NOAA FISHERIES
West Coast Region

NMFS Biological Opinion on Implementation of the National Flood Insurance Program in Oregon

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Timeline

- In 2004, the Western District Court in Washington ruled that FEMA retains discretion over certain aspects of the NFIP

- In 2008, we issued a jeopardy opinion for implementation of NFIP in Puget Sound

- As part of a settlement agreement, FEMA initiated consultation on implementation of NFIP in Oregon

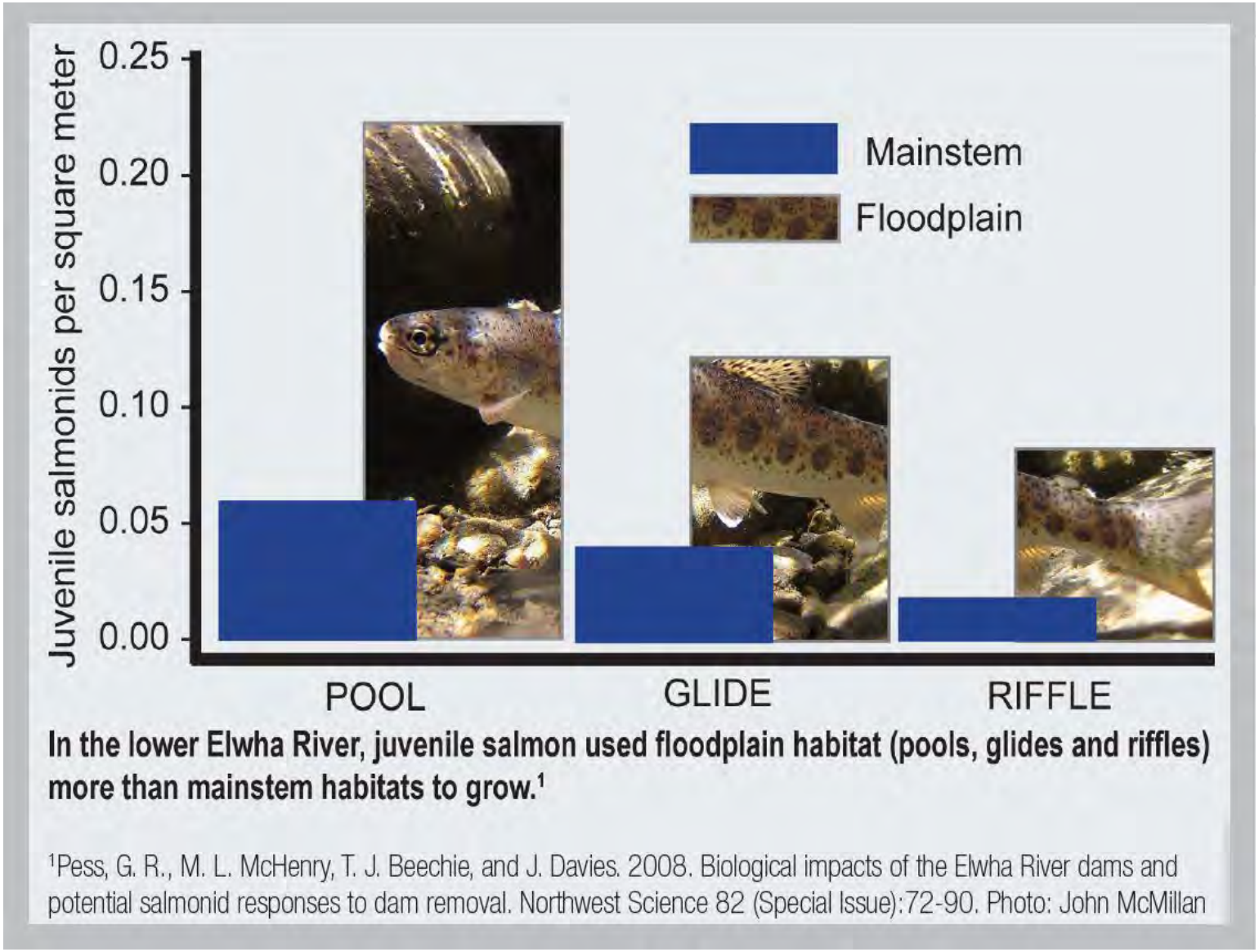
Timeline

- In September 2013, we issued a draft jeopardy opinion to FEMA
- We worked with FEMA, the State, and other stakeholders to revise the RPA
- We issued a final opinion on April 14, 2016

Why are floodplains important to salmon?

- Channel migration & formation of diverse habitat types
- Access to off-channel habitats
- Prey resources
- Velocity refuge for fish
- Water & sediment storage

- Good water quality, including stream recharge/cool water temperatures
- Climate Change is going to increase flood frequency

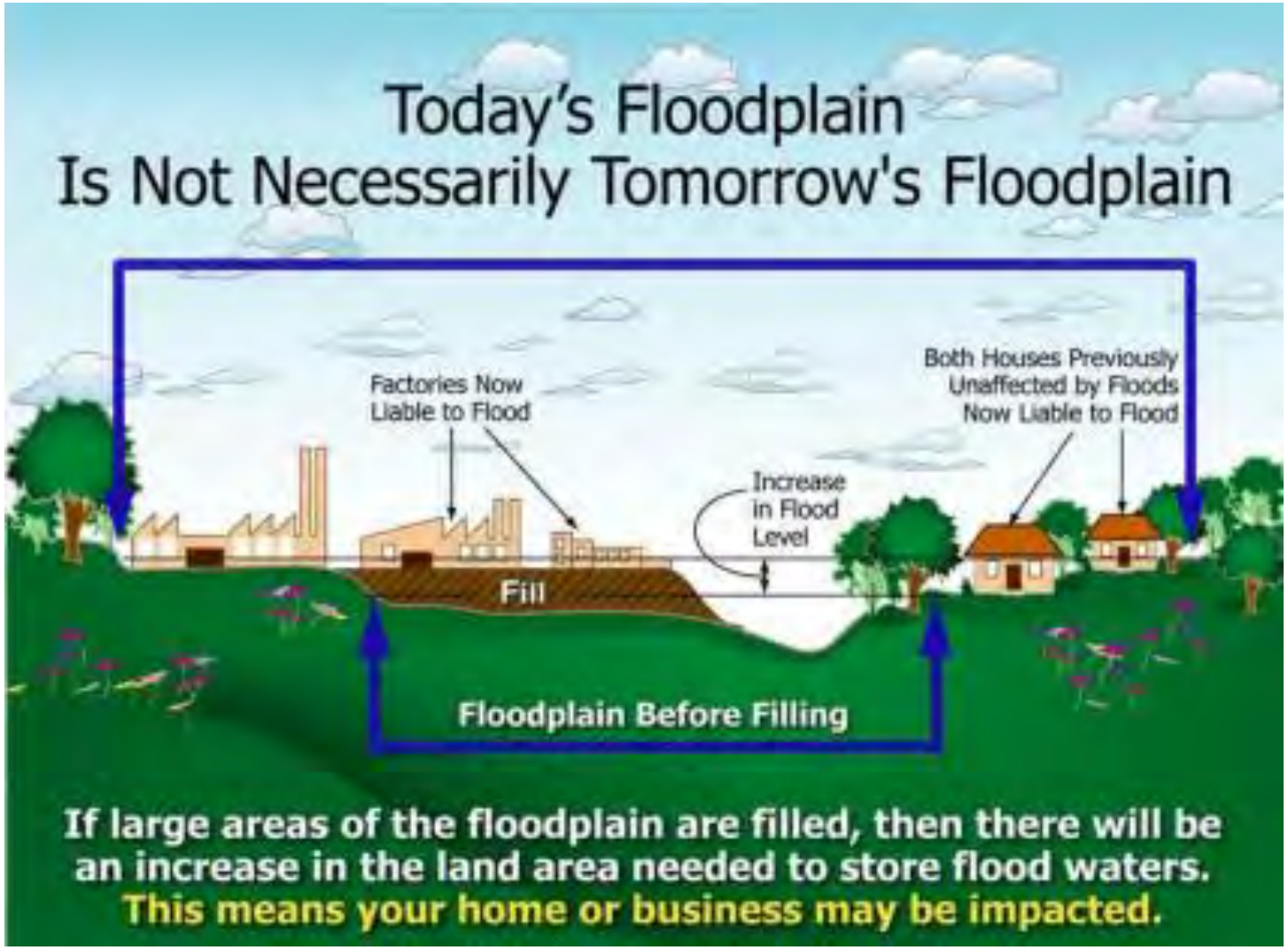


In the lower Elwha River, juvenile salmon used floodplain habitat (pools, glides and riffles) more than mainstem habitats to grow.[1]

[1]Pess, G. R., M. L. McHenry, T. J. Beechie, and J. Davies. 2008. Biological impacts of the Elwha River dams and potential salmonid responses to dam removal. Northwest Science 82 (Special Issue):72-90. Photo: John McMillan

SO WHAT DOES THE NFIP HAVE TO DO WITH SALMON?

NATIONAL FLOOD INSURANCE PROGRAM



From: City of Roseburg

Effects of Levees

Photo courtesy of Dave Montgomery

Photo courtesy of Lauren Rogers

Our biological opinion

Concludes:

- NFIP jeopardizes the existence 16 fish species and SRKW
- NFIP adversely modifies critical habitats by reducing their quality & function

Contains:

- A reasonable and prudent alternative (RPA) to the proposed action
- An Incidental Take Statement

RPA Overview

Key elements of the RPA include:

1. Updating floodplain maps to more accurately identify where flood risks are and where they are expected under future conditions.
2. This information is critical to avoiding floods and preserving those areas needed to support salmon survival. Limiting the types of development allowed in floodways and channel migration zones to flood-compatible uses, since these high risk areas also have the highest habitat values.
3. Tracking floodplain development and require mitigation of the impacts of development to ensure that floodplain features are not lost that are critical to supporting the survival and recovery of listed species.

What does OR RPA Seek:

- Avoid development impacts in dynamic flood risk areas (frequent flood areas, high volume/high velocity flood areas, erosion prone areas)

- Mitigate for development impacts in the remainder of the floodplain ("flood fringe) – flood storage, riparian vegetation, impervious surface

Key RPA highlights – Element 1

RPA Element 1 – FEMA to notify participating jurisdictions of the consultation outcome and provisions of the RPA

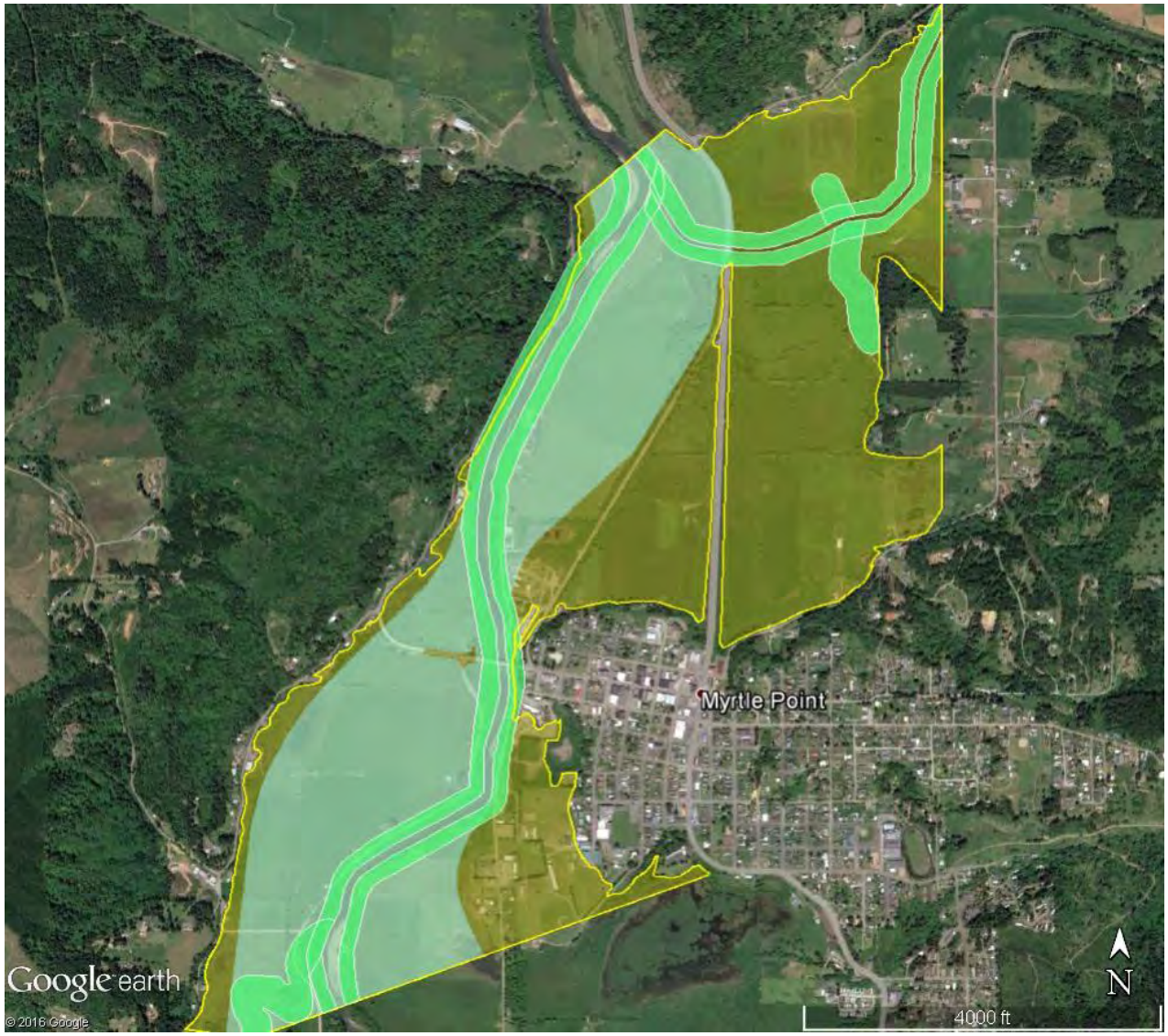
RPA Element 2

RPA Element 2 – Interim Measures

FEMA revisions of mapping and minimum criteria will take several years, so RPA Element 2 is designed for faster implementation.

- FEMA to review impacts with NMFS on conditional letters of map revision and map revisions based on fill.
- Simple mitigation ratios for loss of flood storage and reduced vegetation.
- Recommend mitigation ratio for loss of flood storage be higher when development occurs in floodway or erosion zone.

RPA Element 2



RPA Element 3

Recommends FEMA modify mapping regulations to:

- improve mapping quality,
- increase the number of mapped areas,
- revise floodway mapping standard,
- map flood-related erosion zones,
- designate High Hazard Areas (floodway, erosion-prone areas)

RPA Element 4

Recommends FEMA modify development regulations to:

- limit development in high hazard areas to water dependent uses, grandfathered uses, silviculture, agriculture, open space, and restoration activities
- Identify appropriate minimum lot sizes in floodplains to prevent densification of floodplain development
- require mitigation for loss of natural and beneficial functions in floodplains (eg flood storage, riparian vegetation, hyporheic function/impervious surface)

RPA Element 5

RPA Element 5 - Data Collection and Reporting

Local reporting to FEMA of floodplain development permits:

- How much flood displacement by fill or structures
- How much new impervious is added
- How much vegetation is removed
- If floodplain is either disconnected (flood control works eg levees) or reconnected (daylighting of streams, removal or breach of levees)
- Location of action and of mitigation for floodplain impacts

Key RPA Highlights

To Review- RPA recommends three types of development impacts should require mitigation:

- Loss of flood storage
- Reduced vegetation
- Impervious surface (stormwater, hydrologic, groundwater recharge)

Implementation

- We will be working with FEMA and the Oregon Department of Land Conservation and Development to provide information and technical assistance to affected communities.

- DLCD has convened workgroups to assist implementation

Where to find more information:

http://www.westcoast.fisheries.noaa.gov/habitat/conservation/index.html

Under “Habitat Protection” and “Floodplains”

Questions?