

Life After the Memo

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

Zachary Christin
Project Director

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Ecosystem Services Timeline

2008



Office of Environmental Markets

2012



USFS Planning Rule

2013



CEQ

Principles and Requirements



FEMA

FEMA Policy FP-108-024-01

2014



\$1B National Disaster Resilience Competition

2015



Incorporating Natural Infrastructure and Ecosystem Services in Federal Decision-Making







After the Memo

Recent Policy

MEMORANDUM FOR:

Mitigation Division Directors
FEMA Regions I-X



FEMA

May 12, 2016


An aerial photograph of a coastal area. A long bridge or causeway extends from the top center towards the middle of the frame, crossing a body of water. On either side of the bridge, there are residential areas with houses and some commercial buildings. The water is a mix of dark blue and light grey, with white foam from waves visible in the foreground. The sky is overcast and grey.

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



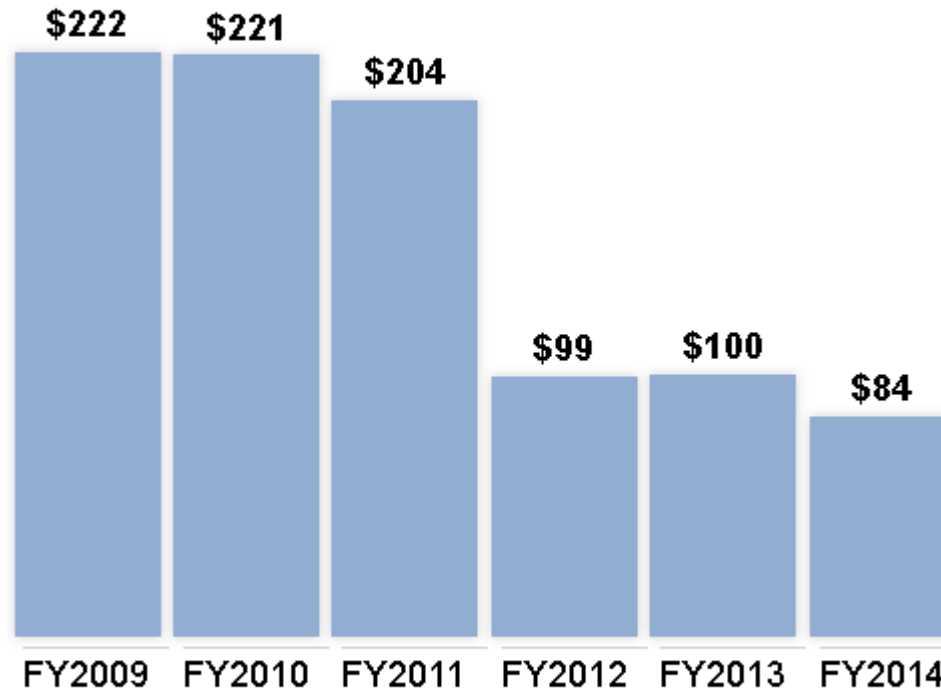


3. Aquifer Storage and Recovery projects

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



(in millions, 2014 number from proposed budget)

Source: Federal Budget, Department of Homeland Security

Oregon Biological Opinion



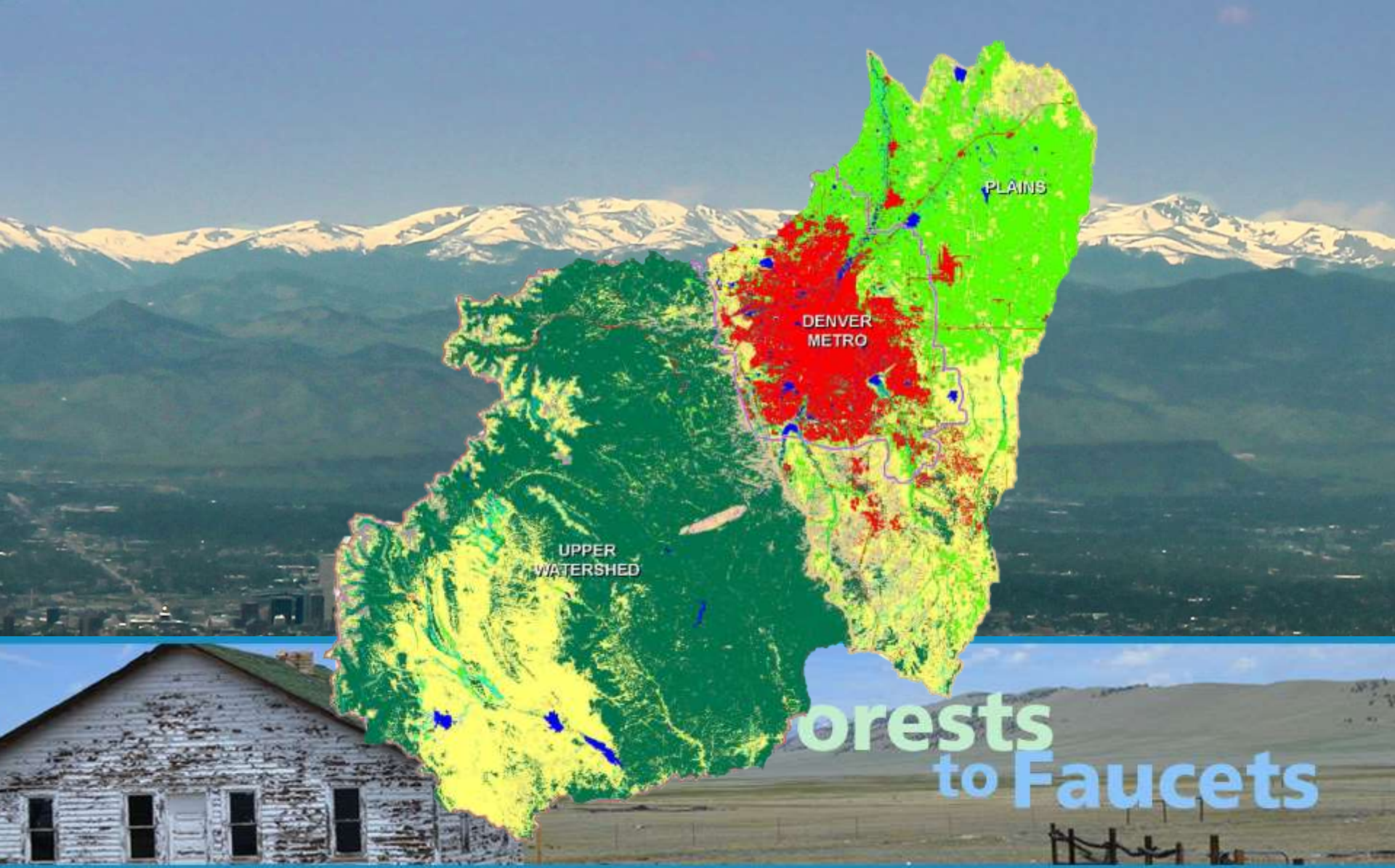
- Litigation in Oregon over the impact of the NFIP on listed fish species
- NFIP program creates jeopardy of extinction for many endangered and threatened species
- Contested by FEMA

Dysfunctional Floodplains



Local Approach to Floodplain Mapping

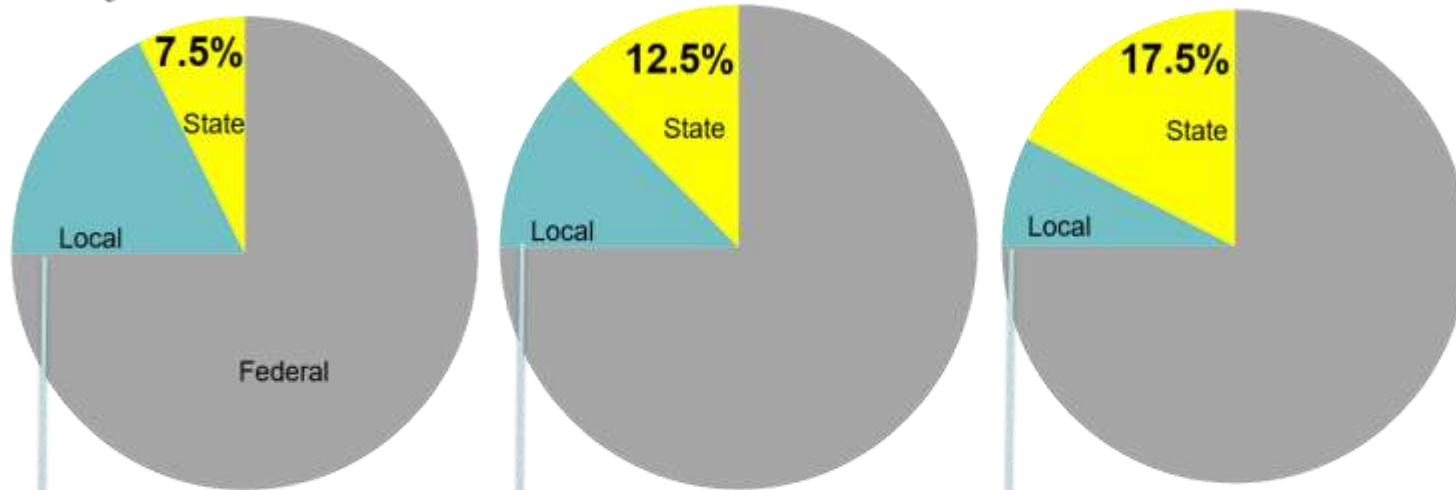




forests to Faucets

Solution: Collaboration on Funding Incentives

After the disaster:



No action

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.

zchristin@eartheconomics.org