



## Washington State Chapter

180 Nickerson St, Ste 202  
Seattle, WA 98109

Phone: (206) 378-0114

Fax: (206) 378-0034

[www.cascade.sierraclub.org](http://www.cascade.sierraclub.org)

### **National Marine Fisheries Service Recommendations and the Army Corps Shellfish Aquaculture NWP48 Conditions Jeopardize ESA Species Protection Required by Federal Law**

#### **Introduction**

It is apparent when reviewing the timeline documentation from when Bill Dewey complained about environmental protections, that regional/local National Marine Fisheries Service (NMFS) then minimized protections. These protections necessary to protect ESA listed species have been systematically reduced based on industry pressure and non peer reviewed industry data provided by the Southwest Branch Chief who is a geoduck/shellfish developer. As a result, the Army Corps shellfish conditions are not adequate and violate Federal law. It is also clear from the NMFS Office of Protected Resources that the Army Corps issued NWP's which have resulted in a "jeopardy opinion" and must consider cumulative impacts which have not been addressed.

#### **1. Bill Dewey (shellfish industry lobbyist) Letter to NOAA--4-11-11**

The following information time line documents that Bill Dewey writes a letter to NOAA complaining that the NMFS and USF&W consultations/findings were holding back aquaculture permits in Washington. After Dewey's complaint, the next two letters from National Marine Fisheries Washington State local offices documents regulations being minimized without adequate scientific basis. These minimal conditions allow significant impacts from shellfish aquaculture on critical habitat and endangered species in violation of federal law.

Per Dewey Letter--"Local regulations in Washington State coupled with U.S. Army Corps of Engineers permitting and NMFS and USFWS consultations have effectively prevented any new shellfish farms from getting permitted for the past four years."

[http://nmfs.socrata.com/views/8xv7-hh6w/files/ZXBScy\\_Vqf\\_ti8cte0qhFN2P9YEuTw-oQqpL8OFAwvk?filename=H%3A%5CBillID%5CMy%20Documents%5CNOAA%5CTaylor%20Shellfish%20comments%20on%20NOAA%20and%20DOC%20aquaculture%20policies.pdf&content\\_type=application/pdf](http://nmfs.socrata.com/views/8xv7-hh6w/files/ZXBScy_Vqf_ti8cte0qhFN2P9YEuTw-oQqpL8OFAwvk?filename=H%3A%5CBillID%5CMy%20Documents%5CNOAA%5CTaylor%20Shellfish%20comments%20on%20NOAA%20and%20DOC%20aquaculture%20policies.pdf&content_type=application/pdf)

#### **2. National Marine Fisheries Seattle Regional to Army Corps Letter--4-26-11**

The only data on geoduck aquaculture included in the scientific literature was written by Jeff Fisher, a geoduck developer and past industry contract scientist. Despite the lack of

independent peer reviewed scientific research, the regional NMFS minimized protections as shown in the following document:

Re-initiation of Endangered Species Act Section 7 Programmatic Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Nationwide Permit 48 Activities in Washington State.

[http://www.caseinlet.org/uploads/NMFS\\_Letter\\_04.26.11\\_1\\_.pdf](http://www.caseinlet.org/uploads/NMFS_Letter_04.26.11_1_.pdf)

### **3. National Marine Fisheries Southwest Region Letter to Army Corps Letter--10-13-11**

This letter documents the consultation by the Southwest Branch Chief Jeffrey Fisher, who is a geoduck/shellfish developer in Totten Inlet and was the Taylor Shellfish contract scientist. Comments diluting conservation measures `proposed by the Corps can be seen on pages 12-14 of the March 9, 2011 Addendum to the Nationwide 48 Biological Assessment. No new peer reviewed science was presented as a basis for reducing protections for ESA listed species: [http://www.caseinlet.org/uploads/NMFS\\_Letter\\_10.13.11\\_1\\_.pdf](http://www.caseinlet.org/uploads/NMFS_Letter_10.13.11_1_.pdf)

### **4. National Marine Fisheries Service-Maryland to Army Corps—February 2012**

The following jeopardy opinion was issued by the NMFS Office of Protected Resources Director to the Army Corps: “Based on our assessment, we concluded that the USACE has not structured the proposed Nationwide Permits in a manner that insures that the direct, indirect, or cumulative effects of the activities that would be authorized by the proposed Nationwide Permits are not likely to jeopardize the continued existence of endangered or threatened species under NMFS' jurisdiction or result in the destruction or adverse modification of critical habitat that has been designate for those species.”

<http://blog.nwf.org/wp-content/blogs.dir/11/files/2012/02/NMFS-Opinion-on-USACE-Nationwide-Permits-2012.pdf>

### **5. 2012 NWP48 Permit Conditions for Commercial Shellfish Aquaculture Activities**

The following conditions are inadequate to protect both ESA listed species and non listed species in Washington. These conditions continue to allow the shellfish industry to operate/expand in or directly adjacent to the highest valued habitats in Washington State: Designated Critical Salmon Habitat, Documented Forage Fish Habitat and Eelgrass beds. Specific impacts include:

1. Degradation of water quality for all species from both dry and wet harvesting in the intertidal area. According to the Washington Department of Natural Resources, wild geoduck harvesting is restricted between: “-18 ft MLLW and -70 ft uncorrected.”(SEIS, page 6).”

[http://www.dnr.wa.gov/Publications/aqr\\_geo\\_lowres2001\\_final\\_SEIS.pdf](http://www.dnr.wa.gov/Publications/aqr_geo_lowres2001_final_SEIS.pdf)

The DNR dive harvesting restriction was based on the following scientific recommendation by Charles Simenstad, a highly respected nearshore scientist with the University of Washington School of Fisheries (per his 1999 letter to DNR):

Per Charles Simenstad:

“You have obviously taken considerable time, effort and thought to evaluate the potential impacts from all aspects of geoduck harvesting, and I believe have incorporated this information into best management practices regulating leasing and harvesting criteria. Most

of your considerations encompass mechanisms of impact to juvenile salmon during their initial stages of estuarine residence. Depending upon the methods, practices, and extent of geoduck harvesting, juvenile salmon migrating along Puget Sound and associated shorelines are potentially vulnerable to a variety of effects that could be associated with geoduck harvesting, including: (a) direct impact to salmon exposed to sediment plume, (b) alteration of migratory behavior when encountering the sediment plume generated by water jet removal of the clams, (c) sedimentation of intertidal habitat (e.g. eelgrass, *Zostera marina*) important to juvenile salmon, (d), cumulative loss of primary production due to turbidity shading by sediment plume, and (e) attraction or aggregation of potential predators on juvenile salmon.....I am restricting my evaluation of impacts to juveniles of ocean-type salmon (e.g. chum, Chinook and to some degree pink because during their early marine life history when migrating as fry (30-80mm FL) they are confined to estuarine and Nearshore shallow water habitats. As such , they are susceptible to Nearshore impacts that alter this behavioral mandate or reduce critical habitat attributes such as the composition and production of their prey resources and refugia from predation (e.g. vegetative structure provided by eelgrass, etc.).**The exclusionary principle of not allowing leasing/harvesting in shallower water than -18 ft. MLLW or 200 ft. distance from shore (MHW), 2 ft vertically from elevation of lower eelgrass margin, and within any region of documented herring or forage fish spawning should under most conditions remove the influences of harvest-induced sediment plumes from migrating salmon. As the available information indicates that sediment plumes do not (or are not allowed to?) enter the Nearshore zone, impacts to juvenile salmon habitat and prey resources should also be protected from impact by these policies if effectively regulated.”**

Dan Penttila stated in his expert report during the 2011 Pierce County Longbranch geoduck EIS hearing:

“The disparate policies of siting subtidal wild-geoduck harvest leases on bottomlands no shallower than -18 feet in tidal elevation for the benefit of juvenile salmonids (Simenstad, 1999) while allowing conceivably even more impacting geoduck farm operations to occur within this very important nearshore migratory habitat zone needs to be explained and justified, through an EIS.”

This clip of harvesting wild densities reinforces that sand is being moved even when low densities of geoduck are being harvested--wild subtidal harvesting less than 10,000 holes where intertidal can be over 80,000 holes.

<http://www.youtube.com/watch?v=loRecKli48Y>

2. Point source marine plastic pollution from degrading PVC tubes, nets, bands both at the site and lost in deeper waters.
3. Impacts to forage fish as outlined by Dan Penttila, the foremost authority on Washington forage fish:

[http://www.caseinlet.org/uploads/Penttila Comments on ACOE Permit Conditions-March 28-2102.doc](http://www.caseinlet.org/uploads/Penttila%20Comments%20on%20ACOE%20Permit%20Conditions-March%2028-2102.doc)

[http://www.caseinlet.org/uploads/Penttila--Summary\\_of\\_Aquaculture\\_Impacts\\_Relative\\_to\\_Forage\\_Fish-March\\_27\\_2012.docx](http://www.caseinlet.org/uploads/Penttila--Summary_of_Aquaculture_Impacts_Relative_to_Forage_Fish-March_27_2012.docx)

4. Degradation of eelgrass in the site and adjacent to a geoduck site from geoduck operations. The SeaGrant geoduck research clearly points out the impacts as shown in the following report:

<http://www.wsg.washington.edu/research/pdfs/reports/GeoduckReport2011.pdf>

Page 4: “On Fisk Bar, where eelgrass recruited to the area after geoducks were planted, harvest activities produced effects on almost every measured biological and physical parameter of the farmed and reference sites with limited “spillover effects” from the farmed site to adjacent reference sites. However in 2011, one year after the removal of tubes and nets from the new culture cycle, the first signs of eelgrass recovery were observed, indicating that current farming practices do not make sites unsuitable for later colonization by eelgrass.”

While the shellfish industry understands they can no longer site their operations in eelgrass, many of their sites are adjacent to these high valued ecological habitats. Allowing the shellfish industry to site their operations 10 feet from eelgrass beds not only degrades the adjacent eelgrass, but is also contrary to the goal of a 20% increase in eelgrass beds by the Puget Sound Partnership. It is also important to point out that these sites are forever sites to be converted to aquaculture. The notion that plant and animal species will “recover” is an attempt to change the discussion when recovery is not possible for permanent aquaculture operations.

#### **NMFS/Army Corps Conditions for Aquaculture—2012 NWP48**

To minimize the potential for adverse effects to the aquatic environment from shellfish aquaculture activities, including effects to Endangered Species Act protected species, their critical habitat, and essential fish habitat, the U.S. Army Corps of Engineers (Corps) will add the following requirements to all permits for shellfish aquaculture activities, as appropriate. These standard conditions are the result of extensive coordination and consultation on commercial shellfish activities between the Corps, National Marine Fisheries Service (NMFS), and U. S. Fish and Wildlife Service (USFWS). Other conditions may also be added, as necessary, to permits for shellfish aquaculture activities. 1. Washed gravel shall be used for shellfish bed preparation.

2. Unsuitable material (e.g., trash, debris, car bodies, asphalt, tires) shall not be discharged or used as fill (e.g., used to secure nets, create berms, provide nurseries).

3. A Pacific herring spawn survey shall be conducted prior to undertaking the activities listed below if any of these activities will occur outside the approved work window for the project area’s Tidal Reference Area, which is *[insert work window]*. The activities requiring a spawn survey are: 1) mechanical dredge harvesting, 2) raking, 3) harrowing, 4) tilling or other bed preparation activities, 5) frosting or applying oyster shell on beds, 5) geoduck harvesting, net removal, or tube removal. Vegetation, substrate, and aquaculture materials (e.g., nets, tubes) shall be inspected for Pacific herring spawn. If Pacific herring spawn is present, these activities are prohibited in the areas where spawning has occurred until such time as the eggs have hatched and Pacific herring spawn is no longer present. The Corps encourages the permittee to complete a training class on identifying Pacific herring spawn with the Washington Department of Fish and Wildlife (WDFW). A map showing the Tidal

Reference Areas and a table with the approved work windows for Pacific herring can be found at the Corps, Seattle District, Regulatory Branch website. You shall maintain a record of Pacific herring spawn surveys, including the date and time of surveys; the area, materials, and equipment surveyed; results from the survey; etc. The record of Pacific herring spawn surveys shall be made available upon request to the Corps, NMFS, and USFWS.

4. Newly positioned <sup>1</sup>shellfish culturing (e.g., culturing by rack and bag, raft, long-line, ground methods) shall not be placed within 10 horizontal feet of eelgrass or kelp.
5. Newly positioned shellfish culturing (e.g., culturing by rack and bag, raft, long-line, ground methods ) shall not be placed above the tidal elevation of +7 feet Mean Lower Low Water if the area is documented as surf smelt spawning habitat by the WDFW. A map showing the location of documented surf smelt spawning habitat is available at the SalmonScape interactive program on the WDFW website.
6. Newly positioned shellfish culturing (e.g., culturing by rack and bag, raft, long-line, ground methods) shall not be placed above the tidal elevation of +5 feet Mean Lower Low Water if the area is documented as Pacific sand lance spawning habitat by the WDFW. A map showing the location of documented Pacific sand lance spawning habitat is available at the SalmonScape interactive program on the WDFW website.
7. You shall not use tidelands waterward from the line of mean higher high water (MHHW) for the storage of aquaculture gear (e.g., bags, racks, marker stakes, rebar, nets, tubes) for a consecutive period of time exceeding 7 days.
8. All pump intakes (e.g., for geoduck harvest, washing down gear) that use seawater shall be screened in accordance with NMFS and WDFW criteria. Note: This does not apply to work boat motor intakes (jet pumps) or through-hull intakes.
9. Land vehicles (e.g., all-terrain, trucks) and equipment shall not be washed within 150 feet of any stream, waterbody, or wetland. All wash water shall be treated before being discharged to any stream, waterbody, or wetland.
10. Land vehicles shall be stored, fueled, and maintained in a vehicle staging area placed 150 feet or more from any stream, waterbody, or wetland. Where this is not possible, documentation must be provided to the Corps as to why compliance is not possible, written approval from the Corps must be obtained, and the operators shall have a spill prevention plan and maintain a readily-available spill prevention and clean-up kit.
11. Inspect all vehicles operated within 150 feet of any stream, waterbody, or wetland daily for fluid leaks before leaving the vehicle staging area. Repair any leaks detected in the vehicle staging area before the vehicle resumes operation.
12. All tubes, mesh bags, and area nets used on the tidelands below the line of mean higher high water shall be clearly, indelibly, and permanently marked to identify the permittee name and contact information (e.g., telephone number, email address, mailing address). On the nets, identification markers will be placed with a minimum of one identification marker for each 50 feet of net.

---

<sup>1</sup> “Newly positioned” is defined as being placed within a portion of the project area where aquaculture is not currently located and has not previously occurred.

Note: You will have 180 days from verification to implement this condition. If this special condition cannot be met, you shall submit a plan to the Corps for written approval describing specific measures and/or best management practices that will be undertaken to prevent the inadvertent release of aquaculture equipment into waters of the U. S.

13. At least once every three months beaches in the project vicinity shall be patrolled by crews who will retrieve aquaculture debris (e.g., anti-predator nets, tubes, tube caps, stakes) that escapes from the project area. Within the project vicinity, locations shall be identified where debris tends to accumulate due to wave, current, or wind action, and after weather events these locations shall be patrolled by crews who will remove and dispose of aquaculture debris appropriately. You shall maintain a record with the following information and the record shall be made available upon request to the Corps, NMFS, and USFWS: date of patrol, location of areas patrolled, description of the type and amount of retrieved debris, other pertinent information.

14. You shall ensure area nets (e.g., anti-predator nets) are tightly secured to prevent them from escaping from the project area.

15. You must submit a request for permit modification to the Corps if there is an increase in the reported amount of gravel that is being applied to “frost” (i.e., to harden) the substrate at a mudflat or vegetated shallow, which are special aquatic sites. Mudflat is defined at 40 CFR 230.42(a) and vegetated shallow is defined at 40 CFR 203.43(a).

16. Vessels used for shellfish culturing at the project area shall not ground in eelgrass beds. If this special condition cannot be met, within 90 days of verification, you shall submit a plan to the Corps describing specific measures and/or best management practices that will be undertaken to minimize negative effects to eelgrass from vessel operation and receive Corps written approval.

April 30, 2012