Eco-Logical and Integration of Geospatial Tools and Data

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Eco-Logical and Eco-Plan

- The approach and the tool for ecological based planning in transportation
## Demands On DOT’s in Project Development

How can Eco-Logical & Eco-Plan meet these demands?

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>Risk Management:</td>
<td>Having a clear approach to the project while building proactive relationship with resource agencies</td>
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<td>Performance:</td>
<td>Balanced outcome for transportation and environment</td>
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<td>Investment:</td>
<td>Avoidance and mitigation costs justified</td>
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<td>Schedule:</td>
<td>Increases predictability of environmental actions (permitting)</td>
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<td>Governance:</td>
<td>Shared effort in collaborating with approving agencies and stakeholders</td>
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Ecosystem Approach to Developing Infrastructure Projects
What is the Eco-Logical Approach?

- Predictability
- Connectivity
- Conservation
- Transparency
Currently funds 14 assistance projects—seven Lead Adopter Incentive recipients ($200,000-250,000 each) and seven User Incentive recipients ($25,000 each).
Eco-Plan supports transportation planning by providing prepared maps of national ecological data sets that can be used to avoid and minimize transportation impacts.

- Review maps of national ecological data sets
- Find data and other useful GIS information
- Upload or draw a planning area or transportation network
- No GIS skills needed
Eco-Plan Advanced, a separate website hosted by Esri ArcGIS Online, provides all of the information available through Eco-Plan with additional capabilities.

- Add any data set to the prepared maps of national ecological data
- Set up groups to save, share and comment on maps
- Conduct GIS analysis and create reports
- Requires GIS skills
Eco-Plan and Eco-Plan Advanced

• Three Pilot Projects
  – UC Davis
  – East-West Gateway Council
  – Parsons
Eco-Logical Resources for Practitioners – Coming This Fall

• AASHTO Practitioner's Handbook
• Updated Website
• Technical Assistance
• Peer exchanges
• Workshops
• Eco-Plan and Eco-Plan Advanced to be released this fall
Today’s Agenda: Benefits of an Eco-Logical Approach

- **Margaret Barondess**, Environmental Services Section, Bureau of Development, Michigan Department of Transportation.
  
  *Establishing better outcomes for I-75 and Lake Erie and other reconstruction projects in a preservation-oriented state.*

- **Judy Gates**, Director, Environmental Office, MaineDOT
  
  *Delivering projects in Maine where the most challenging stakeholder swims upstream.*

- **Kendall Wendling**, Transportation Planner, North Central Texas Council of Governments
  
  *Applied Eco-Logical approach into Long Range Transportation Plan and Corridor Feasibility Study*

- **Brian Yanchik**, Lead Ecologist, Federal Highway Administration Resource Center

- **Shari Schaftlein**, Director, Office of Human Environment, Federal Highway Administration
  
  *Eco-Plan and Eco-Plan Advanced – Two National Level Planning tools for pre-NEPA planning*
Eco-Logical Website:

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