



US Army Corps  
of Engineers®  
San Francisco District

SAN FRANCISCO DISTRICT

Regulatory Division, Eureka Field Office  
601 Startare Drive, Box 14  
Eureka, CA 95501

# PUBLIC NOTICE

PROJECT: Humboldt Bay Mariculture Pre-Permitting Project

PUBLIC NOTICE NUMBER: 2016-00401N

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COMMENTS DUE DATE: June 12, 2017

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1. **INTRODUCTION:** The Humboldt Bay Harbor, Recreation and Conservation District (Harbor District) (POC: Jack Crider, 707-443-0801), 601 Startare Drive, Eureka, CA 95501, through its agent, SHN Engineers (POC: Greg O'Connell, 707-441-8855), has applied to the U.S. Army Corps of Engineers (Corps), San Francisco District, for a Department of the Army Permit to place up to eight 12-inch diameter concrete or metal pilings within one of three project areas to facilitate mooring for a total of 3.08 acres of shellfish and macroalgae aquaculture on three areas of submerged lands within Humboldt Bay, near the City of Eureka, Humboldt County, California. This infrastructure would be used for Humboldt Bay Harbor District leases to individuals or businesses to carry out aquaculture activities. This Department of the Army permit application is being processed pursuant to the provisions of Section 404 of the Clean Water Act of 1972, as amended (33 U.S.C. § 1344 *et seq.*) and Section 10 of the Rivers and Harbors Act of 1899, as amended (33 U.S.C. § 403 *et seq.*).

## 2. PROPOSED PROJECT:

**Project Site Location:** The project would be located at three separate subtidal areas along the shore of northern Humboldt Bay, near the city of Eureka, Humboldt County, California. (Enclosure 1).

**Project Site Description:** Humboldt Bay is a multi-basin tidal lagoon with limited freshwater input. Humboldt Bay encompasses approximately 62.4 square kilometers (15,400 acres) at mean high tide in three geographic segments: South Bay, Central/Entrance Bay, and Arcata Bay (North Bay). South Bay is largely included in Humboldt Bay National Wildlife Refuge with the exception of commercial docks and public boating access at Fields Landing on the east shore of the bay. Shallower, subtidal

channels continue northward into Arcata Bay. These subtidal sloughs include Mad River Slough Channel, East Bay Channel, Eureka Slough, Fay Slough and Arcata channel, and the secondary and tertiary channels that connect with the larger subtidal channels. Two freshwater streams drain into brackish and tidal sloughs in the South Bay: Salmon Creek into Hookton Slough and Elk River into Elk River Slough. In the North or Arcata Bay: Freshwater Creek drains into Freshwater Slough, Rocky Gulch and Washington Gulch both drain directly into the bay as does Jacoby Creek; Jolly Giant Creek drains into Butcher's Slough near the Arcata marsh; and Janes Creek drains into McDaniel Slough.

The project area is located within subtidal habitat of North Bay. The tidal range in North Bay is approximately -2.0 feet (ft) to +8.5 ft mean lower low water (MLLW). Intertidal area in North Bay have substrates that are comprised mainly of silty mud with some sand. The total surface area of North Bay ranges from 2,941 acres at MLLW to 8,525 acres at MHW, and the total volume ranges from 38,914 acre-ft at MLLW to 68,910 acre-ft at MHW.

The subtidal community in Humboldt Bay is comprised of plant and animal species that are always inundated by water. Due to the numerous aquatic species that occur in the bay and estuaries, "functionally related" species groups have been defined. Special status fish in this community include tidewater goby (*Eucyclogobius newberryi*), coastal cutthroat trout (*Oncorhynchus clarkii clarkia*), coho salmon (*O. kisutch*), steelhead (*O. mykiss*), Chinook salmon (*O. tshawytscha*), longfin smelt (*Spirinchus thaleichthys*), green sturgeon (*Acipenser medirostris*) and eulachon (*Thaleichthys pacificus*). Commercially and recreationally important species that utilize subtidal areas include Dungeness crab (*Cancer magister*), Pacific herring (*Clupea*

*pallasii*), rockfish (*Sebastes* spp.) and California halibut (*Paralichthys californicus*). Numerous bird and marine mammal species also utilize subtidal areas.

**Project Description:** The Project would increase production of Kumamoto oysters (*Crassostrea sikamea*), Pacific oysters (*C. gigas*) and Manila clams (*Tapes philippinarum*) in Humboldt Bay, California. It would also potentially include culture of native macroalgae (Rhodophyta). As shown in the attached figures, the applicant proposes mariculture/aquaculture activities in three areas selected by the Harbor District (Enclosure 2). The areas selected for this project are 6.0 acres, 6.6 acres and 8.6 acres in size and are proposed to support 0.87 acres, 0.96 acres, and 1.25 acres of aquaculture activities, respectively.

Cultivated shellfish species would be limited to Pacific oysters, Kumamoto oysters, and Manila clams. Cultivated macroalgae would be limited to native red algae such as *Chondracanthus*, *Gracilaria*, *Palmaria* and *Porphyra* species.

For each site, the following culture methods may be used: Floating Upwelling Systems (FLUPSYs) or Pump Systems; Nursery Rafts; or Macroalgae Longline (Enclosure 3). Each of these cultivation structures would allow the shellfish or shellfish seed it contains to be submerged in the waters of Humboldt Bay during grow-out. The structures installed would be connected to the existing or proposed piling, pier, or wharf within each of the three project areas by way of floating gangways, cables, and chains.

A FLUPSY is an in-water, raft-like structure that upwells water through upwelling bins to provide a consistent source of nutrients to growing shellfish. The FLUPSY method is used to mature Kumamoto oyster, Pacific oyster and Manila clam seed. They are moored by chain and line to a pier and adjacent pilings or anchored with concrete or steel anchors. They are constructed of aluminum with poly-encapsulated floats for floatation, and have a submerged trough containing a paddle wheel or propeller. This trough is surrounded by open wells containing the upwelling bins. The paddle wheel or propeller moves the water out of the trough; in order for the trough to refill, water must pass through the upwelling bins containing oyster seed. The bottoms of the upwelling bins are a 1.2- to 1.8-millimeter mesh screen, which allows water to come up through the upwelling bin and exit the bin

at the top. Alternatively, instead of using a paddle wheel or propeller, water may be pumped to the shellfish seed (a Pump System). The FLUPSYs only contain seed, which is grown to market size using different methods.

Nursery rafts are anchored to concrete anchors, accessible by skiff. Based on past practices in Humboldt Bay, typical nursery rafts would be about 12 feet wide by 24 feet long and constructed from aluminum with polyethylene encapsulated styrofoam for floatation. The rafts would be held in place with mooring lines and chains attached to pier, wharf, piling or adjacent aquaculture structures or with anchors on the seafloor. Nursery rafts are typically designed with grated decking, a holding tank, upwelling tanks, and associated equipment such as intake and circulation pumps. The pumps would draw seawater from below the rafts through a screened intake pipe and feed it to the holding tank, where it would be collected and passed to the upwelling tanks by way of a single pass gravity fed system. Each raft has 24 tray wells, which contain seed nursery trays in stacks of about 8-20 suspended in each well. The rafts only contain seed, which is grown to market size using different methods. The nursery rafts would receive seed (ranging in size from 0.3 to 0.4 millimeters) purchased or transferred from a seed setting facility and hold it until it grows enough to be transferred to the FLUPSYs for further growth. Nursery rafts would be used to grow Kumamoto oyster, Pacific oyster and Manila clam seed.

Longline culture of macroalgae involves an array of single, independent lines (ropes) fixed by removable mooring points or anchors and supported by floats. The algae would be collected locally from drift or by trimming algae no closer than 2 inches from the holdfasts and would be attached to the ropes for culture. Alternatively, spores may be settled onto ropes. A mature culture line would be covered nearly entirely by live holdfast tissue, promoting generation of vegetative growth (thalli) radiating outward from the live line. Periodically, the line would be raised and run over a star wheel assembly on an open work skiff, and through a cutter assembly, removing the mature thalli and leaving the holdfasts intact on the line for further culture. It is expected that algal biomass at harvest density would be approximately 2–3 pounds per foot of culture line. Maintenance of the line would include periodic changing of leaders and floats to remove epiphytic growth. Lines would likely be arranged parallel to shore to minimize drag with tidal currents. Lines would be spaced to accommodate service and harvesting by a work skiff, likely with a

minimum spacing of 20 feet between lines. Visits to the site would be focused during the increasing photoperiod in spring and summer months, with overwintering visits likely limited to periodic maintenance. Growth rates on site are unknown but during harvest periods, visits may be weekly, with monthly maintenance visits in the offseason. Deployment or removal of lines would be more intensive but less frequent, on the order of two to three weeks of daily visits at the beginning or end of the growing season. Harvested product would be fresh cut seaweed in net bags.

**Pile Driving:** To facilitate the mooring of aquaculture structures within Subtidal Site 3, the Harbor District proposes to install up to eight 12-inch diameter steel or concrete piles. These piles would be installed in the deeper waters of this project site and would be configured to provide maximum mooring space. Installation of the piles would be carried out using either vibratory installation methods (using a machine that vibrates the pile at high speeds to liquefy the adjacent substrate while simultaneously applying downward pressure) or a more traditional impact pile driver. To help ensure that piling installation activities do not adversely affect marine wildlife as a result of elevated levels of underwater noise, the Harbor District proposes to use a marine wildlife monitor, to install hydroacoustic monitoring equipment during the first five pile driving events to determine the sound levels being generated and the appropriate monitoring distances, and to implement maximum underwater sound threshold levels for both marine mammals and special status fish species.

**Basic Project Purpose:** The basic project purpose comprises the fundamental, essential, or irreducible purpose of the project, and is used by the Corps to determine whether the project is water dependent. The basic project purpose is commercial shellfish production in Humboldt Bay, California.

**Overall Project Purpose:** The overall project purpose serves as the basis for the Section 404(b)(1) alternatives analysis, and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project, while allowing a reasonable range of alternatives to be analyzed. The overall project purpose is placement of mariculture infrastructure at specific sites in Humboldt Bay, California.

**Project Impacts:** The Harbor District proposes to set maximum thresholds for the size and intensity of

aquaculture activities within the three project areas rather than provide specific descriptions of how each area would be configured and used. Specifically, each of the three cultivation areas would have a maximum total surface area, volume, benthic footprint, biomass of cultured shellfish, and level of activity that all aquaculture operations within it would need to remain below that threshold.

For the three project areas, the proposed maximum thresholds per acre would be 6,322 square feet of aquaculture operations; 19,357 cubic feet of aquaculture equipment in the water column; 102 square feet of fill (footprint of anchors and mooring systems); and 216 pounds (dry weight) of cultured shellfish biomass. The maximum threshold for each project area – based on its acreage – is shown below. The maximum size for each joined structure would be 10,000 square feet and any single or joined structure of that size would have a buffer around it of at least ten feet of open surface water. Walkways may be located between structures but would be limited to no more than three feet in width and would be grated to allow light penetration of at least 50%.

To provide its eventual lease holders with the flexibility to adapt their operations to their own needs – for example, to change the number, type, size, and configuration of different floating structures – the Harbor District has not specified the exact number of each type of structure within each project site but has instead proposed a maximum surface area threshold. The total amount of water surface area used by these structures would be 41,752 square feet (0.96 acres) at Subtidal Site 1, 54,370 square feet (1.25 acres) at Subtidal Site 2, and 37,054 square feet (0.87 acres) at Subtidal Site 3 for a combined total of approximately 3.08 acres. The Project will occur in and potentially affect subtidal habitats in Arcata Bay. The Project proposes culture within 21.2 acres, which is approximately 1% of the 2,110 acres of subtidal habitat in Arcata Bay (Enclosure 4).

Current shellfish culture equipment in Humboldt Bay covers approximately 0.76 ac of the bottom (the “benthic footprint”) with post, anchors, etc. The Project would allow for approximately 0.05 ac of additional benthic footprint by the Project piles and/or anchors. Hence, the total benthic footprint of existing and Project shellfish culture equipment would be less than 0.81 ac (which is in addition to the unknown benthic footprint created by non-culture related structures). This represents less than 0.01% of the 7,795 ac of Arcata Bay.

Humboldt Bay contains approximately 45% of California's eelgrass habitat and eelgrass is one of the most abundant habitats in Arcata Bay, densely covering approximately 1,365 ac of Arcata Bay's 7,166 ac of subtidal and intertidal habitats. The Project is designed to avoid impacts to eelgrass.

**Proposed Mitigation:** In order to minimize the potential for adverse effects from the proposed project, the Harbor District has proposed the following mitigation and minimization measures that are intended to address potential adverse effects:

- The Harbor District will require lessees to hold annual educational meetings with their personnel (which will be described in annual reports)
- Only lighting fixtures that are fully shielded and designed to minimize off-site glare and reduce on-water light spillage will be utilized at night. Motion-sensing lighting will be used to the extent feasible to reduce the amount of time lights are on. Where motion-sensing lighting is not feasible but lights do not need to be on continuously, timers will be installed to reduce the amount of unnecessary lighting. Permanent light fixtures shall not be installed, lights shall be brought to sites when needed.
- Boat traffic will be routed around eelgrass beds to minimize the potential for damage to eelgrass from propellers and hulls.
- Prior to placement of shellfish culture equipment, eelgrass will be mapped and a 10 ft. buffer will be placed around eelgrass plants. Shellfish culture will not occur within these areas. This is the buffer size recommended by the CA Department of Fish and Wildlife for the Project (CDFW 2015).
- Shellfish farm operators will not intentionally deposit shells or any other material on the bay floor. Natural deposition of shells and other materials will be minimized to the maximum extent feasible. Annually, shells deposited on the bay floor will be removed, unless they are fully buried. Annual monitoring described above will determine the need for shell removal.
- The Harbor District will also insist on the use of CDFW screening criteria to protect juvenile longfin smelt in

bays and estuaries from impingement or entrainment by water intakes. These criteria allow for protection of juvenile salmonids, as based on criteria developed by NMFS (2008). These criteria, which all water intakes under the Project will maintain, are as follows: Round or square (measured diagonally) openings in intake screens shall not exceed 2.38 millimeters (mm) (3/32 in); Slotted opening in the screen shall not exceed 1.75 mm (0.0689 in); Approach velocity shall not exceed 0.2 ft per second for self-cleaning screens or 0.05 ft per second for non-self-cleaning screens. Self cleaning screens must achieve full clearance of the entire screen at least once every five minutes; Overall screen porosity shall be a minimum of 27%.

- During the herring spawning season (December, January and February) shellfish farmers will visually inspect shellfish culture equipment to be worked on prior to harvesting, planting or maintenance to determine if herring have spawned. If herring spawning has occurred then the harvesting, planting or maintenance will be postponed for two weeks on the beds where spawning occurred in order to allow for successful reproduction.
- During washing of seed and equipment, screens will be used to contain all clams regardless of size and any culls will be discarded in locations where they cannot reach coastal waters. All clam seed will be removed from Humboldt Bay prior to reaching 12 mm shell size, at which size they are not yet sexually mature. All clam seed will be removed from Humboldt Bay prior to reaching 12 mm shell size, at which size they are not yet sexually mature.
- A biological monitor shall be on-site during pile installation to determine if special status bird and/or marine mammal species are displaying avoidance behavior or other signs of being negatively affected by the pile installation activities. If this occurs then pile installation shall cease until the bird or marine mammal species are no longer in close enough proximity to the operations to be effected.
- All bio-fouling organism removal operations shall be carried out onshore or on a vessel. All bio-fouling organisms removed during these cleaning operations shall be disposed of at an appropriate upland facility.

- In addition to the mitigation measures proposed by the applicant, the Corps will require copies of all aquaculture leases and an annual compliance report submitted by the Harbor District that details all structures and fill in jurisdictional waters, and leases and lessee changes.

**Project Alternatives:** Other project designs investigated by the applicant include:

No project Alternative: The No Project Alternative is the scenario of not implementing the Project, Alternative 1 or Alternative 2. Under this scenario, it is expected that existing shellfish culture would continue and culture would be expanded in Humboldt Bay through permitting efforts by private entities. However, the rate of expansion may be slower and the final area of culture may be less. Additionally, planning for locations and types of culture would not happen in the comprehensive manner that is happening through the Project (i.e., different culture activities would be proposed separately by individual private culturists).

Alternative 1: Under Alternative 1, only subtidal culture, as described above and with mitigation measures described below would occur. No intertidal culture would occur. Hence, the potential effects associated with intertidal culture would not occur. Major considerations include the larger footprint of intertidal culture and higher biomass of cultured shellfish.

Alternative 2: Under Alternative 2, only intertidal culture with mitigation measures would occur. No subtidal culture would occur. Hence, the potential effects associated with subtidal culture would not occur.

The Corps has not endorsed the submitted alternatives analysis at this time. The Corps will conduct an independent review of the project alternatives prior to reaching a final permit decision.

### 3. STATE AND LOCAL APPROVALS:

**Water Quality Certification:** State water quality certification or a waiver is a prerequisite for the issuance of a Department of the Army Permit to conduct any activity which may result in a fill or pollutant discharge into waters of the United States, pursuant to Section 401 of the Clean Water Act of 1972, as amended (33 U.S.C. § 1341 et seq.). The applicant has recently submitted an application to the

California Regional Water Quality Control Board (RWQCB) to obtain water quality certification for the project. No Department of the Army Permit will be issued until the applicant obtains the required certification or a waiver of certification. A waiver can be explicit, or it may be presumed, if the RWQCB fails or refuses to act on a complete application for water quality certification within 60 days of receipt, unless the District Engineer determines a shorter or longer period is a reasonable time for the RWQCB to act.

Water quality issues should be directed to the Executive Officer, California Regional Water Quality Control Board, North Coast Region, 5550 Skyline Boulevard, Suite A, Santa Rosa, California 95403, by the close of the comment period.

**Coastal Zone Management:** Section 307(c) of the Coastal Zone Management Act of 1972, as amended (16 U.S.C. § 1456(c) *et seq.*), requires a non-Federal applicant seeking a federal license or permit to conduct any activity occurring in or affecting the coastal zone to obtain a Consistency Certification that indicates the activity conforms with the State's coastal zone management program. Generally, no federal license or permit will be granted until the appropriate State agency has issued a Consistency Certification or has waived its right to do so.

Section 307(c) of the Coastal Zone Management Act of 1972, as amended (16 U.S.C. § 1456(c) *et seq.*), requires a Federal applicant seeking a federal license or permit to conduct any activity occurring in or affecting the coastal zone to obtain a Consistency Determination that indicates the activity conforms with the State's coastal zone management program. Generally, no federal license or permit will be granted until the appropriate State agency has issued a Consistency Determination or has waived its right to do so. Since the project occurs in the coastal zone or may affect coastal zone resources, the applicant has applied for a Consistency Determination from the California Coastal Commission to comply with this requirement.

Coastal zone management issues should be directed to the District Manager, California Coastal Commission, North Coast District Office, 710 E Street, Suite 200, Eureka, California 95501, by the close of the comment period.

**Other Local Approvals:** there are no other local approvals identified for this project.

#### 4. COMPLIANCE WITH VARIOUS FEDERAL LAWS:

**National Environmental Policy Act (NEPA):** Upon review of the Department of the Army permit application and other supporting documentation, THE CORPS has made a *preliminary* determination that the project neither qualifies for a Categorical Exclusion nor requires the preparation of an Environmental Impact Statement for the purposes of NEPA. At the conclusion of the public comment period, the Corps will assess the environmental impacts of the project in accordance with the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321-4347), the Council on Environmental Quality's Regulations at 40 C.F.R. Parts 1500-1508, and Corps Regulations at 33 C.F.R. Part 325. The final NEPA analysis will normally address the direct, indirect, and cumulative impacts that result from regulated activities within the jurisdiction of the Corps and other non-regulated activities the Corps determines to be within its purview of Federal control and responsibility to justify an expanded scope of analysis for NEPA purposes. The final NEPA analysis will be incorporated in the decision documentation that provides the rationale for issuing or denying a Department of the Army Permit for the project. The final NEPA analysis and supporting documentation will be on file with the San Francisco District, Regulatory Division.

**Endangered Species Act (ESA):** Section 7(a)(2) of the ESA or 1973, as amended (16 U.S.C. § 1531 *et seq.*), requires Federal agencies to consult with either the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) to insure actions authorized, funded, or undertaken by the agency are not likely to jeopardize the continued existence of any Federally-listed species or result in the adverse modification of designated critical habitat. As the Federal lead agency for this project, the Corps has conducted a review of the California Natural Diversity Data Base, digital maps prepared by USFWS and NMFS depicting critical habitat, and other information provided by the applicant, to determine the presence or absence of such species and critical habitat in the project area.

Based on this review, the Corps has made a preliminary determination that the following Federally-listed species and designated critical habitat are present at the project

location or in its vicinity, and may be affected by project implementation. Special status fish and their critical habitat in the project area include tidewater goby (*Eucyclogobius newberryi*), coho salmon (*O. kisutch*), steelhead (*O. mykiss*), Chinook salmon (*O. tshawytscha*), and green sturgeon (*Acipenser medirostris*).

To address project related impacts to these species and designated critical habitat, the Corps will initiate informal consultation with USFWS and NMFS, pursuant to Section 7(a) of the Act. Any required consultation must be concluded prior to the issuance of a Department of the Army Permit for the project. To complete the administrative record and the decision on whether to issue a Department of the Army Permit for the project, the Corps will obtain all necessary supporting documentation from the applicant concerning the consultation process. Any required consultation must be concluded prior to the issuance of a Department of the Army Permit for the project.

**Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA):** Section 305(b)(2) of the MSFCMA of 1966, as amended (16 U.S.C. § 1801 *et seq.*), requires Federal agencies to consult with the National Marine Fisheries Service (NMFS) on all proposed actions authorized, funded, or undertaken by the agency that may adversely affect essential fish habitat (EFH). EFH is defined as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. EFH is designated only for those species managed under a Federal Fisheries Management Plan (FMP), such as the *Pacific Groundfish FMP*, the *Coastal Pelagics FMP*, and the *Pacific Coast Salmon FMP*. As the Federal lead agency for this project, the Corps has conducted a review of digital maps prepared by NMFS depicting EFH to determine the presence or absence of EFH in the project area. Based on this review, the Corps has made a *preliminary* determination that EFH is present at the project location or in its vicinity, and that the critical elements of EFH may be adversely affected by project implementation. The following FMPS are found within the project area: Pacific groundfish FMP, Coastal pelagics FMP, and Pacific Coast Salmon FMP. EFH for these species may be adversely affected by, but not limited to, the presence of overwater structures installed in foraging and rearing areas, the disturbance of individuals during aquaculture planting, harvesting and maintenance, and the interference in foraging in areas of aquaculture gear. To address project related impacts to EFH, the Corps will initiate consultation

with NMFS, pursuant to Section 305(5)(b)(2) of the Act. Any required consultation must be concluded prior to the issuance of a Department of the Army Permit for the project.

**Marine Protection, Research, and Sanctuaries Act (MPRSA):** Section 302 of the MPRSA of 1972, as amended (16 U.S.C. § 1432 *et seq.*), authorizes the Secretary of Commerce, in part, to designate areas of ocean waters, such as the Cordell Bank, Gulf of the Farallones, and Monterey Bay, as National Marine Sanctuaries for the purpose of preserving or restoring such areas for their conservation, recreational, ecological, or aesthetic values. After such designation, activities in sanctuary waters authorized under other authorities are valid only if the Secretary of Commerce certifies that the activities are consistent with Title III of the Act. No Department of the Army Permit will be issued until the applicant obtains the required certification or permit. The project does not occur in sanctuary waters, and a *preliminary* review by the Corps indicates the project would not likely affect sanctuary resources. This presumption of effect, however, remains subject to a final determination by the Secretary of Commerce, or his designee.

**National Historic Preservation Act (NHPA):** Section 106 of the NHPA of 1966, as amended (16 U.S.C. § 470 *et seq.*), requires Federal agencies to consult with the appropriate State Historic Preservation Officer to take into account the effects of their undertakings on historic properties listed in or eligible for listing in the *National Register of Historic Places*. Section 106 of the Act further requires Federal agencies to consult with the appropriate Tribal Historic Preservation Officer or any Indian tribe to take into account the effects of their undertakings on historic properties, including traditional cultural properties, trust resources, and sacred sites, to which Indian tribes attach historic, religious, and cultural significance. As the Federal lead agency for this undertaking, the Corps has conducted a review of latest published version of the *National Register of Historic Places*, survey information on file with various city and county municipalities, and other information provided by the applicant, to determine the presence or absence of historic and archaeological resources within the permit area. Based on this review, the Corps has made a *preliminary* determination that historic or archaeological resources are present in the permit area, and that such resources may be adversely affected by the project. To address project related impacts to historic or archaeological resources, the Corps will initiate

consultation with the State Historic Preservation Officer or the Tribal Historic Preservation Officer, pursuant to Section 106 of the Act. Any required consultation must be concluded prior to the issuance of a Department of the Army Permit for the project. If unrecorded archaeological resources are discovered during project implementation, those operations affecting such resources will be temporarily suspended until the Corps concludes Section 106 consultation with the State Historic Preservation Officer or the Tribal Historic Preservation Officer to take into account any project related impacts to those resources.

**5. COMPLIANCE WITH THE SECTION 404(b)(1) GUIDELINES:** Projects resulting in discharges of dredged or fill material into waters of the United States must comply with the Guidelines promulgated by the Administrator of the Environmental Protection Agency under Section 404(b) of the Clean Water Act (33 U.S.C. § 1344(b)). An evaluation pursuant to the Guidelines indicates the project is dependent on location in or proximity to waters of the United States to achieve the basic project purpose. This conclusion raises the (rebuttable) presumption of the availability of a practicable alternative to the project that would result in less adverse impact to the aquatic ecosystem, while not causing other major adverse environmental consequences. The applicant has submitted an analysis of project alternatives which is being reviewed by the Corps.

**6. PUBLIC INTEREST EVALUTION:** The decision on whether to issue a Department of the Army Permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the project and its intended use on the public interest. Evaluation of the probable impacts requires a careful weighing of the public interest factors relevant in each particular case. The benefits that may accrue from the project must be balanced against any reasonably foreseeable detriments of project implementation. The decision on permit issuance will, therefore, reflect the national concern for both protection and utilization of important resources. Public interest factors which may be relevant to the decision process include conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

**7. CONSIDERATION OF COMMENTS:** The Corps is soliciting comments from the public; Federal, State and local agencies and officials; Native American Nations or other tribal governments; and other interested parties in order to consider and evaluate the impacts of the project. All comments received by the Corps will be considered in the decision on whether to issue, modify, condition, or deny a Department of the Army Permit for the project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, and other environmental or public interest factors addressed in a final environmental assessment or environmental impact statement. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the project.

**8. SUBMITTING COMMENTS:** During the specified comment period, interested parties may submit written comments to L. Kasey Sirkin, San Francisco District, Regulatory Division, Eureka Field Office, 601 Startare Drive, Box 14, Eureka, California 95501; comment letters should cite the project name, applicant name, and public notice number to facilitate review by the Regulatory Permit Manager. Comments may include a request for a public hearing on the project prior to a determination on the Department of the Army permit application; such requests shall state, with particularity, the reasons for holding a public hearing. All substantive comments will be forwarded to the applicant for resolution or rebuttal. Additional project information or details on any subsequent project modifications of a minor nature may be obtained from the applicant and/or agent, or by contacting the Regulatory Permit Manager by telephone or e-mail cited in the public notice letterhead. An electronic version of this public notice may be viewed under the *Public Notices* tab on the Corps website:  
[www.spn.usace.army.mil/Missions/Regulatory](http://www.spn.usace.army.mil/Missions/Regulatory).