U.S. Environmental Protection Agency
Great Lakes National Program Office
Significant Activities Report

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INTERNATIONAL ACTIVITIES

Scientific Exchange with Baltic Sea Scientists

Great Lakes and Baltic Sea Partnership Logo

On February 21st, Tony Kizlauskas, Marc Tuchman and Karen Rodriguez of GLNPO kicked-off a workshop of U.S. Great Lakes and Baltic scientists in Chicago, Illinois as part of the Baltic Fellows Program. This program facilitates the exchange of expertise on environmental issues between Great Lakes and Baltic environmental professionals and scientists. This is beneficial to both sides, since the Great Lakes and the Baltic Sea face similar environmental threats. Tony Kizlauskas gave an introduction to the Great Lakes and the Great Lakes Program. Marc Tuchman and Karen gave a joint presentation on the background of Invasive Species issues in the Great Lakes. The workshop specifically focused on Invasive Species issues, with other presenters from the Great Lakes Commission; Illinois/Indiana Sea Grant; and Wisconsin Sea Grant. The Baltic Fellows also provided a brief overview of their respective activities. After their Chicago workshop, the Baltic scientists traveled to Washington, DC to visit with USEPA scientists there.

More information on the Great Lakes and Baltic Sea Partnership and the Baltic Fellows Program is available on the Internet at:
http://www.epa.gov/glnpo/baltic/index.html.
(Tony Kizlauskas, 312-353-8773, kizlauskas.anthony@epa.gov; Marc Tuchman, 312-353-1369, tuchman.marc@epa.gov; Karen Rodriguez, 312-353-2690, rodriguez.karen@epa.gov)

Lake Restoration Plan Updates Set for Earth Day Release


North Shore of Lake Superior

On Earth Day – April 22nd, 2002 – the Lakewide Management Plan 2002 Updates for Lakes Superior, Erie, Huron, Michigan and Ontario are scheduled for release. These updates will report on the progress made over the last two years in achieving the goals and objectives of the 2000 Lakewide Management Plans (LaMP). In accordance with the directive from the Binational Executive Committee, LaMP updates are to be released every two years to track the progress of critical pollutant reduction and ecosystem system restoration and protection. The LaMP 2000 document presented a strategic ecosystem management plan for each lake and detailed projects and processes designed to achieve the overall goals.

In reporting progress, each LaMP emphasizes different programs and projects, reflecting the unique priorities and characteristics of each lake. Lake Superior, for example, concentrates on the progress of "zero discharge" of nine critical pollutants, and on the development of the broader ecosystem objectives – especially sustainability. Lake Huron reports on contaminated sediment dredging and remediation activities in Saginaw Bay, environmental

indicators, and the development of a GIS-decision support system to better manage important tributary habitat. The Lake Michigan LaMP has proven a leader in the area of beach closings, monitoring and education/outreach. Lake Erie reports on its preliminary selection of an ecosystem alternative, the dynamic status of its aquatics, fisheries and habitats, and its future plans for LaMP implementation. Lake Ontario reports on adoption of ecosystem indicators for the lake; beneficial use impairments; current status of levels of critical pollutants; sources and loadings of critical pollutants; and trackdown/remedial actions in the watershed. *(Lake Superior: Elizabeth LaPlante, 312-353-2694, laplante.elizabeth@epa.gov; Lake Michigan: Judy Beck, 312-353-3849, beck.judy@epa.gov; Lake Huron: James Schardt, 312-353-5085, schardt.james@epa.gov; Lake Erie: Dan O'Riordan, 312- 312-886-7981, oriordan.daniel@epa.gov; Lake Ontario: Barbara Belasco, 212-637-3848, belasco.barbara@epa.gov)*

SEDIMENTS

Tannery Bay Sediment Cleanup to Begin

White Lake Public Advisory Committee Logo

A Consent Agreement was reached between the Michigan Department of Environmental Quality and Genesco, Inc. to remediate over 70,000 cubic yards of contaminated sediments in White Lake, Michigan. The agreement calls for Genesco to contribute $3.5 million and the State to provide $3.1 million in Clean Michigan Initiative Funds. In an effort to help jump start the project, GLNPO provided a $500,000 grant in 1999 to MDEQ towards the cleanup. The State's consultant is currently developing the bids and specs for the project, with dredging slated to begin in mid-May of 2002. *(Marc Tuchman, 312-353-1369, tuchman.marc@epa.gov)*

Indiana Harbor Dredging Project Continues to Advance

Indiana Harbor Canal Entrance

The project to restore navigation depths and remove some of the most grossly contaminated sediments in any U.S. waterway is advancing toward start-up. The Indiana Harbor Canal in Northwest Indiana was last dredged in 1972 and extensive contaminated sediment deposits have built up from past discharges from heavy industry in the area. Extensive monitoring will accompany the project in order to safeguard the public and the environment from the dredging project. The U.S. Army Corps of Engineers is conducting background air contaminant sampling at the dredged material disposal site. This data will be compared to air monitoring data collected after dredging and disposal of Indiana Harbor sediments begins at the site to determine if future dredging and disposal activities are impacting local air quality. USEPA Region 5's Air Monitoring Branch (George Bollweg and Motria Poshyvanyk) have provided significant support on this project and is working closely with the Corps to review the data and develop screening-level values to include on the web site for comparison purposes.

The Corps of Engineers has posted the results from their initial round of background air contaminant sampling on their Web site http://www.lrc.usace.army.mil/topics/IHC/air/main.htm. Initial review of the data indicates that the air contaminant concentrations are comparable to other urban areas in the U.S. *(Scott Cieniawski, 312-353-9184, cieniawski.scott@epa.gov)*

Initial Risk Assessment of Lower Ottawa River Completed


Ottawa River, Ohio

An "Ecological Screening-Level Risk Assessment of the Lower Ottawa River" was completed under GLNPO grant GL975080 by the Toledo Metropolitan Area Council of Governments. The study evaluated potential risk for wildlife and aquatic life for multiple segments of the lower nine miles of the Ottawa River near Toledo, Ohio. The report's findings indicate that lead and PCBs consistently exceeded the standard hazard quotient of 1.0 along multiple river miles for both wildlife and aquatic life. It was noted that PCB and lead hot spots were not co-located, suggesting different sources of contamination within the river. It is recommended that this area be further evaluated to test whether the chemicals of concern at this site are truly having an impact and to help prioritize further remedial options. *(Demaree Collier, 312-886-0214, collier.demaree@epa.gov)*

ECOSYSTEM PROTECTION AND RESTORATION

Wetland Scientists Meet


Wetland in Illinois Beach State Park

The Great Lakes Coastal Wetlands Consortium's Project Management Team met during the first day of a 3-day Regional Workshop on Bioassessment of Wetlands held at Kellogg Biological Station near Kalamazoo, Michigan from March 4th to 6th. Several presenters updated the group on efforts to develop a Geographic Information System-based inventory of coastal wetlands from existing (but often incompatible) data sources, a statistical framework for designing a monitoring plan, and other Great Lakes coastal projects funded by EPA's Office of Research and Development. Collaborators on upcoming pilot studies also had the opportunity to coordinate work planned for the coming field season. Consortium members also participated in the session the second morning on bioassessment of Great Lakes coastal wetlands, which included discussions on the use of coastal wetland plant and invertebrate assemblages to develop Indices of Biological Integrity. The bioassessment workshop was sponsored by USEPA Region 5, the Michigan Department of Environmental Quality, and Michigan State University. *(Duane Heaton, 312-886-6399, heaton.duane@epa.gov)*

Michigan Wildflower Conference


Blackeyed Susans

GLNPO staff were invited to speak at the 15th Annual Michigan Wildflower Conference on March 4th at the Kellogg Center in East Lansing, Michigan. The audience of about 150 people heard a presentation describing the concept of Biodiversity Investment Areas developed for the State of the Lakes Ecosystem Conferences, an assessment of the values and condition of some of those areas, and a description of stewardship activities that people who are investing in these areas are undertaking around the basin. Well received, the presentation generated discussions about the Detroit River National Wildlife Refuge as the newest protection effort in the region, the use of indicators to measure positive change in these areas, and plans to identify inland Biodiversity Investment Areas. *(Karen Rodriguez, 312-353-2690, rodriguez.karen@epa.gov)*

Natural Landscaping Benefits Explained


New England Asters

On February 19th, GLNPO, in partnership with Openlands Project and Chicago Wilderness, hosted the Natural Landscaping Roundtable for Large Properties. During this two-hour breakfast meeting, water and air quality and stormwater control benefits from natural landscaping topics were covered. Participants learned about the various programs promoting natural landscaping such as the Clean Air Counts Campaign (Delta Institute) and Corporatelands Program (Openlands Project) and how natural landscaping fits into the efforts of Chicago Wilderness. A case study of natural landscaping at Tellabs corporate campuses was followed by dynamic discussion. Forty people attended the meeting including representatives from corporations, utilities and sanitary districts. Each participant received a packet of information containing natural landscaping tools including fact sheets, a video, and a native plant CD. Followup to the meeting has included discussions with three large landowners about new natural landscaping projects.

On March 6th, GLNPO staff conducted a workshop session on Natural Landscaping as part of the Indian General Assistance Program conference. Participants learned about the environmental benefits of natural landscaping as well as the variety of tools available to promote natural landscaping. Each participant received a packet of information including fact sheets, a video, and a native plant CD. *(Danielle Green 312-886-7594, green.danielle@epa.gov)*

Great Lakes Bat and Mine Protection and Restoration Project Lauded

More than 25 mines were surveyed for bats during the winters of 1999/2000 and 2000/2001. Fourteen gates were constructed at ten different mine sites. An estimated 400,000 bats have been protected by this project. In addition, reopened and protected mines offer hundreds of miles of additional mine passage, allowing bat populations to expand. Some bats consume large quantities of insect "pests," thereby reducing the need for application of chemical pesticides in the Great Lakes basin.

The project's successes have gained national recognition. National Geographic Radio Expeditions was so excited by the bats and mines work that their reporters crawled down mine shafts, interviewed the Michigan partners, and recorded enough tape for a two-part series that aired June 5 and 6, 2001 on National Public Radio's Morning Edition, with more than six million listeners.

Classroom presentations, local lectures, community events, and local media coverage have also raised awareness. Nearby towns and communities have benefitted by learning why bats that live in their "backyard" are so important.

On a state and national level, Bat Conservation International produced the Bats of the Great Lakes Poster and distributed more than 10,000 copies to Great Lakes state agencies, federal government agencies, local tourist mines, and schools. The poster shows the types of bats found in the region, explains why bats are important to our economy and environment, and why bats hibernate in mines of the Great Lakes region.

A feature article about Great Lakes Bats and Mines was published in BATS Magazine (Winter 2000). Each issue reaches 15,000 people quarterly. *(John Schneider, 312-886-0880, schneider.john@epa.gov)*

RESEARCH AND MONITORING

GLNPO Shares Quality Assurance Expertise

GLNPO's Quality Assurance Manager participated in a team training session to over 120 employees in the USEPA Office of Water's Office of Science and Technology during the week of February 25th. Six separate 2-hour sessions were given during a three-day period. Material presented from GLNPO's Quality System included its graded approaches for assistance agreements as well as GLNPO's internal documentation process for review and approval of quality documentation. Three different examples of GLNPO Quality Documentation were presented that covered modeling, secondary data, and research and monitoring for invasive species. The examples used were GLNPO's "Great Lakes Sediment Data Support" written by Scott Cieniawski and Demaree Collier of GLNPO, the "Lake Erie Total Phosphorus Loads, 1996-2000," written by David Dolan through GLNPO Project Officer David Rockwell, and the "Influence of Physical Factors and Exotics on Diporeia" written by GLNPO Project Officer Robert Beltran. *(Lou Blume, 312-353-2317, blume.louis@epa.gov)*

Emergency Medical Training for Shipboard Scientists

GLNPO Scientists Practice Emergency Medical Procedures

From March 4th through 7th, GLNPO scientific staff participated in intensive emergency medical training. The Emergency Medical Response Training course was taught by staff from the George Washington University Hospital. Among the activities were many real-life scenarios requiring diagnosis and treatment of injuries and medical emergencies. Everyone was trained to start an IV, and administer medication and oxygen, etc. The most physically taxing portion of the training was carrying an adult, on a backboard, up from the engine room. All of this training is necessary preparation for a shipboard emergency aboard the GLNPO 180-foot research vessel, the *R/V Lake Guardian*, since medical help may not be readily available when the vessel is far from port. *(Paul Horvatin, 312-353-3612, horvatin.paul@epa.gov)*

Spring Survey of Lakes Set to Start

R/V Lake Guardian

The Spring Water Quality Survey gets underway on March 27th and will run through May 6th. All the Great Lakes will be visited, with samples being taken to assess their chemical and biological health. During the survey, USEPA Region 2, along with Canadian and US scientists, will sample contaminants in the air and water of the Lake Ontario basin from aboard GLNPO's 180-foot state-of-the-art research ship, the *R/V Lake Guardian*. The work will aid the science component of the Lake Ontario LaMP. This begins what will be a very busy season for the Lake Guardian and GLNPO scientists. *(Glenn Warren, 312-886-2405, warren.glenn@epa.gov)*

New Lake Erie Study

Nearshore Lake Erie

Following up on the December 2001 meeting of leading Lake Erie scientists from the U.S. and Canada, hosted by GLNPO, (See the January 2002 Significant Activities Report), a Request for Proposals (RFP) was issued on January 14th, to support research into increasing phosphorus concentrations and decreased oxygen levels in Lake Erie. In response, a proposal was received from a consortium of 22 U.S. and Canadian scientists. The proposal is currently being reviewed.

Great Lake scientists became concerned over an increasing Lake Erie "dead zone, " essentially devoid of oxygen in the Summer. Preliminary 2001 data shows dissolved oxygen concentrations in Lake Erie's central basin to be near the worst observed during the last 5 years, despite international success in reducing phosphorus loadings, phosphorus concentrations in the lake are increasing (observed through U.S. and Canadian monitoring). Reducing phosphorus loads should have reduced algae production and decomposition (which removes oxygen from the water), and

resulted in higher dissolved oxygen concentrations. To understand and address this situation, GLNPO is shifting its program to develop missing information such as external phosphorus load calculations (completed in December); convene researchers to further explore the biological effects being seen in Lake Erie (also completed in December); initiate the special study for which the RFP was issued and the proposal was received; and integrate research and management efforts through the Lake Erie Lake Management Plan. *(Glenn Warren, 312-886-2405, warren.glenn@epa.gov)*

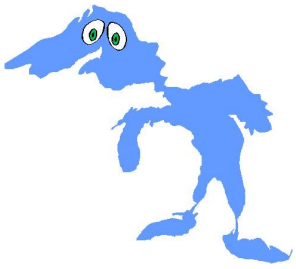
OUTREACH

Great Lakes Day in Washington

Tom Skinner, USEPA Great Lakes National Program Manager

USEPA's Great Lakes National Program Manager, Tom Skinner, addressed the Congressional Briefing which was part of the annual Great Lakes Day in Washington, DC. This year's event took place on March 14th. Tom laid out the plans of the U.S. Great Lakes Federal, State, and Tribal environmental and resource agency partners to protect and restore the Great Lakes. He described how the partners would work more closely and how they would increase accountability to ensure that their collective efforts were really having a positive impact on the Great Lakes ecosystem. Other participants in the briefing included John Mills, Tom's counterpart at Environment Canada. John discussed how the Great Lakes Water Quality Agreement between the United States and Canada (the cornerstone of the binational Great Lakes Program) could be strengthened. *(Tony Kizlauskas, 312-353-8773, kizlauskas.anthony@epa.gov; Vicki Thomas, 312-886-6942, thomas.vicki@epa.gov)*

SHEMO on the Loose



SHEMO

On May 2nd, Paul Bertram and Nancy Stadler-Salt have been invited to present SHEMO to several classes of students at the Rouge River Water Festival. The festival is a one-day interactive experience for nearly 3000 5th graders from the Detroit area, University of Michigan-Dearborn. SHEMO is a whimsical way to tell the "Story of the Great Lakes" from their creation to the present day. Paul and Nancy's presentations have been well-receive by young and old. SHEMO debuted at the 1996 State of the Lakes Ecosystem Conference in Buffalo, New York. Although the story is told in a light-hearted rhyme, it has a deeper, more important meaning: relating how the Great Lakes were brought to the brink of collapse by pollution and restoration efforts to bring them back to health. *(Paul Bertram, 312-353-0153, bertram.paul@epa.gov)*

GRANTS

FY2002 Grant Proposals Are In!

GLNPO received 192 proposals seeking $20.2 million in funding in response to its December 20th, 2001 competitive grant solicitation. There is $2.9 million available for projects to be awarded from Fiscal Year 2002 funding. The "FY2001-2002 USEPA Great Lakes National Program Office Request for Proposals/Funding Guidance" (Funding Guidance) requested that Proposals be developed in the areas of (I) Contaminated Sediments; (ii) Pollution Prevention and Reduction; (iii) Ecological (Habitat) Protection and Restoration; (iv) Invasive Species; (v) Habitat Indicator Development; and (vi) Strategic or Emerging Issues. More than 1,500 postcards were mailed, an announcement was made to the "GLIN-Announce" and NACD listservers, notice was published in the Federal Register, and reminders were distributed on February 8th and 11th via e-mail and GLIN-announce. The RFP is available on the Internet from http://www.epa.gov/glnpo/fund/2002guid. The following tables summarize proposal submissions for the past 3 years:

By Type of Organization Submitting Proposal

Type of Organization	**FY2000** (Number and Percent of Total)	**FY2001** (Number and Percent of Total)	**FY2002** (Number and Percent of Total)
State Agencies	39 / 15%	53 / 22%	30 / 16%
Universities	86 / 33%	81 / 33%	74 / 39%
Federal Agencies or Research Centers	38 / 15%	30 / 12%	10 / 5%
Tribal Organizations	6 / 2%	4 / 2%	6 / 3%
Counties, Municipalities, and Special Purpose Districts	26 / 10%	30 / 12%	18 / 9%
Not-for-profits and Others	66 / 25%	44 / 18%	54 / 28%
Totals	261	242	192

By Subject Category

Category	FY2000 (Number and Requested Funding)	FY2001	FY2002
Contaminated Sediments	65 / $10.3M	59 / $9.1M	51 / $8.4M
Pollution Prevention and Reduction	61 / $5.9M	36 / $2.5M	31 / $2.5M
Ecological (Habitat)	71 / $6.2M	55 / $5.1M	49 / $3.9M
Invasive Species	30 / $2.9M	29 / $2.3M	27 / $2.5M
Strategic/Emerging Issues	34 / $5.4M	40 / $5.3M	29 / $2.8M
Indicators	n/a	23 / $2.5M	4 / $170,000

By Lake Affected by Proposed Project

Lake*	# Proposals	Funding Requested
Erie	90	$10.3M
Huron	58	$5.7M
Michigan	98	$9.9M
Ontario	67	$6.8M
Superior	77	$7.6M
*Each Lake's total below includes 41 proposals applicable to "All Lakes."		

The proposals received in the FY2002 GLNPO Grant Proposals solicitation are listed at http://www.epa.gov/glnpo/fund/2002guid/proposals2002.html. *(Mike Russ, 312-886-4013, russ.michael@epa.gov)*