



US Army Corps
of Engineers®
Seattle District

Public Announcement

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Minor Modifications and Clarifications to Shellfish Activity Programmatic Biological Opinion Conservation Measures

The U.S. Army Corps of Engineers (Corps) Seattle District hosted a shellfish permitting informational meeting on January 22, 2018. As a follow-up to the meeting, the Seattle District requested feedback regarding implementing the conservation measures in the Shellfish Activity Programmatic Biological Opinions, the proffered Nationwide Permit (NWP) 48 process, and suggestions for additional shellfish activities (e.g., other shellfish species, cultivation methods) to consider for future programmatic consultations. We greatly appreciate the thoughtful and informative feedback we received as a result.

We coordinated with the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) to review the comments received regarding implementation of the Programmatic Biological Opinions' conservation measures. As a result, minor modifications and/or revisions were made to two of the 28 conservation measures (CM 10 and CM 15). CM 10 has been clarified to allow work for two weeks after a negative forage fish spawn survey. If work is occurring outside approved in-water work windows, a new forage fish spawn survey would need to be completed for any work occurring two weeks past a previous negative spawn survey. CM 15 has been modified to remove the 5 gallon volume limit for portable fuel containers. In addition, CM 30 has been removed due to the delisting of the Puget Sound/Georgia Basin distinct population segment of canary rockfish [delisted on March 24, 2017, (82 FR 7711)].

Comments regarding the NWP 48 (2017) process included a spectrum of perspectives. There was strong support for continued use of the proffered NWP 48 process, which was efficient and compliant with program regulations. It was recommended the Seattle District use this same approach for subsequent versions of NWP 48 for previously verified operations with no changes. We also received comments encouraging NWP 48 to provide stronger protections for the marine environment, specifically in reducing use of plastics/PVC, increasing protection for eelgrass, and considering cumulative effects.

A summary of the comments and our responses to questions regarding specific conservation measures and to general comments and additional information about shellfish aquaculture permitting is available on our website at: <https://www.nws.usace.army.mil/Missions/Civil-Works/Regulatory/Permit-Guidebook/> select Chapter IX: Aquaculture.

Response to Comments/Questions

Received at the Shellfish Aquaculture Permitting Process

Informational Meeting on January 22, 2018

Date: November 2018

On January 22, 2018, the Seattle District solicited comments and questions from stakeholders including the public and shellfish industry regarding implementation of the Conservation Measures (CM) from the Programmatic Biological Opinions (PBOs) for Shellfish Activities in Washington State. The Seattle District, National Marine Fisheries Service (NMFS), and U.S. Fish and Wildlife Service (USFWS) (Services) reviewed the comments that were received. As a result, minor modifications and/or revisions were made to 2 of the 28 conservation measures (CM 10 and CM 15). In addition, NMFS is eliminating or modifying any conservation measures relevant to the Puget Sound/Georgia Basin distinct population segment of canary rockfish, which was delisted from the Endangered Species Act (ESA) on March 24, 2017, (82 FR 7711). The following summarizes the comments and questions, and provides responses to specific conservation measures and to general comments. If you have specific questions about your project, please contact the Seattle District, U.S. Army Corps of Engineers (Corps) at (206) 764-3495.

CM 1: Gravel and shell shall be washed prior to use for substrate enhancement (e.g., frosting, shellfish bed restoration) and applied in minimal amounts using methods which result in **less than 1 inch** depth on the substrate annually. Shell material shall be procured from clean sources that do not deplete the existing supply of shell bottom. Shells shall be cleaned or left on dry land for a minimum of one month, or both, before placement in the marine environment. Shells from the local area shall be used whenever possible. Shell or gravel material shall not be placed so that it creates piles on the substrate. Use of a split-hull (e.g., hopper-type) barge to place material is prohibited.

Comment. Prohibition of split hull barge not necessary; split-hull barges can meet the 1-inch placement requirement.

Response. CM 1 prohibits the use of a split-hull barge. Applicants may provide technical documentation to the Corps from the manufacturer and operator, demonstrating that use of the equipment could place material less than 1-inch in depth in shallow, nearshore water depths. If new information is provided by applicants demonstrating gravel/shell can be placed in a manner that results in less than 1-inch depth annually, this conservation measure could warrant further discussion with USFWS and NMFS (Services) for potential removal of the prohibition of split-hull barges.

CM 9: If conducting 1) mechanical dredge harvesting, 2) raking, 3) harrowing, 4) tilling, leveling or other bed preparation activities, 5) frosting or applying gravel or shell on beds, or 6) removing equipment or material (nets, tubes, bags) within a **documented or potential** spawning area for Pacific herring (*Clupea pallasii*) outside the approved work window¹, the work area shall be surveyed for the presence of herring spawn prior to the activity occurring. Vegetation, substrate, and materials (nets, tubes, etc.) shall be inspected. If herring spawn is present, these activities are prohibited in the areas where spawning has occurred until such time as the eggs

¹ See Seattle District website for work window <http://www.nws.usace.army.mil/Missions/Civil-Works/Regulatory/>

have hatched and herring spawn is no longer present. A record shall be maintained of spawn surveys including the date and time of surveys; the area, materials, and equipment surveyed; results of the survey, etc. The Corps and the Services shall be notified if spawn is detected during a survey. The record of spawn surveys shall be made available upon request to the Corps and the Services.

Comment. The list of activities does not mention harvest by hand. Should I assume harvest by hand is allowed if herring spawn is present?

Response. Although not specifically mentioned, CM 9 includes harvest by hand methods. No material, including shellfish product, can be removed while herring spawn is present. Herring are known to spawn on shell material.

CM 10: For ‘new’ activities only, activities occurring in or adjacent to **potential** spawning habitat for sand lance, or surf smelt shall have a spawn survey completed in the work area by an approved biologist² prior to undertaking bed preparation, maintenance, and harvest activities if work will occur outside approved work windows for these species. If eggs are present, these activities are prohibited in the areas where spawning has occurred until such time as the eggs have hatched and spawn is no longer present. A record shall be maintained of spawn surveys including the date and time of surveys; the area, materials, and equipment surveyed; results of the survey, etc. The Corps and the Services shall be notified if spawn is detected during a survey. The record of spawn surveys shall be made available upon request to the Corps and the Services.

Comment. What is the length of time work could occur outside the approved work windows if a forage fish spawn survey finds no spawn is present?

Response. After coordinating with Washington Department of Fish and Wildlife (WDFW), work may continue outside of the approved in-water work window for two weeks after a forage fish spawn survey, conducted by an approved biologist, concludes no eggs are present. After the two weeks, a new forage fish spawn survey would need to be completed if additional work would occur outside the approved in-water work windows. CM 10 will be modified with this clarification as follows:

CM 10 Modification: For ‘new’ activities only, activities occurring in or adjacent to **potential** spawning habitat for sand lance, or surf smelt shall have a spawn survey completed in the work area by an approved biologist³ prior to undertaking bed preparation, maintenance, and harvest activities if work will occur outside approved work windows for these species. If eggs are present, these activities are prohibited in the areas where spawning has occurred until such time as the eggs have hatched and spawn is no longer present. If eggs are not present, work can occur for two weeks. After two weeks, a new forage fish spawn survey shall be completed if still outside the approved work windows. A record shall be maintained of spawn surveys including the date and time of surveys; the area, materials, and equipment surveyed; results of the survey, etc. The Corps and the Services shall be notified if spawn is detected during a survey. The record of spawn surveys shall be made available upon request to the Corps and the Services.

Note: All work windows for forage fish, salmon and bull trout are located on the Seattle District’s web page at <http://www.nws.usace.army.mil/Missions/Civil-Works/Regulatory/Permit-Guidebook/> then select Work Windows - Marine Waters.

² For information on how to become an “approved biologist” for conducting forage fish surveys contact WDFW

³ For information on how to become an “approved biologist” for conducting forage fish surveys contact WDFW

Comment. Can training also be authorized from other individuals with expertise, such as company employees who have completed WDFW's training?

Response. WDFW is the appropriate agency to train individuals to conduct forage fish spawning surveys, with precedent for training requirements and credentials. WDFW offers a number of training opportunities each year. You do not need to be a fishery biologist to take the training. It is open to anyone who wants to learn how to conduct forage fish spawning surveys. Ecology's Coastal Training Program handles the registration and logistics for forage fish training at <http://www.coastaltraining-wa.org>.

CM 11: All shellfish gear (e.g., socks, bags, racks, marker stakes, rebar, nets, and tubes) that is not immediately needed or is not firmly secured to the substrate will be moved to a storage area landward of MHHW prior to the next high tide. Gear that is firmly secured to the substrate may remain on the tidelands for a consecutive period of time up to 7 days. Note: This is not meant to apply to the wet storage of harvested shellfish.

Comment. Can shellfish gear that is not being used, but is not expected to float away, remain indefinitely on the tidelands?

Response. While shellfish gear is secured to the tidelands, habitat (e.g. benthic species, substrate) utilized by ESA-listed species and/or their prey is reduced. To minimize this impact, shellfish gear must be removed from the tidelands to an upland location after 7 consecutive days.

CM 13: Land vehicles (e.g., all-terrain, trucks) shall be washed in an upland area such that wash water is not allowed to enter any stream, waterbody, or wetland. Wash water shall be disposed of upland in a location where all water is infiltrated into the ground (i.e., no flow into a waterbody or wetland).

Comment. Suggest CM 13 and CM 14 be combined.

Response. See response to CM 14 comment below.

CM 14: Land vehicles shall be stored, fueled, and maintained in a vehicle staging area located 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.

Comment. Combine CM 14 and CM 15 with a more general statement of objectives (e.g., use Best Management Practices (BMPs) to prevent fuel spills; provide examples)

Response. CM 13, CM 14, and CM15 are conservation measures that are protective of critical habitat, which includes water quality, with activity-specific measures that must be implemented. It is not appropriately enforceable and protective of ESA-listed species and critical habitat to combine them or to merely state that BMPs must be followed. Applicants are encouraged to develop BMPs for their operation, however those BMPs would be supplemental in nature and would not supersede the CMs.

CM 15: For boats and other gas-powered vehicles or power equipment that cannot be fueled in a staging area 150 feet away from a waterbody or at a fuel dock, fuels shall be transferred in Environmental Protection Agency (EPA)-compliant portable fuel containers 5 gallons or smaller at a time during refilling. A polypropylene pad or other appropriate spill protection and a funnel

or spill-proof spout shall be used when refueling to prevent possible contamination of waters. A spill kit shall be available and used in the event of a spill. All spills shall be reported to the Washington Emergency Management Office at (800) 258-5990. All waste oil or other clean-up materials contaminated with petroleum products will be properly disposed of off-site.

Comment. Restricting fuel containers to 5 gallons or less is too restrictive.

Response. This condition applies to the portable fuel containers used to refill the tanks attached to the motors. The intent of restricting fuel containers to 5 gallons or less was to minimize risk of spills. We received information that fuel containers larger than 5 gallons were in common use. After reviewing available information, the Services indicated the foreseeable effects to ESA-listed species and critical habitat would not be changed if the volume restriction was removed. The conservation measure is being revised to remove the phrase, “5 gallons or less.”

Note: The applicant is responsible for complying with all state conditions for transporting larger quantities of fuel/oil over marine waters.

CM 15 Modification: For boats and other gas-powered vehicles or power equipment that cannot be fueled in a staging area 150 feet away from a waterbody or at a fuel dock, fuels shall be transferred in Environmental Protection Agency (EPA)-compliant portable fuel containers during refilling. A polypropylene pad or other appropriate spill protection and a funnel or spill-proof spout shall be used when refueling to prevent possible contamination of waters. A spill kit shall be available and used in the event of a spill. All spills shall be reported to the Washington Emergency Management Office at (800) 258-5990. All waste oil or other clean-up materials contaminated with petroleum products will be properly disposed of off-site.

CM 17: The direct or indirect contact of toxic compounds including creosote, wood preservatives, paint, etc. within the marine environment shall be prevented. [This does not apply to boats.]

Comment. This CM should not apply to existing features and be consistent with other laws and regulations.

Response. Existing features, such as racks, that are not in compliance with this standard shall be updated to meet this standard during scheduled maintenance, repair, or replacement, or before the end of the term of the next renewed authorization. This is consistent with CM 27.

CM 18: All tubes, mesh bags and area nets 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 shall be placed with a minimum of one identification marker for each 50 feet of net.

Comment. Marking equipment does not prevent marine debris and is not clear how it reduces impacts to ESA-listed species.

Response. Marking equipment is intended to ensure compliance with the requirement that equipment is securely fastened to the substrate and regularly monitored to prevent introducing debris into the marine environment. CM 18 and CM 22 facilitate adaptive management of shellfish-related marine debris in areas prone to gear escapement.

CM 22: At least once every three months, beaches in the project vicinity will be patrolled by crews who will retrieve debris (e.g., anti-predator nets, bags, stakes, disks, tubes) that escape from the project area. Within the project vicinity, locations will 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 shellfish related debris appropriately. A record shall be maintained with the following information and the record will 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.

Comment. There are other sources of marine debris than shellfish aquaculture. Only about 25% of debris is shellfish aquaculture debris.

Response. Marine debris is an important issue but other sources of debris are not relevant to the Shellfish Activities Programmatic Biological Opinions.

CM 27: Unless prohibited by substrate or other specific site conditions, floats and rafts shall use embedded anchors and midline floats to prevent dragging of anchors or lines. Floats and rafts that are not in compliance with this standard shall be updated to meet this standard during scheduled maintenance, repair, or replacement or before the end of the term of the next renewed authorization. [Any alternative to using an embedded anchor must be approved by the NMFS.]

Comment. Does CM 27 apply to temporary anchorage of floats/rafts?

Response. CM 27 also applies to temporary anchorage of floats/rafts. This is consistent with other consultations in the Seattle District.

CM 30. Mechanical dredge harvest/harrowing shall not be conducted in **North Puget Sound** between April 1 and August 31.

Comment. Will this CM be removed due to the delisting of canary rockfish?

Response. NMFS has concurred with removal of CM 30 due to the delisting of the Puget Sound/Georgia Basin distinct population segment of canary rockfish [delisted on March 24, 2017, (82 FR 7711)].

General Comments. We received a number of general comments not directed to a specific CM. One comment requested that we include the purpose/intent of each CM. Another comment stated that the CMs do not adequately reduce impacts, but instead focus on small issues which obfuscates from the larger issues. Another commenter stated that the CMs are not adequate for minimizing impacts of the “continuing” activities.

We received comments that the forage fish and eelgrass protection measures are inadequate. Specifically, commenters remarked that the buffer for eelgrass is insufficient, and forage fish are known to spawn year-round, even during the approved in-water work window. Other commenters expressed concern that the protections and analysis of several species, habitat features, and the cumulative effects analysis within NWP 48 and the programmatic biological assessment (PBA) are insufficient. Another commenter stated that additional CMs are needed to address the use of plastics and netting.

Response. The purpose and intent of the CMs are located in the Biological Opinions and in the PBA. These CMs have been determined to be adequately protective of ESA-listed species and critical habitat. Cumulative effects of the proposed action in the PBA were evaluated in both the PBA and the Biological Opinions. If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered, then re-initiation of the consultation would occur. Conditions of the Biological Opinions require

tracking and annual reporting of activities and acreages covered. Reinitiation of the consultation would also occur if certain events occur, such as: take is exceeded, new species are listed or critical habitat is designated.