



Habitat Restoration in the Grand Calumet River Area of Concern and Indiana Lake Michigan Beaches Sanitary Surveys

GLRI funded projects

January 25th, 2011

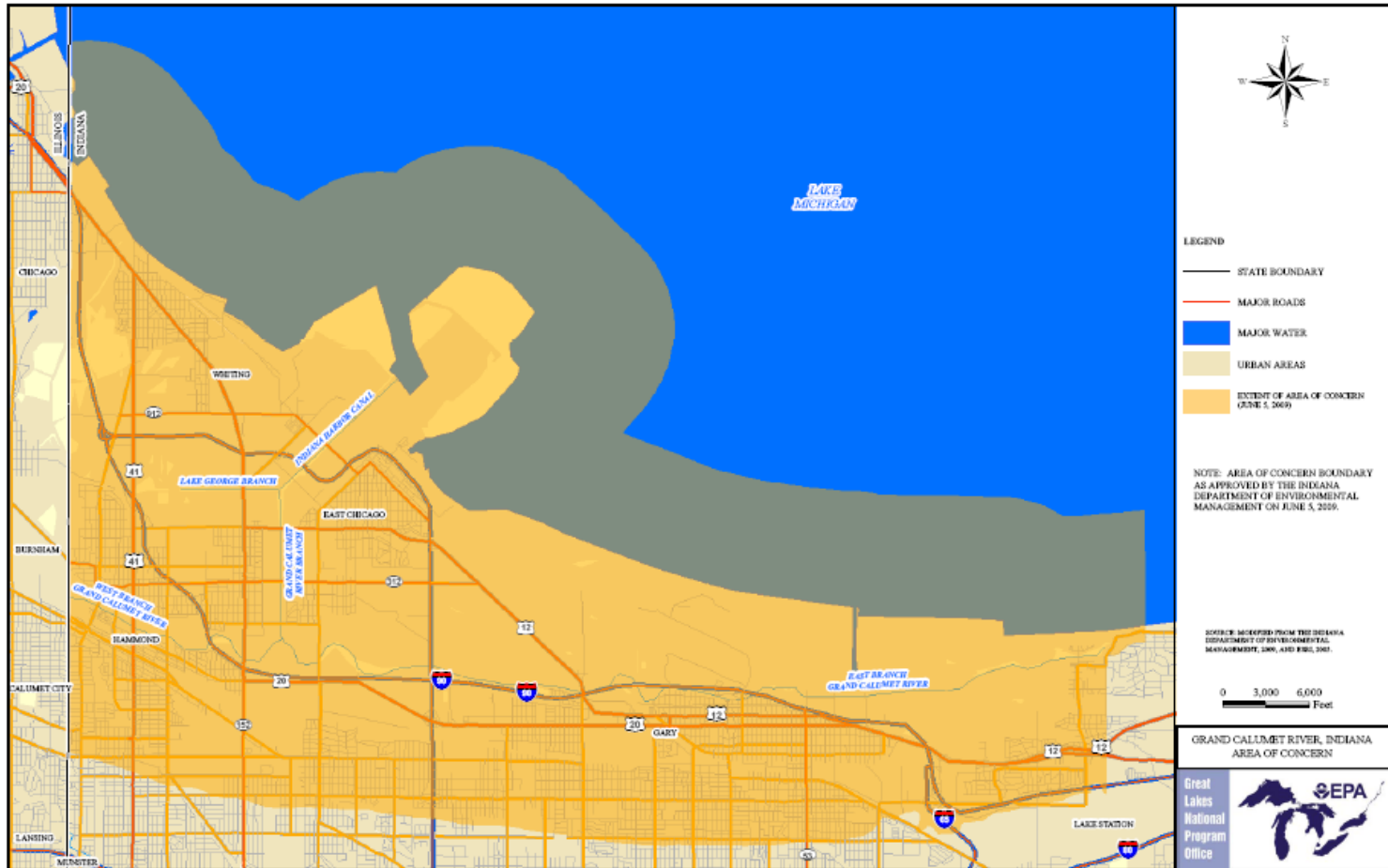
Presented by:

Danielle Barnett & Michelle Caldwell

Indiana Dept. of Environmental Management (IDEM)



Grand Calumet River (GCR) Area of Concern (AOC) Boundary





Project Goal

- To improve the quality and increase the acreage of suitable habitat for wildlife, including migratory birds.
- Progress towards habitat related delisting targets in the Grand Calumet River AOC:
 - Degradation of fish and wildlife populations
 - Loss of fish and wildlife habitat



Key Outcomes

- Control of woody and herbaceous invasive plant species within remnants of the dune and swale ecosystem.
- To improve conditions for the federally endangered Karner blue butterfly and other non-game wildlife species.
- If you build it...they will come.



Partnerships and Collaborations

- Without partnerships – there would be no project.
 - Four major partners, six sites, 230 acres
 - The Nature Conservancy (Ivanhoe, Beemsterboer, and DuPont)
 - Indiana Department of Natural Resources (DuPont and Pine Station)
 - Lake County Parks and Recreation Department (Gibson Woods)
 - Save the Dunes (Cline Avenue/Martin Oil site)



Lessons Learned

- What would you do differently, if anything, to enhance your application?
 - Looking back...nothing. We were as prepared as we could be.
 - Looking forward...more groundwork, better targets.



Why was your project successful?

- Success was based on several things:
 - Project partnerships – solid partners with great reputations in habitat restoration and conservation.
 - A focused approach – identification of specific sites and species that would be helped by restoration.
 - Focus area – as an AOC we have a particular focus because of already existing program guidance and interest by U.S. EPA.



GLRI Beach Project Description

- Partnering with Dr. Richard Whitman's team at the USGS Great Lakes Science Center.
- Conduct Great Lakes Beach Routine Onsite Sanitary Surveys at all Lake Michigan beaches, including National Lakeshore beach access sites, for two consecutive beach seasons (2011 and 2012).
- Collect weekly Microbial Source Tracking samples at all project beaches and 7 outfalls for 2011 season.



GLRI Beach Project Goals

- Identification of remedial projects to reduce and/or remove contamination sources.
- Implement best management practices at all Lake Michigan beaches.
- Reduce the number of beach advisories and closings during future beach recreational seasons.



GLRI Beach Project Outcomes

- Data from 2,190 sanitary surveys conducted in conjunction with routine *E. coli* monitoring.
- Microbial Source data from 420 samples collected in 2011.
- Immediate outputs include:
 - preliminary identification of the origin of microbial contamination (human vs animal).
 - Identification of “hotspots” of bacterial contamination along shoreline.



Lessons Learned

- What would you do differently, if anything, to enhance your application?
 - Looking back...Better planning of logistics and resource allocation.
 - Looking forward...taking more time to plan out the tasks of the project.



Why was your project successful?

- Success was based on several things:
 - RFP understanding – Read it...Learn it...Live it.
 - Project partnership – partnering with a federal entity with established expertise, experience and local facilities...priceless.
 - An U.S. EPA approved method – using a tool developed by U.S. EPA scores major points.



Why was your project successful?

- Success was based on several things (cont'd):
 - Focus area – beaches within the Great Lakes basin continue to be a particular focus due to:
 - An existing U.S. EPA program (BEACH Act)
 - Potential human health risks
 - An economic resource for communities (tourism)
 - Beaches are just really cool and fun places to visit (most important)



Questions?

Contact:

Danielle Barnett
IDEM Remedial Action Plan Coordinator
dbarnett@idem.IN.gov
(219) 757-0277

Michelle Caldwell
IDEM BEACH Act Coordinator
mcaldwel@idem.in.gov
(219) 757-0283



Marquette Park Lagoons