How to Read the Reasonable and Prudent Alternative (RPA)¹

The RPA is part of the Biological Opinion issued by the NMFS (also called NOAA Fisheries) on the implementation of the NFIP in Oregon. The RPA contains recommendations to FEMA for how the NFIP can be implemented, within the scope of the federal agency's legal authority and jurisdiction, so that the program will not jeopardize the continued existence of ESA listed species or damage their critical habitat.

When reading the RPA it is important to understand its context within federal law:

- The RPA does not and cannot give directives to NFIP communities.
- Any changes to the NFIP that will affect implementation of the program by local governments will be generated and communicated by FEMA.
- The ESA requires that the RPA work within FEMA's existing authority and be economically and technologically feasible. FEMA has authority to set minimum standards that NFIP communities use when issuing development permits only in the SFHA shown on a current FIRM. For this reason NOAA-F's recommendations and development standards in Element 2 do not extend beyond the SFHA on a current FIRM.
- The ESA allows FEMA some latitude when responding to directives in the RPA. FEMA will work to implement all the RPA requirements that are within its legal authority. When FEMA determines that a particular RPA directive is outside the scope of their authority, FEMA will explore alternatives to accomplish the purpose of the recommendation.
- The RPA resulted from a consultation between two federal agencies. A federal consultation is not required to be a public process. Some directives in the RPA recommend FEMA make changes to NFIP rules or NFIP mapping protocols. Any changes to federal rules and mapping protocols that FEMA decides are needed will require a public process.
- The RPA does not give directives to local governments or the state, nor does it give directives to property owners and developers. A person seeking a local permit for a development project in a SFHA is subject to the application procedures and standards in place for their city or county at the time they submit their application.
- The RPA does not change state law governing when a project is vested. Once vested, projects can proceed according to terms in local codes or permits.

¹ Glossary of acronyms included in this document located on p4.



Summary of 2016 NOAA-F Biological Opinion, Reasonable and Prudent Alternatives affecting FEMA administration of the NFIP

Six Elements comprise the Biological Opinion, Reasonable and Prudent Alternatives (RPA):

Element 1. **Notice, Education, and Outreach.** NOAA Fisheries recommends that FEMA develop an education and outreach strategy for RPA implementation and provide notice to all affected NFIP participating communities in Oregon (232 cities and counties) regarding the substance of the RPA. DLCD, the designated state coordinating agency for the NFIP in Oregon, will work with FEMA to get input from local governments as FEMA develops an implementation plan.

Element 2. Interim Measures. Most RPA elements will take years to fully implement, however Element 2 includes measures for more immediate implementation. These interim measures are intended to slow the rate at which development currently permissible under NFIP rules degrades habitat necessary for species survival and recovery. NMFS states that these interim measure alone are inadequate to avoid continued decline of threatened fish populations and loss of habitat. NOAA-F intends Element 2 to apply the portion of the SFHA near adjacent to salmon bearing surfacewaters and recommends mitigation for the impacts of new development. The RPA directs FEMA to require local governments to adopt new standards to implement the protective measures in Element 2 as soon as possible but not later than April 2018. Interim measures will remain in place until FEMA makes changes to mapping protocols and implements additional development permit review standards as described in Elements 3 and 4.

Element 3. **Mapping Flood and Flood-Related Hazard Areas.** NOAA Fisheries recommends that FEMA implement new standards using up-to-date scientific understanding to identify and map flood hazard and flood related erosion hazard areas. Key requirements of new standards include: use of more complex flood models; mapping of 90th percentile value of 100-year flow as the Base Flood Elevation (50th percentile is currently used); and more conservative floodway calculations (likely to result in wider floodways). Also, they ask for flood and erosion hazards based on future conditions to be depicted on FIRMs. Oregon NFIP communities will be required to adopt new maps, when published, and regulate development in flood hazard areas shown on new maps. This RPA element also calls for channel migration zones to be modeled and mapped over time.

Element 4. **Floodplain Management Criteria.** NOAA Fisheries recommends that FEMA develop new, and revise existing, regulatory floodplain management criteria for NFIP participating communities. Local code revisions requested in Element 4 include: limits on development and some uses in high hazard areas (frequently flooded or subject to flood related erosion); restriction on lot divisions that create buildable parcels entirely within the SFHA; limits on the creation of new impervious surfaces in the SFHA; and mitigation standards for adverse impacts associated with allowed floodplain development and removal of riparian vegetation within the SFHA.

Element 5. **Data Collection and Reporting.** NOAA-F recommends that FEMA collect, and annually report, floodplain development information to NOAA-F. Local government would supply this information to FEMA using a standardized reporting form or system.

Element 6. **Compliance and Enforcement.** Recommends that FEMA use the existing CAV auditing and technical assistance process to ensure participating communities comply with any new FEMA guidance or standards developed in response to RPA Element 2, and eventually Element 4, within a reasonable amount of time.



FEMA actions in response to the RPA likely to affect NFIP communities in the next two years

RPA Element 1

FEMA shall provide notice to all affected NFIP participating communities in Oregon regarding the substance of the RPA. This notice is to be sent 60 days from release of the BiOp. Mayors, the chairs of county commissions, and Floodplain Managers should expect to receive a letter in mid-June.

RPA Element 2

Sub-Elements 2A and 2B direct FEMA to:

Implement interim measures to mitigate for impacts of new development throughout the SFHA

- Clear and objective mitigation ratios are provided for fill and tree removal in the floodplain.
- Mitigation ratios are higher for the portion of the floodplain closest to surface waters.
- Specific areas for which higher mitigation ratios apply are not well described, implementation may depend on whether or not certain floodplain features have been mapped in a given area.
- An exception to the mitigation ratios is allowed if their application is impractical and FEMA and NMFS accept an alternative mitigation strategy, such as offsite mitigation.

Limit development in a portion of the Special Flood Hazard Area (SFHA)

- The RPA uses 170 foot riparian buffer zone (RPZ), which FEMA originally described in their proposed action, is used to evaluate the need for mitigation action.
- Water dependent uses are allowed if impacts are mitigated.
- Habitat restoration activities are allowed.
- Other uses are allowed if they are hyper-mitigated such that they result in a net gain in habitat
- Other activities are allowed if they will have "no adverse effect", in other words, not create any impacts. (Reroofing an existing structure is an example of an activity with no adverse effect.)

Sub-Element 2 C through F directs FEMA to:

- Review requests for Letters of Map Revision (LOMR) and Conditional Letters of Map Revision (CLOMR) to assure that all impacts to salmon habitat have been avoided or mitigated.
- Track all development activity permitted by local governments.
- Modify the existing program to prioritize buy-outs of repeat damage properties in areas with high priority salmonid populations.

5/4/2016 FEMA letter to NOAA-F: "Given the expansive scope of the interim RPA requirements [RPA Element 2], FEMA will need at least two years before those requirements are fully implemented. In the meantime, FEMA will encourage NFIP communities to proactively comply with any interim RPA requirements to the best of their abilities and to continue to meet their existing legal responsibilities under the ESA."

RPA Element 5

FEMA is likely to respond to the RPA directive for regular reporting of floodplain development activity early in the implementation process.



GLOSSARY

BFE: Base Flood Elevation; the water surface elevation at the crest of the base flood, a flood having a 1% chance of being equaled or exceeded in any given year (also known as the 100 year flood).

BiOp: Biological Opinion RPA: Reasonable and Prudent Alternative, a sub-section of the Biological Opinion

CAV: Community Assistance Visit, conducted by FEMA in local communities

CLOMR: Conditional Letter of Map Revision

CMZ: Channel Migration Zone, the path of a river or stream as it naturally migrates over time

DLCD: Department of Land Conservation and Development

ESA: Endangered Species Act

FEMA: Federal Emergency Management Association

FIRM: Flood Insurance Rate Map

LOMR: Letter of Map Revision

NOAA: National Oceanic and Atmospheric Administration

NOAA-F: National Oceanic and Atmospheric Administration, Fisheries Division (also called

NMFS)

NMFS: National Marine Fisheries Service (also called NOAA-F)

SFHA: Special Flood Hazard Area, area with a 1% or greater chance of flooding in any year