

GLP MEMBER UPDATES FALL 2013

FEDERAL

U.S. Coast Guard

Ballast Water Regulation

The Coast Guard published its ballast water discharge standard regulation in the Spring of 2012. It adopts the IMO standard and will require the installation of type-approved BW management systems on "salties". The use of approved ballast water management methods are required on those new ships constructed after 1 DEC 2013 and will be implemented on existing ships during the vessel's first scheduled drydock after 2014 or 2016 depending on the vessel's BW tank capacity. Initially, these requirements will not apply to Lakers but after additional analysis and development of more capable BW treatment systems, the Coast Guard may include more stringent requirements in a future rulemaking.

CG Type Approval

The multi-faceted type approval process consists of land-based and shipboard-based testing (by independent labs) focused on the biological efficacy of the BWMS. For those systems whose performance could be affected by the cold and pure fresh water of the Great Lakes, additional testing may be necessary. Assessment of the BWMS' ability to properly operate in the harsh marine environment is also undertaken and all of the system's components are examined to ensure compliance with marine engineering, electrical, and mechanical standards. This testing and certification is usually conducted by vessel classification societies. For Independent Labs (IL) that will be involved in the type approval process, CGHQ approved NSF International in July '12. Duluth-Superior's Great Ship Initiative is part of the NSF team. Det Norske Veritas is the other approved IL. Two BWMS are in beginning stages of type approval at NSF International.

Alternate Management Systems (AMS)

Since it will take some time to certify all of the independent labs that will be completing this testing, the Coast Guard has developed an interim program to accept the use of some BWMS that have been type-approved by other flag states. AMS is intended as a bridging strategy to allow for the use of BWMS type-approved by foreign administrations in accordance with the IMO Convention. The AMS must be installed and approved and would be used in lieu of ballast water exchange until full type approval can be obtained, but for a period of no longer than 5 years after the ship was otherwise required to comply with the ballast water discharge standard. The Coast Guard has issued 13 AMS Determination Acceptance Letters to date and 18 other AMS reviews are currently in progress.

EPA Vessel General Permit 2.0

EPA and USCG HQ are discussing how the implementation of VGP 2.0 will take place once it goes into effect in December of 2013.

Ballast Water Working Group (BWWG)

The ballast water working group has completed the 2012 annual report and is beginning to collect data for the 2013 report. The 2012 report is posted on the Ninth Coast Guard District website. In 2012, 100% of vessels bound for the Great Lakes Seaway from outside the Exclusive Economic Zone (EEZ) received ballast management exams on each Seaway transit. All 6,974 ballast tanks, during 386 vessel transits, were assessed; (100% of the ballast tanks on inbound vessels were assessed in 2009, 2010 and 2011).

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National Oceanic and Atmospheric Administration

GLANSIS

GLANSIS is currently in need of expert reviewers, particularly for management sections and plant profiles.

In our current round of updates (which includes adding the impact assessments and management information for all species) we have:

- 78 species finished and posted
- 19 species reviewed and pending final edits prior to posting
- 52 species for which the work is complete but management sections still need review.
- 24 species for which work is complete, but still pending review of both management and impact assessment sections.
- 13 watchlist species for which everything is complete, but still pending review
- 16 established species (mostly plants) for which the rewrite is still in progress, I expect those to be ready for review prior to the Panel meeting.
- 5 range expansion species for which the assessments are in various stages of progress - hope to have ready for review by mid-December
- 40 watchlist species for which the assessments have been done, but still need to be written up in fact sheet format
- 1 NEW established species (red swamp crayfish) for which I still need to track down the occurrence (map) data to get it ready for review.

NMFS/Habitat Restoration

Five restoration projects supported with GLRI funding are addressing AIS as part of their activities:

- Invasive vegetation control in the Lower Black River Area of Concern - 40 acres of non-native Phragmites, purple loosestrife, narrow-leaved cattail, and Japanese knotweed; projected milestone will be met by Q3 FY14
- Maumee Corps: Putting People to Work Restoring Habitat in the Maumee AOC - 250 acres of glossy/common buckthorn, autumn olive, bush honeysuckle, and non-native Phragmites; projected milestone will be met by Q3 FY14
- Habitat Restoration Ottawa National Wildlife Refuge in the Maumee AOC - 87 acres of Phragmites; will be met by Q4 FY14
- Troy Aquatic Habitat Restoration: Invasive vegetation control in the Clinton River Area of Concern - 12.5 acres of Common buckthorn, honeysuckle and Phragmites; projected milestone will be met by Q4 FY14
- Upper St. Clair River Habitat Restoration: Invasive vegetation control in the St. Clair River Area of Concern - 7 acres of reed canary grass, purple loosestrife, non-native Phragmites, non-native cat-tails, Eurasian bush honeysuckles, spotted knapweed, white and yellow sweet clover; and Japanese knotweed; projected milestone will be met by Q1 FY15

Regional Ecosystem Prediction Program - AIS in the Great Lakes

Project is entering its final year of funding in 2014 but it expects to continue activities well into 2015. Key project results continue to be communicated to managers through the Management Transition Board process. In particular, dispersal of larvae from ports and ballast water discharge points to help fine tune monitoring efforts. Other noteworthy results coming up in the next few months will be the likely impact of Asian Carp to the Lake Erie food web in case of invasion and establishment.

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STATE/PROVINCIAL

Indiana

The Indiana Department of Natural Resources continues its efforts to prevent the spread of AIS species especially across the Watershed divide from the Mississippi River basin watershed to the Great Lakes watershed.

One of the greatest threats to the Great Lakes is the potential introduction of Asian Carp beyond the Mississippi river basin and into the Great Lakes. The Indiana DNR is currently funding 2 on-going research projects one that is evaluating the critical knowledge gaps about pathogens and diseases including exotic parasites and infectious diseases that might be associated with Asian Carp introductions and furthering the evaluation of their susceptibility to native pathogens and diseases these evaluations and biological collections are ongoing through this winter from Asian Carp located within the upper and middle Wabash River.

The second on-going Asian Carp research project has reached the end of its 3rd year of the Asian Carp tracking and spawning evaluation. With just shy of 300 radio telemetry tags implanted into Silver and Bighead carp over the last three years the evaluation of the movements and habitat usage give a more complete view of how this novel aquatic invasive species is using this smaller section of the Wabash River and how close Asian Carp are getting to areas of great concern like the potential watershed connection in Ft. Wayne Indiana at Eagle Marsh. In Indiana the greatest risk to interbasin transfer of AIS and more specifically Asian Carp lies in the potential watershed connection at Eagle Marsh, during the 2013 season there were multiple storm events that tested the temporary barrier and very specifically the aging Graham McCulloch Ditch which required emergency repairs. Because of these factors there has been exception collaboration and efforts put forth to plan and implement starting in 2014 a permanent separation to this watershed connection.

We have recently finished the 7th year of sonar treatment at Lake Manitou in Rochester, IN and while over the past 7 years other Hydrilla locations have been found in other states that threaten the Great Lakes Basin, Indiana's efforts to eradicate this population that was present throughout this heavily used 700acre+ lake that is located less than 50 miles from the Great Lakes Watershed. After 6 years of whole-lake Sonar application this year the population was determined to have been reduced to low enough levels to start focused treatment on the upper three quarters of the lake where historically Hydrilla had been located. The occurrence of plant fragments and tubers have reduced every year since inception of this eradication project, this year it took a two day intensive diver based survey that searched previous plant beds to locate remaining plant fragments.

The Indiana Invasive species Council in October of 2013 put together and presented an Early Detection and Rapid Response Workshop with over 60 participants including invasive species experts, invasive species database professionals and interested citizens, representing state, federal, and local government agencies; educational institutions; commercial enterprises with an interest in invasive species; and non-governmental organizations such as land trusts, conservation organizations, woodland owners associations, and cooperative weed management areas (CWMAs). The workshop was organized around four major components of Early Detection and Rapid Response (EDRR) systems:

- Education, Awareness, and Training
- Reporting Mechanisms and Validation
- Databases, Record Keeping, and Data Referral
- Rapid Response

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Michigan

Michigan Departments of Environmental Quality, Natural Resources, Agriculture and Rural Development, and Transportation collaborated on a comprehensive update to the Aquatic Invasive Species (AIS) State Management Plan, which was approved by the ANS Task Force in June, 2013.

In August, 2013, Michigan's legislatively mandated AIS Advisory Council, composed of 23 members, submitted final recommendations to the Michigan legislature and governor on Michigan's AIS State Management Plan, ballast water regulations, organisms in trade, the control and management of invasive Phragmites, and funding for the AIS program.

An interdepartmental Response Plan for AIS in Michigan has been drafted and is expected to be finalized this winter.

Asian carp table top and field-based mock exercises were conducted in August-September, 2013 on the St. Joseph River, a tributary to Lake Michigan. Response to reports of red swamp crayfish being used as bait was conducted in July-August, 2013.

As part of an early detection pilot project, European frog bit was detected in two new locations in northern Michigan. Physical removal was initiated in September, 2013 and follow-up action including trial treatments with herbicides is planned.

Inspections and education efforts for wholesale/retail bait dealers and plant nurseries continued with 280 and 171 inspections, respectively. Work on the pet industry in Michigan has been initiated.

AIS monitoring is being incorporated into routine biological monitoring. Development and planning for state-wide AIS monitoring efforts was initiated in October, 2013. In addition, Michigan's "exotic plant watch" volunteer monitoring program is being expanded.

Education and outreach efforts continue to increase with a collaborative public service announcement with Minnesota and Wisconsin, an AIS booth with prevention and management materials, and a mobile boat wash unit, and a video on juvenile Asian carp identification.

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New York

The IS Council, comprising 9 agencies, met November 7 13, 2013 and the IS Advisory Committee, comprising 25 NGOs, met September 17, 2013. Training session for iMapInvasives, the state GIS database, were held throughout the state during spring 2013. With the execution of the Western NY contract, all eight Partnerships for Invasive Species Management (PRISMs) now receive State support. An engineering intern working with the Port of Albany over the summer conducted a feasibility analysis for off-loading ship ballast to the water treatment facility. Management of a large hydrilla infestation in the Inlet of Cayuga Lake has been ongoing since 2011. An additional hydrilla infestation has been confirmed in the Croton River, a tributary to the lower Hudson River, during fall 2013. A statewide manual for boat steward programs is being developed, in collaboration with SeaGrant. Boat stewards were deployed on the Erie Canal system during the 2013 field season, and will be expanded throughout the canal system in 2014. New regulations focused on commerce of invasive species were released for a 60 day public comment period on October 23. New legislation passed both houses and was signed by the Governor prohibiting the import, breeding and introduction of Eurasian boars into the wild.

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Ohio

Ohio continues to monitor for Asian carp in the Ohio River and Lake Erie watersheds, including an assessment of the recent collection of naturally produced grass carp in Lake Erie. Ohio continues to work with the USACE, NRCS and Tetra Tech to develop closure options the Ohio-Erie Canal, Little Killbuck Creek, and Grand Lake St Mary's and will revisit the low risk connection at Mosquito Lake. Ohio continues to work with several partners to combat Phragmites and Hydrilla in the Lake Erie Basin. Ohio completed a draft *Asian Carp Tactical Plan* and is working to develop an *Ohio River Asian Carp Action Plan* and a *Rapid Response Plan*.

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Ontario

In August 2013, the Ministry of Natural Resources (MNR) released an Invasive Species Discussion Paper on the Environmental Registry for public comment. The discussion paper outlines a new prevention and management framework to better address invasive species in the province. Public comments received were positive and very supportive of potential new or enhanced policy and legislation.

MNR expanded surveillance activities Asian Carps within the Great Lakes focusing on the Lake Erie basin and southern Lake Huron. Surveillance includes both targeted environmental DNA sampling as well as fisheries monitoring by MNR's Lake Erie and Upper Great Lakes Management Units' regular sampling programs. No Asian Carps have been detected as part of these efforts. MNR also worked with DFO to respond to two Grass Carp detections in the Grand River within the Lake Erie basin.

Eradication efforts for European Water Chestnut, continue in the Ottawa River, at Voyageur Provincial Park. In addition, MNR worked with partners such as Ducks Unlimited Canada and the Ontario Federation of Anglers and Hunters (OFAH) to develop an eradication plan for a new detection of water chestnut at Bayfield Bay, on Wolfe Island in Lake Ontario, which will be implemented in 2014.

MNR continues to work in partnership with the Ontario Federation of Anglers and Hunters, to deliver the Invading Species Awareness Program for Ontario, which undertook a variety of outreach activities this summer. Together,

MNR and OFAH are developing EDDMapS Ontario, a web-based mapping system as well as a mobile application for documenting invasive species distribution.

MNR initiated work with the Ontario Invasive Plant Council in the fall to develop a provincial best management practices guide for aquatic invasive plant management, and to develop a provincial website on Phragmites control activities in Ontario.

MNR is working with the U.S. Aquatic Ecosystem Restoration Foundation, to conduct a jurisdictional scan of aquatic invasive plant management programs across the United States and a bi-national workshop to communicate the results is planned in February 2014.

MNR continues to support the development of the Canada/Ontario Invasive Species Centre (ISC) (www.invasivespeciescentre.ca). The ISC issued a call for proposals in September for invasive species outreach, research and management projects. Proposals are now being reviewed for funding in 2014.

MNR initiated a project to examine the status of lake dwelling Brook Trout across the province and to investigate changes in status over time. One hypothesis is that species introductions are one of the leading causes of the loss of lake dwelling Brook Trout populations in Ontario. Many of Ontario's Brook Trout lakes are small (<25 ha) with very simple fish communities, often just Brook Trout and one or two forage species. Brook Trout populations in these lakes are very sensitive to species introductions, particularly spiny-rayed fishes such as percids and centrarchids. A Time series status of Brook Trout populations, accompanying fish communities and other stressors will be built to determine the causes of Brook Trout losses over time.

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Wisconsin

The Department of Natural Resources completed surveying 200 inland lakes for AIS as part its comprehensive monitoring program. Department staff, county AIS coordinators and volunteers all assisted in the effort. This is the third year of this program which targets 200 lakes per year for a minimum of five years to determine if the rate of AIS spread is increasing, decreasing or staying the same. New discoveries in 2013 include New Zealand Mud Snails in Black Earth Creek, which is a destination water for trout anglers. The clone is from the western states and is believed to have been brought to Wisconsin on the boots of anglers. Environmental DNA of Silver carp in Sturgeon Bay (Lake Michigan) was discovered in one of fifty samples collected by the University of Notre Dame. Additional samples taken in various ports in Wisconsin were all negative. Additional samples will be collected and analyzed by the USFWS to better determine the significance of the positive sample. The Department is developing a comprehensive AIS stream monitoring program which will utilize Department staff, and county AIS coordinators and a variety of organizations around the state. The prohibited Red Swamp Crayfish was reported and verified by staff as being used in an elementary school district's science curriculum in southeast Wisconsin. The school district was notified that this species was illegal to possess and told to destroy the specimens. Refreezable ice packs with a printed AIS message reminding anglers to drain their live well were used to increase awareness and compliance with Wisconsin's AIS laws.

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REGIONAL/BINATIONAL

International Joint Commission

The Great Lakes AIS is a binational issue of United States and Canada. The IJC maintains AIS issue as a "Watching Brief" in its IJC's 2012-2015 Priority Cycle. The IJC provided funding for participation by staff in key AIS prevention related initiatives as official observers to keep the Commission informed, and IJC is looking forward to read the GLMRIS report that will be available soon.

The IJC received \$150,000 GLRI fund in 2010 to develop a Binational AIS Rapid Response Plan. This project has been completed in 2013. The two reports generated by this project include: (1) "Binational AIS Rapid Response Planning for the Great Lakes-St. Lawrence River Basin - Analysis of Jurisdictional Role and Capabilities-" and (2)

"Binational AIS Rapid Response Planning for the Great Lakes-St. Lawrence River Basin - A Pilot Plan for the Lake Huron/Lake Erie Corridor." These reports are available on IJC's website (http://ijc.org/en/_ais/publications).

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Great Lakes Commission

The GLC is working in partnership with the Great Lakes and St. Lawrence Cities Initiative to investigate separation of the Chicago area waterways as a long-term solution to the threat of an invasion from Asian carp or other species, while maintaining and enhancing associated uses of the system. Work is ongoing with a team of consultants to develop a "preferred option" for separation; an interim partial barrier option; a financing study to define mechanisms for paying for separation; and a hydraulic modeling analysis of how separation would affect stormwater and flood management. Meetings of a project advisory committee have been held periodically throughout the project.

Work is underway on a grant from the Great Lakes Restoration Initiative to develop software and tools to track, identify and monitor the sale of invasive species via the internet. The GLC has hired the software development firm RightBrain Networks to develop the web-crawling software system. A stakeholder workshop was held in November to provide an update on progress to date and get feedback from interested parties.

The GLC continues to expand a partnership with the USGS-Great Lakes Science Center to lead communications and research on the invasive plant Phragmites. The GLC established the Great Lakes Phragmites Collaborative in 2012 to engage the resource management community, reduce redundancy, link science and management, facilitate adaptive management, and encourage a systems approach to management and conservation associated with this invasive plant. The Collaborative supports an interactive web-hub (www.greatlakesphragmites.net), a webinar series, and related resource development and is guided by a regional advisory committee. The GLC also supports the Collaborative for Microbial Symbiosis and Phragmites Management, established in partnership with the USGS to bring together researchers to explore the potential to use symbiotic relationships both to control invasive Phragmites and encourage native plant establishment.

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TRIBAL AUTHORITIES

Chippewa Ottawa Resource Authority

CORA represents five tribes in Michigan with regard to the tribes' commercial and subsistence fisheries in the 1836 treaty-ceded waters of Lakes Huron, Michigan and Superior. The tribes which are party to the 1836 Treaty are the Bay Mills Indian Community, Grand Traverse Band of Ottawa and Chippewa Indians, Little River Band of Ottawa Indians, Little Traverse Bay Bands of Odawa Indians and Sault Ste. Marie Tribe of Chippewa Indians.

CORA, through the Inter-Tribal Fisheries and Assessment Program, participates on the Council of Lake Committees under the Great Lakes Fishery Commission and is helping to establish sea lamprey control plans for Lakes Huron, Michigan and Superior. The CORA tribes also assisted the U.S. Fish and Wildlife Service and partners by providing a staging area for sea lamprey control efforts in the St. Marys River in the summer of 2013. Through participation in the Lake Michigan Committee's Native Planktivore Restoration Task Group, CORA is scoping the feasibility of enhancing native cisco populations in Lake Michigan. Cisco populations have been inhibited in the past due to competition from invasive alewife.

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UNIVERSITY/ RESEARCH

Cooperative Institute for Limnology and Ecosystems Research (CILER)

CILER is actively involved in two major areas of research pertaining to AIS. The first involves modeling potential ecosystem impacts if Asian carp species become established in the Great Lakes. The overall goals of this research are to 1) assess the ability of bighead and silver carps to survive and grow (using ambient plankton and benthos prey densities) in Lakes Michigan, Huron, and Erie; and 2) determine the potential impacts of Asian carps on population dynamics and biomass of important native and state-managed fishes. To address these questions we are proposing to use two bioenergetics based modeling frameworks: the first is an individual-based model of Asian carps and selected key species in near shore and off shore environments; the second is a spatially-explicit model of Asian carps impacts on food webs in near shore and open lake habitats of Lakes Erie, Huron and Michigan. For both

model types, selected key fish species of near shore environments include: walleye, yellow perch, alewife, gizzard shad, and emerald shiner; selected key fish species of offshore environments include: lake trout, lake whitefish, rainbow smelt, Chinook salmon, Deepwater sculpin.

The second area of research is in regards to developing tools to support compliance monitoring for the newly established ballast discharge standards. In collaboration with the Maritime Environmental Research Center of the University of Maryland and the Alliance for Coastal Technologies (ACT), we are supporting research to develop and verify instrumentation that can provide bulk estimates of biomass in ballast water discharge. Our initial joint efforts in this area were focused on a workshop and demonstrations of in situ fluorometry (both chlorophyll and pulse/modulated fluorometers) and have been extremely successful, resulting in the development of several promising instruments for use in compliance monitoring onboard ships. While fluorometry has the potential to be a very valuable ballast water discharge compliance monitoring tool, estimates of live biomass are restricted to photosynthetic organisms using this approach. We would, therefore, would like to identify and facilitate the development of other promising approaches (e.g., ATP kits).

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AT LARGE

Minnesota Sea Grant Program

Outreach: Minnesota Sea Grant continues to partner with the National Park Service to promote Stop Aquatic Hitchhikers!™ and Habitattitude™ awareness and empower communities, organizations and businesses to take action against the spread of AIS in the Great Lakes region. We also entered into a new partnership with the USDA U.S. Forest Service to focus AIS spread prevention education in the Superior National Forest and surrounding areas. The Great Lakes Sea Grant Network (GLSGN) project, led by Minnesota, completed the first comprehensive regional outreach campaign targeting 15 pathways aimed at preventing the spread of AIS. It featured Stop Aquatic Hitchhikers! (SAH!), Nab the Aquatic Invader (NAI), Habitattitude (Hab), AIS-Hazard Analysis and Critical Control Point (HACCP) program, and social media communications. Overall, GLSGN and its partners generated 14,535,539 impressions (or 300% of our two year goal). Efforts resulted in 288 SAH! talks that educated 22,879 people; coordinated mass media efforts with Wildlife Forever and other partners; coordinated production of 79 education tools; co-hosted 185 booths at boat, sport, and travel shows and other events educating 151,088 visitors; posted 196 social media (FB posts, Tweets, RSS feeds, pod casts, and blog) generating 235,311 exposures; and issued 23 news releases combined with 232 mass media stories, which generated 11,267,282 exposures. Nab the Aquatic Invader! featuring SAH!, taught 73,407 students and teachers. Hab was re-launched with 3 statewide meetings; 2 talks educated 981 people; 5 booths educated 22,141 visitors; 3 new and existing education tools were produced. Four HACCP workshops taught 60 people. Efforts were supported by 253 partners across the Great Lakes region. Importantly, a new regional survey of anglers conducted in collaboration with Wildlife Forever and the North America Media Group shows that strategic communications using SAH! can raise awareness and change desired behavior, thereby, protecting our waters.

A second two-year GLRI grant continues to extend and broaden those regional AIS outreach efforts. So far, the GLSGN and its partners generated 2,366,823 exposures (or 115% of the two-year goal). Since July, 340,209 exposures were generated. One Hab state meeting was held in Ohio. Two talks educated 75 people. Five booths educated 2,841 visitors. The Get Habitattitude! temporary tattoo was reproduced. Forty-two partners supported campaign efforts. Social and mass media coverage resulted in 290,941 exposures. Youth education efforts at 13 workshops (5) and events (8) taught 806 teachers and students. Eleven talks featuring SAH! educated 116 people. SAH! talks were offered at a wide variety of conferences, workshops, outdoor shows, fishing group meetings, and other events. Seven events extended prevention messages along transportation corridors based on efforts with partners, and supporting communities, which educated 4,828 people. EPA awarded Minnesota Sea Grant, on behalf of the GLSGN, a third two-year GLRI grant to extend outreach on Organisms in Trade (OIT). Overall, efforts generated 622,126 exposures for a total of 1,618,666 exposures (or 162% of the two-year goal). Since July, 2 Hab talks and 3 booths educated 580 people. Two SAH! booths educated 368 visitors. Thirty social media (21 Facebook posts, 8 Tweets, and 1 Podcast) generated 18,066 exposures. Five mass media pick-ups generated 257,175 exposures. One NAI event educated 17 teachers about Nab lessons and how to prevent the spread of AIS. Illinois-Indiana Sea Grant's web designer initiated a new design for the NAI website, Top Desk Administrator and Kids' Secret Headquarters pages. Models of community stewardship projects serve as the framework and demonstrate new

student understandings of the AIS problems, and how the community can help be part of the solution. In addition, Hab and SAH! messaging will serve as tools for other classrooms to use in spread prevention messaging. Work has begun to create an Asian carp costume to continue support for the SAH! campaign. An Organisms in Trade (OIT) Symposium planning committee is organizing the event for June 3-4, 2014 in Milwaukee, WI.

Ballast Water: Sea Grant continues to provide leadership and support in sharing the best available science to promote improvements to ballast water policy and assist in the timely and effective implementation of ballast water management and control systems on vessels. Staff continue to support the Great Lakes Ballast Water Collaborative, SLSDC/SLSMC Highway H2O Academic Advisory Committee, and Green Marine Science Advisory Committee. We participated in the Toronto Marine Club, the Great Lakes Ports Association Winter Meeting, two Green Marine Advisory Council meetings, and the Fall Hwy H2O meeting.

We continue to provide consultation and research for all groups seeking to understand the impacts of maritime trade and potential AIS movement in the Great Lakes. We also work closely with MN Pollution Control Agency, and the Duluth Seaway Port Authority at the State level. NOTE: the next major meeting of the Great Lakes Ballast Water Collaborative is tentatively scheduled for March 2014 in Washington D.C.

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North Central Regional Aquaculture Center

Regional aquaculture outreach in the US North Central Region has prioritized the recognition of aquaculture and baitfish industry sector efforts in helping to control and monitor Aquatic Invasive Species (AIS) in aquatic animal trade. Members from these groups believe they are unfairly targeted by unnecessary, restrictive and onerous regulations. Some states have regulations in place that impede commerce within these sectors. Furthermore, recreational fishing licensing sales are dropping in many states, and opportunities for jobs and seafood production are being lost to other countries. To that end a proactive industry and partnership building approach is necessary to help establish fair regulations, improve ANS control and monitoring, and advance environmental, social and economic conditions in the US. Currently we are assessing the status of ANS prevention and control in the US. From this assessment, we intend to formulate a plan to expand the current AIS HACCP curriculum, or develop a comparable program, into a more verification and/or certification oriented program. A task force will be formed in 2014 for strategic planning purposes, with possible implementation of such a program in 2014-2015.

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Ontario Federation of Anglers and Hunters

The Ontario Federation of Anglers and Hunters (OFAH), in partnership with Ontario Ministry of Natural Resources (OMNR), have been working on a number of projects as part of Ontario's Invading Species Awareness Program.

With funding provided by the Canada/Ontario Invasive Species Centre, ISAP staff worked with the University of Georgia's Centre for Invasive Species and Ecosystem Health to implement the Early Detection and Distribution Mapping System for Ontario (EDDMapS Ontario). In addition to the on-line system, staff have also been working on the development of a mobile reporting tool for both Android and iPhone devices in order to increase the number of invasive species reports received from the public and ultimately increase Ontario's capacity for early detection. Two new billboards are being installed along Highway 11 in Rainy River, Ontario. The billboards are intended to educate non-resident anglers on the Ontario regulations pertaining to the movement of live baitfish into Ontario.

Program staff are working with staff from Environment Canada, OMNR, and the Minnesota Sea Grant to produce a bi-national Lake Superior Aquatic Invasive Species Guide.

Program staff launched "Operation Boat Clean" at the Barrie Marina on Lake Simcoe, in partnership with Aurora District OMNR. Staff assisted with the installation of a boat wash station at the marina to raise awareness about the importance of cleaning your boat after it is taken out of the water to prevent the introduction/spread of invasive species. Staff also delivered "Operation Boat Clean" resources (educational signs & post cards) for installation and distribution to 28 marinas in the Lake Simcoe watershed.

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Saint Lawrence Seaway Development Corporation

Attorney and former Congresswoman Betty Sutton, a native of Ohio, was appointed by President Obama to be the tenth Administrator of the Saint Lawrence Seaway Development Corporation (SLSDC). Ms. Sutton was sworn-in on August 13, 2013 by U.S. Secretary of Transportation Anthony Foxx. As Administrator, Ms. Sutton leads the SLSDC, which partners with the Canadian St. Lawrence Seaway Management Corporation to manage and maintain the St. Lawrence Seaway. Among her many activities since being sworn-in, Ms. Sutton attended the 9th Annual Great Lakes Restoration Conference in Milwaukee, WI where SLSDC Deputy Administrator Craig Middlebrook participated on a panel discussion titled "New Ballast Technology vs. Regulations" and she also toured the Great Ships Initiative ballast treatment testing facility in Superior, WI. Planning is underway for the next meeting of the Great Lakes Ballast Water Collaborative, which last met in August 2012. The next meeting will likely take place in Washington D.C. in early spring.

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