Improving the Health of the Western Lake Erie Coastal Zone

October 20, 2013

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Western Lake Erie - Degrading Ecosystem

- Aquatic Environment
  - Dead zones
  - High nutrient concentrations

- Coastal Ecosystem
  - Impaired wetlands, uplands, migratory stopover sites, fish passages

- Conservation Efforts Ongoing by other Stakeholders

- How does MDOT plan projects in this watershed and address these issues?
Unique Opportunity for MDOT

• I-75: A Gateway into Michigan
• Western Lake Erie Coast
• Partnering and stakeholder input
• Selected for a SHRP2 Pilot project
Goal of the Project

- To develop and implement a Collaboratively-based Landscape Scale Conservation Plan that facilitates rebuilding the I-75 Corridor while maximizing conservation and restoration outcomes in the region.
Expectations for Project Success

- Natural resource objectives for Project clearly defined
- Balanced solution addressing natural resource and transportation needs
- Long term strategy with resource agency consensus
- Transparent process that includes existing stakeholders with natural resource concerns
- Leverage existing tools and materials from stakeholders to drive cost-effective process for project
I-75 Corridor

• $500 million project
• Total reconstruction
• 5 phases
• Environmental Concerns
  • Wetlands
  • Threatened and Endangered Species
  • Water quality
Ecosystem Based Planning

- 2006 Eco-Logical Approach
  - 6 Federal Agencies
  - Time Savings
  - Maximize environmental benefits
  - Wetland banking
  - Leads to the Integrated Ecological Framework or IEF
SHRP2 Implementation Pilot Project

• Set up an Integrated Ecosystem Framework (IEF)

• Core Team:
  – MDOT – Project Lead
  – MNFI – Facilitate Conservation Planning
  – SEMCOG – Outreach, communication, ownership

• Technical Advisory Committee (MDOT+ SEMCOG + FHWA + Federal Resource Agencies + State Resource Agencies + Nature Conservancy + Monroe County)

• Stakeholder Outreach
Value to MDOT

IEF will:

- Identify conservation priorities to guide future mitigation
- Meld transportation and conservation planning
- Get early buy-in from key national, state and local agencies
- Streamline permitting process
Proposed Role of TAC

- Define project scope and ID conservation priorities
- Identify key stakeholders
- Provide data and information
- Expertise
- Review all materials and suggest changes
- Approve the final product
- Facilitate implementation by serving as liaison
- Make decisions
Overview of the IEF Process

• IEF = Integrated Ecological Framework

• Step-by-step, peer-reviewed, science-based process that guides transportation and resource specialists in the integration of transportation and ecological decision making.

• The IEF responds to two critical needs:
  1. Identify potential impacts early in the planning process
  2. Assure that mitigation provides effective, measurable, and high-quality environmental outcomes
Integrated Ecological Framework (IEF)

Step 1: Build and Strengthen Collaborative Partnerships
Step 2: Characterize resource status; Integrate cons. plans
Step 3: Create Regional Ecosystem Framework
Step 4: Assess Land Use and Transportation Effects
Step 5: Establish and Prioritize Ecological Actions

Step 6: Develop Crediting Strategy
Step 7: Develop Programmatic Consultation, BO or Permits
Step 8: Implement Agreements and Adaptive Management
Step 9: Update Regional Plan/Ecosystem Framework
Tools to Facilitate IEF (Steps 1-5)

- Weight conservation values
- Model ecological condition
- Assess cumulative impacts
- Create conservation solutions
Resources to Inform IEF

- Existing Cons. Plans
- Data Layers
- Models

Research

Experts
Final Products

- Biodiversity Conservation Strategy (targets, threats, actions, goals, obj’s)
- Regional Conservation Priority Map
- Measured impacts from I-75 project
- Identified mitigation opportunities
- Mitigation agreements
- Western Lake Erie IEF Website
Benefits of Eco-Logical to I-75

• Relationship improvements with agencies and stakeholders, already benefitting other projects
• Approach to project design also benefits natural resources
• Cost-effective approach in applying existing tools and materials to project study
• Collaborative approach by multiple agencies recognized by public