

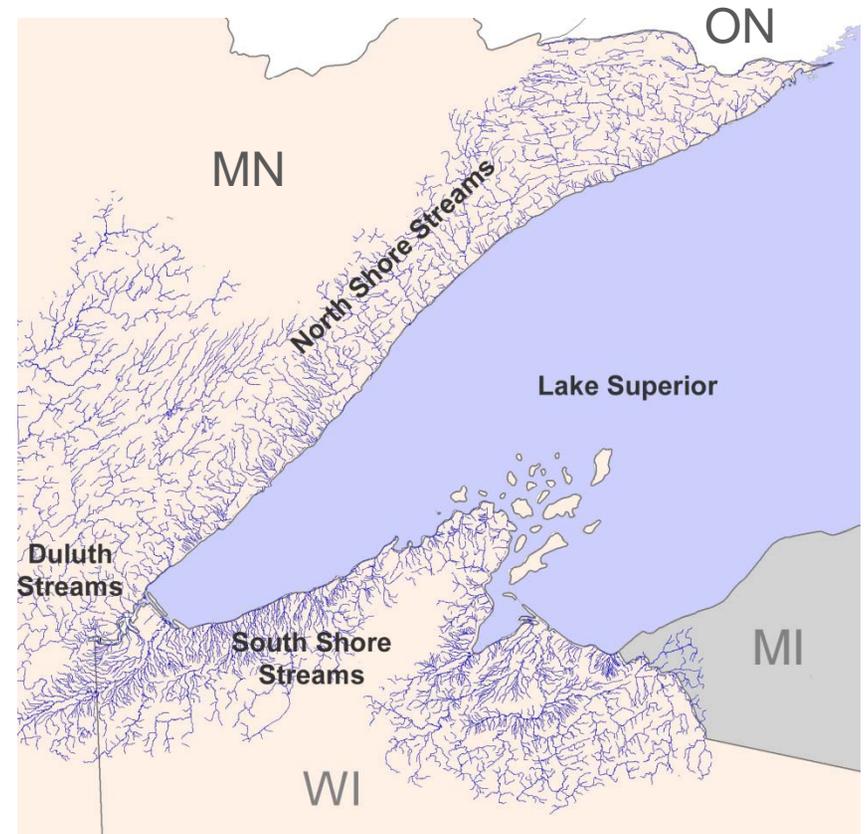
MINNESOTA SEA GRANT
PROGRAM
2010 NSGO REVIEW

Miguel A. Lugo

Minnesota

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Minnesota Sea Grant



Program Management

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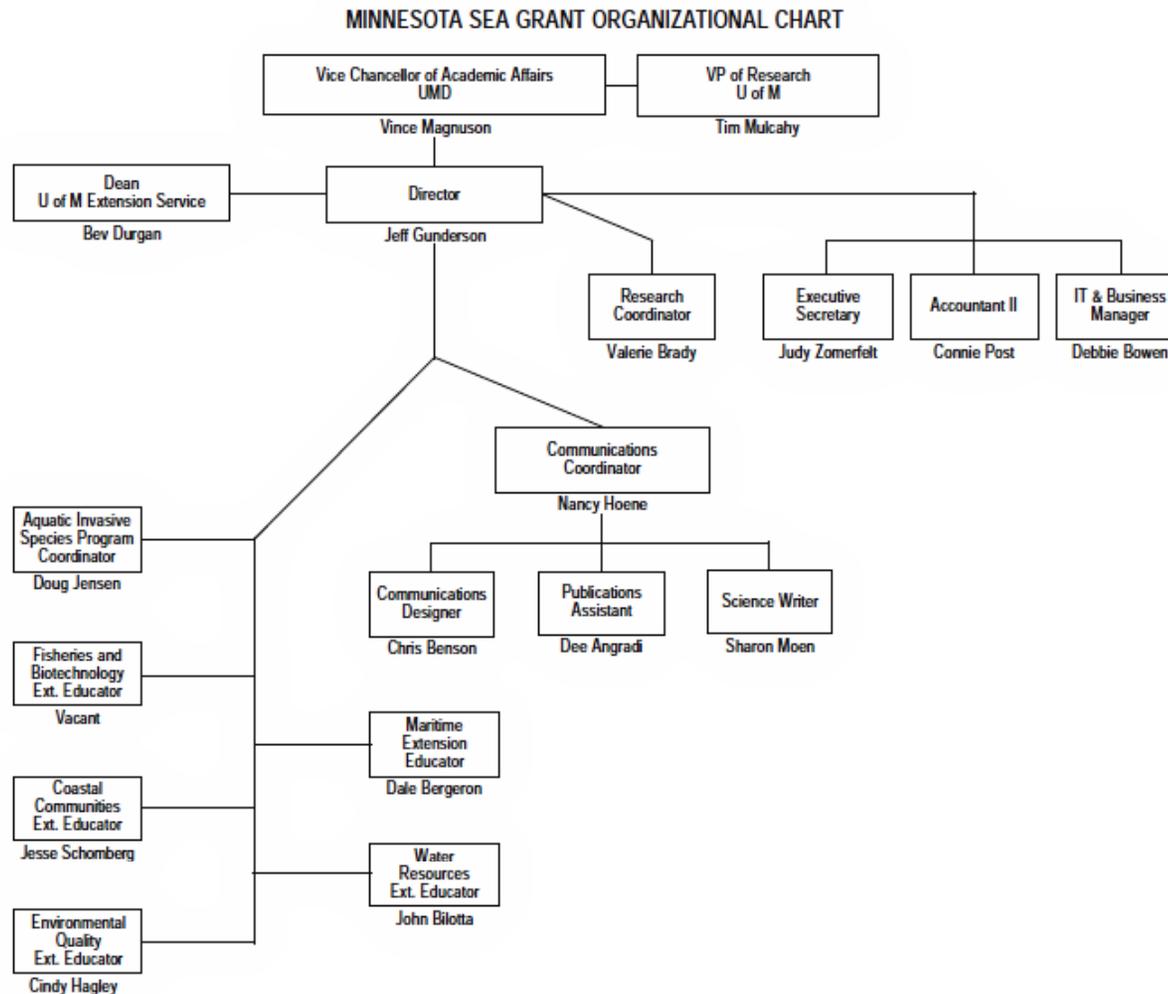
Minnesota Sea Grant

- Management Team
 - Director, **Jeff Gunderson**, (1.00 FTE)
 - Research Coordinator, **Valerie Brady**, (0.50 FTE)
 - Communication Coordinator, **Nancy Hoene**, (1.0 FTE)
 - Fiscal Officer, **Connie Post**, (0.85 FTE)
 - Program Leader, **TBA**

Program Organizational Chart

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Minnesota Sea Grant



Extension Program

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- Jeff Gunderson, as director, supervises MNSG Outreach which includes Extension and Communications.
- Gunderson reports to the Vice Chancellor for Academic Administration on the UMD campus. (MNSG, however, remains a university-wide program)
- MNSG receives partial salary (10-15%) for five extension staff from University of Minnesota Extension through the Natural Resources and Environment program area. We report through the Associate Dean for the College of Food, Agriculture, and Natural Resource Sciences to the Dean of University of Minnesota Extension.

Program Management – Advisory Board

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Minnesota Sea Grant

- ❑ Made up of 12 leaders representing government, businesses, agencies, academia, and other Sea Grant audiences.
- ❑ Three year terms, 1/3 of the committee is replaced or reappointed each year.
- ❑ The committee helps identify Great Lakes and Minnesota coastal issues that can be addressed by research, outreach, or education.
- ❑ The chair of the advisory committee participates on the technical review panel.
- ❑ MNSG has constant interaction with the research community and clientele.

Institutional Setting

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Minnesota Sea Grant

- The Director of MNSG reports directly to the Vice-Chancellor for Academic Administration on the Duluth campus.
- MNSG is a University-wide program
- Minnesota Extension Service provides partial salary for five Sea Grant extension educators
- Minnesota Sea Grant was moved into a newly renovated elementary school located on the UMD campus in 2009
 - ▣ Now ADA compliant
 - ▣ Better internet connections
 - ▣ Better conference facilities
 - ▣ Closer to campus

MN Sea Grant Program Plan – Estimated 4-yr Budget Allocation by focus area

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Minnesota Sea Grant

National Focus Area	Focus Area from Program Strategic Plan	*Estimated Level of Effort of Federal, Match and Leveraged (%)	*Estimated Level of Effort of Federal and Match (\$)	*Estimated Level of Effort of Leveraged (\$)
Safe & Sustainable Seafood Supply	Safe & Sustainable Seafood Supply	15%	\$914,580	\$4,000
Sustainable Coastal Development	Sustainable Coastal Development	40%	\$2,438,880	\$120,000
Healthy Coastal Ecosystems	Healthy Coastal Ecosystems	40%	\$2,438,880	\$120,000
Hazard Resiliency in Coastal Communities	Hazard Resiliency in Coastal Communities	5%	\$304,860	0
Total		100%	\$6,097,200	\$244,000

* Percentages and dollars amounts are based of the 2009-2013 alignment information

Performance Measure/Outcome

Highlights

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Minnesota Sea Grant

- **Outcome:** The Center for Ocean Science Education Excellence Great Lakes (COSEE GL) program creates a variety of multi-state opportunities for Sea Grant to educate teachers about the Great Lakes and our oceans. Minnesota Sea Grant contributes planning, marketing, extension expertise, products, and follow-up for COSEE GL activities.
- **Objective:** 1. By the end of 2013, program evaluation will document that over 85% of a projected 400 teachers participating in the program will have incorporated Great Lakes/ocean science into their classrooms.
- **Performance Measure:** Number of teachers incorporating Great Lakes and ocean literacy into their classroom and the number of students reached as a result.
- **Minnesota Target:** 60 teachers, 5000 students.

Some Major Partners

- National
- Great Lakes Region
- State

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Minnesota Sea Grant

- Pet Industry Joint Advisory Council – Habitattitude campaign to prevent release of aquarium plants and animals
- US Fish and Wildlife Service – Habitattitude and Stop Aquatic Hitchhikers campaigns, AIS-HACCP training, Genetic Biocontrol of Invasive Fish and Mussels Symposium
- Lake Carriers Association (18 shipping companies); American Great Lakes Ports Association (10 Great Lakes ports); St. Lawrence Seaway Development Corp. – ballast water collaborative and other maritime transportation issues
- US EPA (Great Lakes National Program Office) – Making a Great Lake Superior conference and Coordinated Science and Monitoring Initiative (CSMI - research planning).
- NOAA Great Lakes Environmental Research Laboratory – climate change, harmful algal blooms, aquatic invasive species
- EPA Mid-Continent Ecology Division – CSMI workshop, Ecology of Lake Superior Conference, Great Lakes Regional Research Information Network
- University of Minnesota Extension – Shoreland, stormwater, and aquaculture education
- Natural Resources Research Institute (UMD) – LakeSuperiorStreams.org, stormwater management, land use planning
- Minnesota Invasive Species Council – 2008 Minnesota Invasive Species Conference
- MN Department of Natural Resources – Stop Aquatic Hitchhikers campaign and other AIS and fishery initiatives

Network Activities – 2008/2009

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Minnesota Sea Grant

- Jeff Gunderson – Chair of Great Lakes Program Leaders 2009-2011
- Steve Bortone and Jeff Gunderson – Chair of Great Lakes Sea Grant Directors 2009
- Jeff Gunderson – Chair Elect Assembly of Extension Sea Grant Program Leaders*
- Jesse Schomberg --Great Lakes Representative to the Sustainable Coastal Community Development Extension Committee for 2008-2009
- Sharon Moen – Chair of the Great Lakes Communicators 2009
- Dale Bergeron – Great Lakes Maritime Task Force
- Doug Jensen – Great Lakes Panel on Aquatic Nuisance Species
- Cindy Hagley – Facilitator for National Sea Grant Strategic Plan, Healthy Coastal Ecosystems Focus Team, June 2008.

2010 RFP Process

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Minnesota Sea Grant

- Request for pre-proposals -- MNSG provides feedback to PI before full proposal.
- Full proposals submitted to MNSG and peer reviewed by three to five reviewers.
- Proposals reviewed by Technical Review Panel (TRP – an external 5-member expert panel). Proposals reviewed based on scientific merit and consistency with RFP.
- Scientifically-sound proposals as determined by TRP are reviewed by Advisory Committee based on adherence to MNSG strategic plan and mission.
- Final funding decisions are made by MNSG Director in consultation with the Management Team.
- Consideration is typically given to young investigators, new investigators to the program, and balance among campuses.
- Note: The decision to fund a joint proposals with WISG was made collaboratively

Program Metrics – 2008/2009

Awards and Honors

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Minnesota Sea Grant

- Anne Kapuscinski was one of the five recipients of the International Society for Conservation Biology's Distinguished Service Award for 2008
- Barb Liukkonen was co-author of the poster, "Impact of a Conservation Field Day: Lake County Case Study," which received a first-place award from the Association of Natural Resource Extension Professionals.
- APEX award for our publication "Towards Sustainable Tourism"
- Cindy Hagley was elected to UM Council of Academic and Professional Administrators in 2009
- Jesse Schomberg, Valerie Brady, and Cindy Hagley were on a multi-organization team that received the St. Louis River Alliance Environmental Stewardship Award presented to Weber Stream Restoration Initiative. January 2009.

2008/2009 Highlights of Metrics

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Minnesota Sea Grant

- 151 organized/sponsored meetings, reaching 6350 people
- 167 public presentations, reaching 7792 people
- 607 communication products printed and distributed
- 2 Knauss Sea Grant Fellow
- 410 volunteer hours

2008/2009 Program Impacts

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Minnesota Sea Grant

- ***Erie Pier Dredge Material Reuse (NATIONAL PILOT PROGRAM)***
Minnesota Sea Grant worked with US Corps of Engineers to re-engineer how dredge material is handled in the US with the potential to create a multi-billion dollar impact as confined disposal facilities become full and outdated. Staff initiated a relationship with the National Sea Grant Law Center to engage the help of law students to review the policies that might govern the movement and use of dredge material. Staff also initiated a cost market analysis to create an understanding of the value of recycle-reuse of dredge material
- ***Aquatic Invasive Species Program*** -Program evaluation showed that 97% of boaters and anglers surveyed in Minnesota, Wisconsin, and Iowa said that they took action at water accesses to prevent the spread of aquatic invasive species.

2008/2009 Research Accomplishments

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Minnesota Sea Grant

- **COST-EFFECTIVE SYNTHESSES OF A PHEROMONE COMPONENT FOR SEA LAMPREY CONTROL** – Researchers developed ways to synthesize structural analogs of petromyzonamine disulfate (PADS), the principle component of the sea lamprey migratory pheromone. The synthetic pheromone could be used to help control sea lamprey, one of the most damaging invasive species in the Great Lakes.
- **DETERMINING SOURCES OF FECAL BACTERIA LEADING TO BEACH CLOSURES IN LAKE SUPERIOR** – Human fecal marker measurements have been completed using qPCR for all study sites. Researchers found that human fecal contamination is prevalent in the water samples of one study site. The human marker gene was mostly found in water samples (14.5%). Only about 5% of the sand and sediment samples had DNA reacting with the human marker gene.

Best Management Practices

- MNSG collaborated with WISG program to fund a joint research proposal through a joint RFP.
- The chair of our advisory committee participates on the technical review panel to serve as a liaison between the TRP and the advisory committee.
- We requested and were granted a reduction in the IDC rate for graduate student salaries from 51% to 15%.