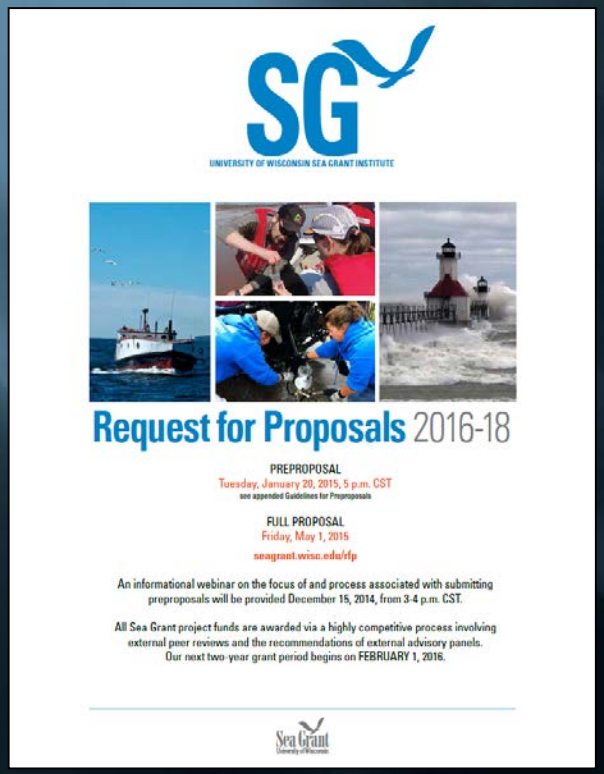
Wisconsin Sea Grant

Welcome to our informational webinar for prospective investigators

December 15, 2014



Instructions here:

-Webinar will be recorded for future reference – seagrant.wisc.edu/rfp
-You are encouraged to use dial-in conference number
Please use your Attendee ID#
-Please make sure you mute your telephone/microphone
-Use the Chat window to ask questions
Questions will be answered in the order they are received
-Please email future questions to jennifer.hauxwell@aqua.wisc.edu

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Agenda

1. Welcome, overview (5-10 min)	Jim Hurley
2. Research priorities (10 min)	Jen Hauxwell
3. Integrated Assessments (10 min)	David Hart
4. Education proposals (5 min)	Kathy Schmitt Kline
5. iPROPOSE (10 min)	Rich Dellinger
6. Questions (20 min)	All

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Introduction

- Instructions for WebEx
- Why are we here?
- What's new for 2016-18?
  - Fellows
  - Focused RFP
- Preproposal and proposal review process

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A Side Issue

SG

UNIVERSITY OF WISCONSIN SEA GRANT INSTITUTE

CONTACT
James Hurley, Director
hurley@aqua.wisc.edu
608-262-0905

Find a Fellowship

Enriching experiences, exploration of marine science in real-world settings, plus mentoring and stipends—find a fellowship that fits your interests. Wisconsin Sea Grant is pleased to highlight these 2015 and 2016 opportunities.

Dean John A. Knauss Marine Policy Fellowship
This competitive program provides a one-year internship either on Capitol Hill with a lawmaker or a Congressional committee or with a federal agency in the Washington, D.C. area. For 2016 placements, apply by 5 p.m. CST Friday, Feb. 13, 2015 .

National Marine Fisheries Service/Sea Grant Joint Graduate Fellowship Program
Population and Ecosystem Dynamics and Marine Resource Economics. This fellowship is open to U.S. citizen Ph.D. candidates who wish to pursue work in population dynamics and marine resources economics in a summer experience under the supervision of the National Marine Fisheries Service. The FY 15 opportunity deadline is Jan. 29, 2015.

NOAA Coastal Management Fellowship
This two-year fellowship provides on-the-job education and training opportunities in coastal resource management and policy for postgraduate students. At the same time, it provides project assistance to state coastal zone management programs. Apply by 4 p.m. Friday, Jan. 23, 2015.

Great Lakes Commission-Sea Grant Fellowship
The Great Lakes Commission-Sea Grant Fellow works with members of the Great Lakes' science, policy and information/education communities to advance the environmental quality and sustainable economic development goals of the Great Lakes states. Applications for the 2014 opportunity are due 5 p.m. CST Feb. 27, 2015.

Further details, including a podcast, can be found at the "students" tab at **seagrant.wisc.edu.**

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Please encourage your students to consider these fellowships

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2016-18 Ominbus

- Second 2-year RFP in 4-year Strategic Plan *and* Evaluation Period
- RFP discussed at length in recent Advisory Council meetings to address all aspects of strategic plan
- Result - More focused RFP for second two-year period
- FY16 budget is unknown, but we anticipate at least $900K available for new, first-year starts in February 2016

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Important for 2016-18

- At the full proposal stage, outreach/education components will be *required*
- Students on Sea Grant projects will be incorporated into Sea Grant Fellows programming
- National Sea Grant College Program will continue to run NOAA Aquaculture competition. In addition to WI Sea Grant RFP, FY15 should be extension, FY16 research.

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Review Process

- Preproposals due January 20, 2015
- Preproposals reviewed by external expert panel(s) in February, 2015. Determines likelihood of success as full proposal to WI Sea Grant.
- Full proposals due May 1, 2015
- Every proposal receives at least three external reviews
- Peer review panel(s) in late summer, 2015. Advisory Council attends to add advice on relevancy

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Review Process

- Ranking from proposal panels determines final funding priorities
- Funding begins on February 1, 2016
- Some proposals could start in Year 2, depending upon availability of funding, “rebates” from NSGO

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Wisconsin Sea Grant 2016-18 RFP

Base research focus areas (capped at $120k/year)**:**

- Healthy Great Lakes Coastal Ecosystems
- Sustainable Fisheries and Aquaculture in Great Lakes Region
- Resilient Great Lakes Communities and Economies

Priority focus area (capped at $25k/year)**:**

- Environmental Literacy and Workforce Development (Kathy)

Three additional special requests:

- Minnesota-Wisconsin joint request – capped at $120k/year (Wisconsin budget)
- Illinois/Indiana-Wisconsin joint request – capped at $100k/year (Wisconsin budget)
- Integrated Assessments (David) - capped at $150k/year

"UW Sea Grant supports scientific research, education and outreach to foster the wise use, conservation and sustainable development of Great Lakes and coastal resources."

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Base Research Focus Areas

See description in RFP

See Wisconsin Sea Grant College Program 2014-17 Strategic Plan

-Detailed list of research priorities for each focus area

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Healthy Coastal Ecosystems

HCE Research Priorities

- Develop and calibrate new standards, measures and indicators of Great Lakes ecosystem sustainability.
- Identify critical uncertainties that impede progress toward achieving sustainability of Great Lakes ecosystems and the goods and services they provide.
- Identify biological, physical and chemical factors that threaten the sustainability of Great Lakes ecosystems and the services they provide.
- Develop data, models, and policy information that support ecosystem-based planning, decision-making and management approaches.
- Develop baseline data, standards, methodologies and indicators to assess the health of ecosystems and watersheds.
- Evaluate ecosystem-based management approaches for planning.
- Develop technologies and approaches to assess degraded ecosystems and solutions to improve ecosystem health.
- Develop an environmentally friendly and effective live well and bilge treatment that is easy to use and dispense to prevent aquatic invasive species spread by anglers and boaters.

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Sustainable Fisheries and Aquaculture

SFA Research Priorities

- Develop and improve practices and techniques for aquaculture, including aquaponics.
- Enhance the nutritional value, shelf life, sustainability and cost of fish food
- Develop methods and enhance the ability to diagnose and prevent disease and pathogens.
- Develop new approaches to fish product handling, packaging and marketing.
- Develop innovative technologies and approaches to wild Great Lakes fish harvest, including those that reduce by-catch or improve fuel efficiency.
- Develop methods to reduce the environmental impact of aquaculture and wild fish harvesting operations.
- Enhance the fuel efficiency of Great Lakes fishing vessels.
- Identify new, native species for aquaculture.
- Evaluate the benefits and risks of consuming Wisconsin-sourced wild, commercially caught and farm-raised fish for various populations.

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Resilient Communities and Economies

RCE Research Priorities

- Document the socioeconomic values of open-water and coastal tourism and related businesses and other water-dependent industries.
- Conduct valuation of Wisconsin's Great Lakes natural coastal resources.
- Develop or enhance community planning and visualization tools that demonstrate the benefits, risks and consequences of urbanization on the coastal environment.
- Assess the economic and social well-being of Wisconsin coastal communities to document improvements in quality of life related to implementation of coastal development plans and other mitigation strategies.
- Assess the impacts of human activities on Great Lakes watersheds, water quality and supply.
- Evaluate the impacts of increased climate variability and change, including intensity and frequency of rainfall and storm events on coastal community infrastructure.
- Develop visualization tools so that communities can understand the consequences of alternative development and stormwater mitigation scenarios.
- Develop the ability and means to predict coastal hazards and warn residents and recreationists of the risk.

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Joint Request with Minnesota Sea Grant

Priority research areas:

- Environmental, economic, and social implications of crude oil transport near or on the Great Lakes

  https://www.glc.org/oiltransport/comments.php

- Determining and communicating the value (economic and social) of cleaning up and restoring contaminated/ degraded waters and shorelines

  → St. Louis River Estuary as a case study

  (>$420 million invested in AOC cleanup since 1978)

- Research that increases our understanding of the St. Louis River Estuary, including research on social and economic topics as well as the other sciences

Valerie Brady, Minnesota Sea Grant, vbrady@umn.edu, (218) 726-8714

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Joint Request with Illinois-Indiana Sea Grant

Goals:

- Increase resilience of Lake Michigan coastal communities to severe weather events
- Advance risk-based weather forecasts and communications for the Great Lakes region

Specifically:

- Incorporate iterative learning from impacts and outcomes of past weather events (including those outside of the Great Lakes basin) and subsequent adaptation strategies
- Couple local data on infrastructure vulnerability with event-based weather forecasting

Carolyn Foley, Illinois-Indiana Sea Grant, cfoley@purdue.edu

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Joint Calls - Guidelines for Preproposals

- Require a collaboration between a Wisconsin researcher and joint call partner (Minnesota or Illinois-Indiana researcher)
- Instructions for preproposals are slightly different between the 2 joint calls
- For both joint calls, please distinguish in the budget entry, what portion of the budget is for the Wisconsin-based researcher and what portion is for their other state collaborator

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Integrated Assessments

- What is Integrated Assessment?
- How did the special request for IA come about?
- Tell me more about the two IA topics in the special request
- What do I need to know about developing an IA preproposal?

"Integrated Assessment is a collective, deliberative process by which experts review, analyze, and synthesize scientific knowledge in response to user's information needs relevant to key questions, uncertainties or decisions." (NRC 2007)

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What is Integrated Assessment?

Integrated Assessment emerged as a unique methodology in the 1980s. It addresses "wicked problems" where "facts are uncertain, values in conflict, stakes are high, decisions are urgent, and an extended peer community is required for the resolution of the relevant issues"(Gough et al. 1998)

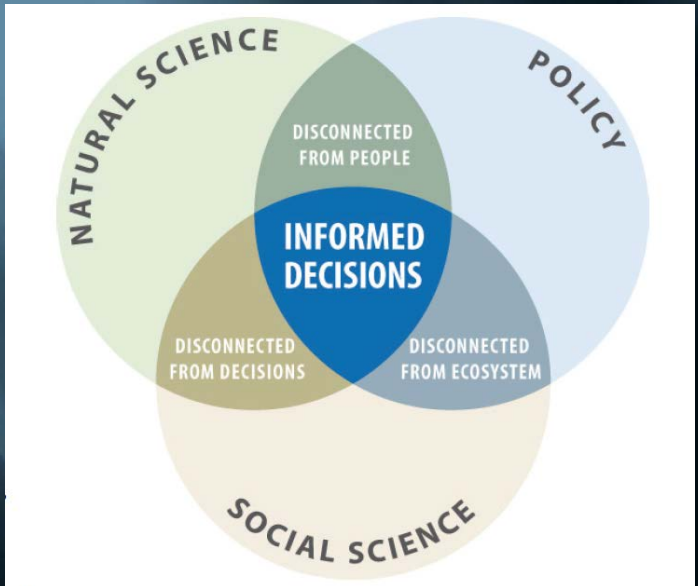
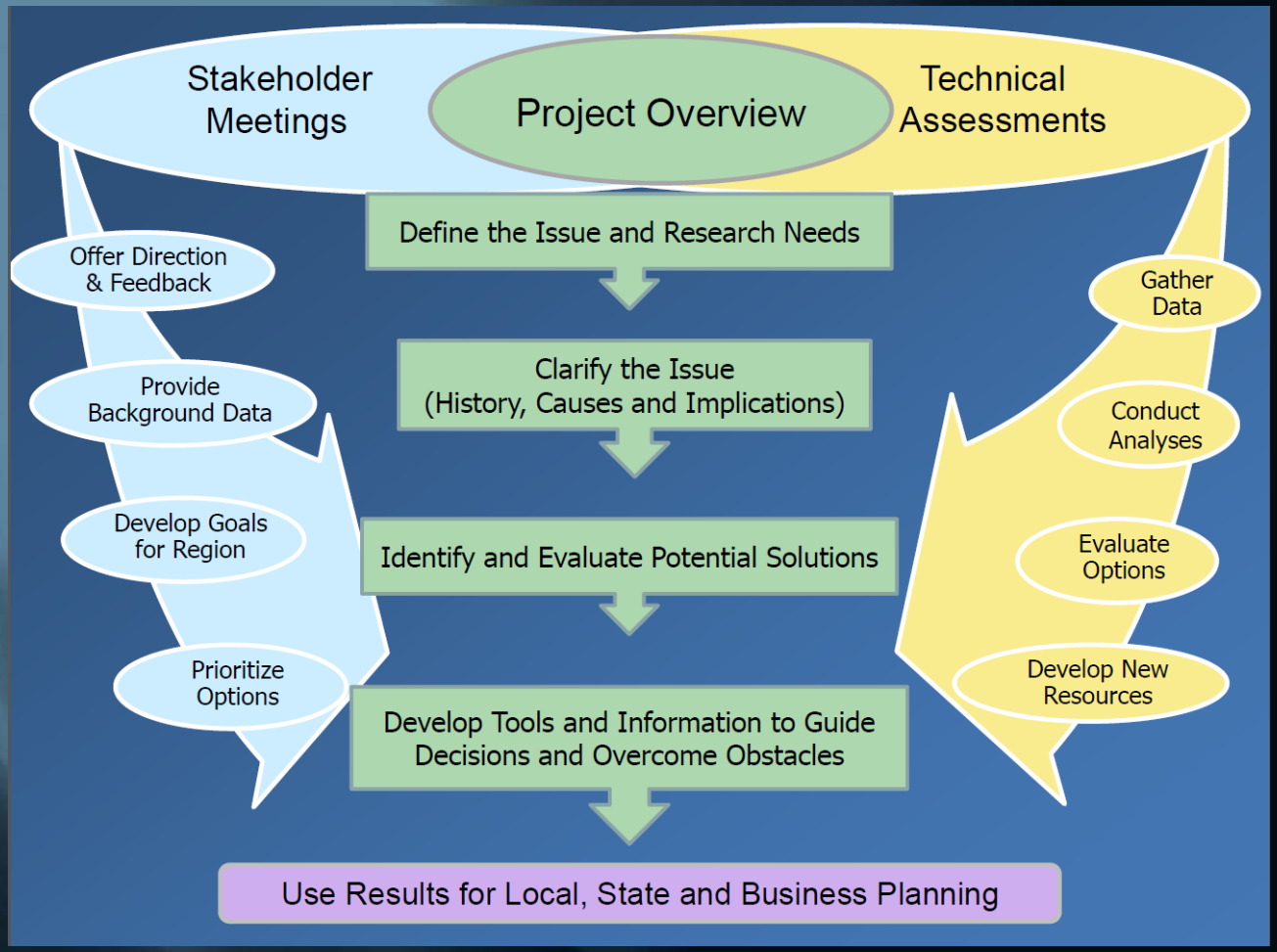


Figure 1. Integrated Assessment brings together knowledge of ecosystems, people and policy to improve decision making.

- Multi-disciplinary – at core, requires natural scientists, social scientists and policy analysts
- Collaborative – connects researchers with resource managers, policy makers and stakeholders
- Different than traditional Sea Grant funded research – limited data collection…
- Develops policy alternatives for the sponsor, NOT prescriptions or recommendations
- Sea Grant extension plays an important facilitation role

What is Integrated Assessment?



- Read the IA process and benefits guides developed by the University of Michigan
- Review a final report for one of the many integrated assessments completed by Michigan Sea Grant (e.g. NE Michigan or Fish Consumption Adv.)

Tackling Wicked Problems Through Integrated Assessment: A Guide for Decision Makers, Project Leaders and Scientists. 2009. University of Michigan.

How did the special request for IA come about?

- UWSG Advisory Council discussion of more holistic/integrated approaches to addressing place-based “wicked problems”
- Dialog with Univ. of Michigan Graham Institute & Michigan Sea Grant staff about their use of IA
- UW Sea Grant staff retreat in August to identify potential IA topics
- Briefings with key partners (aka “sponsors”) of the highest ranked IA topics

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IA Topics

1. **Total Maximum Daily Load (TMDL) Implementation in the Agriculture Sector in the Lower Fox River Watershed**
   - Key partner: Wisconsin DNR
   - TMDL for LFRW was developed in 2012, but implementation remains a challenge
   - Possible policies and tools: incentive-based policies, new business/market creation, farmer-led community organizations, new technology,…
   - Some risk/high reward topic

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IA Topics

2. **Climate Adaptation in a Great Lakes Coastal Community**
   - Leverage WICCI and NCA research
     - Temps, ice cover, wind speeds, rainstorms, water levels,…
     - Vulnerable port infrastructure, outdated stormwater systems, fragile coastal ecosystems,…
   - Identify a coastal community and secure a statement of support from a local government official who would engage in the IA and would be receptive to receiving policy options for climate adaptation
   - The community could be small or big

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What should I know for developing an IA preproposal?

- Additional preproposal elements for IA topic
  - 1) IA topic info, 2) project team bios, 3) key stakeholders, 4) summary of existing data and studies
  - These elements should be entered in the "Applications" section of iPropose
- Preproposal Selection Criteria
  - Understanding of context and underlying issues
  - Project approach
  - Preliminary identification of relevant data sources
  - Competency of the proposing team

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What should I know for developing an IA preproposal?

- IA is a new approach for UW Sea Grant
  - We will be learning as we go along. The focus, and thus the design, of each IA is unique. The IA process is best seen as a flexible framework.
- At most, one proposal for each topic would be funded
- The higher level of funding available for an IA proposal ($150K/yr) acknowledges the additional effort of assembling a multidisciplinary team

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Environmental Literacy and Workforce Development (ELWD) in the Great Lakes Region

ELWD Priorities

- Work with education partners to develop K-12 curricula that address the Great Lakes Literacy Principles and adhere to science and environmental education standards approved by the Wisconsin Department of Public Instruction.
- Engage Sea Grant-supported graduate students, scientists and informal educators to help develop educational demonstrations for Great Lakes issues and topics to promote Great Lakes literacy.
- Engage the public and lifelong learners through a Great Lakes seminar series that draws upon the expertise of Sea Grant and agency researchers.
- Assess the applicability of new and traditional media tools—as well as innovative learning tools such as virtual globes or Augmented Reality Interactive Storytelling (ARIS) platforms—to reach relevant audiences, and apply those tools to build marine-science literacy.
- Engage and train graduate and undergraduate students about Great Lakes coastal resources.

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What should I know for developing an ELWD preproposal?

- ELWD is the fourth Sea Grant focus area
- Separate ELWD external review panel
- Capped at $25k/year (per proposal)
- We intend to fund 2 proposals

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What should I know for developing an ELWD preproposal?

- **Preproposal Selection Criteria**
  - Ability to advance environmental literacy and workforce development in the Great Lakes Region.
  - Ability to address Great Lakes Literacy Principles & WI DPI science and environmental education standards
  - Innovativeness (new approaches or learning tools)
  - Competency of the proposing team
  - Ability to contribute to Sea Grant performance measures

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What should I know for developing an ELWD preproposal?

- **Sea Grant Performance Measures**
  - Number of Sea Grant facilitated curricula adopted by formal and informal educators.
  - Number of people engaged in Sea Grant supported informal education programs.
  - Number of Educators who participated in Sea Grant education programs.

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iPROPOSE

Demonstration by Rich Dellinger

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Questions?

Please use the Chat window to ask questions

Questions will be answered in the order in which they are received

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Thanks!

Feel free to contact us or any members of our staff with questions as you develop your preproposals

jennifer.hauxwell@aqua.wisc.edu, (608) 262-0905

http://seagrant.wisc.edu/home/ - staff directory

seagrant.wisc.edu/rfp

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