Life After the Memo

A Look at how Federal Agencies Incorporate Ecosystem Services in Floodplain Management Policy

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Project Director

ACES Conference - December 6, 2016
Ecosystem Services Timeline

2008
- USDA Office of Environmental Markets

2012
- USFS Planning Rule
- CEQ Principles and Requirements
- FEMA Policy FP-108-024-01

2013
- Office of Environmental Markets

2014
- HUD $1B National Disaster Resilience Competition

2015
- Incorporating Natural Infrastructure and Ecosystem Services in Federal Decision-Making

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After the Memo
Recent Policy

MEMORANDUM FOR:
Mitigation Division Directors
FEMA Regions I-X

May 12, 2016
1. All FEMA Project Types Eligible to Incorporate Ecosystem Services

Climate Resilient Mitigation Activities
2. Floodplain and Stream Restoration for Drought, Wildfire, and Flood Mitigation
3. Aquifer Storage and Recovery projects

Flood diversion projects that allow for groundwater recharge are eligible as drought mitigation projects.
Opportunity in National Policy: Changing Disincentives
Flood Hazard Mapping and Risk Analysis Program Budget

<table>
<thead>
<tr>
<th>Year</th>
<th>Budget (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2009</td>
<td>$222</td>
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<tr>
<td>FY2010</td>
<td>$221</td>
</tr>
<tr>
<td>FY2011</td>
<td>$204</td>
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<td>FY2012</td>
<td>$99</td>
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<td>FY2013</td>
<td>$100</td>
</tr>
<tr>
<td>FY2014</td>
<td>$84</td>
</tr>
</tbody>
</table>

(in millions, 2014 number from proposed budget)

Source: Federal Budget, Department of Homeland Security
Oregon Biological Opinion

• Litigation in Oregon over the impact of the NFIP on listed fish species

• NFIP program creates jeopardy of extinction for many endangered and threatened species

• Contested by FEMA
Dysfunctional Floodplains
Local Approach to Floodplain Mapping
Solution: Collaboration on Funding Incentives

After the disaster:

- **7.5%** State
- **12.5%** State
- **17.5%** State

**Four mitigation actions:**
1. Current AOT Road standards
2. National Flood Insurance Program
3. Local Hazard Mitigation Plan
4. Local Emergency Operations Plan

**Four mitigation actions and**
- River Corridor Protection, or
- FEMA Community Rating System credit for no new structures in FEMA flood hazard area
Thank you.

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