

**PACIFIC SALMON ESSENTIAL FISH HABITAT AMENDMENT 18: ADDITIONAL
ALTERNATIVES FOR CONSIDERATION**

This table presents the Alternatives under consideration by the Pacific Fishery Management Council (Council), reflecting changes made at the September 2012 Council meeting. The table also depicts potential new Alternatives to address concerns regarding experimental reintroduction of Pacific salmon populations. These are numbered as Alternatives 2A, 2B, and 6E.

Subject Area	Alternatives
Identification of Pacific salmon EFH	1A. No Action 1B. Revise the identification of EFH to clarify that EFH is designated only for stocks included in the fishery managed by the PFMC
<i>ESA Section 10(j) experimental population reintroduction efforts (this is a new subject area)</i>	<i>2A. No Action 2B. Amend Appendix A to clarify that efforts to reintroduce Pacific salmon as an experimental population into historically occupied habitats under Section 10(j) of the Endangered Species Act will be considered when designating EFH.</i>
Chinook salmon freshwater EFH	32A. No Action 32B. Add four hydrologic units (HUs) as Chinook salmon EFH: 17060108 (Palouse), 17060308 (Lower NF Clearwater), 18050005 (Tomales-Drakes Bay), and Lake Chelan (17020009) 32C. Designate the mainstem Columbia River and side channels as EFH for Chinook salmon, in HU 17070101. 32D. Update EFH designations and maps to be consistent with new USGS California Central Valley 4th field hydrologic units.
Coho salmon freshwater EFH	43A. No Action 43B. Add five HUs as coho salmon EFH: 17070103 (Umatilla), 17060305 (South Fork Clearwater), 17060304 (Middle Fork Clearwater), 17060302 (Lower Selway), and 17060301 (Upper Selway). 43C. Remove coho salmon EFH from one HU: 18060006 (Central California Coast).
Puget Sound pink salmon freshwater EFH	54A. No Action 54B. Designate HU 17110013 (Duwamish) as PS pink salmon EFH 54C. Designate HU 17110017 (Skokomish) as PS pink salmon EFH 4D. Designate HU 17110021 (Crescent-Hoko) as PS pink salmon EFH* 4E. Designate HU 17100102 (Queets-Quinault) and as PS pink salmon EFH*

Impassable barriers	<p>65A. No Action</p> <p>65B. Make housekeeping updates, including correct names, other minor corrections, removing dams from the list that are upstream of other impassable barriers, and removing barriers that are now passable from the list: [Dexter Dam (HU 17090001, Middle Fork Willamette River); Big Cliff Dam (HU 19070005, North Santiam River); Soda Springs Dam (HU 17100301, North Umpqua River)].</p> <p>5C. Update the list of dams based on the existing Amendment 14 criteria *</p> <p>65D. Revise the criteria for designating a dam as the upstream extent of EFH, and update the list based on the new criteria and new information.</p> <p><i>6E. Revise the criteria for designating a dam as the upstream extent of EFH, include consideration of efforts to reintroduce experimental populations of salmon into historically occupied habitats under Section 10(j) of the Endangered Species Act, and update the list based on the new criteria and new information.</i></p> <p>Note: Alternatives 56C and 56D are mutually exclusive</p>
Marine and estuarine EFH – all species	<p>76A. No Action</p> <p>76B. Clarify that PS pink salmon marine EFH includes U.S. EEZ waters, Puget Sound/Straits of Juan de Fuca, and Alaskan waters that are designated salmon EFH by the NPFMC.</p> <p>These were considered but rejected:</p> <ul style="list-style-type: none"> • Remove marine EFH designation for Alaska marine waters. • Refine marine EFH descriptions.
EFH descriptions	<p>87A. No Action</p> <p>87B. Update the text for EFH summaries and descriptions for each species of Pacific Coast salmon, based on best available science. Provide new references as an appendix to Amendment 18; and update EFH descriptions, life history, and habitats, based on new information regarding habitat needs, life history, etc.</p>
HAPCs	<p>98A. No Action</p> <p>98B. Designate channels and floodplains as a HAPC</p> <p>98C. Designate thermal refugia as a HAPC</p> <p>98D. Designate spawning habitat as a HAPC</p> <p>98E. Designate estuaries as a HAPC</p> <p>98F. Designate marine and estuarine submerged aquatic vegetation as a HAPC</p>
Fishing activities that may adversely affect EFH	<p>109A. No Action</p> <p>109B. Revise description of MSA fishing activities.</p> <p>109C. Revise description of non-MSA fishing activities.</p>
Non-fishing activities that may adversely affect EFH	<p>1110A. No Action</p> <p>1110B. Update the information on the existing 21 non-fishing activities that may adversely affect EFH.</p> <p>1110C. Add new non-fishing activities that may adversely affect EFH:</p>

	<p>1110C1. Pile Driving <u>Activities causing high intensity acoustic or pressure waves**</u></p> <p>1110C2. Over-water structures</p> <p>1110C3. Alternative energy development</p> <p>1110C4. Liquefied natural gas projects</p> <p>1110C5. Desalination</p>	<p>1110C6. Power plant intakes</p> <p>1110C7. Pesticide use</p> <p>1110C8. Flood control maintenance</p> <p>1110C9. Culvert construction</p> <p>10C10. Activities that contribute to climate change*</p> <p>1110C11. <u>Coal export terminal facilities**</u></p>
Information and research	<p>1211A. No Action</p> <p>1211B. Identify and prioritize new information and research needs.</p>	
Procedures for changing EFH	<p>1312A: No Action</p> <p>This alternative would maintain the status quo and require that all changes to Pacific Coast salmon EFH be accomplished through an FMP amendment.</p> <p>1312B: Develop one or more alternatives that:</p> <ul style="list-style-type: none"> • describe a process for modifying EFH without a plan amendment, • identify the types of changes to EFH that could be made without a plan amendment, and • identify the types of changes to EFH that would continue to be made through a plan amendment. 	

*Removed from consideration (September 2012 Council meeting)

**Added or amended (September 2012 Council meeting)