



**FEMA**

**June 10, 2016**

**FAQ: How can I elevate my new structure without fill?**

National Marine Fisheries Service's (NMFS) Biological Opinion (BiOp) on the NFIP implementation in Oregon requires FEMA to issue guidance on a variety of issues. Element 1 of the Reasonable and Prudent Alternative (RPA) requires FEMA to issue a letter to all communities that provides notice of the findings in the BiOp, interim measures, and guidance regarding elevating new structures in a manner that minimizes adverse effects of fill as an elevation technique to natural floodplain functions. This Frequently Asked Question (FAQ) document provides resources to find more detailed guidance on elevating new structures. There will be additional guidance documents provided as FEMA implements the BiOp, however this specific guidance is required by element 1 of the RPA.

FEMA has the following web-based and publications available to help understand some of the available options:

- FEMA 54-Elevated Residential Structures
  - This document contains design characteristics and recommendations for pilings, posts, piers, and other open foundation systems; several case studies are provided.
- FEMA P-259-Engineering Principles and Practices of Retrofitting Floodprone Residential Structures
  - Section 5E offers some elevation techniques for retrofitting a home.
- FEMA 15- Design Guidelines for Flood Damage Reduction
  - This document offers various pre-construction design considerations.
- FEMA P-347-Above the Flood: Elevating Your Flood Prone House
  - This document is largely targeted to existing structures and does not include post or pier elevating, but still offers alternatives to using fill.
- FEMA P-312-Homeowner's Guide to Retrofitting 3rd Edition
  - This document is also mainly targeted to existing structures and the example method 2 in Chapter 3 shows an open foundation.
- FEMA P-499-Home Builder's Guide to Coastal Construction
- FEMA P-55-Coastal Construction Manual
- Technical Bulletin 5-Free-of-Obstruction Requirements