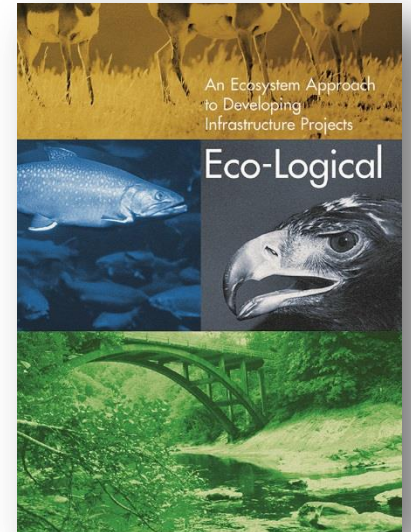




Ten Years of the Eco-Logical Approach: Looking Back at What We've Accomplished, and Forward to What We've Yet to Do

Mike Ruth, Federal Highway Administration

Julianne Schwarzer, USDOT Volpe Center



U.S. Department of Transportation
Federal Highway Administration



AMERICAN ASSOCIATION
OF STATE HIGHWAY AND
TRANSPORTATION OFFICIALS
AASHTO

Video

- <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

Forest Service releases its **Open Space Conservation Strategy**

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

DOI issues Secretarial Order 3330: **Improving Mitigation Policies and Practices** of the Department of the Interior

USACE releases 2008 **Mitigation Rule Retrospective**

USFWS issues proposed revised Mitigation Policy

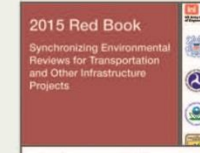
DOI Issues Secretarial Order 3289: **Addressing the Impacts of Climate Change** on America's Water, Land, and Other Natural and Cultural Resources establishes Landscape Conservation Cooperatives (LCCs)

Forest Service publishes technical guide to evaluate watershed conditions



NPS releases its Green Parks Plan

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



Release of the updated Red Book



JANUARY 2007

NOVEMBER 2007

FEBRUARY 2010

JULY 2010

JULY 2011

MARCH 2012

2013

OCTOBER 2013

SEPTEMBER 2015

NOVEMBER 2015

FEBRUARY 2016

APRIL 2006

2007

APRIL 2008

JUNE 2010

MAY 2011

AUGUST 2011

APRIL 2012

NOVEMBER 2012

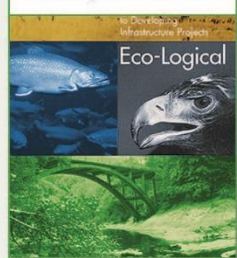
MAY 2013

JULY 2014

OCTOBER 2015

APRIL 2016

Eco-Logical Published



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 National Forest System **Land Management Planning Rule**

NPS releases its Climate Action Plan



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



10 Year Anniversary!



FHWA launches **Eco-Logical Grant Program**

Maryland's **Watershed Resources Registry** launches publicly

Forest Service issues **Watershed Condition Framework**



Presidential Memorandum **Modernizing Federal Infrastructure Review** and Permitting Regulations, Policies, and Procedures



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

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

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



U.S. Department of Transportation
Federal Highway Administration

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

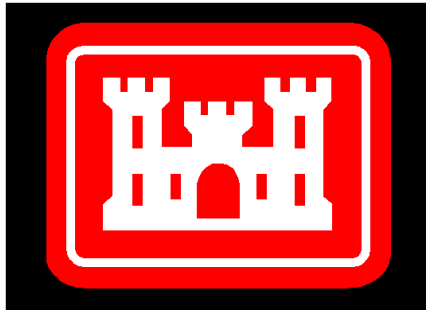


National Oceanic and Atmospheric Administration Fisheries Service has conducted Integrated Ecosystem Assessments (IEAs) in five of the Nation's eight large marine ecosystems to ensure consideration of diverse needs and activities in the management of coasts and waterways.



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.

ECO-LOGICAL REAFFIRMATION



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

2012: Executive Order 13604: Improving Performance of Federal Permitting and Review of Infrastructure Projects

2013: Presidential Memorandum on Modernizing Federal Infrastructure Review and Permitting Regulations, Policies, and Procedures

2015: Release of the Updated Redbook

2015: The White House Council on Environmental Quality (CEQ) and Office of Management and Budget (OMB) Memorandum on Incorporating Ecosystem Services into Federal Decision Making

2015: The Department of the Interior Landscape-Scale Mitigation Policy

2015: The Presidential Memorandum on Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment

2015: FAST Act; Various Project Development Provisions and FAST-41

Implementing Eco-Logical Program

Last Year's Accomplishments Included:

Launched the Starter Kit website and online technical assistance request tool

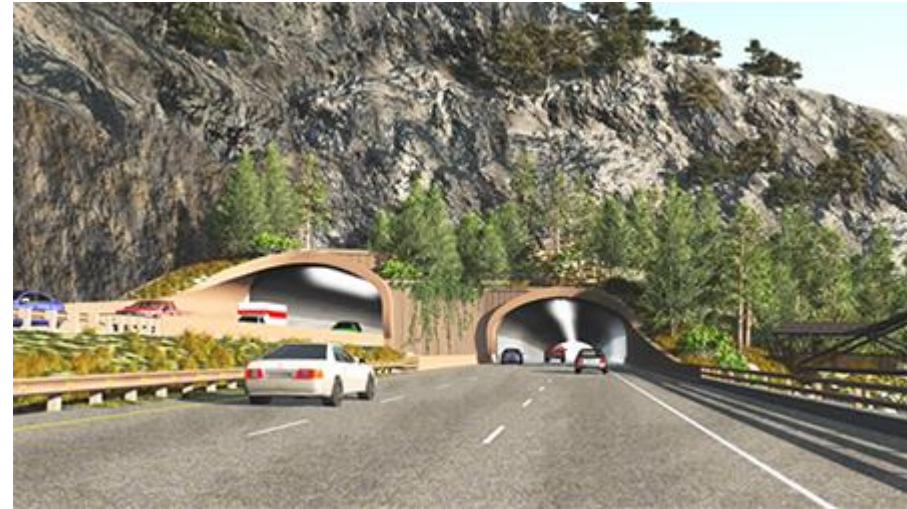
Engaged a team of Eco-Logical “Champions”

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

Category	Findings	
1. Building and Sustaining Partnerships	1.1	Agencies implementing Eco-Logical recruit partners early in the process.
	1.2	IAP recipients use a variety of methods to promote consistent stakeholder engagement while respecting partners' time constraints.
	1.3	Successful relationships established through IAP projects carry over into other projects, lay the groundwork for future collaboration, and result in new opportunities for streamlining.

Recent Findings About the Eco-Logical Approach

Category	Findings	
2. Institutionalizing Eco-Logical into Agency Practices	2.1	In many cases, IAP project leads serve as “champions” for promoting Eco-Logical within their agency and building institutional knowledge.
	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.
	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.
	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.

Recent Findings About the Eco-Logical Approach

Category	Findings	
3.Quantifying and Communicating Results	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.
4.Developing Data, Tools, and Strategies	4.1	Eco-Logical data and tools are most effective when tailored to the region's goals, priorities, and constraints.
	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.

Looking Ahead



Source: Michigan Department of Transportation

For More Information

Mike Ruth

FHWA Office of Project Development
and Environmental Review

(202) 366-9509

Mike.Ruth@dot.gov

David Williams

FHWA Office of Project Development and
Environmental Review

(202) 366-4074

David.Williams@dot.gov

Julianne Schwarzer

USDOT Volpe Center

(617) 494-3259

Julianne.Schwarzer@dot.gov



<https://www.environment.fhwa.dot.gov/ecological/ImplementingEcoLogicalApproach/default.asp>

Thank You – Questions?

