



**FEMA**

December 19, 2012

**FAQ: How does Compliance with Species-Protective Floodplain Development Permit Standards also Address Compliance with Species-Protective Standards for Levee Construction and Maintenance?**

**What is the National Marine Fisheries Service 2008 Biological Opinion?**

In 2004, FEMA entered into a consultation with the National Marine Fisheries Service (NMFS) to consult on the effects of implementation of the National Flood Insurance Program (NFIP) on endangered species and critical habitat. In September 2008 NMFS provided a Biological Opinion in which they concluded that development consistent with the NFIP jeopardizes threatened or endangered Chinook salmon, chum salmon, steelhead, and killer whales and adversely modifies critical habitat based on potential take of listed species.

Federal agencies are prohibited by the Endangered Species Act (ESA) from causing jeopardy to endangered species or adverse modification of critical habitat. Once a jeopardy determination is made, NMFS is obligated to provide a Reasonable and Prudent Alternative (RPA), which are measures FEMA can do to avoid jeopardy to endangered species and adverse modification of critical habitat. These measures outline steps FEMA and communities participating in the NFIP can do to minimize harm to Puget Sound Chinook salmon, Puget Sound steelhead, Hood Canal summer-run chum and Southern Resident killer whales.

**What are the new species-protective standards that apply to floodplain development permits?**

RPA #3 of NMFS' 2008 Biological Opinion requires that FEMA and all of the affected participating communities ensure that any type of floodplain development, as defined by 44 CFR § 59.1, does not have an adverse effect on listed species or their critical habitat. Floodplain development includes any and all activities associated with Letters of Map Change, especially those caused by manmade alterations. Additional FAQ's are available on the FEMA NFIP/ESA website at: [www.fema.gov/nfip-and-endangered-species-act](http://www.fema.gov/nfip-and-endangered-species-act). Each of these FAQs are designed to demonstrate how the no adverse effect standard can be met by addressing the implementation of specific performance standards required by the Biological Opinion such as low impact development, vegetation retention, cumulative effects, and compensatory storage.

**What are the new species-protective standards that apply to levee construction and maintenance?**

RPA 5 of the 2008 Biological Opinion asks FEMA to address the effects of levee vegetation maintenance and certain types of construction in the floodplain. The RPA seeks for FEMA to address the effects of floodplain development for levees to achieve some or all of the habitat-based objectives contained in the RPA.



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RPA 5A specifically asks FEMA to not recognize levees that are certified by the U.S. Army Corp of Engineers (COE) utilizing the COE's vegetation standards unless it is demonstrated that the standard will not adversely affect species or their habitat.

RPA 5D provides specific guidance on how **new** levees are to be constructed in order to be ESA Bi-Op compliant. RPA 5D provides an example of a levee design that NMFS considers to not have an adverse effect to species. According to RPA 5D, an ESA BiOp compliant levee would have the following characteristics:

- The natural channel migration pattern remains intact (or if presently confined, is allowed to expand to its natural pattern),
- Bioengineering methods are used to stabilize the banks,
- Large wood is incorporated into the levee setback area,
- Riparian vegetation is included in the design, and

No increase occurs to upstream and downstream flood levels, volumes and velocities

### **How does FEMA “recognize” levees?**

FEMA does not certify levees of any kind. Levee certification is the process that deals specifically with the design and physical condition of the levee, and is the responsibility of the levee owner or community in charge of the levee's operations and maintenance. Certification must be completed for the levee to be eligible for accreditation by FEMA. FEMA does not own, operate, maintain, inspect, or certify levees. FEMA's role is very limited to identifying and mapping the level of flood risk associated with levees and only accredits them where data showing compliance with 44 CFR 65.10 is provided by the community, levee owner, or other interested parties. Once a levee has been certified by the U.S. Army Corps of Engineers (COE) or a registered professional engineer as meeting the design criteria and operations and maintenance standards set out in 44 C.F.R. 65.10, FEMA will “accredit” the levees as offering protection against the 1 percent annual chance flood (base flood) for the purpose of reflecting that protection on a Flood Insurance Rate Map (FIRM). Additional information on the levee accreditation process can be found on the FEMA website at: <http://www.fema.gov/living-levees-its-shared-responsibility/fema-levee-resources-library>.

### **Does FEMA prohibit vegetation on levees?**

As long as a levee meets the requirements of 44 CFR 65.10, vegetation is permissible on any accredited levee. As such, FEMA is “neutral” on levee vegetation. FEMA does not have any vegetation management standards and accepts certification from a number of sources, nor does FEMA rely upon the COE's vegetation standards for accreditation. For more information regarding the vegetation on levees please see the FAQ on Levee Vegetation located on the FEMA website at: <http://www.fema.gov/nfip-and-endangered-species-act>.



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### **How does FEMA ensure that any levee construction or maintenance performed in Puget Sound communities is ESA-compliant?**

RPA 3 development standards apply to levees if floodplain development (44 CFR 59.1) occurs associated with any aspect of levee construction, maintenance, repair, shoring, replacement, enhancement, augmentation or other similar activities. The NFIP requires a floodplain development permit to be issued for these activities. As required by RPA 3, floodplain development permits must not have an adverse effect on endangered species and/or critical habitat when communities issue them. This standard applies regardless of whether the community is using a programmatic regulatory approach (the Door 1 or Door 2 approach) or applying this standard to each individual permit unless the project is covered under a separate consultation that determines the project to be ESA compliant (the Door 3 approach). For more information regarding the various option for complying with the ESA (i.e., Doors 1-3), please see the FAQ on Compliance Options located on the FEMA website at: <http://www.fema.gov/nfip-and-endangered-species-act>.

### **How does FEMA ensure that any new levees are constructed in a manner that is ESA-compliant?**

As discussed above, RPA 5D provides specific guidance on how **new** levees are to be constructed in order to be ESA compliant. RPA 5D provides an example of a levee design that NMFS considers to not have an adverse effect to species. RPA 3 requires floodplain development to not have an adverse effect on species. While FEMA does not have vegetation standards for levees, FEMA has issued guidance to the communities that adherence to the provisions of RPA 5D will ensure that the floodplain development permit is compliant with the no adverse effect standard of RPA3. Proponents of a new levee may be able to build a levee that is not strictly compliant with the performance standards above; however, they will need to seek their own separate consultation for the project with NMFS or FWS. Notably, most new levees constructed to the 100 year protective standard will also apply for a Conditional letter of Map Revision (CLOMR) or Conditional Letter of Map Revision Based on Fill (CLOMR-F) to be recognized for mapping purposes. As discussed in the FAQ entitled "[How Compliance with New Species-Protective Floodplain Development Permit Standards Also Address Compliance with Species-Protective Standards for Letters of Map Revision](#)", all CLOMRs and CLOMR-Fs must also be ESA-compliant.