

Illinois Habitat and Species Workshop
January 21, 2009
U.S. Environmental Protection Agency Training Center,
77 West Jackson, Chicago, Illinois

Summary Notes

Brian Anderson, the Director of the Illinois Natural History Survey, welcomed over 30 participants to the workshop. He stated that a major factor to consider throughout this workshop was to loosen the definition of the geographic scope of the discussion beyond the artificial hydrologic watershed drainage area to the Great Lakes within Illinois. After all, birds, plants, mammals do not exist within this narrow boundary. Historically, Illinois stakeholders have complicated ecological processes by rerouting stream dynamics and constructing the extra-urban domain of Chicago. He encouraged participants of the workshop to take advantage of the significant level of expertise around the table on developing consensus on conservation and restoration objectives and implementation methods.

Judy Beck of the U.S. Environmental Protection Agency (USEPA) reinforced and amplified Anderson's comments by also including the broader airsheds and groundwater systems at play within the state.

Roger Gauthier of the Great Lakes Commission (GLC) reviewed the agenda. He indicated that presenters would be starting out at from a "40,000-foot" perspective and adding more detail through the day until a few site-specific case studies were discussed. Time had been factored into the agenda to promote dialogue between participants.

Jan Miller of the U.S. Army Corps of Engineers (USACE), Great Lakes and Ohio River Division, provided an overview of the USACE Great Lakes Habitat Initiative (GLHI), which provided the impetus for the 2007 state habitat workshop series and development of the regional databases of potential habitat restoration and protection projects and funding/technical assistance programs that could support them. The GLHI produced an implementation plan that the USACE has used to inform its resource allocation decisions, which is also available for consideration by other agencies. These products are available online at: <http://www.glni.org/>. Miller noted that the GLHI was a two-year project which was completed in 2008. Stakeholders involved in the GLHI have continued to work together and are now part of the Habitat/Species Subcommittee of the Great Lakes Interagency Task Force which is supporting implementation of the Great Lakes Regional Collaboration (GLRC) Strategy for Protecting and Restoring the Great Lakes. Miller stated that the GLRC has identified that over 100,000 acres of wetlands have been restored across the Great Lakes region, but identifying improvements in ecological services that have been improved is difficult to quantify. He expects that the GLRC web tools will help the region to visualize the extent and location of efforts underway to implement ecological restoration.

Roger Gauthier made a brief presentation on the current status of the web-based habitat restoration tools funded under the Corps' GLHI project, which are now branded as part of the GLRC Habitat/Species Subcommittee's activities. The web tools can be found at: gis.glin.net/habitat/. The web tools are all browser-based (e.g., accessible with common browsers such as Internet Explorer or Mozilla Firefox). The project repository now has over 230

projects included which showcase the current phase of the projects (proposed, planned, in design, preparations completed, under implementation/construction and post construction monitoring). The project repository includes detailed information on current stressors affecting the project area, benefits anticipated, costs by phase and other salient characteristics. The tool has been designed to utilize the characteristics of the project to help users search for appropriate funding/technical assistance programs to advance the project. The funding/technical assistance database currently has 130 programs identified. Sustaining the database to insure currency and comprehensiveness is a major challenge that needs to be overcome.

Lynn Boerman of the Illinois Department of Natural Resources (IDNR) provided a comprehensive overview on Illinois' Conservation 2000 (C2000) / Partners for Conservation initiative. The initiative covers 84% of Illinois, including over 62,000 acres restored and 6,000 acres protected through easements or acquisitions costing over \$34M with about \$38 in state/local match. She showcased a series of web pages that help users to access information on the initiative, including online applications, program priorities and prior investment areas. She also provided an overview on the Open Space Land Acquisition Development (OSLAD) grant program, including funding levels, grant cycles, priorities, and evaluation criteria. Information on C2000 and OSLAD grant program can be found at: www.dnr.state.il.us.

Boerman also provided an overview on the current status of the Illinois Coastal Management Program (ICMP), acting as a proxy for Frank Pisani, the Development Manager for ICMP. Plans to implement the ICMP are currently under review by the National Oceanic and Atmospheric Administration (NOAA) to insure compliancy with the Coastal Zone Management Act. Illinois' coastal zone is a major breeding/rearing zone for over 75% of the state's threatened and endangered bird species. The coastal zone has many areas with unique, scarce, fragile or vulnerable natural habitat and contains high-quality beach, foredune and prairie environments. The ICMP is expected to receive over \$2M per annum to be used by eligible recipients to protect, conserve and restore critical habitat. The ICMP is planning to include participating in lessons learned dialogues and intrastate coordination between Illinois, Indiana and Wisconsin. The ICMP website can be found at: www.dnr.state.il.us/owr/cmp/. Approval by NOAA of Illinois CZMA application is expected to occur no later than July 2010. A comment was provided that CZMA reauthorization by Congress is delaying implementation of Illinois' request.

Steve Mandel, Highland Park Councilman, made a brief presentation on the objectives of the Lake Michigan Watershed Ecosystem Partnership (LMWEP) outlined in a two-page handout. The LMWEP is a network of municipalities, businesses, individuals and NGOs that strives to protect and restore Lake Michigan and its watershed in Illinois through implementation of water quality and habitat improvement projects. A current project to be completed this spring is referred to as the Strategic Subwatershed Identification Process (SSIP), which is a first-ever comprehensive collection of primary data on condition in each of Illinois' over 40 glacial ravines. The LMWEP has assisted its members in logging their existing projects into the GLRC project repository.

Steve Robillard of the IDNR Division of Fisheries made a presentation highlighting the critical needs to include ecological restoration focus on aquatic habitats. The Illinois Comprehensive Wildlife Conservation Plan and Strategy (CWCP) is focused on restoring viable lake trout populations in nearshore waters, preventing introduction of new invasive species and no net loss of critical habitat. Fisheries management is focused primarily on trout, salmon, yellow perch, bloater chub, bass, bluegill and rockbass. The CWCP is integrated into the Great Lakes

Fisher Commission Fish Community Objectives and the Joint Strategic Plan for Management of Great Lakes Fisheries. The Joint Plan helps to focus attention on critical new emerging issues like genetics crossovers that occur between various desirable species strains. The Lake Michigan GIS developed by the University of Michigan highlights the shortfall of desired fishery habitat in Illinois waters within Lake Michigan.

During open dialogue, Robillard stated that habitat restoration for Lake Trout requires very specific data collection of substrate at a sub-meter accuracy. Lake Superior has naturally spawning of Lake Trout, but Lake Michigan has not had the same success. The recent downturn in diporia populations in Lake Michigan is a major factor in reducing recruitment success. There is also a substantial problem through most of Illinois nearshore waters with legacy contamination of sediments. He stated that there is a major paucity of observations of substrate and nearshore habitat than can be used to plan aquatic habitat restoration projects that would improve spawning and rearing of desired species. There is also a critical need to better understand nearshore habitat resiliency to climate change.

Tammy Mitchell of the Illinois Environmental Protection Agency (IEPA) provided a presentation on the Rapid Response Initiative dealing with aquatic invasive species. The initiative is focused on:

- preventing environmental harm from aquatic invasives including degradation of habitat, depletion of native and naturalized species and disruption of food webs;
- preventing economic harm such as degradation of fisheries, damage to infrastructure and interference with recreational uses; and
- preventing harm to human health, including introduction of bacteria or viruses.

The rapid response initiative needs identification of resources including staff and equipment, methods for AIS identification, rapid and coordinated responses from the multi-agency and multi-jurisdictions affected and an effective communication campaign. Two recent rapid response exercises were completed on in Erie, PA on AIS interagency coordination and the other in Romulus, MI on a theoretical botulism outbreak, including identification of research needs. She noted that most long-term monitoring strategies is conducted at the habitat level, not at the species level which is needed to detect new introductions and spread of AIS.

Chris Grubb of the National Wildlife Federation (NWD) made a brief presentation on the structure and activities of the Healing Our Waters (HOW) Coalition and described ways HOW can help advance state priorities related to habitat restoration and protection. He reviewed HOW's priorities for Congressional authorization and appropriations for the next few years. He encouraged that those non-governmental participants who can join HOW to do so. He identified that the Great Lakes Restoration Conference will be conducted in Duluth, MN on September 10-12, 2009.

An open dialogue followed about expected Congressional appropriations for restoration activities, including speculation about how Economic Stimulus funding could affect the region. Comments were provided that the Illinois Association of Park Districts and the Land and Water Conservation Fund have identified anticipated recreational and economic benefits from specific restoration activities. It is becoming more important to identify likely job creation benefits that would be attained for various restoration projects.

David Brakhage of Ducks Unlimited (DU) made a brief presentation on a Joint Venture (JV) concept that several NGOs were promoting to advance GLRC objectives. A JV method has been developed to successfully implementing the North American Waterfowl Management Plan. In some states, such as Michigan and Wisconsin, a JV-like model is being considered to step down implementation of the GLRC Strategy. In Michigan, action frameworks were developed for each of the eight strategy areas. Tori queried participants on whether the infrastructure is in place to make a similar JV work in Illinois. Several participants indicated that the C2000 initiative is a successful example of how Illinois could participate in this type of step-down process.

Next, three projects/programs were discussed as examples of fostering collaboration within Illinois to advance ecological restoration progress.

The first presentation was made by **Chris Mulvaney** of Chicago Wilderness (CW) described how its Biodiversity Recovery Plan was created covering over 360,000 acres within over 25 counties from Milwaukee, WI to Berrien County, MI. The CW is an alliance of over 230 regional conservation agencies. The CW works with member organizations to develop common goals and to increase public involvement in local conservation programs. All organizations agree to a common Memorandum of Understanding (MOU) that outlines rights and responsibilities of membership and general organizational policies. The CW is led by a Steering Committee composed of elected representatives and has a number of subordinate teams to promote scientific assessments, sustainability principles, education and communication and natural resources management.

The CW is focused on a three-part strategy: 1) An Atlas of Biodiversity (to increase awareness of the geology, living communities and the role of people; 2) A Biodiversity Recovery Plan which outlines needed actions; and 3) a Report Card to track results of progress and calls for further action. The current Report Card is entitled: *"Summary Report: The State of Our Chicago Report – A Report Card on the Health of the Region's Ecosystems"*. A companion detailed Technical Report, published in 2006, provides detailed assessments of the terrestrial and aquatic communities within the CW, animal assemblages, plant species, and ecological management objectives and implementation strategies, including a vision to restore a "green infrastructure" that amplifies habitat corridors across the region. Further information can be found at: www.chicagowilderness.org/.

The second presentation was made by **Debbie Maurer** of the Lake County Forest Preserve District on the Chiwaukee Illinois Beach Coastal Area Habitat Restoration and Long-term Conservation Program. The Spring Bluff Forest Preserve is centrally located in the Chiwaukee Prairie in close proximity to the Chiwaukee Prairie Nature Preserve in Wisconsin and Illinois Beach State Park. Habitat restoration throughout this coastal plain is challenged by a wide variety of stressors including changes in alongshore sediment transport, spread of aggressive invasive plants including Lyme Grass, Phragmites and Reed Canary Grass, changes in overland hydrology affecting water quality and deleterious impacts from fire suppression programs over the long period to name a few major factors. Historic lake level fluctuations and shoreline construction has substantially changed littoral transport of sands and other materials, leading to a need to address erosion along this reach of Lake Michigan shoreline. Species of concern within the prairie include the Marsh wren and Blanding's turtle

Partners have initiated significant projects as part of the long-term conservation program for Chiwaukee Prairie including:

- Conducting a baseline hydrology study of the Spring Bluff Forest Preserve to improve understanding of overland flow characteristics and impacts;
- Implementing strategic invasive species management and Savanna Canopy restoration projects;
- Conducting a study of the influence of cattails upon nutrient levels; and
- Conducting wildlife studies on Blanding's Turtle population dynamics.

Maurer made specific reference to the critical need to better understand landscape level processes that are at work that affect long-term conservation goals. The partnerships at work are working toward improving knowledge of the natural and social resources that exist within the lake plain from Kenosha Dunes to Waukegan Harbor, the threats that either exist or are emerging, and strategic solutions to accomplish community goals.

The third presentation was made by **Nicole Kamins** of the City of Chicago, Department of Environment, on the Calumet Initiative involving numerous individual projects. Her presentation provided illustrations on how nature, industry and community actions have been connected historically. The development of the southeast side of the Chicago urban environment has been influenced by major changes in the Lake Michigan shoreline, changes in the flow characteristics of the Calumet River, by construction of the rail network across the region, by filling of coastal wetlands and by other forms of natural resource utilization. The challenges to nature within the southeast side include substantial slag and dredge spoil deposits, contaminated sediments and groundwater, unnatural hydrology, infestation of aggressive invasive plants, significant nuisance species, persistent trash dumping, and off-road recreational demands. Meanwhile there are huge opportunities in place to capitalize on prior work, including large existing ecologically significant wetlands and habitat for over 40% of Illinois' state listed threatened and endangered species. The urban setting for the Calumet Initiative also provides a unique opportunity since there is an innate desire within the population for more natural settings and interpretive opportunities.

Kamins illustrated that the Calumet Initiative has "no small plans," including production of substantial open space reserves that are identified in the City of Chicago's Calumet Area Ecological Management Study. The study findings focus on how all stakeholders can be engaged in reaching community goals, including academia, local and state governments, federal agencies, environmental organization, local resident organization, industry, local consulting firms, foundations and nature and cultural groups. A major endeavor currently underway is the creation of a Calumet Hydrologic Master Plan to assess overland and groundwater flow movement and water quality impacts. She showcased work currently underway at the Hegewisch Marsh Ecological Rehabilitation Project, including debris removal, woody invasive plant removal, trail staking/grading, herbaceous invasive control, vernal pool enhancement, tree and shrub planting and prescribed burns.

Kamins concluded with a list of key discussion topics including:

- Urban, contaminated sites are challenging (as well as fascinating) to restore;
- Need to think creatively about how to manage sites to balance needs of native flora/fauna, human visitors, regulatory management and changing hydrologic regimes;

- Thinking of the Calumet region as a whole system rather than disparate and non-connective sites;
- Intensive collaboration has led to the successes so far; partners are vested in outcomes;
- Consistent public outreach is necessary for continued buy-in;
- Greater innovation is needed to explore non-traditional funding sources; and
- "Patience is a virtue;" big plans take time.

Federal agency representatives from the USACE, the USEPA, the USF&WS, and NOAA provided brief overviews of their habitat restoration funding and/or technical assistance programs. Several of these presentations were augmented by handouts summarizing program details and/or pointed participants to relevant web sites.

Gauthier, with input from other participants, then provided summary points and next steps that he gathered from the presentations and discussions within workshop, including:

Restoration Challenges:

- A substantial body of knowledge exists to implement comprehensive long-range restoration/protection/conservation plans that have been developed for much of the Illinois drainage to the Great Lakes;
- There is a common vision of what restoration needs to accomplish across the region;
- Funding for restoration activities is highly unstable;
- Aquatic habitat is not getting the same attention as coastal wetlands and upland habitat;
- Stakeholders need to be able to be opportunistic; particularly if funding becomes available under stimulus or Great Lakes restoration plans;
- Stimulus funding needs to recognize that local cost share is not available, particularly now;
- The local cost share for federal projects needs to include the value of land provide and allow for in-kind services from state, municipal and NGOs; and
- There is a continuing challenge to sharing information to maintain effective partnerships.

Web Tools:

- The GLRC databases can provide value to help identify projects for expected stimulus funding in early 2009;
- The GLRC databases could be a useful mechanism of bringing disparate stakeholder input into defining anticipated project benefits and to help continue partnering;
- The GLRC project repository currently does not adequately represent the complexity of several major restoration/protection program (e.g., the Calumet Initiative, the Chicago Wilderness; the Chiwaukee Prairie restoration plans);
- To the extent possible, the GLRC project repository needs to connect to higher resolution local planning tools including GIS resources and products on the web.

A few other key observations were provided by workshop participants including:

- The USEPA is focusing on 2011 as the "Year of the Wetlands" and has added a new tri-axis tow vehicle to its nearshore tools that can collect key physical, chemical and biological observations; and

- The National Beach Act is coming up for reauthorization in Congress, with significant debate likely to occur on the protocols used to determine resource allocations.

Gauthier asked if this type of forum should be repeated and if this is something that the Illinois participants would welcome. Most attendees saw some merit in conducting this type of dialogue on an annual basis. Several participants indicated that follow-on coordination activities should be focused on a narrower agenda. Some participants stated that many organizations in the Lake Michigan drainage area in Illinois already had good working relationships in place to continue collaborative restoration activities. The consensus opinion was nevertheless that there is value in getting all federal agencies together at one time each year to hear about funding opportunities and how Indiana state programs could be more engaged in these processes. Gauthier indicated that follow on workshops could be done via webinars, focusing on narrow topics.