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STAFF RECOMMENDATION**ON CONSISTENCY DETERMINATION**

Consistency Determination No. **CD-89-99**
Staff: LJS-SF
File Date: 8/13/99
45th Day: 9/27/99
60th Day: extended through 10/15/99
Commission Meeting: 10/13/99

FEDERAL AGENCY: **U.S. Navy**

DEVELOPMENT**LOCATION:**

Northeast corner of Naval Air Station North Island (NASNI), with additional activities southeast of the Naval Amphibious Base (NAB) (dredged material disposal site) and the western portion of NASNI (mitigation site), Coronado, San Diego County (Exhibits 1 and 2).

DEVELOPMENT**DESCRIPTION:**

Homeporting of two NIMITZ-Class nuclear powered aircraft carriers, including dredging 534,000 cubic yards of sediment from Berth J, disposal of dredged material to create intertidal/subtidal habitat southeast of NAB, Pier J/K reconstruction and fill of 1.5 acres, creation of intertidal habitat mitigation area near Pier B, relocating the existing ferry/flag landing, and construction of a warehouse, fleet support building, equipment laydown building, and utility and fencing improvements (Exhibits 1-4).

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EXECUTIVE SUMMARY

The U.S. Navy has submitted a consistency determination for proposed construction of facilities and infrastructure needed to support the homeporting of two NIMITZ-class nuclear-powered aircraft carriers (CVNs) at Naval Air Station North Island (NASNI) in Coronado, San Diego County. (On November 16, 1995, the Commission concurred with a Navy consistency determination (CD-95-95) for the homeporting of one CVN at NASNI.) The current project includes: (1) dredging to deepen Berth J to accommodate a deep-draft CVN; (2) reconstructing Berth J/K, including 1.5 acres of bay fill to support a CVN wharf; (3) facilities and infrastructure to support two homeported CVNs, including a CVN warehouse, a fleet support building, an equipment laydown building, and lighting and fencing improvements; (4) relocating the existing ferry landing at NASNI; (5) constructing a 37-acre intertidal/subtidal habitat enhancement area in bay waters south of the Naval Amphibious Base; and (6) constructing a 2.6-acre eelgrass/bay fill mitigation site adjacent to Pier B on North Island.

Marine resource/environmentally sensitive habitat issues are addressed as follows: (1) the project is an allowable use for estuarine fill under Section 30233(a) of the Coastal Act; (2) the dredge materials have been sufficiently tested and the proposed disposal activities are suitable for in-bay disposal given the sediment test results; (3) with the mitigation and monitoring measures incorporated into the project, the project represents the least damaging feasible alternative; (4) dredged material will be disposed within the San Diego Bay estuary and therefore sand supply

issues are not raised; (5) dredging and disposal impacts will be adequately monitored, with provisions for modifications and/or remediation should circumstances justify it; (6) adequate mitigation is being provided for estuarine fill and impacts to eelgrass and least terns; (7) the functional capacity of the San Diego Bay estuary will not be affected; and (8) oil/hazardous substances spill risks and radiation hazards will not be increased. The Commission therefore concludes that the project is consistent with the marine resources, water quality, diking/filling/dredging, environmentally sensitive habitat, and hazardous materials risk policies (Sections 30230-30233 and 30240) of the Coastal Act.

The public access and recreation issues potentially raised by the project include: (1) whether physical public access along the NASNI shoreline should be provided; and (2) spillover impacts off-base such as traffic and parking congestion, which can affect access and recreation. The project will not affect physical access to the shoreline and therefore mitigation in the form of public access at NASNI is not required. The proposed conversion at NASNI of homeported CVs to CVNs raises only minor concerns with regard to coastal recreational traffic in the project area generated by NASNI personnel, given the minor increase in personnel assigned to a CVN compared to a CV, and the overall decrease in personnel assigned to NASNI since 1995. The Commission therefore concludes that the project is consistent with the public access and recreation policies (Sections 30210-30212, 30250, 30252, 30253(5), and 30254) of the Coastal Act.

The project would not generate significant visual resource impacts, and the Navy will use its base architectural plan to minimize any potential impacts. The State Historic Preservation Officer concurs with the Navy that the project would not affect any significant archaeological resources. The project is adequately designed for potential geologic hazards and would not contribute to geologic instability on or adjacent to the site. Potential adverse air quality impacts will be mitigated through a permit from the San Diego County Air Pollution Control District. The Commission therefore concludes that the project is consistent with the visual resource (Section 30251), archaeological resource (Section 30244), geologic hazard (Section 30253(1) and (2)), and air quality (Section 30253(3)) policies of the Coastal Act.

SUBSTANTIVE FILE DOCUMENTS:

1. Final EIS for the Developing Home Port Facilities for Three NIMITZ-Class Aircraft Carriers in Support of the U.S. Pacific Fleet, July 1999.
2. Consistency Determinations CD-95-95 (Navy, Homeporting), ND-72-96, CD-29-97, ND-62-97, CD-140-97, CD-161-97, and CD-9-98 (Navy, Homeporting modifications).
3. Final EIS for the Development of Facilities in the San Diego-Coronado to support the Homeporting of One NIMITZ Class Aircraft Carrier, October 1995.

4. Sand Screening (Harris) Report, FY '97 MCON Project P-706, Channel Dredging, Naval Air Station North Island, Coronado, California, U.S. Navy, January 29, 1998.

5. Corps of Engineers, Navy, and Coast Guard San Diego Bay Dredging Consistency Determinations CD-71-95, CD-26-94, CD-91-93, CD-53-87, CD-3-87, and CD-33-85.

6. Notice of Preparation of Environmental Impact Report for the San Diego Regional Beach Replenishment Project, April 20, 1999.

STAFF SUMMARY AND RECOMMENDATION

I. Project Description. The U.S. Navy proposes to construct and operate facilities and infrastructure needed to support the homeporting of two NIMITZ-class nuclear-powered aircraft carriers (CVNs) at Naval Air Station North Island (NASNI) in Coronado, San Diego County (Exhibits 1-4). The two CVNs would join the U.S. Pacific Fleet, replacing two conventionally powered aircraft carriers (CVs) homeported at NASNI, and join one CVN homeported at NASNI. The proposed project, alternatives, and environmental commitments are described in detail in the *Final Environmental Impact Statement for Developing Home Port Facilities for Three NIMITZ-Class Aircraft Carriers in Support of the U.S. Pacific Fleet (1999)*, which is incorporated by reference into this report. Project construction is scheduled to commence in November 1999 and extend through July 2002.

The proposed action at NASNI consists of the following elements:

1. **Dredging.** A CVN is 1,092 feet long, 252 feet wide on the flight deck, and 134 feet wide at the hull, and is one of the deepest draft ships in the Navy fleet. To accommodate a deep-draft CVN at NASNI Berth J, a 17.7-acre area at the berth would be dredged from -42 feet to -50 feet mean lower low water (MLLW) with a 3-foot overdepth dredging allowance (Exhibits 4, 5, and 9). The volume of dredged material from the berthing and dike foundation areas is estimated at 534,000 cubic yards (c.y.). The dredged material from the berthing area would be removed by a combination of hydraulic and clamshell dredges. With a hydraulic dredge, the sediment would be pumped through a pipe placed along the bay floor to the NAB site; with a clamshell dredge, the sediment would be loaded onto bottom dump barges that would place the sediment directly at the NAB site (Exhibits 6 and 7). In addition, approximately 48,400 c.y. of sediment would be excavated to construct a 2.6-acre bay fill and eelgrass mitigation site at the western edge of NASNI near Pier B (Exhibit 8). Excavation for the mitigation site would use exclusively land-based equipment.

2. **Disposal.** The 534,000 c.y. of dredged material from Berth J would be disposed at an area just south of the Naval Amphibious Base (NAB) to create a 37-acre intertidal/

shallow subtidal habitat enhancement area. Of the 48,400 c.y. to be excavated from the Pier B mitigation site, approximately 29,400 c.y. will be used as bay fill for construction of the new Pier J wharf. The remaining dredged material from the mitigation site (approximately 19,000 c.y.) would be stockpiled at NASNI for future habitat enhancement or construction purposes.

3. New Wharf and Landfill. The existing J/K pier, representing 1.3 acres of surface area, would be demolished and replaced with a new wharf to provide the required CVN dimensions of 90 feet wide and 1,300 feet long. The new 1.5-acre landfill and wharf would be contained by a dike structure consisting of approximately 84,600 c.y. of imported quarry run and armor stone. The dike structure will be constructed by excavating down to existing bearing material in the bay and filling it with quarry and armor rock material. The rock containment dike placement will be constructed to accommodate expected operational conditions, including fill loads and seismic activity. The fill material (imported from the west end of NASNI near Pier B) would be covered with an asphalt concrete cap to provide laydown space during maintenance and a transitional paved area to the other CVN berth facilities. The concrete wharf would be supported by concrete and steel piles, reinforced concrete pile cap beams, and the deck slab. The wharf and related facilities would provide steam, condensate return, low-pressure compressed air, potable water, pure water, salt water, sanitary sewer, oily waste, jet fuel, and marine diesel fuel. Electrical utilities would include a new 4,160-V substation. Steam piping on the wharf would run along the wharf edge. Condensate return piping would run on pipe hangers along the underside of the wharf.

4. Other Improvements. Other improvements would include relocating the existing ferry/flag landing that accommodates NASNI personnel transported across San Diego Bay. The landing is proposed to be relocated from west of Pier J/K to an existing small boat pier directly south of Pier K. A CVN warehouse, a fleet support building, and an equipment laydown building, and lighting and fencing improvements would be constructed.

II. Background/Project History. On November 16, 1995, the Commission concurred with the Navy's consistency determination for the relocation of one NIMITZ class aircraft carrier from the Alameda Naval Air Station (San Francisco Bay) to NASNI (CD-95-95). The previous project consisted of the following activities (Exhibits 10 and 11): (1) dredging of the carrier berthing area, turning basin, and the San Diego Bay navigation channel; (2) disposal of the dredged material as bay fill, at the designated ocean disposal site, and at various beach disposal sites; (3) construction of berthing facilities to accommodate the larger class ship and its greater utility requirements; (4) construction of maintenance facilities equipped and designed to support a NIMITZ class aircraft carrier; and (5) mitigation along the west shore of North Island to replace the loss of shallow bay habitat in the carrier turning basin.

The three "depot-level" propulsion plant maintenance facilities constructed under CD-95-95 are the Controlled Industrial Facility (CIF), Ship Maintenance Facility (SMF), and

Maintenance Support Facility (MSF). The CIF is used for the inspection, modification, and repair of radiologically controlled equipment and components associated with naval nuclear propulsion plants. The SMF would house the machine tools, industrial processes, and work functions necessary to perform non-radiological depot-level maintenance on CVN propulsion plants. The MSF would house the primary administrative and technical staff offices supporting CVN propulsion plant maintenance, as well as the central area for receiving, inspecting, shipping, and storing materials.

The beach/nearshore disposal portion of that project, as originally concurred with by the Commission in CD-95-95, consisted of placing 7.9 million c.y. of suitable clean sandy material at four beaches throughout the County (i.e., nearshore disposal at Imperial Beach, Del Mar, Oceanside, and Mission Beach).

The Navy commenced disposal operations in September 1997, beginning with South Oceanside beach disposal and Mission Beach nearshore disposal. After disposing of about 50,000 c.y. of sand at South Oceanside, the Navy discovered hazardous munitions (including live ordnance) in the dredge material. On September 21, 1997, the Navy found twenty .50 caliber casings, a 20 mm mk-2 unfired shell, and three .50 caliber blanks on the beach. On September 25, the Navy discovered an 81 mm mortar on the beach. On September 28, the Navy found a 40 mm M25 shell casing, a 20 mm M2 1944 shell casing, and a 45-70 MK12 shell casing, on its hopper dredge screens. No ordnance was found in investigations of nearshore disposal at Mission Beach, where about 7,000 c.y. were disposed.

Concerned about public health, but wishing to proceed expeditiously with the project, the Navy immediately ceased its beach and nearshore disposal operations and, on October 1, 1997, sought Commission authorization for disposal at LA-5 of the Area 1 material. The Commission staff asked the Navy to request only the minimum necessary disposal at LA-5, since at that time the Navy was still considering whether any of the Area 1 material could be safely used for beach replenishment. Consequently, the Navy requested interim authorization from the Executive Director to dispose of 561,000 c.y. of Area 1 material at LA-5, pending submittal of the matter to the full Commission for a public hearing. On October 3, 1997, the Executive Director informed the Navy that "In the interim the Commission staff does not oppose the Navy's current request to proceed to place at LA-5 the Area 1 material ...". This authorization was based in part on the Navy's commitment to submit a consistency determination for Commission review of any further LA-5 disposal.

On October 3, 1997, the Navy also received authorization from the U.S. Army Corps of Engineers (Army Corps) and EPA, to take the entire Area 1 volume (3.44 million c.y) to LA-5, subject to certain conditions agreed to by the Navy, including that the Navy would screen the material using a 3-inch grating attached to the dredge pipeline intake.

On October 14, 1997, as a follow-up to its interim request to the Commission for disposal of 561,000 c.y. at LA-5, the Navy wrote to the Commission stating its intent to dispose of the remainder of the Area 1 material at LA-5, but still put a substantial amount of sand onto beaches (i.e., the sand from the “inner channel” (i.e., Areas 4, 5, 6, 8 and 10). The Navy estimated this remaining amount to be approximately 1.5 million c.y of beach suitable material.

On November 6, 1997, the Commission objected to the Navy Consistency Determination CD-140-97, which had originally been submitted as a request to dispose of up to 2.61 million c.y. of “Area 1” material at LA-5, but which was modified during the public hearing, to a request to dispose of up to 645,000 c.y. and for a one month period. On November 13, 1997, the Navy submitted Consistency Determination CD-161-97, again for disposal of Area 1 material at LA-5 (this time for up to 871,000 c.y). This submittal was withdrawn prior to any Commission vote.

On November 17, 1997, in dredging Area 4 and placing material on the beach at South Oceanside, the Navy discovered additional munitions, and subsequently suspended all beach/nearshore disposal. On November 19, 1997, the Navy informed the Commission that it was proceeding with the modified project for disposal at LA-5, despite the Commission’s objection.

After the Commission filed a lawsuit, on January 28, 1998, the U.S. District Court issued a preliminary injunction enjoining the Navy from conducting further dredging. The injunction was “... conditioned upon the Commission’s expeditious study of proposed alternatives to offshore dumping, including those set forth in the Harris Report, and the good faith of the parties to negotiate a resolution which is the stated goal of both sides.”

On January 30, 1998, the Navy submitted Consistency Determination CD-9-98 for the disposal of all the remaining material at LA-5. Also on January 30, 1998, the Commission’s Executive Director wrote the Navy outlining a potential solution involving: (1) obtaining an authorization to use any excess existing project funds not spent by the Navy for beach replenishment; (2) increasing the federal match ratio to allow the Navy to spend up to \$9.6 million in federal funds (to match \$4.7 million in State funds); (3) obtaining additional funding (up to approximately \$10 million) to make up for lost sand, “so that the end result is the placement of approximately the same amount of on-shore and near shore sand as had been originally included in the Navy’s project.” This letter indicated that the staff could recommend that the Commission remove its opposition to continued dredging and concur with a revised consistency determination containing these features. The letter further stated that:

If the Navy agrees to vigorously seek this Congressional authorization, and if we can secure the firm support of the San Diego Congressional delegation for this initiative in the form of new legislation or an

amendment to an existing bill, that would probably be as much assurance as we can reasonably expect.

On February 10, 1998, the Navy agreed to pursue legislative changes to allow the use of any remaining channel dredging project funds for beach nourishment, providing for alternative sources of sand including borrow site sand instead of channel sand for beach nourishment, as well as to support efforts to seek additional funds for beach nourishment "... up to or equal to the amount needed to provide the total amount of sand identified for beach replenishment in the project as approved [i.e., originally concurred with] by the Commission" Based on this agreement the Commission and the Navy jointly stipulated to a lifting of the District Court's preliminary injunction. The Navy subsequently modified its consistency determination to include these commitments.

On March 10, 1998, the Commission concurred with the Navy's modified consistency determination which authorized LA-5 disposal but included these commitments for beach replenishment.

On April 20, 1999, SANDAG, which has become the lead agency implementing the beach replenishment project using the Navy's funds and matching State funds, published a Notice of Preparation of an EIR for the San Diego Regional Beach Replenishment Project. This project consists of dredging up to three million c.y. of sand from offshore borrow sites and placing the sand on 13 beaches in San Diego County (Exhibits 12 and 13). The current schedule calls for sand placement to begin in the spring of 2000.

III. Status of Local Coastal Program. The standard of review for federal consistency determinations is the policies of Chapter 3 of the Coastal Act, and not the Local Coastal Program (LCP) or Port Master Plan (PMP) of the affected area. If the LCP or PMP has been certified by the Commission and incorporated into the CCMP, it can provide guidance in applying Chapter 3 policies in light of local circumstances. If the LCP or PMP has not been incorporated into the CCMP, it cannot be used to guide the Commission's decision, but it can be used as background information. The City of San Diego's and Coronado's LCPs and the Port of San Diego's PMP have been certified by the Commission and incorporated into the CCMP.

IV. Federal Agency's Consistency Determination. The Navy has determined the project consistent to the maximum extent practicable with the California Coastal Management Program.

V. Staff Recommendation:

The staff recommends that the Commission adopt the following motion:

MOTION. I move that the Commission concur with the Navy's consistency determination.

The staff recommends a **YES** vote on this motion. A majority vote in the affirmative will result in adoption of the following resolution:

Concurrence

The Commission hereby **concurs** with the consistency determination made by the Navy for the proposed project, finding that the project is consistent to the maximum extent practicable with the California Coastal Management Program.

VIII. Findings and Declarations:

The Commission finds and declares as follows:

A. Marine Resources/Environmentally Sensitive Habitat.

1. Coastal Act Policies. Section 30230 of the Coastal Act provides:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 provides:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30232 provides:

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Section 30233 provides:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

...

(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities

...

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. ...

Section 30240 provides:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

2. Background/Issue Summary. The Navy proposes to dredge approximately 534,000 cubic yards of sediment in a 17.7-acre area to deepen the carrier berth at Berth J, and dispose of the dredged material offshore of the Naval Amphibious Base to create a 37-acre intertidal/subtidal habitat enhancement area. The Navy also proposes to excavate approximately 48,000 cubic yards of sediment to construct a mitigation site near Pier B, and use approximately 29,000 cubic yards of that material as bay fill for construction of the new wharf at Berth J (Exhibits 4-8).

The productivity of the San Diego Bay, one of California's major estuaries, has suffered as a result of, among other things, contaminant and sedimentation inputs, historical dredged material disposal, and projects that have in-filled wetland and estuarine areas. According to the Navy, the proposed project would not contribute to a further degradation of the productivity of the bay, since it includes measures to protect fish and wildlife habitat areas from potential adverse effects of construction, dredging, and fill activities, and includes mitigation when impacts cannot be avoided.

In order to concur with the Navy's consistency determination, the Commission must find the project would not adversely affect marine resources and other environmentally sensitive habitat, and, because the project involves dredging and filling within a coastal estuary, complies with the three-part test of Section 30233(a) of the Coastal Act: (1) the project must be one of the eight allowable uses under Section 30233(a); (2) the project must be the least damaging feasible alternative; and (3) the project must include feasible mitigation measures to minimize adverse environmental effects. In addition, under Section 30233(b) and (c), the Commission must also be able to find that the project provides for beach replenishment where dredged material is suitable, and that the project will not alter the functional capacity of the estuary.

3. Allowable Use. The project is a new or expanded port and/or coastal-dependent boating facility. The Commission therefore finds that the project therefore qualifies as the first and/or fourth of the eight enumerated uses listed under Section 30233(a).

4. Alternatives. Several alternatives issues are raised, primarily: (a) the decision to locate two CVNs at NASNI; (b) the size and location of the proposed fill area; and (c) potential dredged material disposal options.

a. Locating CVNs at NASNI. The Navy completed an extensive analysis (documented in the FEIS) to identify a reasonable range of potential CVN home port locations within the U.S. Pacific Fleet's Area of Responsibility along the West Coast and Hawaii. Possible concentrations of naval presence within the Pacific Fleet that would minimize the need for extensive improvements and expense in the creation of CVN home port capacity were identified in San Diego, the Pacific Northwest, and Hawaii. Within these concentrations, specific CVN home port locations were then selected as a result of their ability to satisfy a number of operational objectives or requirements. The Navy then compared each location's ability to provide necessary support facilities for varying numbers of CVNs. The Navy then identified a preferred alternative (Alternative Two in the FEIS) that would: (1) upgrade the current facilities and infrastructure at NASNI (which currently has the homeport capacity to support one CVN and two CVs) with the additional capacity to support a total of three CVNs; and (2) maintain the existing CVN homeport capacity at Naval Station Everett in the State of Washington.

Home port facilities and infrastructure for two CVs and one CVN currently exist at NASNI, which has provided the facilities and infrastructure to homeport three aircraft carriers since World War II. NASNI contains two CVN-capable berths: one for the NASNI homeported CVN and one for a transient CVN. CVNs homeported in the Pacific Northwest use this transient berth when in

training off of southern California. This transient berth would remain in operation after construction of the two proposed CVN homeport berths. The Depot Maintenance Facility constructed for the CVN now homeported at NASNI is capable of providing all necessary CVN pierside maintenance support for up to three homeported CVNs. Given the existing carrier facilities and the requirements for Pacific Fleet operations, the Navy determined that homeporting two additional CVNs at NASNI is the preferred alternative.

b. Fill size and Location. The Navy maintains that the proposed 1.5-acre fill in San Diego Bay for the reconstructed Pier J would support only essential structures and facilities, and is the minimum fill amount necessary to accommodate the CVN homeporting project. The Navy states that:

The existing J/K pier, representing 63,000 square-feet of surface area, would be demolished and reconstructed to provide CVN dimensions of 90 feet wide and 1,300 feet long. . . . The concrete wharf would provide steam, condensate return, low-pressure compressed air, potable water, pure water, salt water, sanitary sewer, oily waste, jet (JP-5) fuel and marine diesel fuel. Electrical utilities would include a new 4,160-V substation.

Approximately 29,000 cubic yards of sediments dredged from the Pier B mitigation site would be used as fill behind a rock containment dike constructed of approximately 85,000 cubic yards of imported quarry run and armor stone.

c. Sediment Disposal Alternatives. A number of disposal sites for dredged sediments are Available within the San Diego Bay region, including beach replenishment, ocean disposal at EPA-designated site LA-5, and upland or nearshore confined disposal. The disposal option for a dredging project depend on several factors, including grain size, sediment quantity, and the chemical characteristics of the sediment. To determine the appropriate disposal alternative, the sediments proposed for dredging and disposal were evaluated by the Navy pursuant to the procedures described in the 1991 EPA/Coprs testing manual, Evaluation of Dredged Material Proposed for Ocean Disposal – Testing Manual (Green Book). The consistency determination discusses the test results:

Sediment quality data were collected by the Navy within the turning basin and adjacent shipping channel as part of NIMITZ-class CVN Homeporting Project (DON 1995b). Sediment samples also were collected within the turning basin and analyzed as part of the Bay Protection and Toxic Cleanup Program (BPTCP) (Fairey et al. 1996). These data are appropriate for characterizing sediment quality in the general vicinity of Pier J/K for the EIS. Sampling and analyses of sediments within the dredging footprint were performed (during January through April 1999) according to protocols defined by EPA/COE to evaluate the suitability of the materials for in-bay (waters of the United States) and ocean disposal.

Magnetometer and diver surveys were completed in May 1998 in the vicinity of Pier J/K to assess the presence of munitions in bottom sediments. These surveys

did not detect munitions. In addition, sediments were tested for explosive compounds and none were detected (See the RCRA-based evaluation submitted with this CD).

Surface sediments collected by the Navy at three locations offshore from the homeporting area and within the dredging footprint for the proposed project, consisted primarily of sand-sized particles (76 to 93 percent). Middle- and bottom-core sediments contained similar proportions of sand-sized particles (64 to 98 percent and 81 to 99 percent, respectively). Samples collected within the turning basin by the BPTCP contained higher proportions of fine-grained particles (<63 micron diameter; 41 to 64 percent).

Surface sediments contained total organic carbon (TOC) concentrations of 0.01-0.61 percent. Middle- and bottom-core sediments contained similar TOC concentrations (0.05 to 1.09 percent and 0.01 to 0.73 percent, respectively). Sediments at adjacent sites (0-1 and 0-2) in the northwest portion of the approach channel contained similar TOC concentrations. Samples collected within the turning basin by the BPTCP contained relatively higher TOC concentrations (1.1 to 1.7 percent), consistent with the presence of higher percentages of fine-grained materials.

Recent (December 1997) sampling and analyses of sediments in the vicinity of Pier J/K were performed to provide an evaluation of the potential presence of sediment contaminants. The results indicated that concentrations of all metals were below the respective effects range-median values, and most concentrations were below the respective effects range-low values. Further, concentrations of total petroleum hydrocarbons, volatile organic compounds, and organotins typically were less than or approaching the respective method detection limits. The results of sediment analysis demonstrate that the sediments are not classified as hazardous waste relative to the State of California Title 22 criteria.

Results of chemical analyses of sediment samples from the turning basin performed for the BPTCP were consistent with those obtained by the Navy. The BPTCP results indicated that levels of some metals (copper, mercury, and zinc) and organic contaminants (polychlorinated biphenyls [PCB] and polycyclic aromatic hydrocarbons [PAH]) were above those where effects rarely occur, but were below those that cause biological effects.

All of the testing results, when evaluated by the federal agencies responsible for approval of the proposed dredging project indicated that the sediments were suitable for both ocean and in-bay disposal according to criteria contained in the testing protocol.

Sampling of sediments in the North Island project area in 1996 showed no detectable radioactivity associated with Naval nuclear propulsion plant operation or servicing.

In addition, the April 1999 report by MEC Analytical Systems, Inc., Dredged Material Suitability Evaluation for MCON Project P-700A: Berthing Wharf – Phase II at NASNI, Coronado, CA, presented results of physical, chemical, and biological testing conducted on representative sediment collected at the proposed dredge site. The reports conclusions are as follows:

Tier II evaluation of sediment elutriates prepared from MCON P-700A sediments indicates that of the extensive list of analytes examined, none exceed ambient water quality criteria as defined in the California Ocean Plan (SWRCB 1998).

Evaluation of suspended particulate phase test results showed no unacceptable water column impacts for any of MCON P-700A sediments evaluated.

Evaluation of solid phase test results showed no unacceptable benthic impacts for any of MCON P-700A sediments evaluated.

Though tissue concentrations for a small number of contaminants were found to be elevated relative to reference in MCON P-700A sediment exposed organisms, these values were generally within a factor of 1-3 of the reference and close to detection limits. Furthermore, comparison to relevant residue-effect information via the USACE/USEPA ERED and CBRs for non-polar organics (McCarty and MacKay 1993) suggest that these measured tissue concentrations are unlikely to result in toxicity to benthic biota. Finally, those compounds found to be elevated above reference have little to no propensity to biomagnify and therefore are unlikely to affect higher trophic levels.

A member of U.S. EPA's dredged sediment management unit confirmed with Commission staff that the proposed dredged materials from the homeporting project are suitable for either open ocean disposal at LA-5 or in-bay disposal at the NAB enhancement site in San Diego Bay.

(i) NAB Enhancement Site. The Navy proposes to transport dredged material from the Berth J deepening site to a water area just south of the Naval Amphibious Base (NAB) for the creation of intertidal/shallow subtidal habitat. This 37-acre site is located in Navy-controlled waters off-limits to the general public for military security and public safety reasons, and is presently comprised of unvegetated silty, soft-bottom sediments (primarily fine sands, with lower percentages of silts and clays) at a depth of –10 to –12 feet mean lower low water. The disposal of dredged materials to create the enhancement area includes a 300-foot buffer zone between existing eelgrass beds and the dredged material discharge points, and silt curtains will be used to limit the extent of discharge turbidity plumes. The enhancement area and a 1500-foot buffer zone will be surveyed before and after disposal to ensure no net loss of eelgrass at the site. In addition, eelgrass will be planted around the margin of the disposed sediments to improve the quality of the

area for fisheries habitat. Staff from U.S. EPA and the National Marine Fisheries Service reported to Commission staff that the proposed use of dredged sediments to create the NAB enhancement area is a beneficial use of the sediments and will lead to an improvement in the marine habitat and fisheries in this part of San Diego Bay.

Placement of dredged materials at the NAB enhancement site would cause short-term, adverse unavoidable impacts to water quality due to the creation of a turbidity plume and elevated suspended sediment concentrations. However, long-term impacts to water quality from dredged material disposal operations would not occur because the sandy sediments released at the site will likely sink rapidly. Given the results of sediment testing completed by the Navy at the dredging site, placement of sediments at an NAB area would not result in significant releases of chemical contaminants to bay waters or mortality to aquatic organisms. Thus, impacts to water quality would occur, but these would be insignificant and temporary. Overall, as stated above, habitat impacts from this disposal would be beneficial. The Commission therefore finds that the placement of the sediments at the NAB site represents the least damaging feasible disposal alternative.

(ii) Beach Replenishment. Beach erosion is a major problem along the beaches in San Diego County. This project, with its 534,000 cubic yards of dredged material, represents a potential benefit to recreation and protection of structures through its potential to provide sand to area beaches. To be considered suitable for beach nourishment, sediment must be free of chemical contamination and consist primarily of sand of an acceptable grain size (usually at least 80 percent sand). The dredged sand must also be compatible with the existing material at the receiver beach site. As a result of the previously-referenced sediment testing, the dredged materials from the homeporting project are suitable for beach or nearshore disposal.

However, the Navy is not proposing to place these on or offshore of area beaches due to the risk of munitions in the sediments. The consistency determination states that:

Magnetometer and diver surveys were completed in May 1998 in the vicinity of Pier J/K to assess the presence of munitions in bottom sediments. These surveys did not detect munitions. In addition, sediments were tested for explosive compounds and none were detected (See the RCRA-based evaluation submitted with this CD).

Notwithstanding these findings, the Navy has stated to Commission staff that a risk still exists that once dredging commences, munitions and ordnance that pose a severe and potentially life-threatening danger to the public will be uncovered at the dredge site. During dredging and disposal operations, the Navy will screen out all foreign materials greater than three inches in diameter. However, the Navy believes that munitions as small as 5/16" in diameter may be located in the sediments, and further states that it is unable to screen the dredged materials to a degree specified as necessary by the Navy to guarantee public safety on area beaches. Commission staff exchanged communication in September 1999 with the U.S. Army Corps of Engineers staff at the Waterways Experiment Station regarding new information (since 1996) on hazards associated with ordnance in dredged materials placed in nearshore waters. The Corps

reported that the preliminary results of the Navy's "Harris Sand Screening Report (1998)" remain valid and that "ordnance, even on the larger end of what has been found in this project, is highly mobile in the nearshore. The USACOE is confident that no assurance can be made that ordnance will not move from the nearshore to the beach."

The Commission previously examined this issue in consistency determinations for the homeporting of the first CVN at NASNI (CD-95-95, CD-140-97, CD-161-97, and CD-9-98). In that project, the Navy proposed to dispose 7.9 million cubic yards of sandy dredged material on area beaches. However, discovery of munitions and ordnance in sand placed on the beach led to a suspension of dredge and disposal work (see Section II, Background/Project History, on Page 4 of this report) and, ultimately, to the development of a substitute beach replenishment program involving the Navy and the San Diego Association of Governments, called the San Diego Regional Beach Sand Project (Exhibits 12 and 13). That project will dredge up to three million cubic yards of sand from a half dozen ocean floor sites located one mile offshore and pump the sand to thirteen beaches between Oceanside and Imperial Beach. The current schedule calls for sand placement on area beaches to begin in the spring of 2000.

As with the first homeporting project (CD-95-95), the Navy believes there are no feasible screening alternatives available that would allow for the placement of the dredged sediments on or offshore of area beaches. The Navy therefore proposes to dispose all the materials at the NAB intertidal/subtidal enhancement area in San Diego Bay. Unlike in CD-95-95, however, the Navy is not proposing as a part of this project to place beach-compatible sediments from another location as a substitute for the dredged materials going to the NAB site. However, the Commission concludes that such an element is not necessary in order to find the current project consistent with the sand supply policy of Section 30233(b) of the Coastal Act. Without further screening the Commission finds that the proposed dredged materials may not be suitable for beach replenishment due to the risk of munitions and ordnance present in the sediments. More importantly, unlike the situation in CD-95-95, the Navy is not proposing to dump the materials at the deep-water LA-5 disposal site, where the materials would be lost to the nearshore coastal environment. Instead, the proposed disposal alternative avoids the potential safety risks to the public associated with beach disposal, but arguably retains the materials within the littoral system by keeping the materials in the San Diego Bay estuary for beneficial reuse and marine habitat enhancement.

(iii) Ocean Disposal. Based on the grain size analysis and sediment testing, all of the proposed 534,000 cubic yards of dredged sediment is suitable for unconfined ocean disposal at the EPA-approved offshore disposal site LA-5, located five miles southwest of Point Loma. The site is used regularly for disposal of dredged material generated from San Diego Bay. Where material has passed Green Book standards and is otherwise unsuitable for beach disposal or other beneficial uses, the Commission has historically found this disposal option to represent the least damaging feasible disposal alternative. In the present case, the Navy has determined that disposal at LA-5 is not the least damaging alternative due to the ability to use the dredged materials to enhance San Diego Bay intertidal and subtidal habitat offshore of the NAB.

Commission Conclusion on Alternatives. Additional alternatives discussion regarding other project components can be found in the Navy's FEIS for the homeporting project. Based on the above discussion, which addresses the alternatives questions of key concern to the Commission, the Commission concludes that, with the mitigation and monitoring measures discussed in the following section of this report, the proposed project represents the least environmentally damaging feasible alternative. Homeporting the two subject CVNs at a naval facility other than NASNI is not a feasible alternative. The fill proposed is the minimum area and least damaging feasible location. All proposed dredge materials are suitable for unconfined aquatic disposal and will be placed at the NAB enhancement site in San Diego Bay and will remain in the San Diego Bay littoral system. Therefore, the Commission finds the proposed CVN homeporting is consistent with the alternatives test of Section 30233(a) and the sand supply policy of Section 30233(b) of the Coastal Act.

5. Mitigation/Monitoring. This section addresses mitigation needs related to dredging, disposal, bay fill, and other project impacts on eelgrass, least terns, and other water quality considerations such as hazardous substances treatment, radiation releases, and oil spill risks.

a. Dredging. Potential impacts of dredging on marine water quality include temporarily increased turbidity, reductions in dissolved oxygen, and potential resuspension, remobilization, and redistribution of any chemical contaminants present in the sediments. Dredging would result in losses of infauna and epifauna, and some demersal fish within the dredge footprint. These impacts are typical of all dredge projects, and the Commission has historically determined no mitigation necessary in the following situations: (1) where the need is established through turbidity monitoring, silt curtains or other turbidity-minimizing methods are used; (2) where disposal would not smother environmentally sensitive habitat or sensitive species, such as grunions, kelp, or rocky hard-bottom habitat; (3) where dredging and disposal would not effect on least terns and other sensitive species as specified in the Navy/USFWS least tern MOU.

The consistency determination provides:

Dredging would be conducted in accordance with permit specifications and other requirements of EPA, U.S. Army Corps of Engineers, and RWQCB. Dredging operations associated with this alternative would be performed in compliance with dredging permit issued by the U.S. Army Corps of Engineers. Permit conditions, intended to reduce potential impacts to water quality, are expected to include the following:

- *Dredging would be performed using a clamshell dredge, which minimizes losses or spillage to adjacent waters and/or with a hydraulic dredge;*
- *Water quality monitoring would be conducted during dredging to ensure compliance with conditions specified in the water quality permit; results from monitoring would be reported to regulatory agencies on a regular (e.g., monthly) basis;*

- *Barges transporting dredged material to a disposal site would be required to monitor draft depths prior to disposal to verify that wastes are not leaking during transport; and*
- *A debris management plan would be prepared which addresses types of debris expected, separation and retrieval methods, and disposal methods.*

Dredging operations are expected to generate localized and temporary turbidity plumes associated with resuspension of bottom sediments. Increased suspended sediment concentrations would result in other water quality changes, such as reduced light transmissivity and increased oxygen demand leading to reduced dissolved oxygen concentrations. However, dredging operations would not cause persistent changes in dissolved oxygen concentrations or in other water quality parameters because sediments suspended during dredging would settle to the bottom, and natural mixing processes would reduce any other localized changes to water quality, within a period of several hours after dredging stops. The water quality permit issued for the dredging operations is expected to define criteria for turbidity levels, suspended solids concentrations, and other chemical constituents. The receiving water criterion for turbidity is expected to be defined as a light transmittance level that is 80 percent of the ambient level at a point down-current from the dredge.

Dredging operations associated with this alternative are not expected to cause turbidity levels that exceed the criterion because (1) most of the materials planned for dredging consist of sand-sized particles, which settle rapidly; (2) dredging equipment has a high removal efficiency, thus minimizing the amounts of fine particles that could leak into surface waters; and (3) the remaining fine particles will be diluted below the permit limits. Monitoring of water quality impacts associated with BRAC CVN dredging projects has confirmed that turbidity within the dredging plume did not reduce light levels below 80 percent of ambient levels. Similarly, evaluations of potential water quality impacts performed for the BRAC CVN project (DON 1996a) indicated that under conservative (highest-case) conditions, suspended solids concentrations associated with dredging approximately 56,000 cubic yards of sediments containing 40 percent fines would dissipate within 25 minutes and levels would not be expected to exceed 60 mg/L at a distance 250 feet from the dredge.

Chemical Contamination:

Allowable concentrations of chemical constituents are expected to be the respective instantaneous maximum concentrations specified in the California Ocean Plan. As discussed in Section 3.4 of the Final EIS for Developing Home Port Facilities for Three NIMITZ-Class Aircraft Carriers (1999), sediments proposed for dredging in the vicinity of the homeporting area are primarily sands, with generally low concentrations of chemical contaminants and low potentials for contaminant solubilization or adverse biological effects. Rapid settling of suspended particles

would be expected to limit dredging impacts to water quality to the initial mixing zone in the immediate vicinity of the dredge.

Water quality monitoring for the BRAC CVN dredging project measured low oil and grease concentrations (i.e., maximum total recoverable petroleum hydrocarbon concentrations of 2 mg/L) and nondetectable (<0.05 mg/L) sulfides concentrations, which were in compliance with permit criteria. Concentrations of other chemical constituents in receiving waters have also been in compliance with specified permit limits.

Based on the results of elutriate and bioassay tests of the homeporting area sediments, and turbidity modeling conducted for the BRAC CVN homeporting, sediment resuspension for the proposed action would not result in significant releases of chemical contaminants to bay waters or mortality to aquatic organisms. Thus, impacts to water quality would occur, but these would be insignificant.

Minor, temporary impacts to water quality would also occur at the site of the new wharf construction in association with placement of fill materials. The fill material would consist of cohesive dredged sediments from the mitigation site and covered by armor rock to stabilize the slope. The wharf backfill would not be used as a facility for disposal and isolation of contaminated sediments because existing information did not indicate the need for disposal of contaminated materials for the proposed project. These impacts would consist of formation of turbidity plumes, increased suspended sediment concentrations, and decreased water clarity. Adverse long-term impacts to water quality, such as low dissolved oxygen concentrations and/or elevated contaminant levels, would not occur. This is because the material used to cover the fill area would not contain significant contaminant concentrations or result in substantial releases of contaminants to site waters or toxicity to marine organisms as indicated by the results of testing performed for the BRAC CVN homeporting project. Impacts would be insignificant.

As they are available, the Navy has committed to submit the project monitoring reports to the Commission.

b. Disposal. In-bay disposal of dredged sediments at the proposed Pier J wharf landfill and the NAB enhancement area will result in short-term increases in turbidity and burial of subtidal habitat. Infauna, epifauna, and mobile invertebrates inhabiting the disposal areas may be covered with a layer of sand and smothered, depending on the rate of sand placement and dispersal. As with dredging impacts, these impacts would be temporary, and upon completion of disposal operations, recolonization of the areas by infaunal, benthic, and fish species will occur. Also as with the dredging, placement of sediments and monitoring would be conducted in accordance with permit conditions required by the Corps of Engineers, EPA, and the California Regional Water Quality Control Board.

The consistency determination provides:

Sediments dredged from the navigation channel would be disposed in a manner that is acceptable and permitted by the resource agencies. Disposal options may include using dredged sediments for creation of intertidal/subtidal enhancement site south of NAB, creation of snowy plover habitat, as backfill for new wharf construction (as noted above), or disposal at a designated ocean dredged material disposal site. Sediment quality characterizations for materials from within the dredging footprint demonstrated that the material would be suitable for in-bay disposal or ocean disposal at the ocean dredged material disposal site (at LA-5).

Construction of a mitigation site would also require the dredging and disposal of bay sediments, resulting in short-term and localized resuspension of sediments. Dredging volumes would be about 48,394 CY, with approximately 29,429 CY used as fill in the wharf area and the remaining material for snowy plover enhancement. Creation of a mitigation site, along with alterations in the present site bathymetry, would not result in substantial changes to hydrological conditions that would impact biological communities or navigation.

Placement of dredge at the NAB enhancement site would cause short-term, adverse unavoidable impacts to water quality due to the creation of a turbidity plume and elevated suspended sediment concentrations. However, long-term impacts to water quality from dredged material disposal operations would not be expected because sediments released at the site will likely sink rapidly and natural mixing processes. Placement of sediments at an NAB area would not result in significant releases of chemical contaminants to bay waters or mortality to aquatic organisms. Thus, impacts to water quality would occur, but these would be insignificant.

c. Eelgrass Mitigation. Eelgrass habitat is a valuable resource in southern California bays and estuaries, as it provides habitat for numerous species of algae, invertebrates, and fish, and nursery area for juvenile fish, as well as foraging habitat for the endangered California least tern. The amount of eelgrass impacted due to construction activities at the J wharf homeporting site (dredging and filling), Pier B mitigation site (excavation), and NAB enhancement site (disposal of dredged sediments) would be determined based on pre- and post-construction surveys. Mitigation for all eelgrass habitat impacts from homeport construction activities would be credited from the existing interagency banking agreement that established an eelgrass credit of approximately eight acres from construction and planting of eelgrass at the BRAC CVN (CD-95-95) mitigation site adjacent to Pier B, using a ratio of 1.2:1 as specified in the Southern California Eelgrass Mitigation Policy (NMFS 1992). In past projects the Commission has determined this ratio adequate for this species. The Navy reports that successful eelgrass recolonization at the BRAC CVN mitigation site at Pier B indicates that similar recolonization at the adjacent mitigation site proposed for the current project will also met with success. In addition (as noted earlier in this report), the Navy will also plant eelgrass around the

perimeter of the 37-acre NAB intertidal/ subtidal enhancement area. Staff from the National Marine Fisheries Service communicated support for the eelgrass mitigation component of the project, and noted the beneficial effects the mitigation and enhancement sites will have on the San Diego Bay fishery. Water quality and eelgrass monitoring conditions attached to the Corps of Engineers permit for the project will help to minimize adverse effects on eelgrass habitat in and adjacent to the project sites, and to ensure long-term protection of restored eelgrass beds at the mitigation and enhancement sites.

d. Fill Containment. The reconstructed Pier J wharf includes 1.5 acres of fill that require the construction of a rock containment dike consisting of 84,500 cubic yards of quarry run and armor stone, and the placement of 29,400 cubic yards of backfill excavated from the Pier B mitigation site. The dike structure will be constructed by excavating down to existing bearing material in the bay and filling it with quarry and armor rock material. The rock containment dike placement will be constructed to accommodate expected operational conditions, including fill loads and seismic activity. The fill material would be covered with an asphalt concrete cap to provide laydown space during maintenance and a transitional paved area to the other CVN berth facilities.

U.S. EPA staff reported that the dredged materials to be excavated from the Pier B mitigation site are suitable for in-water placement behind the Pier J wharf containment dike. The consistency determination examines the sediment quality at the mitigation site:

Sediments in the vicinity of Pier B, immediately offshore from the mitigation site, consist primarily (greater than 80 percent) of sand plus gravel with low total organic carbon concentrations (0.2-0.5 percent). Concentrations of metals are generally low and comparable to those in sediments from reference locations (as defined by testing protocols contained in EPA/COE 1991). Concentrations of chlorinated pesticides, PCBs, and phenols are also low or nondetectable. In contrast, elevated concentrations of PAHs (up to several parts per million) occur in sediments from areas immediately offshore from the pier and inshore from the pier on the north side of the pier access road, which are attributable to leaching from creosote-soaked pier pilings.

Recent additional sampling (both in-bay and upland) confirmed that soils and sediments from areas that would be dredged to construct the mitigation site do not contain significant contaminant levels. Additionally, results from surveys of the upland portion of the site did not detect the presence of buried ordnance (see section 3.10). Tabular listings of the data are provided in Volume 3, section 3.4 of the Final Environmental Impact Statement for Developing Home Port Facilities for Three NIMITZ-Class Aircraft Carriers in Support of the U.S. Pacific Fleet (1999).

Results from bioassay tests conducted on sediments from areas immediately offshore from the mitigation site (i.e., inshore from the northern extension of the pier) generally showed low potentials for toxicity and contaminant

bioaccumulation. Elutriate tests did not indicate any measurable releases of contaminants to waters mixed with suspended sediments from the site. Sediments from the area immediately offshore from the mitigation site would be suitable for in-bay or ocean disposal. In general, these observations should also apply to sediments from the mitigation site because this area is relatively farther from the effects of creosote leaching and activities on the pier that may contribute contaminants to bay sediments.

Unlike in CD-95-95 for homeporting the first CVN at NASNI, the proposed backfill materials for constructing the Pier J CVN wharf as a part of this homeporting project are not unsuitable for in-bay disposal and the rock dike will not be containing and isolating contaminated sediments.

e. Least Terns. The turbidity arising from dredging and disposal activity and the loss of eelgrass habitat may adversely affect foraging and nesting activities of the endangered California least tern and other marine birds. The consistency determination reports that:

Construction of the [Pier J] wharf will generate localized turbidity at the dredge site causing a dense plume between 20 to 40 meters wide. Successful avifauna foraging will be limited in this area; this plume will quickly dissipate to a secondary plume due to the construction site location and the ebb and flood currents. As determined during the BRAC CVN dredge monitoring, the surface visibility of the secondary plume will allow for successful foraging of site feeding birds including the least tern. Also, in some cases, the secondary plume acted as a fish attractant for filter feeding fish such as the northern anchovy.

The Pier B Mitigation site is an extension of the BRAC CVN [CD-95-95] mitigation site. The construction of this site will have no effect on marine birds. Construction of the site will be land based and the site will be diked for 95% percent of the construction period. Localized and limited turbidity will be generated when the site is flooded. The USFWS, per informal consultation, has requested that the construction of the mitigation site take place at the earliest phase of the project. Therefore construction will most likely occur during the tern-nesting season. USFWS has concurred with this schedule.

The NAB Habitat Enhancement Area will be constructed using a hydraulic dredge and discharge pipe or bottom-dump barges. Typical ratio of a pipeline discharge is 85% water and 15% sand. This discharge rate along with duration will cause a large primary plume (150-200 meters). Therefore construction activities for this site will avoid least tern-nesting season. Construction of the site outside of the nesting season will still have an effect on resident shorebirds leading to the temporary loss of some foraging habitat and/or food resources until disposal is completed and fishes and invertebrates recolonize the area. Reductions in water clarity of the primary plume following discharge operations could temporarily inhibit feeding activities of marine birds that forage, such as by visual location and

pursuit of fish prey, in near-surface waters (DON 1992a). Therefore, these potential impacts would be localized and/or temporary in duration, such that impacts on breeding, feeding, or passage of marine birds within the region would be insignificant. All project activities would conform with the specifications in the USFWS and DON (1993) memorandum of understanding regarding least terns in San Diego Bay. Species that use the beach, such as the threatened western snowy plover, are unlikely to be affected by construction activity and turbidity due to their foraging.

The consistency determination then examines the proposed mitigation measures incorporated into the homeporting project, based on Navy policies and input from the U.S. Fish and Wildlife Service:

Losses of California least tern and brown pelican foraging habitat due to fill (1.5 acres) would be mitigated by the construction of an equivalent area of habitat near Pier B. The mitigation site design will be determined by the agencies during permitting, but would represent one of two options: intertidal or intertidal/subtidal, as described above under Marine Habitat, Fish, and Invertebrates and section 3.5.1.2 of the Final Environmental Impact Statement for Developing Home Port Facilities for Three NIMITZ-Class Aircraft Carriers in Support of the U.S. Pacific Fleet (1999).

Dredging and in-water demolition and construction activities would be scheduled to occur outside of the California least tern breeding season (April 15 to September 1) to the maximum extent feasible. Dredging at the mitigation site would be accomplished at the start of the project to provide additional least tern foraging area and therefore offset other potential adverse impacts. However, if construction at the mitigation site cannot be avoided during the nesting season, coordination with USFWS (15 April 1999) has determined that it will be more important to complete the mitigation site as expeditiously as possible, even if construction extends into the nesting period.

Engineering measures would be implemented to minimize the turbidity plume associated with in-water construction and dredging. If it is not feasible to avoid in-water construction during the nesting season, in areas ranked as high or very high value to foraging California least terns, or identified as important in ongoing least tern foraging studies, best management practices (BMPs) such as use of silt curtains would be used at the mitigation site to limit the spread of turbidity. Surface turbidity would be monitored at the start of the activity and weekly thereafter. If in-water activities result in a surface plume exceeding 1,000 feet in length or width that persists longer than 1 hour, and that is in or adjacent to a foraging area of high to very high value to foraging least terns during the breeding season, the activities would be suspended until turbidity diminishes. The construction contract would include the foregoing stipulations on turbidity limits,

and a requirement for a biological monitor who would document the extent of turbidity and foraging activities by least terns and other birds in the vicinity of construction. The monitor would report to the Navy for corrective action any exceedance of the acceptable limits on turbidity. All activities would be performed in accordance with permit conditions and agency requirements.

Clean sand resulting from dredging and shoreline excavation activities associated with the project could be used to enhance nesting areas of threatened and endangered species at NASNI. This proposed use of sand is based on coordination with USFWS (15 April 1999). The Navy will coordinate with USFWS regarding specific locations, volumes and methods of placement for this material.

f. Water Quality and Radioactive and Other Hazardous Materials. The Commission notes that the functional capacity of the San Diego Bay estuary will not be affected by the proposed homeporting project, given that fill impacts are mitigated by new subtidal habitat creation, and Navy current studies which indicate that water circulation and harbor currents will not be significantly affected by the removal of Pier J/K and the construction of wharf J. The Commission also notes that oil spill risks would not be increased as a CV is replaced by a CVN; the Navy points out that nuclear carriers carry less hydrocarbon fuel than conventional carriers (approximately 9,000 tons versus 10,800 tons), and thus that conversion to a nuclear carrier should decrease oil spill risks.

(i) Copper. Copper discharges to San Diego Bay waters represents another water quality issue. Copper leaches from Navy ship hulls, which (as are most commercial and recreational vessels) are painted with "ablative copper antifouling coatings." Due to its larger ship hull area than a conventional aircraft carrier, conversion to a CVN would increase copper discharges into the bay at a rate of 0.37 additional pounds of copper per day. However, the Navy reports that:

. . . this increase in copper inputs to the bay associated with berthing a CVN would be offset by decreases of 6 vessels in the size of the Navy fleet, resulting in a net decrease over the next several years in the total copper input from anti-fouling paints on Navy vessels. The number of Navy ships homeported in San Diego has seen a steady reduction from 76 ships in 1992 to 55 ships in 1999. Reductions in hull leachate from Navy vessels are expected to be roughly proportional to decreases in the number and average size (wetted surface) of the ships in San Diego Bay. Thus CVN homeporting is not expected to exacerbate copper loadings in San Diego Bay.

The Navy has also committed to continued research into less damaging antifouling materials. According to the Navy, aside from copper, discharges of other metals, chemicals, and waste substances would not be increased over that of conventional carriers.

(ii) Water Quality. The FEIS for the project examines in great detail the water quality issues associated with the proposed homeporting of two CVNs at NASNI, and concludes that water quality in San Diego Bay will not decline as a result of the project because the minor

impacts associated with CVN operations will be offset by the removal of an equal number of CVs from NASNI. The FEIS provides the following information on project elements addressing water quality protection:

Best management practices (BMP) would be implemented by the Navy to minimize waste discharges to the bay during maintenance operations as well as the magnitude of any accidental waste discharges to the bay during normal operations. These would include spill response and contingency plans prepared by the Navy in consultation with the Coast Guard for preventing or minimizing the effects of accidental discharges and spills.

Annual spill response exercises would be conducted by the Navy to practice implementation of response actions.

...

All operational discharges, including stormwater runoff, would meet applicable regulations and permit standards. Wastewaters generated by CVNs, such as sanitary sewage, oily wastes such as bilge waters, and industrial process waters would be collected and transferred to mechanical systems that would be provided for this project. Domestic sewage would be delivered to the City of San Diego municipal wastewater treatment facility at Point Loma. Industrial wastewaters would be transported to a treatment facility on NASNI, and oily wastewaters would be treated at an existing treatment facility at NASNI. Consequently, impacts to water quality from normal berth-side vessel operations would be less than significant.

Runoff from a CVN deck, wharf, and pier is not covered under a stormwater permit. Thus, the Navy is not required to treat or monitor stormwater flows for these facilities. However, deck runoff is one of the operational discharges being evaluated under the UNDS program [Uniform National Discharge Standards, a program under development by the Secretary of Defense and the USEPA Administrator for discharges incidental to the normal operation of Armed Forces vessels], and may eventually be included under a uniform discharge standard.

CVNs, CVs, and other Naval vessels discharge cooling waters during transit within the harbor and while docked pierside. While CVs and CVNs use different sources of fuel, (oil vs. nuclear), both types of ships rely upon steam propulsion plants that require seawater cooling. The seawater cooling requirements are similar and the thermal and marine life impacts from CVs and CVNs are comparable.

Potentials for contaminant spills to San Diego Bay associated with providing the capacity to homeport one additional CVN are expected to be similar to those for the existing BRAC CVN (DON 1995a)[The FEIS states that this conclusion also applies to the alternative of homeporting two additional CVNs]. Spill-related

impacts to water quality are potentially substantial. The actual significance of impacts to water quality from spills would depend on the volume, frequency, and location of spill events and the types of material spilled. BMPs have been developed and implemented by the Navy to prevent spills and/or minimize impacts. For example, homeported vessels would be surrounded by a surface boom when in berth to contain any spilled or discharged materials and to facilitate cleanup. Additionally, spill response/contingency plans would be developed to describe the types and amount of equipment and personnel resources, emergency and notification requirements, and response procedures needed to minimize the potential impacts of a spill (see section 3.15, Health and Safety). Consequently, impacts to water quality from vessel operations would be less than significant.

(iii) Hazardous Materials. Operations associated with two additional CVNs would also result in an increase in the quantity of chemicals handled, stored, and disposed at the home port site. Therefore, there would be an increase in the potential for chemical releases to occur, resulting in potential adverse impacts to marine water. However, these operation-related impacts to water quality would be reduced to levels that are less than significant by the implementation of the existing Stormwater Pollution Prevention Plan (SWPPP), the existing safety and health programs, and compliance with federal, state, and local statutes and regulations pertaining to soil and groundwater contamination.

Hazardous substances associated with a nuclear carrier and its related facilities are described in detail in the FEIS. To summarize, the FEIS states:

The Navy has implemented a strict Hazardous Material Control and Management (HMC&M) program and a Hazardous Waste Minimization (HAZMIN) program for all of its facilities. These programs are designed to minimize the amount and types of hazardous materials used in the workplace, and to reduce the generation of hazardous waste to an absolute minimum.

The disposition of chemically hazardous wastes would be under the direction of trained personnel in accordance with the facility's hazardous waste management plan, and applicable federal, state, and local regulations.

Because the proposed CVN is of more modern design than the conventionally powered carriers, the use of hazardous materials, including asbestos and PCBs, would be reduced or eliminated wherever possible.

Hazardous waste activities at NASNI are regulated by both the San Diego County Hazardous Materials Management Division, and by the California Department of Toxic Substances Control. ... Hazardous waste constituents identified for CVN depot level maintenance are no different than those existing for current CV maintenance or other maintenance activities at NASNI. ... It has been demonstrated that these hazardous wastes can be managed and handled safely in accordance with permit stipulations. Navy shipments of radioactive and/or

hazardous materials are made in accordance with applicable regulations. ... Hazardous waste generating activities will continue to be monitored and kept in compliance with all applicable local, state, and federal regulations. No impacts will occur.

(iv) Radioactivity. In a September 7, 1999, letter to Commission staff commenting on the subject consistency determination, the Environmental Health Coalition (EHC) discussed, in part, the potential impacts on public health and safety that could occur from the proposed homeporting of two CVNs at NASNI (for the full text of this letter, see Appendix A – Correspondence). EHC stated that:

- (1) The FEIS fails to disclose an accurate history of accidents and administrative violations relating to nuclear powered ships, their support facilities, and non-radioactive hazardous materials.*
- (2) The FEIS fails to release essential emergency planning documents critical to the public's understanding of the risks in locating the CVNs and facilities so close to densely populated areas.*
- (3) The FEIS gives very short shrift to the issues of transportation and storage of radioactive and other hazardous wastes.*

EHC concluded its discussion of public health and safety by stating that:

Because the Coastal Act specifically mandates public health and safety considerations for energy related development within the coastal zone, the CCC has an affirmative legal duty to request additional information and mitigation measures prior to agreement with the Navy's DOC [Determination of Consistency]. Anything less would constitute a violation of the CZMA, CCMP, and the Coastal Act.

Up to three CVs have been homeported at NASNI over the years, in addition to port calls by CVNs conducting training exercises in the Pacific Ocean off San Diego. The consistency determination addresses the radioactive material concerns associated with homeporting two additional CVNs at NASNI:

Since the early 1970s, the Navy has prohibited intentional discharges of even negligible radioactivity into harbors. Stringent, long-standing controls have proven effective in protecting the marine environment from radioactivity. The total amount of long-lived gamma radioactivity released into harbors and seas within 12 nautical miles of shore has been less than 0.002 Curie during each of the last 26 years. This is from the Naval nuclear-powered ships and from the supporting nuclear-capable shipyards, tenders, and operating bases, and at other U.S. and foreign ports that were visited by Naval nuclear-powered ships. To put this small quantity of radioactivity into perspective, it is less than the quantity of naturally occurring radioactivity in the volume of saline harbor water occupied by a single

nuclear-powered submarine. Because these controls would continue, there would be no significant long-term onshore maintenance facilities or vessel-related operational impacts on water quality due to radioactivity from homeporting additional NIMITZ-class aircraft carriers at NASNI.

The Homeporting FEIS further examines the subject of safety of the Navy's nuclear propulsion program:

Radioactive Material Control. Propulsion plant maintenance involves the handling of radioactive material that originated from the ship's pressurized water reactor plants. Small quantities of low level radioactivity, predominantly cobalt 60, are in the ship's valves, piping, and other reactor plant components that would be inspected, repaired or scrapped, and in the liquid that would be processed. . . . These materials would be strictly controlled to protect the environment and human health, using the same proven methods employed in shipyards performing Naval nuclear work. . . . Only specially trained personnel are permitted to handle radioactive material. Environmental monitoring at shipyards, and at other facilities supporting Naval nuclear powered ships, shows these controls have been effective in protecting the environment, and that radioactivity associated with U.S. Naval nuclear-powered ships has had no significant or discernible effect on the quality of the environment. Thus, there would be no radiological impact on the environment from the preferred alternative to homeport and maintain a NIMITZ class aircraft carrier at NASNI.

Radioactive Material Transportation. All shipments of radioactive materials in the Naval Nuclear Propulsion program are required to be made in accordance with the applicable regulations of the U.S. Department of Transportation; the U.S. Department of Energy, and the U.S. Nuclear Regulatory Commission. The purpose of these regulations is to ensure that shipments of radioactive materials are adequately controlled to protect the environment and the health and safety of the general public, regardless of the transportation route taken. In addition, the Navy has issued standard instruction to further control these shipments. These controls insure that shipments of radioactive materials are adequately controlled to protect the health and safety of the general public. These controls have proven to be effective.

Radiological Impacts. The safe operation of the Navy's nuclear powered ships and their support facilities is a matter of public record. In the 41 years since the first naval reactor began operation, the Navy has logged over 4,500 reactor years and over 100,000,000 miles of steaming without a reactor accident or other problem resulting in a significant effect on the environment. This success of the Naval Nuclear Propulsion Program is based on strong central technical leadership, thorough training, and conservatism of design and operating practices. The record of the program's environmental and radiological performance at the operating bases and shipyards presently utilized by nuclear powered warships demonstrates the continued effectiveness of this management philosophy. This record has been independently corroborated by environmental radiological surveys performed by the Environmental Protection Agency (EPA) and state agencies. The radiological analyses in

this EIS concludes there would be negligible radiological impacts associated with homeporting a CVN at any of the alternatives considered.

Maintenance. Refueling NIMITZ class aircraft carrier nuclear reactors will not be accomplished at NASNI. This type of work requires the special assets only found at selected nuclear-capable shipyards. Therefore, any operation that requires the removal, installation, handling or transportation of nuclear fuel will be accomplished at a selected nuclear-capable shipyard, not at NASNI.

The Navy reports in the FEIS that:

It is expected that for each CVN maintained at North Island, approximately 325 cubic feet of low-level radioactive waste per year would be generated. Low-level radioactive waste generated as a result of homeporting NIMITZ-class aircraft carriers in the San Diego area would be stored only at the DMF (depot maintenance facility). Mixed waste generated from NNPP (Naval Nuclear Propulsion Program) activities is a mixture of low level radioactive waste and chemically hazardous waste. The Navy has implemented strict controls to prevent, to the maximum extent practicable, the mixing of radioactive and chemically hazardous waste. However, small amounts of mixed waste (less than 110 cubic feet per year from each CVN) would be generated by the Navy and temporarily stored at North Island until arrangements can be made to ship it for treatment and disposal outside the San Diego area. The mixed waste would be primarily solid in form. The radioactivity would be controlled as noted above.. The chemically hazardous constituents of the waste would be regulated in accordance with the California Hazardous Waste Rules (CCR Title 22), which implements the federal RCRA. Detailed characterization of NNPP mixed waste has been accomplished using sampling and extensive process knowledge, and has confirmed that the waste is suitable for safe storage until it is shipped off site for treatment and disposal. Mixed waste would be packaged in sealed containers, accumulated in a controlled area, and shipped to permitted treatment, storage, and disposal facilities. Mixed waste would be stored in a dedicated, controlled mixed-waste storage facility that meets Navy, EPA, and State of California requirements for storing mixed waste. The mixed-waste storage facility would be permitted in accordance with State of California regulations.

In clarifying the above information, Navy staff reported to Commission staff that low-level radioactive waste and mixed waste generated by CVNs homeported at NASNI will only be temporarily stored at NASNI, and that permanent storage of these materials will occur off-site outside the San Diego area.

The previously-concurred with project for the first CVN at NASNI (CD-95-95) included the following findings:

Construction of three "depot-level" propulsion plant maintenance facilities would be necessary to serve the CVN: the Controlled Industrial Facility, the Ship Maintenance Facility and the Maintenance Support

Facility. The controlled Industrial Facility would be used for the inspection, modification, and repair of radiologically controlled equipment and components associated with naval nuclear propulsion plants. The Ship Maintenance Facility would house the machine tools, industrial processes, and work functions necessary to perform non-radiological depot level maintenance on CVN propulsion plants. The Maintenance Support Facility would house the primary administrative and technical staff offices supporting CVN propulsion plant maintenance, as well as the central area for receiving, inspecting, shipping and storing materials.

Finally, the FEIS also addresses marine water sampling for radioactivity in San Diego Bay:

To provide adequate assurance that procedures used by the Navy to control radioactivity are adequate to protect the environment, the Navy conducts environmental monitoring in harbors frequented by its nuclear-powered ships. The current Navy environmental monitoring program in the San Diego area includes analyzing samples of marine water (see below), sediment (see section 3.4.1), and marine life (see section 3.5.1).

Sampling of marine water in San Diego in 1996, including North Island, showed no detectable radioactivity associated with Naval nuclear propulsion plant operation or servicing (Naval Nuclear Propulsion Program [NNPP] 1997). In addition to Navy sampling, the Environmental Protection Agency (EPA) has conducted detailed environmental surveys of selected U.S. harbors. A previous EPA survey of San Diego Bay in 1987 detected only naturally occurring radioactivity in marine water samples (EPA 1989a), and trace amounts of NNPP radioactivity in a few sediment samples at levels less than 100 times below comparable naturally occurring radionuclides.

g. Commission Conclusion on Mitigation/Monitoring. The Commission finds that the above-discussed mitigation measures adequately address and mitigate project estuarine fill impacts, impacts to eelgrass, least terns, and other water quality impacts. This finding is based on the fact that, where appropriate, the Navy has included sufficient monitoring efforts, including provisions for modifications and/or remediation should monitoring efforts indicate the need for such additional measures. With these mitigation and monitoring components, the Commission is able to conclude that the proposed mitigation and monitoring provisions are adequate to address project impacts.

6. Commission Conclusion on Marine Resources/Environmentally Sensitive Habitat. Based on the above information and analysis, the Commission finds that: (1) the project is an allowable use for estuarine fill under Section 30233(a) of the Coastal Act; (2) the dredge materials have been sufficiently tested and the proposed disposal activities are given the sediment test results; (3) with the mitigation and monitoring measures incorporated into the project, the project represents the least damaging feasible alternative; (4) dredged material will be disposed within the San Diego Bay estuary; (5) dredging and disposal impacts will be adequately monitored, with

provisions for modifications and/or remediation should circumstances justify it; (6) adequate mitigation is being provided for estuarine fill and impacts to eelgrass and least terns; (7) the functional capacity of the San Diego Bay estuary will not be affected; and (8) oil/hazardous substances spill risks and radiation hazards will not be increased. The Commission therefore concludes that the project is consistent with the marine resources, water quality, diking/filling/dredging, environmentally sensitive habitat, and oil spill and other hazardous substance risk policies (Sections 30230-30233 and 30240) of the Coastal Act.

B. Public Access and Recreation.

1. Coastal Act Policies. Sections 30210 through 30212 of the Coastal Act require the maximization and maintenance of public access and recreation opportunities. Section 30210 provides that: "... maximum access ... and recreational opportunities shall be provided for all the people consistent with public safety and military security needs" Section 30212 requires the provision of public access to be provided in new development projects located between the first public road and sea, again, consistent with military security and public safety needs. Section 30252 provides that new development should maintain and enhance public access to the coast by, among other things, providing adequate parking facilities or providing substitute means of serving the development with public transportation. Section 30250 provides that:

(a) New ... industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.

Section 30253(5) provides that new development shall:

(5) Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.

Section 30254 provides that:

Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.

The public access and recreation issues potentially raised by the project include: (1) whether physical public access along the NASNI shoreline should be provided; (2) spillover impacts off-base such as traffic and parking congestion, which can affect access and recreation.

2. Physical Access at NASNI. A small area in the southeast corner of NASNI is available to the public. The remainder of the base is fenced and off-limits to the public due to military security needs. In reviewing past consistency determinations for Navy activities at NASNI (CD-96-94, CD-39-84, CD-10-85, CD-14-86, and CD-95-95), the Commission has traditionally accepted Navy assertions of limited access due to military security needs, and only where a new project would pose a burden on public access would the Commission consider whether additional public access would need be provided in order to find the project consistent with Coastal Act public access policies. For example, in reviewing the previous Navy consistency determination for the Homeporting of the first nuclear carrier (CD-95-95), the Commission determined no physical access mitigation measures were necessary. This was based on the fact that the project did not generate burdens on public access and because the project also benefited public access and recreation, due to substantial amounts of beach replenishment from sand disposal on the region's beaches. The proposed project would not provide the beach replenishment benefits that the previous Homeporting project did; nevertheless the project would not affect physical access to the shoreline. To the extent access and recreation issues are raised, they would relate to traffic and parking concerns, which are addressed below.

3. Traffic and Parking. Access to the "mainland" from Coronado is by two routes. From San Diego, access is via the San Diego-Coronado Bay Bridge. From Imperial Beach, access is via Silver Strand Boulevard (Exhibit 1). Both of these routes are also major recreation through routes, and Coronado itself is a popular visitor destination point, due to its attractive character and location adjacent to both the San Diego Bay and Pacific Ocean, with its attractive sandy beaches and scenic views.

Traffic impacts of development intensification can become access/recreation impacts, if they occur during peak recreational periods and preempt limited traffic capacity available to recreational users. Navy personnel who park off-base can adversely affect recreation by taking up parking that would be available to recreational users. In analyzing access burdens posed by the project, the Commission must analyze whether overflow traffic and parking in the adjacent community of Coronado would adversely affect access and recreation, considering both construction and operation impacts. Conversion from two CVs to two CVNs would entail additional construction traffic and parking needs; and a CVN crew is larger than a CV crew (and maintenance requirements for a CVN also involve increased personnel).

For both the original and the currently proposed Homeporting projects, the City of Coronado has expressed concerns over traffic congestion increases from the project. In

reviewing the previous Homeporting consistency determination (CD-95-95), the Commission noted that the Navy and the City had disagreed over whether the project would increase traffic and parking congestion. At that time the City had asserted that the project would result in significant adverse effects on traffic from construction and operation activities associated with the Homeporting of one or more nuclear carriers, whereas the Navy maintained that the project would not increase parking and traffic congestion (regardless of whether recreation or commuter peaks are considered), in part due to overall base decreases in personnel.

After weighing these arguments, the Commission resolved this disagreement as follows:

In considering these points the Commission must the potential increases against the fact that most of the traffic congestion and parking concerns related to daily and commute periods, as opposed to weekend and holiday peak recreation traffic and parking, and the overwhelming recreational benefits of almost 8 million cu. yds. of sand being added to the region's littoral beach systems. The Commission also notes that it retains the authority to protect public access from measures considered by the City in response to conflicts with the Navy. The City nevertheless has a valid point that it bears the impacts of traffic and parking congestion, should they occur in relation to the project. The Commission strongly urges the Navy to work diligently with the City in addressing its concerns. However, the Commission concludes that the project's access and recreation benefits outweigh its impacts, and that the project, as proposed, is consistent with the public access and recreation ... policies ... of the Coastal Act.

The proposed project would not provide the significant benefits that accrued from the beach replenishment component of the original Homeporting project. Therefore the Commission must once again examine whether the proposal would generate burdens on recreational traffic. For the proposed additional two new carriers, the Navy's makes essentially the same argument as before, which is that the relatively small increment of additional traffic generated by a nuclear carrier (CVN) as opposed to a conventional carrier (CV) is insignificant and offset by overall base personnel decreases over time (Exhibit 14). The Navy's EIS analyzed the traffic issues in detail, reviewing both construction-related and operation-related traffic generation.

Addressing construction impacts, the EIS states:

“Construction activities would generate an estimated 200 additional trips per day for light-duty vehicles and up to 100 truck trips per day (50 round trips). When compared to the existing volume of 32,000 total trips per day and 850 truck trips per day generated by the base, the additional

short-term construction traffic would be less than significant, particularly since it is temporary.

To minimize construction-period impacts the Navy proposes:

... to control the shift times and truck delivery times to minimize impacts during peak periods, to impose measures to reduce the number of construction worker trips, and to continue working cooperatively with the City of Coronado to avoid particular times and routes that are problematic from a traffic perspective.

Addressing a commitment made during the previous Homeporting project, the Navy considered barging construction material to the site; however the EIS rejected this option as infeasible "...for most deliveries because of scheduling constraints and costs. The Navy is planning to use barges for major deliveries to the extent possible where scheduling and logistical constraints can be overcome."

Addressing operation impacts, the EIS estimates that personnel increases due to a change from two CVs to two CVNs is minor for the 96% of the time when two carriers are in port (an approximately 1.5% increase, or a 102 person increase from 6,332 (existing personnel loading) to 6434 (with two additional CVNs))(Exhibit 15). For the other 4% period (13 days/year) when three carriers are in port, the increase in personnel would be 3,319 (a 50% increase over the 6,332 baseline number). When special maintenance activities are occurring for the CVNs, maintenance which would occur for a 6 month period and would occur two times over 6 years for each CVN (this averages to one 6-mo. maintenance activity per year), an additional 450 employees would relocate to NASNI. Nevertheless, the EIS maintains that "... the additional personnel associated with the [maintenance] activities would be offset by the planned decrease in personnel at other NASNI operations and that there would be no increase in commuter traffic volumes." To support this conclusion, the EIS notes that "NASNI has experienced a decrease of about 2,500 personnel since the BRAC EIS was prepared in 1995. ... Thus, the conclusion of no impacts stated in the BRAC EIS is still valid for this EIS."

In terms of trip generation, for operational impacts the EIS states that 102 additional personnel translates to 27 vehicle trips per peak hour and 150 vehicle trips per day for 96% of the time. For the 13 days when three carriers are in port, this would increase to 879 peak hour trips and 4,879 daily trips. The EIS states:

While the impact on transportation would be substantial on these days, it would be intermittent and short-term, and therefore less than significant. The short-term impacts on peak hour traffic would be minimized by staggering the starting and ending times of the daytime duty for one of the CVNs by at least one hour as compared to the other two CVNs in port.

Because the Navy believes the traffic impacts to be insignificant and offset by overall base personnel decreases, the Navy's EIS concludes no mitigation measures are necessary. The EIS also states that any parking needs will be provided within NASNI. At the same time the EIS states that:

...the Navy is committed to working cooperatively with the City of Coronado in efforts to reduce traffic congestion. Ongoing Navy strategies designed to reduce the level of traffic generated by NASNI include a ferry system, carpool/vanpool programs, installation of bicycle racks on buses and throughout the air station, a guaranteed ride home program (for rideshare users with a mid-day emergency), and an educational program to promote these strategies. The Navy has completed a study of the Main Gate so that the entrance would be aligned with 3rd Street at Alameda Boulevard and the exit aligned with 4th Street. This project has been submitted to be included in the military construction program. Furthermore, on those rare occasions when all three "homeported" carriers might be in port simultaneously, once carrier would start its work day either earlier or later than the others to lessen the impact on peak hour traffic. Commander Naval Air Force U.S. Pacific Fleet will direct this procedure.

The Environmental Health Coalition (EHC) has also expressed concerns over the project, including questioning the Navy's "baseline" assumption of three carriers in port. EHC notes that at least one of the carriers has not been at NASNI since 1994, and, therefore, "...many of the offset impacts noted in the FEIS are at best untrue, and more likely, disingenuous." (See Appendix A – Correspondence)

In considering these points the Commission believes the Navy's baseline assumptions appear valid given the historical homeporting of three carriers over the vast majority of time during the past few decades, and that the proposed conversion from CVs to CVNs raises only minor concerns with respect to recreational traffic (Exhibit 16 and 17). Most of the traffic congestion and parking concerns in Coronado are related to daily and commute periods, as opposed to weekend and holiday peak recreation traffic and parking. The Commission again notes that the City bears the impacts of traffic and parking congestion that may occur and again strongly urges the Navy to work diligently with the City in addressing these concerns. However, the Commission concludes that the project, as proposed, is consistent with the public access and recreation (including traffic, parking, and cumulative impacts) policies (Sections 30210-30212 and 30250-30254) of the Coastal Act.

C. **Scenic Resources**. Section 30251 of the Coastal Act provides:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development

shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.

The consistency determination states that:

The project site is located in the northeastern corner of NASNI and is visible from many public areas across the bay and from some areas of Coronado Island. The scale and general appearance of the existing buildings appear today largely as they did in the 1940s; the overall appearance is that of a military establishment that has been and will continue to be an integral part of San Diego's historical and visual environment. Although NASNI is highly developed, alterations to the NASNI shoreline need to be carefully designed due to their visibility from many offsite public viewing points.

The Commission noted in its concurrence with CD-95-95 that the Navy adopted an architectural plan for NASNI, entitled "Base Exterior Architectural Plan," which designates the general project area a "Historic and Scenic Area." This plan contains policies to retain the aesthetic appearance at NASNI, including retention of a "functional and visually cohesive station environment consistent with good planning, design, and environmental policies and practices." The plan recommends enhancing the historic buildings by removing incompatible structural additions and improving the view of the area from off-station (i.e., from the bayfront).

The subject consistency determination states that the proposed homeporting facilities would generate only minor effects on public views. The construction of the Pier J wharf, a CVN warehouse, a fleet support building, an equipment laydown building, a new electrical substation and utility connections, lighting, security fencing, and the berthing of two CVNs (which are visually similar to the slightly shorter CVs they replace) at Berths J and L are actions which would only slightly alter the present appearance of this portion of NASNI. Facility improvements would not disrupt any historic structures and would incorporate architectural features (style, color, texture) consistent with the aforementioned Base Exterior Architecture Plan.

The homeporting facilities and infrastructure needed for the addition of two CVNs would be visually consistent with the existing marine-industrial activity of the area. While the nature of the land and seascape consistently changes with vessels calling and leaving the area, three homeported aircraft carriers and other Navy vessels have been an integral element of the public viewshed towards NASNI for decades. Therefore, operational impacts on aesthetics from the homeporting of two CVNs (replacing two CVs) would not be significant.

In conclusion, given the highly developed existing appearance of NASNI, the fact that proposed buildings would be designed to be visually compatible with this existing appearance, and the fact

that the visual appearance of a CVN is very similar to that of the CVs they would replace, the Commission finds that scenic public coastal views would not be significantly adversely affected by the project, that visual effects have been minimized by the Navy in their project design, and that the project is consistent with Section 30251 of the Coastal Act.

D. Archaeology. Section 30244 provides:

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

The cultural, historic, and archaeological resources of NASNI were examined during reviews of previously approved projects, including the homeporting project covered by CD-95-95. The FEIS for the proposed project reports that:

A cultural resources inventory that included the project area (Chambers and Consultants and Planners 1982) did not identify any prehistoric archaeological sites in the northeastern corner of the base.

The consistency determination states that:

Excavation of the 1.5-acre mitigation site along the western edge of North Island would take place only in historic-period fill, meaning that no significant archaeological sites or other cultural resources would be disturbed by construction. Therefore, this action would have no impact on cultural resources.

Demolition of Pier J/K, its replacement with a new wharf, and the construction of the three new structures would not alter structures within the NASNI Historical District (NASHD), nor would these activities alter the setting of the NASHD. Therefore, proposed facility improvements would have no adverse impacts on historic resources.

Construction of the homeporting facilities at NASNI would include minor changes to the existing quay wall (Berth L). The quay wall is over 363 feet away from the NASHD, the closest significant cultural resource. Because of this distance, facilities improvements in this area would not alter any significant cultural resources, alter the setting or feeling of significant cultural resources, or result in the neglect of any historic properties. Therefore, these facilities improvements would have no adverse impacts on cultural resources.

In addition, the FEIS notes that Pier J/K was constructed in 1989 and is therefore too recent to be included in the National Register of Historic Places. The FEIS also reports that the State Historic Preservation Officer concurred with the Navy's determination that

the proposed dredging, excavation, and upland facility construction would have no adverse effects on cultural resources.

The Navy concludes that the proposed construction of facilities and infrastructure to support the homeporting of two CVNs at NASNI would not alter any significant cultural resources, alter the setting or feeling of significant cultural resources, or result in the neglect of any historic properties. The Commission agrees with the Navy's determination and finds that the project is consistent with Section 30244 of the Coastal Act.

E. Geologic Hazards. Section 30253 of the Coastal Act provides that new development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

The NASNI is located in a highly active seismic region and is underlain by artificial hydraulic fill deposits. The Spanish Bight fault, a segment of the Rose Canyon fault zone, crosses the proposed home port location at NASNI in a northeast/southwest direction (Exhibit 18). While no large earthquakes are attributed to the Rose Canyon fault zone during historic times, the Spanish Bight fault is considered active, indicating fault movement within the past 11,000 years. The Navy has analyzed the potential geologic hazards (seismicity, fault rupture, liquefaction, settlement, flooding) associated with the project and included a number of minimization and mitigation measures to assure that these hazards are adequately addressed and brought to a level of less than significant. These measures are discussed in detail in the Final EIS for the project and are summarized below:

- The project design incorporates the criteria and requirements for the seismic design of buildings on defense installations set forth in the Department of the Army, the Navy, and the Air Force technical manual (TM) 5-809-10/NAVFAC P-355/AFM 88-3 Seismic Design for Buildings.
- The seismic design includes two potential fault rupture and displacement scenarios in the vicinity of the proposed NASNI home port location. Combining these two scenarios, the fault displacement associated with a ten percent probability of exceedance in a 50-year time frame is estimated to be

approximately 0.4 feet. It is anticipated that fault movements on this order would not cause the collapse of the proposed CVN wharf.

- The project design includes mitigation for fault rupture, including: additional bollards for emergency reconfiguration of mooring; emergency isolation valves to prevent releases of hazardous materials from utility pipelines; and wharf seismic joints to limit damage in the event of differential displacements.
- The project design incorporates the 1997 Uniform Building Code, and the criteria for the seismic design of waterfront structures provided in NCEL Report R939 and Naval Facilities Engineering Command Design Manual DM26.
- The berthing structure is designed in accordance with guidelines in military design manuals (Waterfront Facilities Criteria Manuals; Harbor and Coastal Facilities Design Manuals; Design Criteria for Earthquake Hazard Mitigation of Navy Piers and Wharves). In order to avoid potential damage to structures due to ground shaking, liquefaction, or differential settlement of foundation soils, berthing structure fill materials would be compacted using standard geotechnical engineering techniques.
- An earthquake preparedness plan is in place at the proposed project location including computer-based command and control, which is networked throughout the state and approved by the California Office of Emergency Services and the California Department of Health.

The Navy concluded in the FEIS that earthquake-related hazards cannot be avoided in the region and, in particular, in the coastal area of the NASNI where hydraulic fill is pervasive. However, implementation of the above design measures is expected to reduce the adverse effects of seismically-induced structural failure and mitigate the geohazard impacts to less than significant. With the above measures, the Commission finds that the Navy has adequately anticipated and designed for geologic forces and related hazards at the homeport location. In conclusion, the Commission finds that the project will minimize risks to life and property in areas of high geologic, flood, and fire hazard, assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area. The Commission therefore finds the project consistent with Section 30253 of the Coastal Act.

F. Air Quality. Section 30253(3) provides: that new development shall:

(3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.

Section 30414 provides:

(a) The State Air Resources Board and air pollution control districts established pursuant to state law and consistent with requirements of federal law are the principal public agencies responsible for the establishment of ambient air quality and emission standards and air pollution control programs. The provisions of this division do not authorize the commission or any local government to establish any ambient air quality standard or emission standard, air pollution control program or facility, or to modify any ambient air quality standard, emission standard, or air pollution control program or facility which has been established by the state board or by an air pollution control district.

(b) Any provision of any certified local coastal program which establishes or modifies any ambient air quality standard, any emission standard, any air pollution control program or facility shall be inoperative.

(c) The State Air Resources Board and any air pollution control district may recommend ways in which actions of the commission or any local government can complement or assist in the implementation of established air quality programs.

The Federal Clean Air Act allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as the federal National Ambient Air Quality Standards (NAAQS). The California Clean Air Act of 1988 established California Ambient Air Quality Standards (CAAQS) for criteria pollutants and additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. The San Diego County Air Pollution Control District (SDCAPCD) is the local agency for the administration and enforcement of air quality regulations. The California Air Resources Board (CARB) still maintains regulatory authority over mobile source emission statewide.

The San Diego Air Basin is in attainment of the NAAQS for all pollutants except ozone; the U.S. Environmental Protection Agency (EPA) considers the region to be a serious ozone nonattainment area. EPA is responsible for enforcing the Federal Clean Air Act of 1970 and its 1977 and 1990 amendments. On November 30, 1993, the EPA promulgated its rules for determining general conformity of federal actions with state and federal air quality implementation plans. In order to demonstrate conformity with the local State Implementation Plan, a project must clearly demonstrate that it would not: (1) cause or contribute to any new violation of any standard in the area; (2) interfere with provisions in the applicable State Implementation Plan for maintenance or attainment of air quality standards; (3) increases the frequency or severity of any existing violation of any standard; or (4) delay timely attainment of any standard, any interim emission reductions, or other milestones included in the State Implementation Plan for air quality. The EPA has developed specific procedures for conformity determinations for federal actions that include

preparing an assessment of emissions associated with the action based on the latest and most accurate emission estimate techniques.

The impacts on air quality associated with the current proposal to homeport two CVNs at NASNI would be generated by land- and water-based machinery used in the construction of facilities and infrastructure and from the operations of the CVNs while berthed at NASNI. Regarding construction activities, equipment usage and estimated emissions from dredging the turning basin/quaywall area and the mitigation site, disposing sediments at the enhancement site, and constructing the dike, wharf, and upland structures were based on recent construction activities for homeporting the first CVN at NASNI (CD-95-95). The FEIS reports that emissions from these activities would not exceed annual significance thresholds and air quality impacts would be insignificant.

Operational emissions associated with providing the capacity to homeport a second additional CVN, based on the presence of the vessel at NASNI by 2005, would include activities from the addition of one CVN, the decommissioning of one CV, and the addition of a second CVN in port at the same time as the other two homeported carriers at NASNI for 13 days per year. The FEIS reports that the addition of two additional CVNs by the year 2005 would reduce annual emissions of nitrogen oxides, sulfur dioxide, and particulate matter within the NASNI project region, mainly due to the elimination of the fuel oil-fired CV power plants. The project would increase annual emissions of carbon monoxide (CO) and volatile organic compounds (VOC), due to private vehicle use of crew dependents. The Navy states that because population levels at NASNI are expected to decrease in future years even with the homeporting of the two CVNs, future traffic generated by NASNI in 2005 will not exceed historical levels. As a result, the Navy states that traffic emissions associated with the proposed homeporting are not expected to exceed any ambient air quality standards within roadways in proximity to NASNI, and that air quality impacts are therefore not significant.

The FEIS addresses radiological air emissions from the homeporting of two CVNs by referencing the following section of the FEIS regarding homeporting one CVN:

The applicable National Emission Standards for Radionuclide Emissions from project vessels and facilities are contained in 40 CFR 61, Subpart I. Similar facilities and ships at other Navy bases are exempt from the reporting requirements of 40 CFR 61.104(a), consistent with the criteria outlined in 40 CFR 61.104(b), since their emissions result in exposures to the public that are less than 10 percent of the standards established by the EPA in 40 CFR 61.102 (NNPP 1997). Thus since radionuclide air emissions are not expected to increase beyond the levels established at other Navy bases, there would be no significant impacts on air quality due to NNPP radioactivity from providing the capacity to homeport one additional CVN at NASNI.

In conclusion, the Commission finds that the requirements to be imposed by the SDCAPCD through its permit process on the proposed homeporting of two CVNs at NASNI will assure that

the project will be consistent with the Coastal Act Section 30253 requirement that new development be consistent with applicable SDCAPCD air quality requirements.

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