpenter  
SAB DFO

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Dr. James Sanders  
Chair

NOTE AND DISCLAIMER: The minutes of this public meeting reflect diverse ideas and suggestions offered by committee members during the course of deliberations within the meeting. Such ideas, suggestions, and deliberations do not necessarily reflect definitive consensus advice from the Panel members. The reader is cautioned not to rely on the minutes to represent final, approved, consensus advice and recommendations offered to the Agency. Such advice and recommendations may be found in the final advisories, commentaries, letters, or reports prepared and transmitted to the EPA Administrator following the public meetings.

#### **Materials Cited**

The following meeting materials are available on the SAB Web site, <http://www.epa.gov/sab>, at the [Great Lakes Restoration Initiative Action Plan FY2010 - FY2014 and Implementation Strategy webpage](#) .

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- <sup>1</sup> Federal Register Notice Announcing the Meeting (76 FR 51364 - 51365)
  - <sup>2</sup> Determination Memorandum and Biosketches of Candidates
  - <sup>3</sup> Draft (8-29-2011) Review of the Great Lakes Restoration Initiative Action Plan
  - <sup>4</sup> Charge to the SAB
  - <sup>5</sup> Meeting Agenda
  - <sup>6</sup> Agency Comment from Cameron Davis, Senior Advisor to the Administrator
  - <sup>7</sup> Public Comment from Dale Phenicie, Council of Great Lakes Industries