

Pacific Marine Estuarine Fish Habitat Partnership  
PACIFIC COAST JUVENILE FISH HABITAT ASSESSMENT  
Project Update for the Pacific Fishery Management Council

At the request of Council designee Ms. Marci Yaremko (California Department of Fish and Wildlife), the Habitat Committee has prepared an update on the assessment that the Pacific Marine Estuarine Fish Habitat Partnership (PMEP) is coordinating for west coast juvenile fish habitat use of estuaries.

**QUICK SUMMARY:** This coastwide assessment focuses on the role of estuaries as nurseries for important managed species (commercially and culturally important, state or Federal species of concern, food sources for larger fish), and impacts to these systems. The assessment is designed to complement other current west coast fish habitat assessments by NOAA and the National Fish Habitat Partnership. The PMEP will shortly be releasing a data call looking for types of habitat and fish information relevant for the assessments. To improve efficiency, and to reduce potential compilation burdens on already busy scientists, the first data call will be more of an inventory than an actual request of data.

**BACKGROUND:** The PMEP is a voluntary collaboration of local, state, tribal, and Federal governments and nongovernmental and private organizations in California, Oregon, and Washington with one paid coordinator (funded primarily from the National Fish Habitat Partnership, U.S. Fish and Wildlife Service, and The Nature Conservancy). PMEP is one of 18 nationally recognized partnerships that seeks to advance regional and national goals relating to fish habitat conservation and restoration. It is guided by a steering committee and advised by a science and data committee. See <http://www.pacificfishhabitat.org/> for a listing of members.

Within the Council, a number of staff and committee members coordinate with PMEP participants. These include Jennifer Gilden, Council staff; Habitat Committee members Correigh Greene (NOAA) and Fran Recht (Pacific States Marine Fisheries Commission); former Habitat Committee member Vicki Frey (CDFW), future Habitat Committee member John Stadler (NOAA), and alternate Habitat Committee member Korie Schaeffer (NOAA).

**PACIFIC COAST JUVENILE FISH HABITAT ASSESSMENT GOALS:**

- Update wetland delineation and habitat types in west coast estuaries, and classify systems consistent with the Federal Geographic Data Committee's Coastal and Marine Ecological Classification Standard (CMECS).
- Advance understanding of the nursery requirements of 15-20 fish and shellfish species representative of different assemblages across the west coast.

- Review the current state of science concerning nursery functions of west coast estuaries.
- Describe juvenile fish habitat use of estuaries in a way that helps inform and prioritize restoration and protection.
- Complement other fish assessments: PMEP will assure that our efforts are compatible with, support, and add value to other west coast assessments that are being done:
  - The National Fish Habitat Partnership’s National Estuary Assessment—assessing threats to habitats of recreationally and commercially important fish stocks in all aquatic systems.
  - The National Marine Fisheries Service’s nearshore forage fish assessment—focusing on habitat-related changes over time in distribution and abundance of species of forage fish inhabiting estuary and nearshore habitats.

**PRODUCTS:**

- A spatial framework of estuary habitats in Washington, Oregon and California. The framework will provide extent of estuaries and salinity zones from riverine tidal areas to the seaward boundary and classify all systems following the CMECS classification system.
- A geo-referenced database of information on the juvenile fish use of west coast estuaries .
- A literature review of key estuarine-dependent species on the Pacific Coast and nursery functions of estuaries for these species.
- Reports and peer-reviewed publications.

In addition to supporting the other west coast assessments, the PMEP assessment and its estuarine classification and spatial framework will provide information that will:

- increase understanding of the contribution of estuarine habitats to recruitment of commercial stocks to offshore fisheries.
- support analysis of habitat indicators in estuaries needed by the National Marine Fisheries Service’ California Current Integrated Ecosystem Assessment for the Habitat ecosystem component.
- provide new information on habitat use and importance that could better inform EFH designations for these species.

## LIST OF SPECIES FOR WEST COAST FISH HABITAT ASSESSMENTS

YELLOW INDICATES SPECIES TO BE INCLUDED; GREEN SPECIES UNDER CONSIDERATION FOR PMEP NURSERY ASSESSMENT

COMMON NAME	Scientific name	PMEP Nursery Assessment	Forage Fish Assessment	NFHP Assessment	
1. DUNGENESS CRAB	<i>Cancer magister</i>	X		X	
2. GREEN STURGEON	<i>Acipenser medirostris</i>	X		X	
3. STEELHEAD	<i>Oncorhynchus mykiss</i>	X		X	
4. COHO SALMON	<i>Oncorhynchus kisutch</i>	X		X	
5. CHINOOK SALMON	<i>Oncorhynchus tshawytscha</i>	X		X	
CHUM SALMON	<i>Oncorhynchus keta</i>			X	
6. BROWN ROCKFISH	<i>Sebastes auriculatus</i>	X		X	
7. SHINER PERCH	<i>Cymatogaster aggregata</i>	X		X	
8. CALIFORNIA HALIBUT	<i>Paralichthys californicus</i>	X		X	
9. ENGLISH SOLE	<i>Parophrys vetulus</i>	X		X	
10. STARRY FLOUNDER	<i>Platichthys stellatus</i>	X		X	
SPECKLED SANDDAB	<i>Citharichthys stigmatæus</i>			X	
PACIFIC SANDDAB	<i>Citharichthys sordidus</i>			X	
TOPSMELT	<i>Atherinops affinis</i>	X	X	X	
11. PACIFIC HERRING	<i>Clupea pallasii</i>	X	X	X	
12. LEOPARD SHARK	<i>Triakis semifasciata</i>	X			
STAGHORN SCULPIN		X			
BAY SHRIMP		X			
BAT RAY	<i>Myliobatis californica</i>				
PLACEHOLDER (CA species)		X			
PLACEHOLDER (CA species)		X			
PLACEHOLDER (CA species)		X			
PLACEHOLDER (CA species)		X			

THE FOLLOWING FISH ARE NOT IN THE PMEP SURVEY BUT ARE IN BOTH THE FORAGE FISH AND NFHP SURVEY

American shad, *Alosa sapidissima*; Deepbody anchovy, *Anchoa compressa*; Slough anchovy, *Anchoa delicatissima*; Northern anchovy, *Engraulis mordax*; Threadfin shad, *Dorosoma petenense*; Surf smelt, *Hypomesus pretiosus*; Longfin smelt, *Spirinchus thaleichthys*; whitebait smelt, *Allosmerus elongates*; Eulachon, *Thaleichthys pacificus*; Delta smelt, *Hypomesus transpacificus*; Night smelt, *Spirinchus starksi*; Jacksmelt, *Atherinopsis californiensis*; California grunion, *Leuresthes tenuis*; California killifish, *Fundulus parvipinnis*; Threespine stickleback, *Gasterosteus aculeatus*; Pacific sand lance, *Ammodytes hexapterus*

THE FOLLOWING FISH/SHELLFISH ARE ONLY IN THE NFHP SURVEY (AND NOT IN THE PMEP SURVEY OR IN THE FORAGE FISH SURVEY)

Olympia oyster, *Ostreola conchaphila*; Blue mussel, *Mytilus* spp; Pacific littleneck clam, *Protothaca staminea*; Bay shrimp, *Crangon franciscorum*; Leopard shark, *Triakis semifasciata*; Coastal cutthroat trout; *Oncorhynchus clarkii clarkii*; Bay pipefish, *Syngnathus leptorhynchus*; Copper rockfish, *Sebastes caurinus*; Grass rockfish, *Sebastes rastrelliger*; Lingcod, *Ophiodon elongates*; Pacific staghorn sculpin, *Leptocottus armatus*; Kelp perch, *Brachyistius frenatus*; Bay goby, *Lepidogobius lepidus*; White seabass, *Atractoscion nobilis*; Spotted sandbass, *Paralabrax maculatofasciatus*; Diamond turbot, *Hypopsetta guttulata*

Individuals and Contact Information					West Coast Assessments			
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