

**Long term goals of the shellfish industry are indicated by industry 'Goals and Research Priorities for 2015.' We have received no response to our written request for clarification of these goals.**

"Explore options under the Endangered Species Act (ESA) Sections 7 and 10, to develop a regional general permit in cooperation with the Army Corp to provide growers with protection from prosecution under the ESA, Clean Water Act, Rivers and Harbors Act and Marine Mammal Protection Act."

"3.3.2. (H) Identify gaps in current understanding of shellfish ecology specific to West Coast ecosystems and pursue research to fill those gaps. The final goal is to gain a clear understanding of the ecological impacts associated with:

- Oyster culture - bottom, rack and bag, bag, intertidal longline, stake, suspended (longline, tray, lantern net, bag), mechanical dredge harvesting as well as culture of native *Olympia* and assorted non-native species.
- Clam (Manila & native) culture - bottom and bag, hand and mechanical harvesting.
- Mussel culture - suspended raft & long line, *Mytilus galloprovincialis* and *M. trossulus*.
- Geoduck culture - intertidal, subtidal, hydraulic harvesting (intertidal geoduck), predator exclusion.
- Other species not yet commonly grown for aquaculture purposes.
- Integrated Pest Management (IPM) of burrowing shrimp, European green crab, red rock crab, Dungeness crab, shore crab, diving ducks, starfish, oyster drills, gulls, crows and moon snails by the use of deterrents, exclusion or destruction.
- Substrate modification (cultching, graveling, tilling, harrowing, mowing).
- Carrying capacity - modeling of intensively cultured estuaries and an understanding of key phytoplankton species affecting growth, health and survival of shellfish (look at models developed in France, New Zealand, and Maine)."

*--Excerpts from Pacific Shellfish Institute West Coast Shellfish Research and Education 2015 Goals and Priorities. For full document go to: <http://www.pacshell.org/>*