Ten Years of the Eco-Logical Approach: Looking Back at What We’ve Accomplished, and Forward to What We’ve Yet to Do

Mike Ruth, Federal Highway Administration

Julianne Schwarzer, USDOT Volpe Center
Video

• [https://www.youtube.com/watch?v=yZlfY-kdWmg](https://www.youtube.com/watch?v=yZlfY-kdWmg)
10 YEARS OF ECO-LOGICAL LANDSCAPE-SCALE ACTIVITIES

Executive Order 13423: Strengthening Federal Environmental, Energy, and Transportation Management

DOI Issues Secretarial Order 3289: Addressing the Impacts of Climate Change on America’s Water, Land, and Other Natural and Cultural Resources establishes Landscape Conservation Cooperatives (LCCs)

NPS releases its Green Parks Plan

USACE releases 2008 Mitigation Rule Retrospective

USFWS issues proposed revised Mitigation Policy

Release of the updated Red Book

2015 Red Book

Executive Order 13547: Stewardship of the Ocean, Our Coasts, and the Great Lakes establishes NOAA’s Ecosystem-Based Fisheries Management policy

Executive Order 13604: Improving Performance of Federal Permitting and Review of Infrastructure Projects


Implementation of Eco-Logical, Second Strategic Highway Research Program Implementation Assistance Program and related tools/resources launches

2015 Red Book

Implementation of Eco-Logical, Second Strategic Highway Research Program Implementation Assistance Program and related tools/resources launches

EPA/USACE issues Joint Compensatory Mitigation for Losses to Aquatic Resources Rule

BLM launches Rapid Ecoregional Assessments

EPA issues Healthy Watersheds Initiative

Forest Service issues its Climate Action Plan

CEQ/OMB Memorandum on Incorporating Ecosystem Services into Federal Decision Making

FHWA launches Eco-Logical Grant Program

Maryland’s Watershed Resources Registry launches publicly

Forest Service issues Watershed Condition Framework

Presidential Memorandum: Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment

Seven Federal agencies sign the Federal Agency Support for the Green Infrastructure Collaborative

10 Year Anniversary!
Major Agency Accomplishments

**Bureau of Land Management** has initiated 14 Rapid Ecoregional Assessments since 2010 to provide information and tools for land managers and stakeholders to use in resource planning and decisionmaking.

**U.S. Department of the Interior** has established 22 Landscape Conservation Cooperatives (LCCs) to better integrate science and management to address climate change and other landscape-scale issues.

**Environmental Protection Agency** partnered with the U.S Army Corps of Engineers, Federal Highway Administration, and the State of Maryland to develop the Watershed Resources Registry (WRR) to implement a watershed approach to land-use planning and regulatory and non-regulatory decisionmaking.
Major Agency Accomplishments

**Federal Highway Administration** has given over $3.2 million in grant funds for agencies to implement the Eco-Logical approach.

**National Oceanic and Atmospheric Administration Fisheries Service** has conducted Integrated Ecosystem Assessments (IEAs) in five of the Nation's eight large marine ecosystems to ensure consideration of diverse needs and activities in the management of coasts and waterways.

**National Park Service** began to estimate the effects of climate change on their coastal parks by developing a report on the exposure to park infrastructure and assets based on 1 meter of sea level rise. This information is being used in Regional Long Range Transportation Plans to further inform resource stewardship and asset management strategies.
Major Agency Accomplishments

U.S. Army Corps of Engineers approved 738 mitigation banks and 52 in-lieu fee programs since 2008. Additionally, USACE, with support from USFWS, FHWA, EPA, and NOAA, has rolled out the Regulatory In-Lieu Fee and Bank Information Tracking System (RIBITS) nationally as a tool for tracking and displaying information on Clean Water Act Section 404 and Endangered Species Act compensatory mitigation. As a common data platform, RIBITS has contributed to data sharing and to standardizing bank and in-lieu fee program data nationally.

U.S. Department of Agriculture, Forest Service achieved the milestone of 2,100 road-stream crossings removed or upgraded for Aquatic Organism Passage using Federal Highway Administration funding including Legacy Roads and Trails and partner funding between 2008 and 2015.
In the next ten years and beyond, the signatory agencies hope to achieve a shift from Eco-Logical as an “approach” to a business-as-usual practice across the Government.
### Eco-Logical and Major Cross Government Initiatives

<table>
<thead>
<tr>
<th>Year</th>
<th>Initiative</th>
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<tbody>
<tr>
<td>2012</td>
<td>Executive Order 13604: Improving Performance of Federal Permitting and Review of Infrastructure Projects</td>
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<td>2015</td>
<td>Release of the Updated Redbook</td>
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<td>2015</td>
<td>The White House Council on Environmental Quality (CEQ) and Office of Management and Budget (OMB) Memorandum on Incorporating Ecosystem Services into Federal Decision Making</td>
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<td>2015</td>
<td>The Department of the Interior Landscape-Scale Mitigation Policy</td>
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<td>2015</td>
<td>The Presidential Memorandum on Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment</td>
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<td>2015</td>
<td>FAST Act; Various Project Development Provisions and FAST-41</td>
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## Implementing Eco-Logical Program

### Last Year’s Accomplishments Included:

- Launched the Starter Kit website and online technical assistance request tool
- Engaged a team of Eco-Logical “Champions”
- Held a series of local and national peer exchanges and workshops
- Developed two Eco-Logical case studies and the Practitioner's Handbook
- Managed the Implementing Eco-Logical Implementation Assistance Program (IAP)
Colorado Eco-Logical Workshop
## Recent Findings About the Eco-Logical Approach

<table>
<thead>
<tr>
<th>Category</th>
<th>Findings</th>
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<tbody>
<tr>
<td><strong>1. Building and Sustaining Partnerships</strong></td>
<td><strong>1.1</strong> Agencies implementing Eco-Logical recruit partners early in the process.</td>
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<td><strong>1.2</strong> IAP recipients use a variety of methods to promote consistent stakeholder engagement while respecting partners' time constraints.</td>
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<td><strong>1.3</strong> Successful relationships established through IAP projects carry over into other projects, lay the groundwork for future collaboration, and result in new opportunities for streamlining.</td>
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<tr>
<td>2. Institutionalizing Eco-Logical into Agency Practices</td>
<td>2.1 In many cases, IAP project leads serve as “champions” for promoting Eco-Logical within their agency and building institutional knowledge.</td>
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<td>2.2 Formal agreements, such as memoranda of agreement or memoranda of understanding, can help promote long-term implementation of Eco-Logical by formalizing commitments and providing an institutional framework that is more resilient to shifting priorities and staffing changes.</td>
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<td>2.3 One way for agencies to support the long-term use of the Eco-Logical approach is to build connections with related initiatives within the agency.</td>
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<td>2.4 Support for Eco-Logical at the leadership level makes it much easier to institutionalize Eco-Logical into agency practices and ensure long-term implementation.</td>
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<td>3. Quantifying and Communicating Results</td>
<td>3.1 Quantifying the benefits of applying the Eco-Logical approach—based on cost, time, or other savings—continues to be a challenge for agencies implementing Eco-Logical.</td>
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<td>4. Developing Data, Tools, and Strategies</td>
<td>4.1 Eco-Logical data and tools are most effective when tailored to the region's goals, priorities, and constraints.</td>
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<td>4.2 Some technical aspects of Eco-Logical, such as creating an REF or setting up a mitigation crediting program, require a level of specialized expertise that may present a barrier to entry for some agencies.</td>
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Looking Ahead
For More Information

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Thank You – Questions?