

Appendix C

Bodega Bay Harbor Federal Navigation Channel

Fiscal Year 2017 Maintenance Dredging

Cultural Resources Assessment

APPENDIX C

Cultural Resources Assessment

1.0 Introduction

The San Francisco District (District) is required to comply with the historic-preservation statutes and regulations for undertakings such as maintenance dredging of a federally authorized navigation project. The National Historic Preservation Act of 1966 (NHPA) is the primary law applicable to the proposed dredging of the Bodega Harbor federal channels, and in accordance with the implementing regulations of Section 106 of NHPA (see 36 C.F.R. Part 800), the District is responsible for making a reasonable and good-faith effort to identify “historic properties” that may be affected by the proposed maintenance dredging and the disposal of the dredged sediment, an “undertaking” under Section 106 regulations. Historic properties is federal terminology referring to significant cultural resources, i.e., sites, places, objects that meet eligibility requirements for inclusion in the National Register of Historic Places and possess various aspects of integrity. For this undertaking, traditional religious or cultural sites important to Native American tribes, or historic-period maritime resources of scientific value, are examples of resources with potential to be designated as historic properties.

2.0 Dredging Guidance Letter No. 89-01

The Dredging Guidance Letter (DGL), published by the Headquarters, U.S. Army Corps of Engineers in March 1989 and establishing the approach to identify submerged cultural resources in previously dredged federal channels, has been followed by the District for the Bodega Harbor federal channel project. The DGL states that remote-sensing surveys (e.g., magnetometer and/or side-scan sonar) to identify submerged cultural resources are not required within the boundaries of previously dredged federal navigation channels. Only when the District has “reason to believe” that cultural resources (e.g., remnants of shipwrecks, isolated maritime artifacts, or Native American sites) exist in a previously dredged channel would remote-sensing or other methods be considered prior to dredging to identify and evaluate such resources. Since the 1960s there have been multiple episodes of maintenance dredging of the federal channels with no reports of archaeological discoveries. Also, the District’s existing cultural resources records on file, including a database search in 2016 of ships wrecked or lost in the Bodega Bay environs (summarized below) show that no submerged archaeological resources likely exist. The District believes that remote-sensing work to identify submerged maritime resources is therefore unwarranted.

3.0 Area of Potential Effects

The District has defined the proposed project’s “Area of Potential Effects” (APE), a federal term under the regulations, as the federally authorized channels where shoaled sediment will be removed and designated areas within the two ocean-disposal sites (refer to Figure 1 and Figure 2 of this EA that identify the APE components). This is the geographical area where the undertaking has to potential to

affect historic properties. The District currently has selected ocean disposal as its preferred alternative for the federal channel dredging; the sandy material is suitable for dumping in two different ocean sites discussed below.

The APE excludes any of the upland-disposal sites. The inclusion of upland-disposal areas in the APE would be necessary if, in the future, there is sediment found not to be suitable for ocean disposal and the District elects to dredge that material and place it upland (see Section 7 of this EA).

4.0 Cultural Resources Inventory

History. A subgroup of the Coast Miwok, whose territory covered modern-day Marin and southern Sonoma counties, named Olamenlko occupied the Bodega Bay region at the time of European contact. Nine major settlements from this time period, referred to as ethnographic sites or villages, have been identified in the vicinity of Bodega Harbor by various researchers. One of the sites, recorded as Kalnutii and located in the northwestern part of the Harbor, had evidence of protohistoric occupation (the transition period between prehistory and the earliest recorded history).

Well before colonization of California, in the mid-to-late 16th century, Spanish and English explorers sailed along the Marin and Sonoma coastlines. It wasn't until 1775 that the Spanish explorer Bodega y Cuadra discovered and chartered the Bodega Bay area. For the next eighteen years, vessels of English and Spanish registry would visit Bodega Bay to moor there. Russian presence was begun in the Bodega region in 1793 when sea otter hunters arrived from the colonies in the Aleutian Islands. The Russian-American Company established a settlement at Bodega in the early 1800s. The Bodega area also became a source of native inhabitants who either voluntarily or by force were taken to Spanish missions in San Francisco (1776) and San Rafael (1817) for labor and conversion to Christianity. Following secularization of the missions in 1835, American and Mexican settlers entered Sonoma County and were granted large tracts of land. It is estimated that by 1850, the beginning of the American period, only 250 Coast Miwok had survived from a population of approximately.

Terrestrial Archaeology. During the 1970s and the early 1980s, the District sponsored archaeological surveys of extensive areas around Bodega Harbor where upland-disposal sites could be created. In 1973, Dr. David Fredrickson of Sonoma State University identified 47 shell middens situated on the coastal lands that both surround and form Bodega Bay (Fredrickson 1974), which were later determined eligible for the National Register of Historic Places as the Bodega Bay Archaeological District (King 1973). Approximately two-thirds of the archaeological sites were identified on slopes of loosely consolidated sediments which form the lowest marine terrace and beaches. It is the edge and top of the marine terrace where the greatest amount of construction has taken place. Dr. Fredrickson opined that the area of most archaeological potential in and around the Bay corresponded to the area which had received the severest impacts from development.

In 1980, District archaeologist Mark Rudo conducted research and surveys to relocate archaeological resources for the proposed navigation-channel improvements of Bodega Harbor and

the construction of Spud Point Marina (Rudo 1980). None of the shell middens were found to be situated at the Marina project area or within the locations of three facilities which were used for dredged-material placement. The District determined that none of the previously identified archaeological sites would be affected by the proposed undertaking, a determination concurred with by the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (correspondence on file with the District).

Nautical Archaeology. The U.S. Environmental Protection Agency, Region 9 (EPA) officially designated SF-DODS in 1993 and SF-8 in 1982 through the federal rule-making process. The rule-making processes included impact analyses of dredge-spoils disposal at the sites, the results of which were presented in environmental impact statements. The EPA and the District jointly regulate the disposal of dredged material at both sites.

The EPA gathered information on recorded shipwrecks in the vicinity of SF-DODS from the California State Lands Commission (SLC), the U.S. Department of the Interior, Minerals Management Service (MMS), and the U.S. Geological Survey (USGS). No maritime cultural resources were identified in the affected area. The EPA determined that there would be no effects to historic properties from the disposal-site designation and use. The SHPO concurred with the EPA determination and, thus the EPA satisfied the requirements of Section 106 of the NHPA (Office of Historic Preservation reference EPA 920724A).

The EPA considered the effects to shipwrecks during the SF-8 site-designation process. The agency in 1980 reviewed the inventory of Pacific-coast cultural and historical resources maintained by the Bureau of Land Management, and with the information mapped shipwreck zones in the Gulf of the Farallones National Marine Sanctuary. SF-8 was located in a zone of “higher incidence of shipwrecks,” meaning a cluster of three ships within five nautical miles of the disposal site. The EPA noted, however, that the location data vary widely in precision and accuracy, and that in some cases the shipwreck was completely salvaged or the remains have been moved by ocean currents. In addition, the California Office of Historic Preservation reviewed registries and files of known cultural resources and found no “cultural places” qualifying as a State Historic Landmark or a Historical Point of Interest. The National Maritime Museum in San Francisco determined that the proposed disposal site and vicinity should not be excluded from dredge-material disposal by reason of shipwrecks with historical interest. In addition, the District over the past 20 years has maintained an internal list of wrecks reported in San Francisco Bay and offshore of the Golden Gate, compiled from the SLC and MMS sources and maps maintained by the District. The District’s information showed that none of reported wreck locations coincide with the location of SF-8 or its vicinity.

The District accessed the SLC database in 2016 to identify shipwrecks that might be located in Bodega Harbor, because evidently it had not been done during previous dredging and navigation projects. At least 12 vessels have been lost along the Sonoma County coast, the incidents of grounding, burning, capsizing and foundering having occurred in the late 19th and early 20th centuries. No wrecks were situated within Bodega Harbor.

5.0 Conclusion and Determination of Effects

The District believes that historical maritime resources do not exist within Bodega Harbor or within the boundaries of SF-DODS and SF-8. In addition, none of the sites that contribute to the Bodega Bay Archaeological District are located in the submerged lands of Bodega Harbor. The District therefore believes it is reasonable to conclude that the proposed maintenance dredging and disposal will not cause effects to historic properties. In accordance with 36 C.F.R. 800, the District will request comment from the SHPO and the Graton Rancheria Tribal Historic Preservation Officer on the findings and conclusion.