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November 10, 2014

To: Coastal Commissioners and Interested Parties

From: Mark Delaplaine, Manager, Energy, Ocean Resources and Federal Consistency
Joseph Street, Environmental Scientist

Subject: **Addendum to CD-0003-14 – Naval Base Coronado Coastal Campus Project**

This addendum provides proposed revisions to the staff report, a revised ESHA determination memorandum from the Commission's staff ecologist, ex parte communications and written correspondence. The proposed modifications do not change staff's recommendation that the Commission **object** to CD-0003-14.

Revisions to the Staff Report

Additions are shown below in underline and deletions in ~~strikethrough~~.

Page 2, Summary of Staff Recommendation, second paragraph, beginning at line 10:

> "Staff therefore recommends the Commission find that the proposed siting of the Coastal Campus, within ESHA, would be **inconsistent** with the environmentally sensitive habitat policies of the California Coastal Management Program (CCMP) (Coastal Act Section 30240), because it would result in the removal or disturbance of: (a) a large fraction of the Nuttall's lotus currently inhabiting the project site; (b) several individuals of other CNPS-listed plants; ~~and~~ (c) a small patch of coastal sage scrub supporting sensitive plant species within the project footprint~~.~~; and (d) areas of southern foredune habitat within the footprint of the new northern entrance road and along the route of a new water pipeline on the western perimeter of the site."

Page 2, Summary of Staff Recommendation, third paragraph:

> ~~"In addition, several road improvements would be located within ESHA, and a new water line would disturb several acres of southern foredunes habitat along the western boundary of the site. The water line would also involve trenching and pipe installation in a wetland,~~

~~and while this pipeline installation may be an allowable use under Coastal Act Section 30233(a), the Navy has not established that alternatives avoiding wetland fill are infeasible. The Navy has also not conducted wetland delineations using Coastal Act criteria in the area potentially affected by the water line.~~ The southern portion of the proposed water line would retain and reuse an existing pipeline, and thus would avoid the need for trenching and fill within wetlands and vernal pools. The staff therefore recommends that the Commission find the project **~~in~~consistent** with the wetland policy of the CCMP (Coastal Act Section 30233) ~~based on lack of information~~."

Page 2, Summary of Staff Recommendation, fifth paragraph:

"Visual modifications would be most prominent from the northern approach along SR-75 and the Bayshore Bikeway. While most of the new structures would be similar in height and scale to existing structures, the project also includes a 120-foot tall parachute drying tower that would be highly obtrusive. However, relocating this structure to a different NBC installation would result in significant logistical problems, and generate additional traffic and vehicle trips in potential conflict with other Coastal act policies (e.g., coastal access, vehicle miles traveled). The Navy has agreed to examine siting alternatives at SSTC-S to minimize the tower's visual impact. To date, the Navy has not provided ~~any visual impact or feasibility analysis of alternative locations for this structure, or~~ sufficient information to enable the Commission to determine whether the siting, design features and appearance of Coastal Campus structures would be visually compatible with the surrounding area. The staff thus recommends that the Commission find that the proposed project is **inconsistent** with the visual and scenic resources policy of the CCMP (Coastal Act Section 30251) based on lack of information."

Page 7, third paragraph, line 5:

"Assuming the informational deficiencies identified in the following procedural discussion below (and elaborated on in Sections IV. ~~D.,~~ E. and F. of this report) can be resolved, the Commission believes that it would be possible to bring this project into compliance with the CCMP to the maximum extent practicable if the Navy were to implement the following measures: …"

Page 7, first measure necessary to achieve CCMP consistency:

"1. **Avoidance of Nuttall's lotus, CNPS Rank 1 and 2 plant species, southern foredunes and Coastal sage scrub:** The proposed development shall be redesigned to avoid the removal or disturbance of all occurrences of Nuttall's lotus (*Acmispon prostratus*), other CNPS Rank 1 and 2 rare and endangered plant species, southern foredune habitat, and existing ~~stands~~ areas of Diegan coastal sage scrub supporting rare plants at these sites. The redesigned project shall also include adequate buffers between development and ESHA, including buffers of at least 100 feet from wetlands, vernal pools, coastal sage scrub and maritime succulent scrub, and southern foredunes, and at least 25 feet from ~~stands of~~ areas supporting Nuttall's lotus."

Page 8, Procedure if the Commission Objects Based on Lack of Information, beginning with second paragraph:

"As fully described in Sections IV. ~~C., D.,~~E. and F.~~, G., and I.~~ of this report, below, the Commission has found this consistency determination to lack the information that the Commission has requested from the Navy to enable the Commission to determine whether the proposed project is consistent to the maximum extent practicable with Sections ~~30233,~~ 30251~~,~~ and 30253(a) and (b) of the Coastal Act. In order to determine the project's consistency with the CCMP, the Commission has requested that the Navy provide it with the following necessary information:

~~1. **Wetland delineations:** The Navy shall conduct additional wetland delineations, using the Coastal Act definition of "wetland" (Coastal Act Section 30121 and 14 CCR §13577(b)(1)), for areas adjacent to the proposed Option 1 water line easement, and for any additional water line route alternatives (see below) passing close to previously-identified wetlands.~~

~~2. **Analysis of water line route alternatives:** The Navy shall conduct an environmental impacts and feasibility analysis of alternative configurations of the proposed water line that would avoid the dredging and fill of wetlands (as defined under the Coastal Act). The considered alternatives shall include the placement of the water line beneath Hooper Blvd. and previously developed portions of the site.~~

~~3~~1. **Coastal Flooding and Erosion Hazards Analysis:** The Navy shall prepare a site-specific analysis of coastal flooding and erosion hazards at SSTC-S over the full anticipated life of the proposed project. The analysis should project the extent of flooding or inundation that could occur over the anticipated life of the project under both low and high sea level rise scenarios, and under a range of conditions that should include high tide, storm surge, elevated water levels due to El Niño events and warm phases of the Pacific Decadal Oscillation, and 100-year storm events. Projections of flooding and inundation should take into account wave run-up during high wave events, and the combination of seasonal beach erosion and long-term erosion under future high sea level conditions. The study should also analyze the extent of beach and dune erosion that could occur from current processes as well as future sea level rise over the life of the project. In combination, the flooding/inundation and erosion analyses should be used to delineate the areas of the site that can be safely developed, assuring geological stability, without reliance on future shoreline protection devices. The study should also analyze potential future migration of the coastal dune system, taking into account both sea level rise and erosion trends, and project the location of the dune system in relation to the proposed development footprint.

~~4. **Alternatives Analysis for Siting and Design of Paraloft Facility**: The Navy shall provide a detailed analysis of potential alternatives for off- and onsite relocation of the parachute tower, including consideration of the visual impacts and feasibility of each alternative.~~

~~5~~2. **Building Design Criteria and Plans:** The Navy shall provide an ongoing review mechanism that will enable the Commission to be assured that ~~its~~ building siting and design, and final plans for structures, would be visually-compatible with the surrounding area. Ideally, this mechanism should include an agreement to seek the review of the City of Coronado's Design Review Commission, or otherwise demonstrating that its design criteria are consistent to the maximum extent practicable with local visual resource policies.

Specifically, the information is needed to fully analyze the project under the ~~wetland (Section 30233(a)),~~ hazards (Section 30253(a), (b)~~),~~ and visual resources (Section 30251) policies of the CCMP."

Page 16, first paragraph, beginning with line 3:

~~"(An~~ The "Option 2" water line route would ~~have~~ follow~~ed~~ the Option 1 route across the northern portion of SSTC-S, but would then ~~have~~ turn~~ed~~ eastward into the development footprint to connect with the existing water line. ~~Under Option 2,~~ ~~t~~The existing water line, running from the development footprint southward into Imperial Beach, would be ~~abandoned in place and replaced along the same easement.)~~ retained, with no trenching or ground disturbance required along its route in the areas south of the development footprint. In November 6, 2014, correspondence with Commission staff, the Navy has committed to implementing the Option 2 route."

Page 22, indented quotation following the first paragraph:

> *"~~At the Silver Strand Training Center – South the population of Nuttal's lotus is very significant for the species' persistence, the species is rare and declining due to loss of habitat, and the area supporting the species~~ Nuttal's lotus is rare and declining due to loss of habitat, and the area supporting many thousands of the species at the Silver Strand Training Center – South clearly could be easily disturbed or further degraded by human activities and developments."*

Page 27, third paragraph, beginning with line 9:

The Commission's staff ecologist has ~~determined that the seasonal ponds at SSTC-S that support characteristic vernal pool vegetation and/or the federally-listed San Diego fairy shrimp are rare and especially valuable for their role in the ecosystem of providing habitat for a rare and unique biota, and are easily degraded by human activities, and thus meet the definition of an ESHA under Coastal Act Section 30107.5~~ stated that seasonal ponds that support characteristic vernal pool plants or the federally Endangered San Diego fairy shrimp are of very high conservation value. (**Exhibit 9**, p. 3).

Page 27, fourth paragraph, beginning with line 3:

"The existing portion of the "Option 2" alignment of the ~~proposed~~ water utility line ~~would, if implemented,~~ crosses beneath a ditch connected to vernal pool #10 (**Exhibits 6b, 10**)~~,~~. Replacing this portion of the water line, as initially proposed by the Navy, would require trenching through or drilling beneath the vernal pool extension, with potential adverse effects on San Diego fairy shrimp. ~~but the Navy has since abandoned this configuration after its informal consultation with the U.S. Fish and Wildlife Service (FWS) raised concerns about potential impacts to fairy shrimp.~~ In response to this concern, raised by the U.S. Fish and Wildlife Service (USFWS) during its informal consultation, the Navy elected to modify the Option 2 water line by reusing the existing pipeline across the southern portion of the site (i.e., this existing pipe would no longer be replaced with a new pipeline). The consistency determination states:

> *Focused wildlife habitat assessments concluded that the area is suitable habitat for the Federally-listed San Diego fairy shrimp … Surveys conducted in 2003, 2010 and 2011 confirmed presence of San Diego fairy shrimp, and one basin (vernal pool 10) is occupied and within the proposed Option 2 alignment of the water line relocation element. The main part of the basin is outside the proposed water line relocation; however, a small drainage feature that heads west toward the beach from basin 10 would be impacted by construction of Option 2 alignment … During consultation discussions, USFWS … raised concerns over impacts to fairy shrimp from the proposed directional drilling under vernal pool 10 for Option 2 … Accordingly, the Navy has decided to remove work on the southern portion of the water line relocation to avoid these impacts.*

In response to Commission staff concerns about the adverse impacts to wetland and southern foredune areas from the Option 1 route, the Navy now proposes to implement the Option 2 route, without replacing the existing portions of pipe, and thus avoiding the need to trench or drill within vernal pool habitat."

Page 29, second paragraph, beginning with line 1:

"The Commission agrees with the Navy's conclusion that the ~~proposed~~ project~~, as modified to eliminate the "Option 2" water line alignment,~~ as currently configured, would avoid direct impacts to San Diego fairy shrimp and vernal pool habitat."

Page 30, second paragraph, beginning with line 6:

"In addition, the installation of a new water line along either the Option 1or Option 2 routes (*see* above) would require trenching and fill within ~~2.61 acres of~~ areas of southern foredune habitat along the western boundary of the site. As of November 6, 2014, the Navy has proposed to implement the Option 2 route, which would avoid impacts to southern foredunes across the southern half of the site, but would disturb foredune habitat in the northern half of the site and near the new northern entrance (**Exhibits 6a, 6b**) (e-mail, D. McKay to J. Street, 11/6/2014). ~~Based on its location (as shown in **Exhibit 6b**),~~ tThe initial installation of the pipe would result in the removal of several occurrences of CNPS-listed plant species, including Nuttall's lotus, Coast woolly-heads, ~~Orcutt's pincushion, Red~~

~~sand-verbena,~~ and Southwestern spiny rush,[1] growing along the ~~Option 1~~ water line easement (**Exhibit 6b**). While it is possible that the dune vegetation removed during the pipe installation would eventually recover, future maintenance activities along the water line easement would guarantee some degree of periodic disturbance. As discussed previously, there appear to be feasible alternative configurations of the water line that would ~~place~~ route it ~~beneath an existing road (Hooper Blvd.) across the southern portion of the site and~~ through previously developed or disturbed areas within the proposed Campus footprint (**Exhibit 6e**). These configurations would avoid disturbance of southern foredune ESHA and special status plant species."

Page 36, Environmentally Sensitive Habitat Areas Conclusion, first measure needed for CCMP consistency:

"1. **Avoidance of Nuttall's lotus, CNPS Rank 1 and 2 plant species, southern foredunes and Coastal sage scrub:** The proposed development ~~at SSTC-S and NASNI~~ shall be redesigned to avoid the removal or disturbance of all occurrences of Nuttall's lotus (*Acmispon prostratus*), other CNPS Rank 1 and 2 rare and endangered plant species, southern foredune habitat, and existing ~~stands~~ areas of Diegan coastal sage scrub supporting rare plants at these sites. The redesigned project shall also include adequate buffers between development and ESHA, including buffers of at least 100 feet from wetlands, vernal pools, coastal sage scrub and maritime succulent scrub, and southern foredunes, and at least 25 feet from ~~stands of~~ areas supporting Nuttall's lotus."

Page 38, first paragraph, continuing through the end of the Wetlands finding:

"The Commission's staff ecologist agrees that, while a wetland delineation based on the Coastal Act definition may have identified additional wetland areas, these areas would likely occur in the same general (i.e., the low-lying southern portions of SSTC-S) as the Army Corps-defined wetlands rather than in the proposed development footprint (**Exhibit 9**, p. 2-3). The freshwater marsh referenced in the Navy's response, though not an Army Corps jurisdictional wetland, was nonetheless correctly identified as a wetland in the Navy's analysis. The staff ecologist has also noted that the small stand of Southwestern spiny rush (*Juncus acutus*), a plant often associated with salt marsh habitats, occurring in the extreme northwestern corner of the site within the proposed Option 1 water line easement (**Exhibit 6b**), likely represents a non-wetland occurrence of this species based on the surrounding dune topography and well-drained soils (J. Dixon, pers. comm.).

As of November 6, 2014, the Navy has committed to implementing a modified version of the Option 2 water line configuration, following a similar route, but eliminating the previously-planned replacement of the existing pipeline across the southern portion of the site (e-mail, D. McKay to J. Street, 11/6/2014). Instead, the Navy will retain and reuse the existing pipeline, avoiding the need to conduct trenching in the freshwater marsh area or drilling beneath vernal pool #10. Thus, the proposed water line route would avoid all impacts to wetlands. The Commission's ecologist has concluded that additional wetland delineations using State criteria would be necessary only for a water line route near the previously-identified, federal wetlands in the southern areas of the site (**Exhibit 9**). Thus,

with the adoption of the modified Option 2 waterline configuration, no additional wetland delineations are necessary.

However, given that the Option 1 water line configuration would disrupt wetland areas in the southwestern corner of the site, near the YMCA Camp, the Commission's staff ecologist believes that this and other areas potentially affected by proposed water and other utility lines should be surveyed for wetlands meeting the state one-parameter definition (**Exhibit 9**, p. 3). For example, Commission staff notes that a small stand (100-200 individuals) of Southwestern spiny rush (*Juncus acutus*), a plant often associated with salt marsh habitats, occurs in the extreme northwestern corner of the SSTC-S, within the proposed Option 1 water line easement. *Juncus acutus* is considered a facultative wetland plant meaning that this species usually occurs in wetlands, but can at times occur in other areas (Lichvar et al 2014). Its presence is an indication that this area could comprise of "land where the water table is at, near or above the land surface long enough … to support the growth of hydrophytes" (14 CCR §13577(b)(1)), and could thus qualify as a wetland under the Coastal Act definition. A one-parameter wetland survey would be necessary to determine whether this area contains a wetland or "upland" occurrence of this species for the purposes of Coastal Act Section 30233 analysis.

Dredging and Fill of Coastal Wetlands

Coastal Act Section 30233 restricts the Coastal Commission from authorizing a project that includes the dredging and fill of coastal wetlands unless it meets three tests. The first test requires that the proposed activity fit into one of seven use categories enumerated in Coastal Act Section 30233(a). The second test requires that there be no feasible less environmentally damaging alternative. The third and last test mandates that feasible mitigation measures be provided to minimize the project's adverse environmental effects.

1) Allowable Use Test: One of the seven allowable uses of dredging and fill under 30233(a) is "incidental public service purposes." To qualify as an incidental public service purpose, the dredging and fill of coastal waters being undertaken must demonstrate that: (1) it provides a "public service" insofar as it confers benefits to the public, either at large, or to those served by the public entity; and (2) is "incidental," within the meaning of that term as it is used in the Coastal Act (i.e. is ancillary and appurtenant to an existing public service purpose). The example used in Section 30233(a)(4) also specifies that temporary effects, such as those associated with a pipeline burial, can qualify as "incidental." In the present case, the waterlines proposed to be laid through wetland areas on the project site would serve to connect the development to the public water supply, and can be considered both incidental to the campus project, as well as temporary. The Commission thus concludes that the water lines qualify as an "incidental public service" and are an allowable use under Section 30233(a)(4).

2) Alternatives Test: Pursuant to Section 30233(a), the Commission must additionally find that there are no feasible less environmentally damaging alternatives to the proposed dredging and fill in coastal wetlands. In its consistency determination and Draft EIS, the Navy considered two alternatives for locating the water line. The first alternative ("Option 1") would run along the southern and western perimeter of SSTC-S between Imperial

~~Beach and the northwestern corner of the site (**Exhibits 5a**, **6b**). Option 1 would require trenching and burial of a new water pipe in 0.05 acres of southern coastal salt marsh wetland in the area adjacent to the YMCA camp and, possibly, through a small area of potential wetland (as indicated by the presence of *Juncus acutus*) at the northern end of the site. The second alternative ("Option 2") would involve the replacement of an existing water line across the center of the southern portion of the site, between 3rd St. in Imperial Beach and the developed footprint, and installation of a new water line following the western perimeter fence along the northern half of SSTC-S. Option 2 would result in the fill of 0.03 acres of a freshwater wetland located near the northeastern edge of the NRRF antenna array and an unknown area of potential *Juncus acutus* wetland at the northern end of the site (**Exhibit 6d**). Option 2 would also require directional drilling beneath a ditch connected to a vernal pool (pool #10, **Exhibit 10**) supporting the federally-listed San Diego fairy shrimp. The Navy has since abandoned this alternative following its informal consultation with the U.S. Fish and Wildlife Service under Section 7 of the federal Endangered Species Act (*see* **Exhibit 7**), and proposes to implement Option 1 for placement of the water line.~~

~~The Commission is aware of at least one other alternative for locating the water line that appears to avoid filling coastal wetlands altogether, and may thus represent a less environmentally damaging alternative. As discussed in the Draft EIS, the Coastal Campus project also includes the new installation and/or upgrade of natural gas and wastewater service lines along an existing easement running between Imperial Beach and the developed footprint beneath Hooper Blvd., a paved road which currently serves as the primary access road into SSTC-S. Routing the proposed water line beneath Hooper Blvd. into the developed footprint would avoid all wetland areas, and because the road crosses the vernal pool extension ditch over previously-installed fill, would avoid impacts to vernal pool #10 (**Exhibit 6e**). Commission staff has suggested this water line alignment to the Navy as a potential alternative, and more generally, has inquired whether the Navy has considered alternative alignments other than Options 1 and 2.[1] The Navy responded as follows:~~

~~—~~

> ~~*This option was considered, but the two options presented in the Draft EIS were considered desirable because they relocated the waterline outside of the proposed action footprint, which is preferable due to security concerns from NSW.*~~

~~It is possible that specific security concerns exist that would render the Hooper Blvd. water line alternative infeasible, but if so, the Navy has not provided adequate information to support this conclusion. It is notable that "security concerns" do not rule out locating natural gas and sewer lines beneath Hooper Blvd. and developed portions of the site, nor the Option 2 alignment, which would also pass beneath the proposed development footprint.~~

~~If for some reason it proves infeasible to co-locate the water line alongside the wastewater and gas service lines beneath Hooper Blvd., it is possible to envision several more~~

[1] September 17, 2014, correspondence between U.S. Navy and Commission staff.

circuitous routes through non-native grassland areas in the southern portion of SSTC-S that would avoid wetlands and ESHAs. Similarly, the broad footprint targeted for development in the central and northern portions of SSTC-S would seem to contain numerous potential options for locating the water line that would avoid the presumed wetland area near the northern site boundary, as well as other sensitive habitats. To date, the Navy has not provided Commission staff with any analysis of these alternatives for locating the water line, nor any evidence that these alternatives are either infeasible or more environmentally damaging that the proposed Option 1 water line.

3) Mitigation: The final requirement of Coastal Act Section 30233(a) is that the dredging and fill of coastal wetlands may be permitted if feasible mitigation measures have been provided to minimize any adverse environmental effects associated with that fill. The Commission has typically considered pipeline burial in a wetland to qualify as a "temporary effect" not requiring mitigation (Coastal Act Section 30607.1). However, if the proposed wetland dredging and fill fails the alternatives test (i.e., the proposed dredging/fill does not comprise the least environmentally damaging feasible alternative), as is the case here, then discussion of mitigation is premature.

Conclusion

In conclusion, though the Commission finds that the dredging and fill of coastal wetlands for the purpose of installing a water line to serve the proposed SSTC-S Coastal Campus is an allowable use under Section 30233(a)(4), the Navy has not provided sufficient information on the delineation of on-site wetlands using the Coastal Act definition, or the availability, feasibility, and environmental impacts of alternatives. The Commission therefore concludes that it lacks sufficient information to determine that (1) there is no feasible less environmentally damaging alternative to the proposed action, and (2) that the adverse environmental effects of the proposed dredging and fill of coastal wetlands have been minimized. In order to determine the project's consistency with Section 30233, the following information is necessary:

1. **Wetland delineations:** The Navy shall conduct additional wetland delineations, using the Coastal Act definition of "wetland" (Coastal Act Section 30121 and 14 CCR §13577(b)(1)), for areas adjacent to the proposed Option 1 water line easement, and for any additional water line route alternatives (see below) passing close to previously identified wetlands.

2. **Analysis of water line route alternatives:** The Navy shall conduct an environmental impacts and feasibility analysis of alternative configurations of the proposed water line that would avoid the dredging and fill of wetlands (as defined under the Coastal Act). The considered alternatives shall include the placement of the water line beneath Hooper Blvd. and previously developed portions of the site.

Without this information, the Commission is unable to determine whether the proposed project is consistent with the wetlands policy of the CCMP (Coastal Act Section 30233). The Commission therefore objects to the Navy's consistency determination, based on lack

~~of adequate information to determine the project's consistency with the wetlands policy of the CCMP.~~

In conclusion, the Commission finds that the project would avoid the diking, filling or dredging of coastal wetlands, and is thus consistent with the wetland policies of the CCMP (Coastal Act Section 30233)."

Page 44, second paragraph, line 1:

"Another deficiency of the Navy's DEIS analysis is the failure to evaluate hazards that may arise over the life of the Coastal Campus development from future sea level rise and shoreline erosion and retreat."

Page 45, first paragraph:

"Information submitted by the Navy in response to questions from Commission staff has only partially addressed the potential for future flooding and erosion at SSTC-S. In an e-mail dated October 29, 2014, the Navy provided maps of projected inundation (using the NOAA Sea Level Rise Viewer) with three to four feet of sea level rise occurring by 2083, a timeframe which the Navy indicates would exceed the design life of the Coastal Campus. No flooding occurs within the development footprint under either of these projections. However, as noted above, the NOAA Viewer projects future water levels based on current mean high high tide alone, and does not take into account extreme high tides, storm surges, El Niño events and other factors which will lead to brief or extended periods of much higher water levels, independently of sea level rise. Crucially, the NOAA Viewer also neglects future shoreline erosion, which will likely exacerbate future flood hazards at this site.

In a November 6, 2014 e-mail, the Navy provided staff with additional information on the Department of Defense's efforts to plan for and adapt to sea level rise (DoD 2014), along with a link to a detailed technical study of potential sea level rise impacts at Camp Pendleton and Naval Base Coronado (Chadwick et al. 2014). The results of this study appear to provide additional evidence that coastal flooding and erosion associated with sea level rise could threaten portions of the Coastal Campus development in the future, and emphasize the need for a site-specific analysis at SSTC-S.

In the absence of a complete, site-specific analysis of current and future hazards from coastal flooding and erosion, and without assurances that the project would not induce the need for shoreline armoring or endanger the existing coastal dune system, the Commission concludes that it lacks sufficient information to determine whether the proposed project would minimize risks to life and property from flood hazards, assure stability and structural integrity over the life of the development, and avoid contributing to the erosion or destruction of the site and the need for shoreline protective devices that would substantially alter natural landforms."

Page 51, first paragraph, beginning on line 6:

"Commission staff has asked the Navy whether the parachute tower could be relocated, for instance to a previously-developed installation that contains other tall structures. The Navy's initial response indicated that an offsite location would not meet the NSWC's operational needs, but that the "Navy intends to locate that tower to minimize its visual impact to the greatest extent feasible, recognizing that it would be a noticeable feature on the landscape." [20] ~~While the Commission wishes to consider the Navy's operational needs, this response does not explain why these operational needs dictate this location, or provide enough information for the Commission to conclude that an offsite location would be truly infeasible, nor any specific information on the on-site alternatives the Navy is considering.~~ Subsequent correspondence from the Navy, dated October 31 and November 6, 2014, provided details on the operational and logistical considerations in siting the paraloft tower. In essence, the paraloft tower is just one of several integrated facilities needed to support Navy SEAL training and operations at NBC. Relocating the tower to another installation (e.g., NAB) would create significant logistical complications, reduce the efficiency of SEAL activities, and create new safety issues for parachuting operations. Siting the paraloft tower elsewhere would also create additional daily trips on SR-75 by Navy personnel travelling between SSTC-S and NAB; in the Navy's words, "personnel would need to drive up State Route 75 to NAB numerous times per parachute" operation. Thus, an off-site location for the paraloft tower has the potential to contribute to already significant traffic problems along SR-75, and to result in conflicts with other Coastal Act policies, including those protecting public access (Sections and requiring that new development minimize vehicle miles traveled and energy consumption (Section 30253(d)). The Navy has also indicated that it would examine on-site alternatives for siting the paraloft tower in order to minimize its visual impact, stating:

> *Within the Coastal Campus site itself, the Navy will look to locate this facility in the optimal location to allow the existing topography to conceal the maximum amount of its profile, within the extent practicable for operational and other environmental impact concerns.*

Based on these considerations, the Commission concludes that it would be infeasible to locate the paraloft tower at an alternative site, and that the Navy will take steps to minimize the tower's visual impact during facility siting decisions.

As discussed above, the clustering of Coastal Campus development would protect most views to and along the coast, and as a general matter, minimize the visual impacts of the project. However, the Commission's ability to evaluate the visual compatibility of the project with its surroundings is hampered by the early stage of the Navy's planning process and a relative paucity of available information. The Navy has not yet finalized siting or design decisions for the individual MILCON projects that would comprise the Coastal Campus, and notes in its November 6, 2014, correspondence on this issue that each project may be constructed by separate architectural, engineering and construction contractors, and, by implication, may have different design features. Naval Base Coronado is "in the process of procuring a site specific Installation Development Plan for [the] Coastal Campus." As a result, detailed plans and/or simulations of individual buildings and

structures are not yet available, and the development simulations provided by the Navy (included in **Exhibit 15)** contain few architectural details. With regard to building design, the Navy proposes to incorporate several features, including "context-sensitive" architecture and landscaping, low-reflectivity building materials, and light-pollution reduction measures, into the Coastal Campus project in order to improve its visual compatibility with its surroundings. The Navy's recent correspondence also provided excerpts from NBC's Installation Appearance Plan (IAP), which contains broad design guidelines that would help ensure some consistency among building styles at the Campus. ~~Detailed plans and/or simulations of individual buildings and structures are not yet available, and the development simulations provided by the Navy (included in **Exhibit 15)** contain few architectural details. One potential mechanism for ensuring that the Coastal Campus would be visually compatible with the surrounding area would be for the Navy to agree to conform, to the maximum extent practicable, to the City of Coronado's building design guidelines for the Scenic Highway Overlay zone, and to submit its development plans to the City's Design Review Commission for review and concurrence.~~

~~At present,~~ These guidelines notwithstanding, the Commission does not, at present, have sufficient information to evaluate the ~~feasibility of relocating the paraloft tower to another site,~~ visual compatibility of the proposed project with its surroundings, or whether alternative ~~locations within the SSTC-S development footprint~~ facility siting schemes or individual building designs would ~~have greater or lesser visual impacts~~ yield more or less visually-compatible results. Nor does the Commission find that a review process is in place that would assure that siting and design decisions will be made to maximize visually compatibility. One potential mechanism for ensuring that the Coastal Campus would be visually compatible with the surrounding area would be for the Navy to agree to consult with the City of Coronado's Design Review Commission during project design, and to conform, to the maximum extent practicable, to the City's building design guidelines for the Scenic Highway Overlay zone. As a result, the Commission cannot fully evaluate the project's consistency with the visual and scenic resources policy of the CCMP (Coastal Act Section 30251). In order to determine the project's consistency with Section 30251, the following information is necessary:

~~1. **Alternatives Analysis for Siting and Design of Paraloft Facility**: The Navy shall provide a detailed analysis of potential alternatives for off- and onsite relocation of the parachute tower, including consideration of the visual impacts and feasibility of each alternative.~~

~~2~~1. **Building Design Criteria and Plans:** The Navy shall provide an ongoing review mechanism that will enable the Commission to be assured that ~~its~~ building siting and design, and final plans for structures, would be visually-compatible with the surrounding area. Ideally, this mechanism should include an agreement to seek the review of the City of Coronado's Design Review Commission, or otherwise demonstrating that its design criteria are consistent to the maximum extent practicable with local visual resource policies."

Page 66, Appendix A - Substantive File Documents, Correspondence with the Navy, add the following:

"E-mails from Deborah McKay, U. S. Navy, to Joseph Street, Coastal Commission, October 27 & 29, 2014 ("2012 Rare plant survey report", "#1 response Nuttal's lotus at SSTC-S & NBC"), regarding Nuttall's lotus."

E-mails from Deborah McKay, U. S. Navy, to Joseph Street, Coastal Commission, October 31, 2014 ("#6 Paraloft & Design review") and November 6, 2014 ("RE: status update"), regarding visual resources.

E-mails from Deborah McKay, U. S. Navy, to Joseph Street, Coastal Commission, October 28 & 31, 2014 ("RE: answers"), and November 5-6, 2014 ("RE: water line routes"), regarding water line routing and impacts of wetlands and ESHA.

E-mails from Deborah McKay, U. S. Navy, to Joseph Street, Coastal Commission, October 29, 2014 ("#4 Response – flood hazard concerns"), and November 6, 2014 ("coastal flooding – more data"), regarding flood hazards and sea level rise."

Pages 66, Appendix A – Substantive File Documents, Other Documents, Reports, Articles & Consultations, add the following documents:

Chadwick, B., Wang, P.F., Brand, M., Flick, R., Young, A., O'Reilly, W., Bromirski, P., Crampton, W., Guza, R., Helly, J., Nishikawa, T., Boyce, S., Landon, M., Martinez, M., Canner, I., and Leslie, B. (2014). *A Methodology for Assessing the Impact of Sea Level Rise on Representative Military Installations in the Southwestern United States*. Final Technical Report, Project Number RC-1730, Strategic Environemental Research and Development Program, Alexandria, VA, March 2014.

U. S. Department of Defense (DoD) (2014). *2014 Climate Change Adaptation Road Map*. Office of the Deputy Under Secretary of Defense for Installations and Environment, Science & Technology Directorate, June 2014.

U. S. Navy (2008). Naval Base Coronado Final Installation Appearance Plan. Selected pages (pp. 3-1 to 3-3; 3-24 to 3-26).

Exhibit 9 – ESHA determination memorandum:

A revised memorandum is attached to this addendum.

CALIFORNIA COASTAL COMMISSION
NORTH COAST DISTRICT
1385 8th Street, Suite 130
ARCATA, CA 95521
(707) 826-8950

M E M O R A N D U M

FROM: John D. Dixon, Ph.D.
Ecologist

TO: Joseph Street

SUBJECT: Navy Base Coronado Coastal Campus

DATE: October 31, 2014 (Revised November 6, 2014)

Documents reviewed:

Department of the Navy (DofN). 2014. Draft NBC Coastal Campus Environmental Impact Statement. Volume I with Appendices A-C.

AECOM. 2012. Rare plant survey report for Silver Strand Training Complex, Naval Base Coronado, San Diego County, California. In Appendix C of Draft EIS, above.

Goebell, K.E. (USFWS). 2014. Letter report dated September 12, 2014 to C.E. Sund (USN) regarding "Informal Section 7 Consultation on the Coastal Campus Project at Silver Strand Training Complex South, Naval Base Coronado, San Diego County, California."

ICF International. 2012. Results of protocol surveys for listed fairy shrimp, Silver Strand Training Complex-South, Naval Base Coronado. Final report to Naval Facilities Engineering Command Southwest. In Appendix C of Draft EIS, above.

RECON. 1998. Final wetland delineation report for Naval Radio Receiving Facility. A report dated November 6, 1998 to Southwest Division, Naval Facilities Engineering Command. (Cited in Saucedo-Ortiz 2004a).

Saucedo-Ortiz, D. (RECON). 2004a. Final wetland delineation report for the Naval Radio Receiving Facility, Naval Base Coronado, San Diego, California. A report to the Natural Resource Office, Environmental Department, Commander Navy Region Southwest.

Saucedo-Ortiz, D. (RECON). 2004b. Final biological resources survey report for the Naval Radio Receiving Facility, Naval Base Coronado, San Diego, California. A report to the Natural Resource Office, Environmental Department, Commander Navy Region Southwest.

Sund, C.E.(USN). 2014. Letter dated August 21, 2014 to M. Delaplaine (CCC) transmitting "Coastal Consistency Determination (CCD) for Navy Base Coronado (NBC) Coastal Campus."

The land upon which the Silver Strand Training Complex – South is located is a mixture of open space, development in the form of buildings and other infrastructure that are in current use, and the remains of prior development, mostly in the form of roads and

foundations (Figure 1). Most development took place in the northern half of the property. Although invasive iceplant covers much of the land, especially in areas where construction took place, the site also supports large areas of wetlands and native vegetation communities, and significant populations of several rare native plant species. Wetlands include vernal pools (many occupied by the federally Endangered San Diego fairy shrimp), southern coastal salt marsh, and the intertidal sandy beach. Rare terrestrial vegetation communities[1] that are present are Diegan coastal sage scrub (S3.1), maritime succulent scrub (S1.1) and southern foredunes (S2.1). Rare plant species[2] that are present are Nuttal's lotus (1B.1), Orcutt's pincushion (1B.1), variegated dudleya (1B.2), San Diego barrel cactus (2B.1), Palmer's frankenia (2B.1), and coast wooly-heads (1B.2). The southern foredunes support populations of Nuttal's lotus, Orcutt's pincushion, and coast wooly-heads and provide nesting habitat for the federally Threatened western snowy plover. The southern foredunes immediately adjacent to the north on Silver Strands State Beach have been designated "critical habitat" for the plover. The rare plant survey (AECOM 2012) noted that, "The Southern foredunes habitat is some of the most intact of this habitat remaining in San Diego County even considering its encroachment by iceplant. Diegan coastal sage scrub that persists on the site is also unique in this portion of San Diego County. The small population of Orcutt's pincushion is one of the few places where it is known to occur in San Diego County."

Wetlands

The only wetland delineations that have been reported were conducted based on federal definitions of "Wetlands" and "Jurisdictional Non-Wetland Waters of the U.S." The federal definition requires evidence of three "parameters": wetland vegetation, wetland soils, and wetland hydrology. The jurisdictional non-wetland waters of the U.S. are areas that were adjacent to delineated 3-parameter wetlands and had wetland vegetation but no field indicators of wetland hydrology or hydric soils. Both these categories would be "wetlands" as defined by the Coastal Act and the Commission's

[1] These include vegetation communities ranked by the California Department of Fish and Wildlife (CDFW) as S1, S2, and S3, which are defined as follows: S1 - Critically imperiled because of extreme rarity or other factors, such as steep declines, making it especially vulnerable to extirpation in the state. S2 - Imperiled in the state because of rarity due to restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation in the state. S3 - Vulnerable in the state due to a restricted range, relatively few populations, recent and widespread declines, or other factors making it vulnerable to extirpation. Threat rank .1 indicates "very threatened." Communities ranked S1, S2, and S3 are considered "rare" by the CDFW (http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_background.asp).

[2] These include plant species ranked by the California Native Plant Society as ranks 1B or 2, which are defined as follows: 1B - Plants rare, threatened, or endangered in California and elsewhere. 1B plants are rare throughout their range with the majority of them endemic to California and all are eligible for state listing. Rank 2 - Plants rare, threatened or endangered in California, but more common elsewhere. Except for being common beyond the boundaries of California, plants with a rank of 2 would have been ranked 1B and all are eligible for state listing. Threat ranks: 0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat); 0.2-Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat) 0.3-Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known). Species ranked 1B and 2 meet listing criteria under the California Endangered Species Act, are considered rare under CEQA Section 15380, and areas supporting significant populations of these species meet the definition of Environmentally Sensitive Habitat Area in the Coastal Act.

Regulations. Had a delineation been conducted based on California state standards, some additional areas of wetland vegetation not adjacent to federal wetlands may have been discovered and mapped. However, all the mapped wetlands and waters of the U.S. are in the southern portion of the property outside the main area proposed for development and any additional state wetlands would likely be in the same general area. Identified wetlands include vernal pools and southern coastal salt marsh.

All the mapped seasonal wetlands are characterized as "vernal pools" in the Draft Environmental Impact Statement (DEIS; DofN 2014). Fifty-nine depressions that pond water were examined in 2011-2012 (ICF 2012). Of these, 45 were sampled for vegetation and 22 were found to support characteristic vernal pool plant species, and hence can be considered vernal pools in the narrow sense[3]. Twenty-six basins were occupied by the federally Endangered San Diego fairy shrimp. There was no correlation between the presence of vernal pool vegetation and the presence of the fairy shrimp. Seasonal ponds that support characteristic vernal pool plants or the federally Endangered San Diego fairy shrimp are of very high conservation value.

Non-tidal southern coastal salt marsh is present in three closed basins in the southern half of the site. They are maintained by rainwater but support characteristic southern salt marsh vegetation due to the high levels of dissolved salt in the soil. The basin in the southwestern corner of the training complex that includes the YMCA Camp Surf also supports populations of rare plants (salt marsh bird's beak and Palmer's frankenia).

Although no wetlands occur within the boundary of the proposed new development (Figure 2), associated utility lines could directly impact non-vernal pool wetlands delineated based on the federal 3-parameter wetland definition (which are also state wetlands). Any areas proposed for utility lines within the southern portion of the property where 3-parameter wetlands have been documented should be surveyed for wetlands that meet the state 1-parameter definition.

Terrestrial Environmentally Sensitive Habitat Areas

The vegetation communities Diegan coastal sage scrub and it's variant, maritime succulent scrub, are both considered rare habitats by the California Department of Fish and Wildlife. However, small, isolated patches of these habitats, such as those persisting at the training complex, are not rare in coastal southern California. Despite their small size and insular nature, some patches of these vegetation communities are especially valuable for their role in the ecosystem of providing habitat for rare species, including Nutall's lotus, variegated dudleya, and San Diego barrel cactus, and are easily disturbed or degraded by human activities. Therefore, these area meet the definition of Environmentally Sensitive Habitat Area (ESHA) in Section 30107.5 of the Coastal Act.

[3] "Vernal pool" is generally regarded as a special type of seasonal wetland that occurs in areas of Mediterranean climate in a landscape with basins underlain by a relatively impermeable substrate and defined by a unique biota. However the term is sometimes used more broadly to indicate any depressional area where ephemeral ponds form in the spring or even more generally to any seasonally ephemeral pond.

The southern foredunes along silver strand, including the training complex, was noted in the rare plant survey to be some of the most intact foredunes in San Diego County. All the sandy habitat above the beach that is seaward of the western fence line and Rowcliff Boulevard of the training complex is southern foredune, including the area mapped as "disturbed habitat" in Figure 3.7-3a in the DEIS. This habitat is rare and provides many important ecosystem functions, including nesting habitat for the federally Threatened western snowy plover, and habitat for rare plants and insects, such as Orcutt's pincushion, Nutall's lotus, coast wooly-heads, and the globose dune beetle[4]. It is easily disturbed or degraded by human activities and thus meets the definition of ESHA in the Coastal Act. The Proposed Action would impact southern foredunes at the entry control point. A potential utility easement would also impact this habitat.

In addition to rare habitats, ESHA may also be defined by the significant presence of a rare species within an area that is easily disturbed by human activities. At the training complex, Nuttal's lotus (a rare and threatened CNPS 1B.1 species) is found in openings within a sea of exotic iceplant, especially along dirt roads, the edges of paved roads, around old concrete foundations and other cleared areas (Sauceda-Ortiz 2004, AECOM 2012). Were there simply a few 10s or 100s of scattered plants within this highly degraded landscape and were there many records of significant populations elsewhere in more natural surroundings, the degraded area supporting these plants at the training complex would not appear particularly rare. However, this is not the case.

The DEIS describes the status of this species and the populations at the Silver Strand Training Complex – South as follows:

> Nuttall's lotus is a CNPS List 1B.1 species. It is an herbaceous member of the pea family that forms large mats with long branches that radiate out from a mostly perennial root base. It is naturally found in openings between shrubs of sage scrub or in stabilized sand dunes. The distribution of this plant is coastal Southern California and northern Baja California, Mexico. Most locations are in San Diego County, where it is currently thought to be restricted to a few populations at the Santa Margarita River, Ocean Beach, Pacific Beach, North Island, and Silver Strand. While Nuttall's lotus is not a federally listed species, it has been a candidate in the past and has a very limited distribution in the coastal dune habitats of San Diego County. It is relatively abundant at NASNI and SSTC-South, occupying the edges of dirt roads, old cement foundations, and other disturbed sites of urban/developed areas; many thousands of individual plants occur in Alternatives 1, 2, and 3. The total acreage covered by Nuttall's lotus at SSTC south is approximately 10 acres, most of which occurs within the Proposed Action footprint.

Of the few populations of this species left in California, the most significant includes the plants at the training complex. Of the 38 element occurrences listed by the California Natural Diversity Database, all but six are small populations that varied from a few plants to a few hundred plants. Only the following six sites had periodic observations of

[4] A rare species included in: California Department of Fish and Wildlife, Natural Diversity Database. September 2014. Special Animals List. Periodic publication. 52 pp.

large populations: San Luis Rey River, 500 to 9,000; San Elijo Lagoon, <100 to 42,000; Mission Bay Mariner's Cove, 1,000 to 2,500; North Island Naval Air Station Coronado, >5,000 among 12 locations; silver strand from Naval Amphibious Base to Silver Strand Training Center South, tens of thousands to around 900,000 in degraded southern foredunes and adjacent degraded sandy flats; Border Field State Park, 100s to tens of thousands. In 2012, "many thousands of plants" were present at the training complex, especially in openings within iceplant dominated areas (AECOM 2012). The threat to the species and the importance of this population is suggested by the following note[5] for Nuttal's lotus (*Acmispon prostratus*) on the California Native Plant Society's Inventory of Rare and Endangered Plants: "Threatened by development, non-native plants, and land management activities; particularly by U.S. Navy at Silver Strand and Imperial Beach."

Nuttal's lotus is rare and declining due to loss of habitat, and the area supporting many thousands of the species at the Silver Strand Training Center – South clearly could be easily disturbed or further degraded by human activities and developments. Therefore, the area supporting the species meets the definition of Environmentally Sensitive Habitat Area in Section 30107.5 of the Coastal Act, despite the unusual, degraded landscape setting[6]. With the few data available, it is difficult to define the extent and boundary of this ESHA. The rare plant surveys noted the approximate locations of groups of individuals (Figure 3), but did not estimate the number of individuals represented by each filled circle or polygon. Also, this is an annual plant and a significant portion of the population is represented by the seed bank. In fact, the 2004 rare plant survey report suggested that, "[t]he fact that the lotus is found in…open areas, which historically supported dune and coastal sage scrub vegetation and now is overrun with ice plant, suggests that there may be a native seed bank still present underneath the ice plant." (Sauceda-Ortiz 2004). In the absence of detailed distributional data, the most conservative approach to the ESHA boundary would be to create a convex polygon that encompasses the documented locations of Nutall's lotus on the sandy flats above the beach and foredunes but that excludes existing development that is in use. Such a polygon would also encompass most of the area proposed for future development.

Development Setbacks or "Buffers"

In order to protect the integrity and functioning of wetlands and terrestrial ESHA, there must be space between the habitat and development. This habitat buffer keeps disturbance at a distance, improves water quality, and provides important ecological services, such as nesting habitat for wetland pollinators and additional foraging habitat for many species primarily dependent on wetlands or upland ESHA. I recommend that development be set back at least 100 feet from wetlands and from vernal pool

[5] California Native Plant Society. 2014. Inventory of Rare and Endangered Plants (online edition). Accessed on Monday, October 20, 2014 from http://www.cnps.org/inventory

[6] In Bolsa Chica Land Trust v. Superior Court (1999), 71Cal.App.4th at p. 508, the Court of Appeal found that "…ESHA's, whether they are pristine and growing or fouled and threatened, receive uniform treatment and protection." The Nuttal's lotus habitat at the training complex could aptly be described as "fouled and threatened" but nonetheless meets the definition of ESHA in the Coastal Act.

watersheds, and 100 feet from the terrestrial ESHAs that are present on or adjacent to the training complex property. The area supporting Nuttall's lotus is unusual due both to the extensive remains of prior development and the extensive vegetative cover of the invasive iceplant. In order for this plant to survive and thrive, a management plan should be developed to remove the iceplant, restore native habitat, and provide a mosaic of sparsely vegetated areas, and control runoff. With such a plan in place, a 25-foot buffer would be adequate to protect the Nuttall's lotus ESHA.

Figure 1. A portion of the northern half of the Silver Strand Training Complex – South showing existing buildings and other infrastructure, roads and foundations from earlier development, and open space. The dominant terrestrial vegetation in this portion of the complex is invasive iceplant. The areas containing existing infrastructure and the abandoned remains of earlier development are mapped as "Urban/Developed" in the EIS (DofN 2014). Oblique aerial photo Number 10000 dated October 30, 2002 from the Coastal Records Project.

Figure 2. U. S. Army Corp of Engineers wetlands and non-wetland jurisdictional waters of the U. S. (Figure 3.7-2 from DofN 2014). Both categories are wetlands as defined by the Coastal Act and the Coastal Commission's Regulations. Expanded Legend inset for readability.

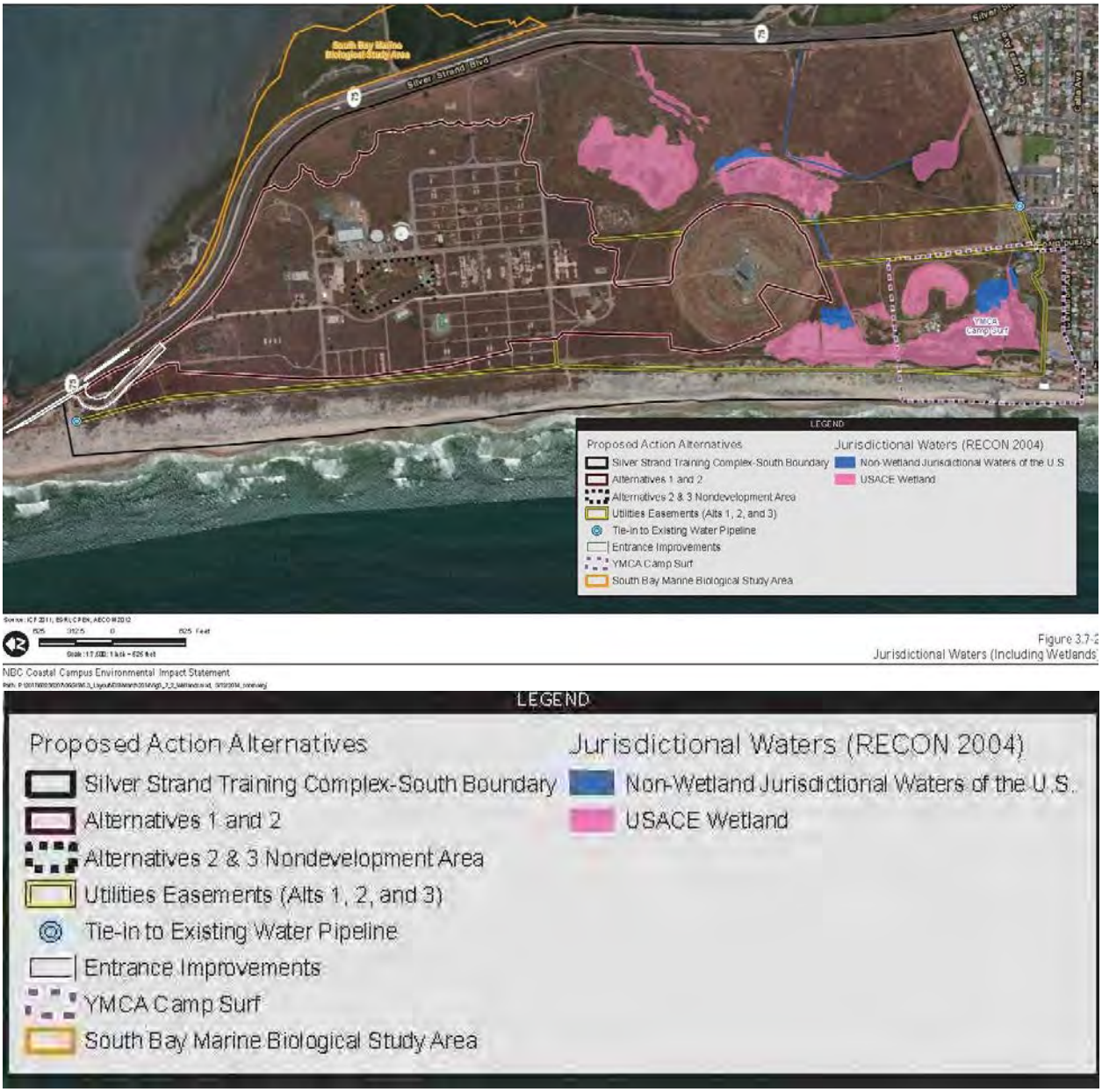


Figure 3. Silver Strand Training Complex – South (Figure 3.7-3a from DofN 2014). A portion of the legend is expanded for readability. The orange filled circles and polygons are “Nuttal’s lotus,” the dark blue filled circles are “San Diego barrel cactus,” and the light blue filled circles are “California box thorn” (CNPS 4 species

Figure 3.7-3a
Special Status Plant Species

Letter sent to all Commissioners

DEPARTMENT OF THE NAVY
COMMANDER NAVY REGION SOUTHWEST
937 N. HARBOR DR.
SAN DIEGO, CA 92132-0058

IN REPLY REFER TO:
11010
Ser N00/559
3 Nov 14

Steve Kinsey,
Supervisor & Chair
County of Marin Board of Supervisors
3501 Civic Center Dr # 329
San Rafael, CA 94903-4193

Dear Commissioner Kinsey:

SUBJECT: FEDERAL CONSISTENCY DETERMINATION FOR THE NAVAL BASE CORONADO COASTAL CAMPUS

This letter is to encourage you to support the Navy's efforts at finding the proper balance between protecting the environment and meeting its critical mission requirements. On August 21st, the Commanding Officer of Naval Base Coronado (NBC) submitted a Coastal Consistency Determination (CCD) for the NBC Coastal Campus stating the Navy determined that the proposed action is consistent with the California Coastal. Please vote to concur with our determination.

Navy Region Southwest is home to 67 percent of the nation's military training airspace and the Southern California Range Complex, which are directly offshore from NBC installations in San Diego. Starting in 2001, the Congressionally mandated growth of special operations forces has spurred a significant increase in Naval Special Warfare personnel stationed or training within the Southwest region. Commander, Naval Special Warfare Command (NSWC) is assigned to Naval Amphibious Base (NAB) Coronado; one of eight installations that comprise NBC and the only Naval amphibious installation on the west coast.

Unfortunately, a majority of the buildings currently supporting NSWC are too small, functionally obsolete and scattered between 60 facilities on 5 separate NBC installations. The proposed Coastal Campus provides an opportunity for state-of-the-art facilities to be co-located for greater operational efficiency and effectiveness. This project within a single area, immediately adjacent to the area where the majority of amphibious training occurs, will minimize intra-day traffic. The project itself involves the construction, operation, and maintenance of a developed campus providing a mix of instructional and administrative facilities that would support

11010
Ser N00/559
3 Nov 14

the NSWC mission to train its personnel. The project is designed to conserve and protect the maximum acreage of wetlands, coastal dunes, and endangered shorebird habitat. The Coastal Campus will also become the first net-zero installation in the Navy. Enclosure (1) provides background information on NBC's natural resources conservation successes and enclosure (2) provides more information on the project.

Natural resources management is not limited to only federally-listed species. Through effective land rehabilitation and invasive plant management, 15 California Rare Plant Rank 1B plant species have been downgraded on SCI. NBC has removed dozens of acres of non-native ice plant along Highway 75 on the Silver Strand in the past 5 years which now support Nuttall's lotus and other sensitive plant and wildlife species. Due to its preference for disturbed areas and its resilience, Nuttall's lotus is too numerous and prevalent to census on NBC. Additional information on NBC's natural resource successes and mission accomplishment are outlined in Enclosure (3) for your review.

As you can see, NBC has a strong tradition of environmental stewardship and excellence in natural resources management. We have brought the same natural resource management expertise and healthy respect for the environment to the design of this facility. NBC will continue its tradition of excellent environmental stewardship in managing the facility for decades to come. I welcome and encourage your support of the Navy's Coastal Campus by voting to concur with our CCD.

P. J. LORGE
Rear Admiral, U.S. Navy
Commander

Enclosures: 1. Naval Base Coronado Natural Resources Successes
2. Naval Base Coronado Coastal Campus Draft EIS Public Meeting Brochure
3. Navy Region Southwest Training for Tridents Booklet

Copy to: CA Coastal Commission Federal Consistency Staff

Letter sent to all Commissioners

Subj: NAVAL BASE CORONADO (NBC) NATURAL RESOURCES SUCCESSES

NBC is home to 30 marine and terrestrial federally-listed species and several environmentally sensitive areas. Finding the proper balance between these competing interests is a continual challenge, but NBC excels at meeting this challenge.

In fact, the U.S. Fish and Wildlife Service named NBC as a winner of the 2013 Military Conservation Partner Award, acknowledging the significant conservation accomplishments achieved in partnership with the Service and other conservation agencies. The Service stated: "This installation provides unique training facilities for the Navy's elite SEAL teams while actively working to conserve the federally-listed California least tern and the Western snowy plover, among many other rare and endangered species. The natural resources staff has taken a landscape-scale approach to conservation which has resulted in numerous measurable successes while supporting the operational requirements of this extraordinary facility." NBC also excels at balancing public use and mission accomplishment. NBC maintains a long history of achieving military training on NBC property and the local beaches while maintaining public access for boating, fishing, and recreation; to include, the YMCA Camp Surf that provides community educational and recreational support to area children.

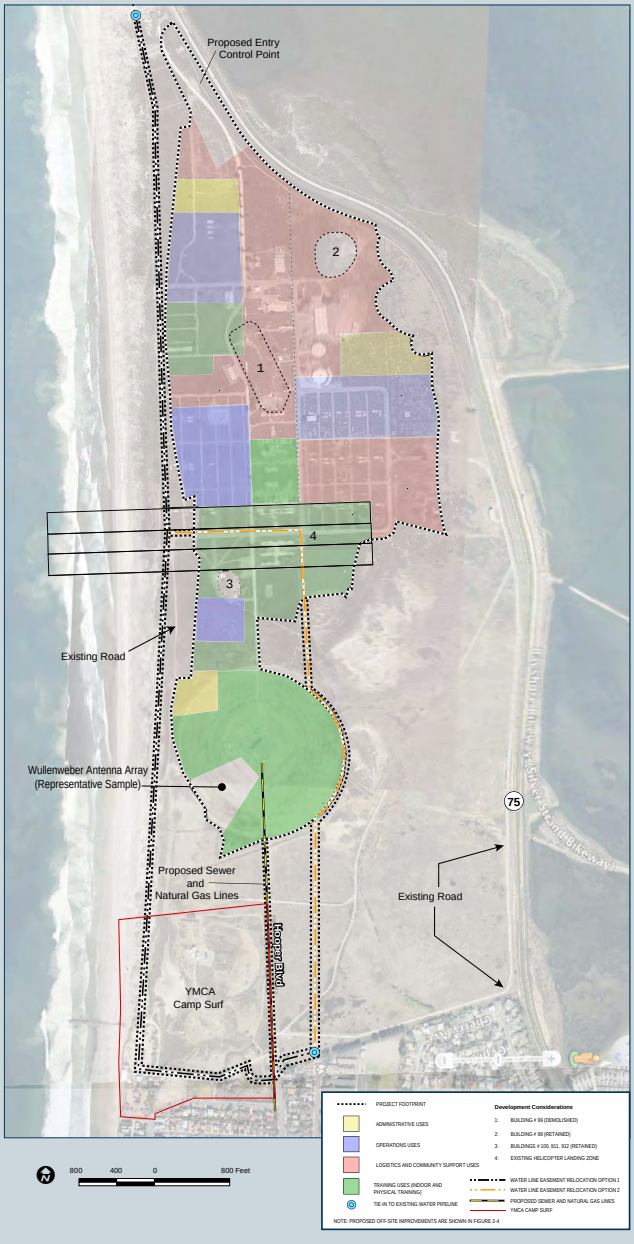
NBC's track record in balancing its military mission with species conservation speaks for itself. Key successes include sustained increases in numbers of multiple species while simultaneously providing access to essential training areas. One such example is the San Clemente Island night lizard, which was removed from the federal endangered species list on May 1, 2014 due to its significant and stable population. San Clemente Island (SCI), one of NBC's installations, is one of the most important training areas in the Southern California Range Complex and the only active live-fire shore bombing range in the United States. Further, NBC is currently supporting the highest number of nesting snowy plovers on record and is meeting the local management targets specified within the Service's 2007 recovery plan for the species.

Enclosure (1)

Letter sent to all Commissioners

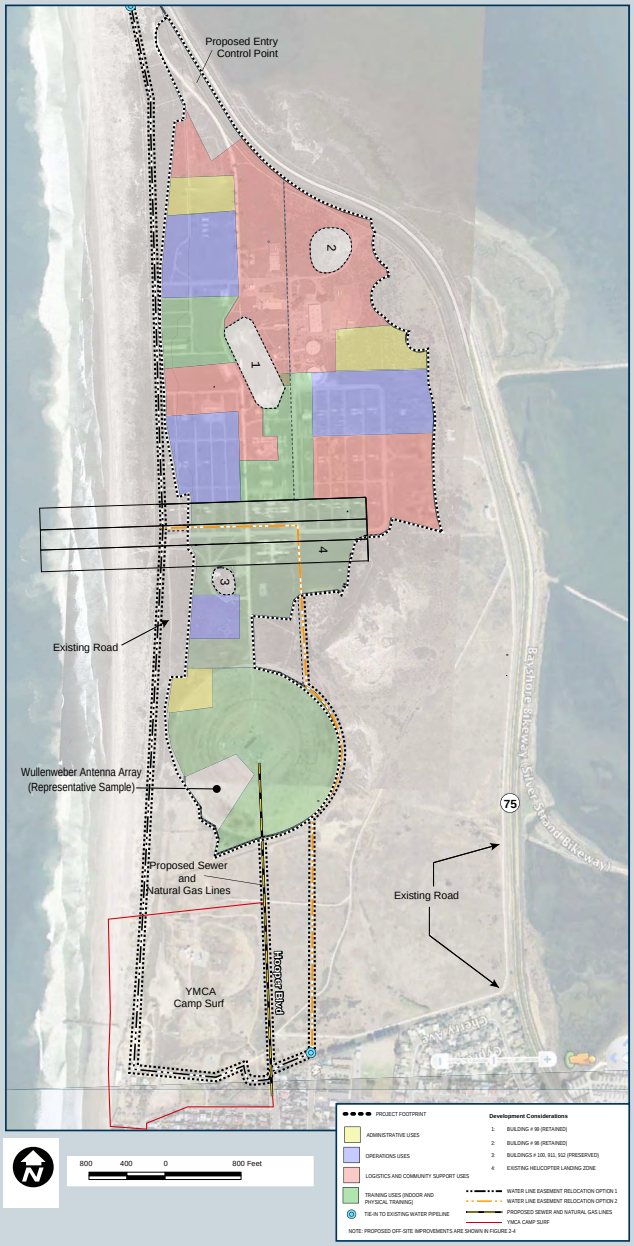
Alternative 1: Silver Strand Training Complex-South (SSTC-South) Bunker Demolition Alternative

Alternative 1 includes consolidation of NSWC facilities at SSTC-South and includes the demolition of Building 99 (a bunker eligible for the National Register of Historic Places).



Alternative 2: SSTC-South Bunker Retention Alternative

Alternative 2 includes all the components of Alternative 1, except Building 99 would be retained rather than demolished.



Alternative 3: Multi-Installation Alternative

Alternative 3 includes all the components of Alternative 1, except Building 99 would be retained rather than demolished.

Alternative 3 would be located on three separate Navy installations: Naval Amphibious Base (NAB) Coronado, Naval Air Station North Island (NASNI), and SSTC-South.

Alternative 4: No Action Alternative

- Maintain existing land uses and current training facilities.
- None of the Proposed Action construction or improvements would occur.
- Current programmed levels of use (type, tempo, location), including requirements for planned growth, would continue.
- NSWC would continue to have limited space for current and future training and operations support, as well as an inability to accommodate Congressionally-mandated growth and requirements.
- Dispersed and functionally obsolete facilities would continue to cause inefficiencies in the planning, execution, and support of NSWC missions.
- This alternative is studied as a baseline of current land and facilities use and is compared to the other alternatives.

About the NBC Coastal Campus EIS

The National Environmental Policy Act (NEPA) was passed by the U.S. Congress in 1969. NEPA ensures that federal agencies consider environmental impacts of actions in planning and decision making, and establishes national policy and goals for the protection of the environment. To comply with NEPA, the Navy has prepared a Draft Environmental Impact Statement (EIS) to support the proposed NBC Coastal Campus. The Draft EIS evaluates four alternatives, including the No Action Alternative. The Draft EIS addresses the potential environmental impacts of the alternatives, including land use and recreation; geology and soils; air quality; hazardous materials and waste; water quality and hydrology; noise; biological resources; cultural resources; traffic and circulation; socioeconomics and environmental justice; public health and safety; utilities and public services; coastal uses and resources; and aesthetics. The Navy welcomes comments on the Draft EIS.

ENVIRONMENTAL IMPACT STATEMENT

EIS Process

To prepare an EIS, biologists, engineers, planners, and other technical professionals evaluate potential environmental impacts to resources. Issues most likely to be of concern to the public are identified and addressed. Where findings indicate that there might be significant impacts, the EIS identifies ways to reduce or minimize those impacts.

The following text describes the steps the Navy has already completed or will undertake as part of the EIS process:

- **Publication of the Notice of Intent (NOI)** - The Navy published the NOI on June 29, 2012 to announce that an EIS will be prepared for the NBC Coastal Campus.
- **Scoping Meetings**: The NOI and scoping meetings gave the public an opportunity to provide comments about the proposed action and the "scope" of the issues to be addressed in the EIS. The scoping period began with the publication of the NOI and concluded on August 14, 2012. Two scoping meetings were held in July 2012.
- **Draft EIS**: The Draft EIS addresses the potential environmental consequences of the NBC Coastal Campus project. The Notice of Availability (NOA) was issued on July 25, 2014 to announce the publication of the Draft EIS.
- **Public Review**: A review period by interested parties to comment on the Draft EIS from July 25 through September 22, 2014.
- **Final EIS**: The Final EIS will address comments received on the Draft EIS. The Final EIS for the NBC Coastal Campus is anticipated to be completed in Spring 2015.

June 2012
Publish Notice of Intent (NOI)

July 2012
Conduct Public Scoping Meetings

July 2014
Publish Draft EIS in Federal Register

August 2014
Conduct Public Meetings on the Draft EIS

You are here

Spring 2015
Publish Final EIS in Federal Register

Summer 2015
Issue Record of Decision (ROD)

- **Record of Decision (ROD)**: Ultimately, the Assistant Secretary of the Navy for Energy, Installations, and the Environment, or a designee, will make the final decision about the NBC Coastal Campus. A ROD will be published to announce the Navy's decision.

This EIS is being prepared in accordance with NEPA; Council on Environmental Quality (CEQ) Implementing Regulations, 40 CFR 1500 / 43 FR 55990, 32 CFR 775 (1500-1508); and other applicable statutes, regulations, and requirements.

Get Involved

Communicating with the public about its proposed plans and soliciting public input is important to the NEPA process and to the Navy. The public has several opportunities throughout the EIS process to learn about and comment on the Navy's proposed plans.

- **Attend a public meeting.** Public meetings will be held in Imperial Beach and Coronado, California, in August 2014. Meeting attendees can learn about the NBC Coastal Campus EIS and submit written comments or have comments recorded by a court reporter.
- **Submit a comment online at: www.NBCCoastalCampusEIS.com.**

- **Submit a written comment in the mail to:**

NBC Coastal Campus EIS Project Manager
Attn: Ms. Teresa Bresler
2730 McKean Street, Bldg. 291
San Diego, CA 92136

Comments must be received by Sept. 22

Comments on the Draft EIS received during the review period will be addressed in the Final EIS.

Letter sent to all Commissioners

NAVAL BASE CORONADO COASTAL CAMPUS

Draft Environmental Impact Statement

PROPOSED ACTION

The proposed NBC Coastal Campus would include construction, operation, and maintenance of a campus that would include a mix of instructional and administrative facilities to support logistics, operations, training, and administration.

- NBC Coastal Campus would be constructed over a 10-year period at a cost of approximately $700 million.
- The Navy is proposing 24 projects that would provide 1.5 million square feet for the following:
  - 3 projects for administrative facilities
  - 4 projects for logistics and military community
  - 7 projects to sustain indoor and physical training
  - 9 projects for operational unit needs
- A new entry gate and off-site improvements to traffic and utilities are also identified.
- All buildings would be limited to 45 feet in height, with the exception of a paraloft (an approximately 50-foot-long by 80-foot-wide by 120-foot-tall parachute drying tower).

The NBC Coastal Campus would include logistical support buildings, equipment use (and equipment maintenance), training facilities, classroom and tactical skills instruction buildings, storage and administrative facilities, utilities, fencing, roads, and parking. The proposed action also includes:

- A food service facility, fuel dispensing facility, and a “mini-mart” type of store for military use only.
- Demolition of infrastructure, site grading, and leveling for site preparation
- Construction of a new entry gate providing immediate access to the northern portion of Silver Strand Training Complex-South (SSTC-South) from State Route 75. Ingress/egress to the Coastal Campus would require signalization.
- The existing southern controlled access gate would remain open; however, use of this gate would be limited to current traffic volumes.
- Additional traffic improvements would be required at eight intersections by 2040.
- Additional off-site utility improvements would also be required.
- Incorporation of sustainable design into new and existing facilities when practicable.

About Naval Base Coronado

Naval Base Coronado (NBC) is a group of eight Navy installations, stretching from San Clemente Island to the Remote Training Site at Warner Springs. NBC has a long relationship with the community extending over 100 years and includes a proud history as the birth place of naval aviation.

Our mission is to provide the highest quality logistical support and quality of life services to U.S. Navy operating forces and for assigned activities and other commands as needed, and to provide the right support, at the right time, in the right amount, enabling operating forces to produce the right level of combat readiness; that is, support the Fleet, Fighter and Family.

Understanding Naval Special Warfare Command

NBC is home to several tenant commands, including Naval Special Warfare Command (NSWC). NSWC leads the Navy’s special operations force and the maritime component of United States Special Operations Command. NSWC is comprised of active-duty Special Warfare Operators (known as SEALs), Special Warfare Boat Operators (also known as Special Warfare Combatant-craft Crewmen), reserve personnel, support personnel, and civilians.

NSWC has facilities on several NBC installations, including Naval Air Station North Island (NASNI), Naval Amphibious Base (NAB) Coronado, and Naval Outlying Landing Field Imperial Beach (NOLFIB).

Purpose and Need for the Proposed Action

Congress mandated U.S. Special Operations Forces to grow, which required NSWC to increase personnel and expand operational training capabilities at NBC. The majority of Congressionally-mandated growth has already occurred at NBC. However, most of the facilities supporting NSWC were built during World War II and are now:

- **functionally obsolete**;
- **too small**;
- **too scattered**.

Development of the Coastal Campus is the opportunity to create facilities that:

- are state-of-the-art;
- provide for mandated growth;
- are co-located for more efficiency;
- ensure that NSWC facilities are secure and private to develop necessary skills;
- optimize the use of facilities and space within existing NBC boundaries.

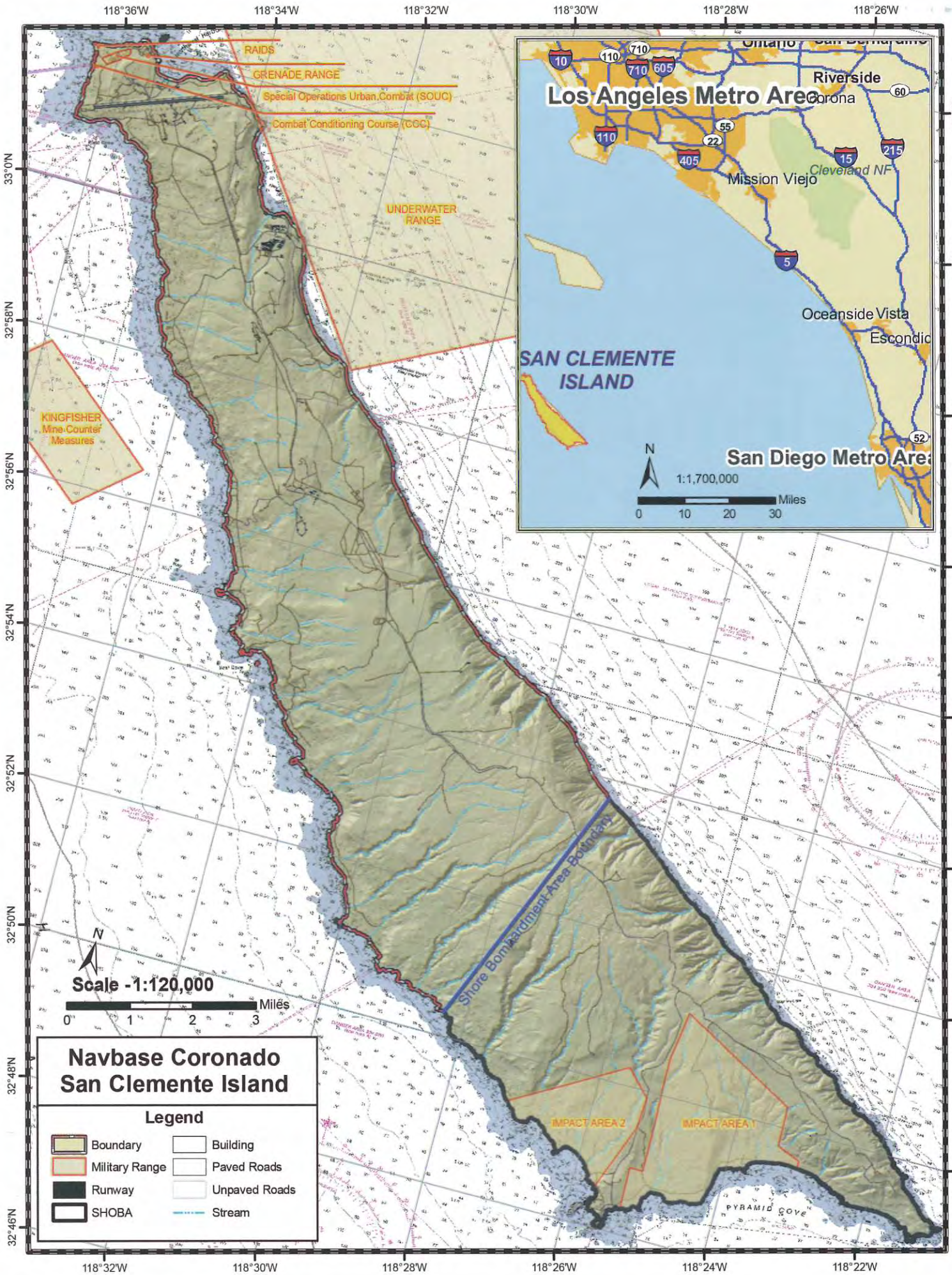
NAVY REGION SOUTHWEST

SERVING OUR MILITARY AND CIVILIAN COMMUNITY

SAN CLEMENTE ISLAND 2014

Training for Tridents

Endangered plants and endangered species make comeback on San Clemente Island



Navbase Coronado San Clemente Island

Legend

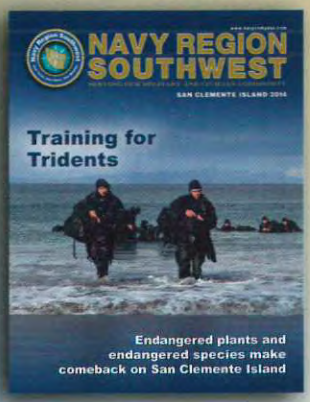
- Boundary
- Military Range
- Runway
- SHOBA
- Building
- Paved Roads
- Unpaved Roads
- Stream

San Clemente Island

Navy Stewardship in Action

ON THE COVER

4 TRAINING FOR TRIDENTS



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ARTICLES

SAN CLEMENTE ISLAND VIDEO

Training for Tridents

By Mass Communication Specialist 1st Class Michael Russell

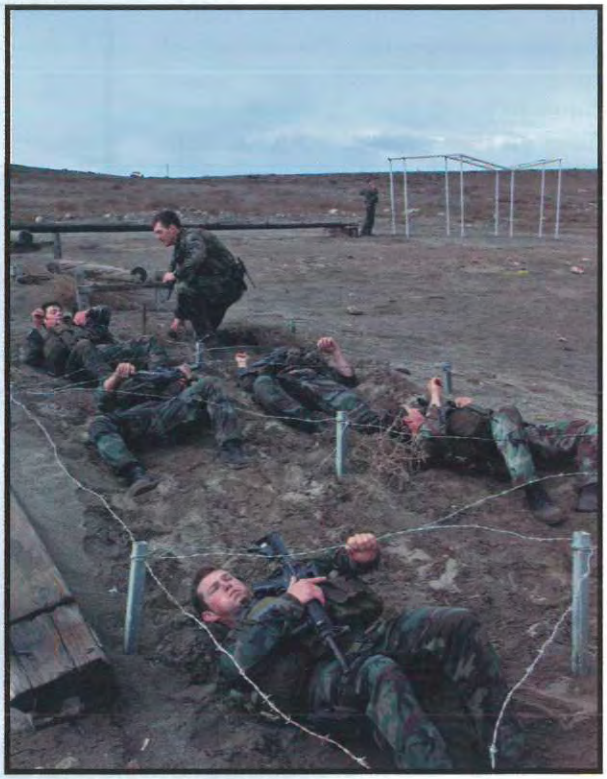
On the journey to becoming a Navy SEAL, candidates complete approximately 25 weeks of training before arriving to San Clemente Island (SCI) for basic weapons, demolition and land navigation training. Arrival at SCI, means students are about to get very familiar with marksmanship, small arms and explosives.

Students spend seven weeks in Third Phase (land warfare training), five of which are held on SCI. While there, they receive two weeks of weapons training, two weeks of demolition training and one week of small unit tactics along with daily physical conditioning. Students, whose training days usually run 14 hours, also receive a series of professional military education classes and mentorship sessions designed to develop the individual personally and professionally.

"The Third Phase mission is to continue selecting, training and qualifying the BUD/S (Basic Underwater Demolition/SEAL) student by establishing the foundation of basic soldiering skill sets," said Master Chief Petty Officer (SEAL) Jonathan Gumbert, NSW Basic Training Command Third Phase Senior Enlisted Advisor. "Emphasis is placed on developing the working relationship between enlisted and officers in a SEAL platoon/squad sized setting."

The foundational skills learned on the island are critical to the student being able to operate among and support his teammates and will be built upon in advanced SEAL training. Owned by the U.S. Navy and used to conduct vital training operations, SCI offers a unique training environment because of its remoteness and the flexibility of its ranges. It offers both static and dynamic small

U.S. NAVY PHOTO



Navy SEAL candidates perform training on San Clemente Island (SCI). Students spend a total of five weeks during the third phase of Basic Underwater Demolition/SEAL training on SCI learning proficiency in weapons, demolitions, land navigation and small unit tactics. Navy SEALs are the maritime component of U.S. Special Operations Forces and are trained to conduct a variety of operations from the sea, air and land. U.S. NAVY PHOTOS

arms ranges with demolition ranges on the northern tip. The variety of ranges, coupled with short travel times to reach them, helps students focus on the required training without interruptions.

Instructors are able to work closely with each student to provide world-class basic marksmanship training. While the majority of candidates have been around firearms before, the ones who have no experience are generally thought to be the easiest to train because they have no "bad habits" that must be corrected. Though sometimes that inexperience can leave a student a bit intimidated.

"The Third Phase Staff spends hours conducting both dry and live-fire exercises that build an individual's confidence," Gumbert said. "Students will leave SCI having shot thousands of rounds through a variety of SEAL weapon systems and will have qualified — at a minimum — as a Navy marksman on the M4 rifle and 9mm pistol."

This training is important not only because it's the foundation for future training but because it's the foundation for future mission execution.

U.S. NAVY PHOTOS

"All SEALs need to have 'shoot, move and communicate' ingrained in their subconscious so that actions on a dynamic battlefield become synced and automatic," said Gumbert. "Our job is to build the student into a competent shooter with a basic understanding of the applications of demolitions in support of SEAL missions."

San Clemente Island is located in the southern part of California's Channel Islands and hosts classes of 45-60 students each for Third Phase training six times each year. It has a rotating, on-scene instructor staff of approximately 8-10 people depending on the evolutions being conducted.

Navy SEALs are the maritime component of U.S. Special Operations Forces and are trained to conduct a variety of operations from the sea, air, and land. ■

The Special Warfare insignia, also known as the "SEAL Trident" is earned after completion of BUD/S and SQT.

Type: Single-grade badge

Eligibility: United States Navy SEALs

Awarded for: Completing Basic Underwater Demolitions/SEAL training and SEAL Qualification Training

The Trident is one of the few warfare specialty pins that is the same for officers and enlisted. It symbolizes that Navy SEALs are brothers in arms — that they train together and fight together. There are four parts to the Trident. Each one symbolizes an important facet of the warfare community.

1. The anchor symbolizes the Navy, the parent service, the premier force for power projection on the planet and the guarantor of world peace. However, it is an old anchor, which reminds the SEAL's that their roots lie in the valiant accomplishments of the Naval Combat Demolition Unit and Underwater Demolition Teams.
2. The trident, the scepter of Neptune, or Poseidon, king of the oceans, symbolizes a SEAL's connection to the sea. The ocean is the hardest element for any warrior to operate in — it is the one in which SEALs find themselves the most comfortable.
3. The pistol represents the SEAL's capabilities on land — whether direct action or special reconnaissance. If you look closely, it is cocked and ready to fire and should serve as a constant reminder that SEALs must be ready at all times.
4. The eagle, the nation's emblem of freedom, symbolizes the SEAL's ability to swiftly insert from the air. It reminds them that they fly higher in standards than any other force. Normally, the eagle is placed on military decorations with its head held high. On the SEAL insignia, the eagle's head is lowered to remind each of us that humility is the true measure of a warrior's strength.

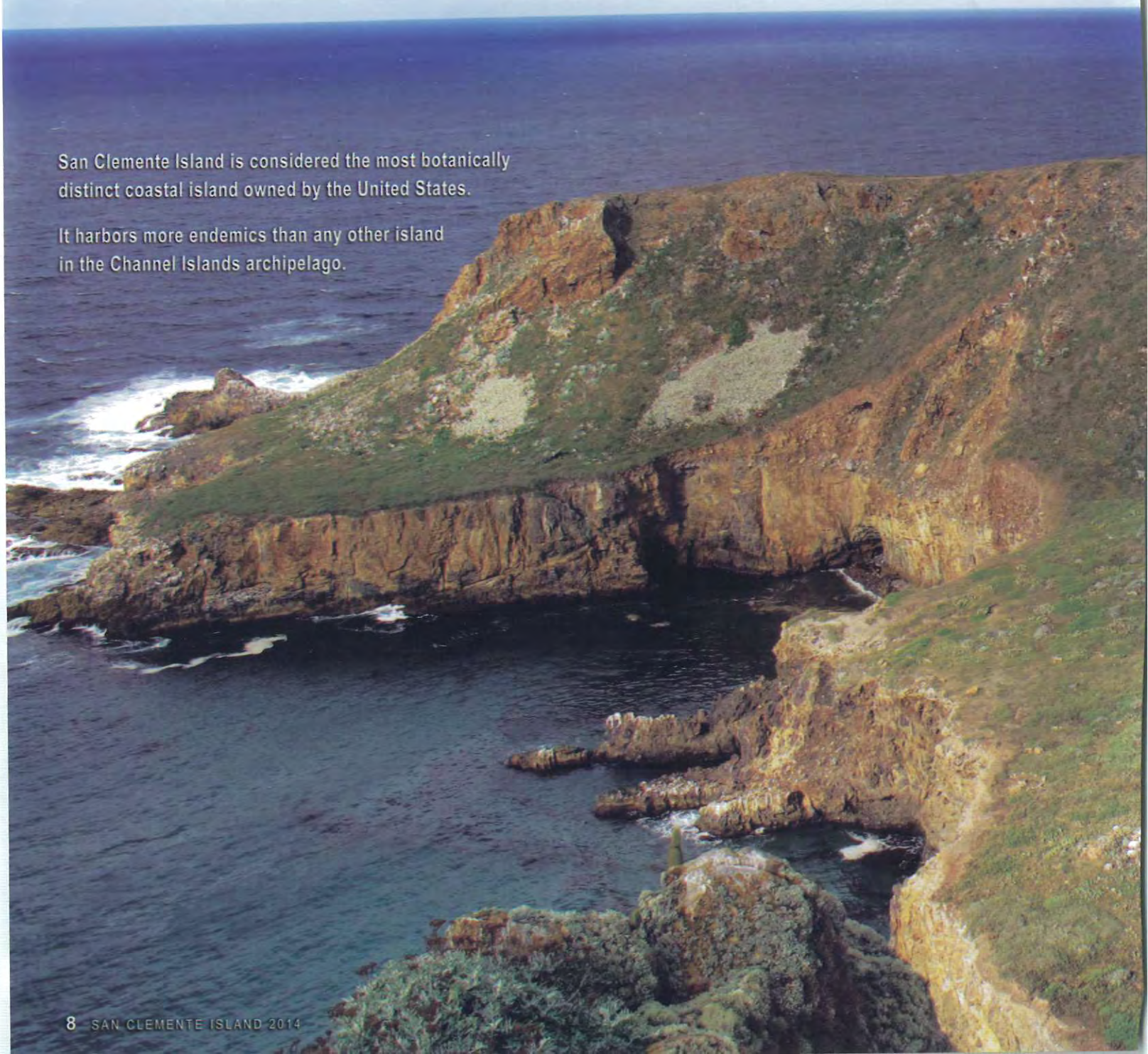
Endangered species make comeback on San Clemente Island

San Clemente Island (SCI) is home to six plant species, four wildlife species, two marine invertebrates, all which are currently federally listed as "endangered" or "threatened" in addition to numerous other native and sensitive species.

The wildlife that are endangered and threatened on SCI include the endemic San Clemente loggerhead shrike, western snowy plover, San Clemente Bell's sparrow (formerly the San Clemente sage sparrow), island night lizard and island fox (which is state but not federally endangered).

In the early 1990s, the San Clemente loggerhead shrikes were documented at an all-time population low, and in 1998 the population dipped to just 14 wild birds. This bird is a subspecies of the mainland loggerhead shrike and only lives at San Clemente Island.

San Clemente Island has an extensive shrike recovery program in place, which consists of predator management, habitat enhancement, captive breeding, release, and



San Clemente Island is considered the most botanically distinct coastal island owned by the United States.

It harbors more endemics than any other island in the Channel Islands archipelago.

population monitoring. Through the Navy's recovery efforts, the number of loggerhead shrikes has grown to 68 breeding pairs in 2013.

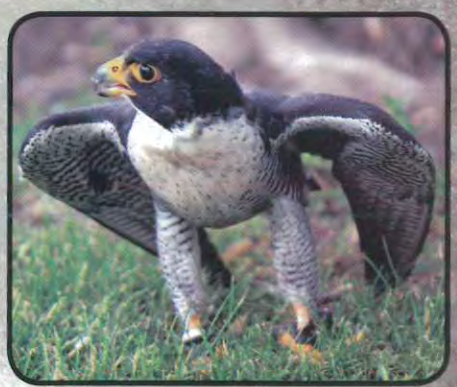
In 1977, the San Clemente Island bush mallow was one of the first plants listed under the Endangered Species Act. Found only on San Clemente Island, only one individual was known at the time of listing. After decades of recovery, there are now thousands of these lavender-flowered plants across much of the island.

Catalina grass, which historically was found on Santa Catalina Island, San Clemente Island, and Guadalupe Island, was believed to be extinct, as the plant hadn't been seen since 1913. However the plant was recently rediscovered on Santa Catalina Island, and rediscovered on San Clemente Island in 2010. San Clemente now supports roughly 1,000 individuals of this unique plant.

San Clemente Island broom and San Clemente Island paintbrush are found only on San Clemente Island. These two plants were also some of the first plants listed under the Endangered Species Act. Just two decades ago, only a few hundred individuals of each of these species existed. Now each of these species has tens of thousands of individuals. The recovery of these two species is so significant that the United States Fish and Wildlife Service (USFWS) down-listed these two species from "endangered" to "threatened" in August 2013.

The Navy took the first big step toward recovering native wildlife and plants by removing feral goats and pigs that were destroying the island's ecosystem. Approximately 30,000 goats were taken off the

Peregrine falcons returned to breed on SCI 4 years ago (2010) after being absent for many years. This species has now returned to breed on all the California Channel Islands (2013), which is indicative of the ecosystem recovering from the effects of the DDT dump off of Long Beach (Montrose) and excellent island natural resource management by the Navy, the National Park Service and the Nature Conservancy. U.S. NAVY PHOTOS



The falcons pictured were hatched in Cave Canyon along the Shore Bombardment Boundary on the western side of SCI. The banding is a cooperative effort between U.S. Fish and Wildlife (specifically Joel Pagel, raptor biologist and Peregrine expert) and the Navy, supported by the Installation Biologist, Melissa Booker and funded by Command Pacific Fleet. U.S. NAVY PHOTO

San Clemente loggerhead shrike was officially listed as endangered under the U.S. Endangered Species Act in 1977 and only 14 individuals remained in the wild in 1998, making it among the most endangered avian populations in the world.

SCI Botany Program

- Promotes sustainability of land use in support of the military mission
- Promotes the recovery and delisting of currently listed plant and wildlife species
- Manages habitat to prevent the future federal listing of sensitive plant and wildlife species

island, with the final goats removed in the early 1990's.

Today, thanks to the Navy's wildlife and botanical management programs, animals and native plants are showing signs of remarkable recovery, and program costs are decreasing. The San Clemente Bell's sparrow has dramatically expanded its range and numbers following the recovery of native vegetation once nearly absent due to over grazing by goats. Navy botanist, Bryan Munson explained, "The return of the native plant life is expanding the populations of the native animals."

Through habitat restoration, erosion control, and invasive species control, the Navy's management efforts have helped transform San Clemente Island. Grasslands, scrublands, and woodlands have covered this once nearly barren island. Sensitive plant and animal species, like the San Clemente Bell's sparrow, have increased dramatically as their habitats have recovered across the island.

One surprising fact that Navy biologists have monitored is the resiliency shown by certain plants and animals to the Navy training operations. Shrikes can be found successfully nesting in the Impact Area and have persisted and expanded there for many years. The federally endangered San Clemente Island bush mallow, a fire-adapted species, thrives within the Shore Bombardment Area.

The Navy has owned San Clemente Island since 1934 and began to work toward native ecosystem recovery in the late 1970s. The endangered island night lizard was delisted on May 1, 2014, based on species recovery. San Clemente Island now has the highest recorded density of any lizard on earth, an estimated 21.3 million island night lizards. Scientists are seeing plants and animals slowly creeping out of caves and canyon bottoms and spreading out across the savannas that had been decimated by the feral goats. Some places that resembled cratered moonscapes are now covered with native shrubs so thick it's hard to wade through them.

The Navy not only manages four federally listed species, but has successfully managed and maintained all species endemic to the island. The Navy manages these species so that their populations are robust and do not warrant inclusion under the Endangered Species Act allowing the Navy to carry out its primary mission of national security at sea. ■

SCI supports a number of federally listed species: 6 plant species, 2 abalones, 1 lizard, resident bird species and off-shore additional marine mammals and sea turtles.

The San Clemente Island foxes that numbered only a few hundred a decade ago have now increased to near 1,000. Roadside signs have been placed to caution drivers to watch for foxes.

San Clemente Island Bell's sparrow (formerly known as sage sparrow) has adapted to maritime desert scrub habitat, cactus, and sage bush. The majority of breeding territories are found on the lower, flat terraces, although nesting sites have now been found in a variety of habitats throughout the island. Nests are typically placed low to the ground in a shrub, using the surrounding vegetation as cover.

Colony of California sea lions and northern elephant seals located at San Clemente Island and near Mail Point.

PHOTO BY MARK LOWRY, SOUTHWEST FISHERIES SCIENCE CENTER, NATIONAL MARINE FISHERIES SERVICE, NOAA

Wayn's world as 'Ambassador-fox' of San Clemente

Wayn is his name, a very lucky 4 month old island fox that was trapped in Waynuk canyon on San Clemente Island (SCI) on July 19, 2010, suffering from puncture wounds to his abdomen and showing signs of starvation.

The Institute for Wildlife Studies and Navy Biologist believe that Wayn was abandoned by his parents and a larger fox ended up attacking him and nearly killing him. Wayn was treated at a veterinary facility on the island called the "Foxpital." Surgery was required to fix two abdominal hernias that were small tears in the muscle wall and injuries.

Because of the recovery time needed, Wayn was not considered a candidate for returning to the wild. Melissa Booker, the Navy's wildlife biologist for San Clemente Island said Wayn would have a hard time surviving without skills learned from his parents and an established territory.

"The fox seems like a goofy, fun-loving animal, but he's still a predator, always looking for food," said Dan Biteman, a researcher at the Institute for Wildlife Studies.

The island fox is spread throughout the Navy-owned Island that is 70 miles from San Diego. Annually, the Navy monitors the fox population to ensure it stays healthy and stable, and vaccinates a portion of the population against rabies and canine distemper. The Navy tracks about 100 foxes to watch for any signs of disease or other threats.

PHOTOS BY SHARON STEPHENSONPINO

"Preserving the fox means preserving training," said Booker who oversees the Navy's program to preserve the animal and to prevent federal listing of the fox, which could result in limitations to Navy training at SCI."

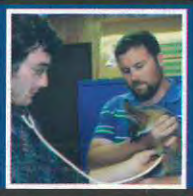
Since being found, Wayn is now the San Clemente Island "ambassador-fox." He resides in his own outdoor enclosure at the Navy's Natural Resource Complex at San Clemente Island, where he provides an opportunity for groups and individuals to see him and learn more about his species.

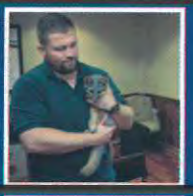
Wayn is taken for walks in the general area around the complex and enjoys a diet of wet and dry cat food, live mice, crickets, fish, hard-boiled eggs in the shell, and a variety of fruits and vegetables. ■

VIDEO LINK

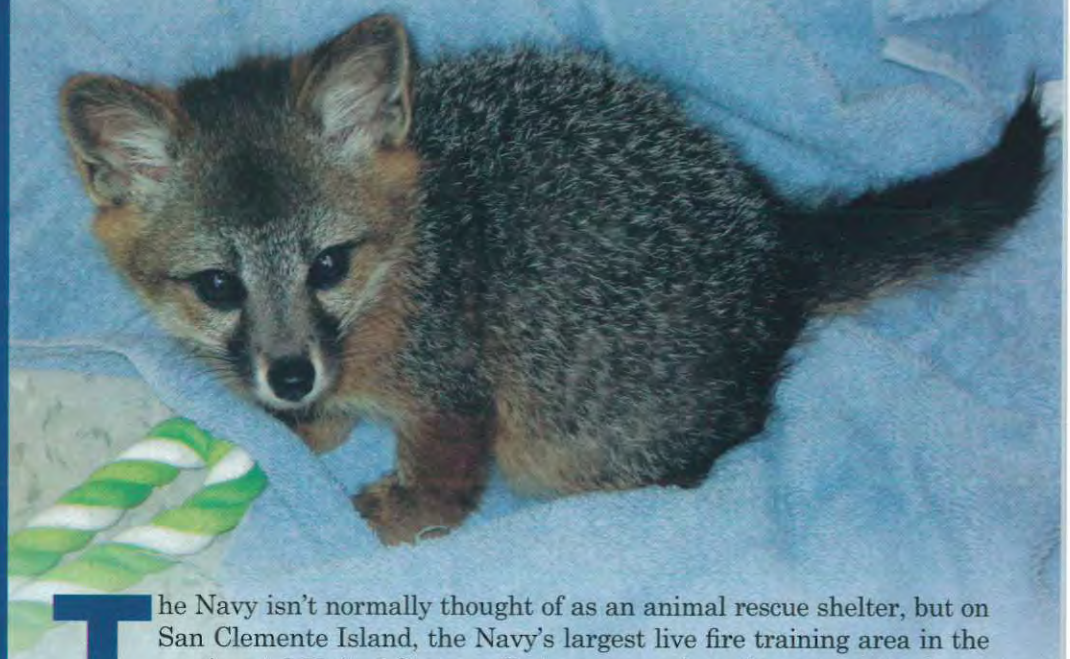
VIDEO LINK






Garth's excellent Navy experience



The Navy isn't normally thought of as an animal rescue shelter, but on San Clemente Island, the Navy's largest live fire training area in the continental United States, efforts were made to house an abandoned fox pup, giving it the chance for a future as an ambassador for its breed.

Nicknamed Garth, the infant pup was found rolled up helpless and parentless on the side of the road and was promptly rescued. The fox pup would not have survived in the wild because of its lack of survival skills and age. This is why wildlife biologists working for the Navy took it into their hands to care for him.

"At his age, he should not have been on his own by himself. So after consulting with our veterinarian and other senior staff members, we decided to put him back out in a cage for the night with some food and water," said Daniel Biteman, who works for the Institute for Wildlife Studies as a Navy wildlife biologist. "We placed three trail cameras around him, to take video clips when motion triggered. We returned the next morning and checked the video clips and did not find that the parents returned for him. We again checked at noon that day with the same findings," Biteman said.

Melissa A. Booker, who also is a Navy wildlife biologist on San Clemente Island, said that it is normal for parents to return for their pups, but after 23 hours with no findings during the surveillance, they knew that the fox pup had probably been abandoned and he was brought in to be cared for and raised.

The Navy's wildlife biologists on San Clemente Island noted that Garth was a little more than the size of a hand when he first arrived and weighed 460 grams. After a few months of care, the fox pup's size tripled to 1.6 kilograms and he acquired a playful personality.

"He has really taken to people and constantly wants to be played with. He has a number of toys, little tennis balls, and a stuffed rabbit he likes to throw around. If he sees us walking near his pen and we don't immediately stop to play with him, he makes a little whooping call noise and looks up at us with these big cute eyes," said Biteman.

The island fox species eats insects, rodents, fruits and plants. Biteman said Garth plays with the crickets he is fed until they don't move anymore and then eats them. In addition to the crickets, now that he is bigger, a new staple has been added to his meals, which are mice. He doesn't understand the mice are for eating and doesn't know how to kill them so he plays with them instead.

"I'm surprised how gentle he is. It is entertaining to watch him play. He will go underneath a sheet lining in his cage until we pull him out. He likes to put both his paws in his water dish and splash around like a little kid and he makes quite a mess," said Biteman.

Biteman said Garth has also become acrobatic to the point that he has watched some impressive back flips in his cage. The fox pup is also sly in that he chases Biteman's hand around to play and then lowers himself to pretend he is taking the hand as prey.

"He is adding the playful element to his predatory technique when playing with my hand. The interesting thing is that he wags his tail which is kind of funny because a wild fox would not do that," said Biteman.

One of the ways that the Navy has executed its mission to protect the natural and cultural resources on San Clemente Island is by working closely with the Santa Barbara Zoo. The Navy has established a relationship where animals like Garth who were not good candidates to be released back into their native environment would be able to go to the zoo. This allows the Navy to continue to foster relationships with California communities.

"We transferred other foxes to the zoo back in the late 90's and that population has gotten a lot older now with only a few left in captivity, which is why we are re-initiating this effort to let a few more foxes go back so the zoo can maintain and exhibit them," said Booker.

"The Santa Barbara Zoo is incredibly thrilled to continue partnering with the Navy to conserve the Channel Island Fox," said Sheri Horiszny, Santa Barbara Zoo Director of Animal Programs.

The San Clemente Island fox, a "state protected" species, is the largest mammal native to the San Clemente Island. Because of the Navy's efforts, there are more than a thousand foxes on the island today.

"The Navy has done a very good job of managing the fox species, it's important for people to understand that and have an appreciation for this fox which is the smallest of the foxes that only is found here in California on our Channel Islands," said Booker.

The Santa Barbara Zoo is the best place for Garth, now that he has turned three months old because it already has a Channel Island fox enclosure. The zoo's other outreach fox just passed away a few months ago so Garth will be the replacement. Booker said the zoo also has an outreach and education program that will use Garth as the ambassador of this breed of endangered fox to help educate people. Garth's ability to educate the community while at the zoo extends the Navy's efforts and provides the public with insight unavailable any other way. Researchers at the zoo can also use Garth to study the habits and behaviors of this rare fox that are smaller than a house cat and yet bouncy and good-natured like a puppy.

"I constantly get the question are island foxes more like cats or dogs," said Biteman "I've watched him do behaviors that I've seen cats do before and he is dog like in some of his play and tackle mannerisms. They are the size of a cat, but after watching him and his behavior, I think they are their own category of species," Biteman said.

A ceremonial Navy sendoff was given for the fox pup where the officer-in-charge of San Clemente Island, Cmdr. Walter Glenn said that Garth had been a great addition and now will be moving on to bigger and better things.

Nicknamed Garth, the infant fox was found curled up, helpless and alone on the side of a road and was promptly rescued. Garth was a little more than the size of a hand when he first arrived, weighing just 460 grams (about 1 pound).

"Do us proud, be a good ambassador," said Glenn.

"I am very happy Garth will have a new home with the Santa Barbara Zoo, I am also excited for the zoo for taking him in as their new ambassador," said Capt. Yancy Lindsey, Commanding Officer, Naval Base Coronado.

Biteman was the main biologist who raised Garth and said he is working on negotiating visitation rights with the zoo and hopes to be allowed to see him.

"I'm looking forward to seeing his new home and seeing where he going to go. I'm going to miss this little guy, I hope he remembers me," said Biteman.

"I think he will be a joy for everyone who gets to meet him," said Booker.

Booker said that Garth had been kept isolated the entire time he was cared for by the Navy, but there is hope that in the future there will be a little girl fox in a similar predicament to be the first fox to interact with him and hopefully make some little Garths. The Santa Barbara Zoo renamed Garth to Beauregard and isn't the only one continuing to partner with the Navy to conserve the Channel Island fox. Two abandoned female fox pups, Ruby and Roxy, were transferred to the California Living Museum in Bakersfield, CA, where they continue to live together and, like Beau, help people appreciate the island fox. ■

Biteman, the main biologist who raised Garth, said he is negotiating visitation rights with the zoo and hopes to be allowed to see him.

"I'm going to miss this little guy, I hope he remembers me," Biteman said.

Night lizard 'DELISTED'

APPROVED

Island Night Lizard
Xantusia riversiana reticulate

Privacy, beauty and romance are most people's ingredients for a great vacation, but for the island night lizard on San Clemente Island, it's a normal way of living.

The island night lizard is unique in many ways. First, it shares its paradise of land, air and sea ranges with the U.S. Navy, U.S. Marine Corps and other military services. While military training activities can occur from dusk to dawn, the island night lizard has no activity during the night, as its name would suggest, but is most active at mid-day with little activity in the early mornings and late afternoons. Another unique aspect to this species is that it is long-lived up to 25 years and gives birth to live young, compared with other reptiles which lay eggs that must be incubated and protected to hatch.

Melissa Booker, Wildlife Biologist, holds the island night lizard.
PHOTO BY SHARON STEPHENSONPINO

The U.S. Fish and Wildlife Service listed the island night lizard as threatened in 1977, mainly because there was not enough known information about this lizard and its habitat. With that lack of information, it was better to be safe than sorry, so the agency placed the island night lizard on the endangered species list. The agency now says the lizards are numbered in the millions and took them off the threatened list as of May 1, 2014.

The Navy was careful not to affect the lizard's natural resources and habitat while conducting readiness training, research development, tests and evaluation activities until adequate data could be acquired.

"Anytime a species is found only on this island and is listed under the endangered Species Act, the Navy has to develop a plan to protect it," said Melissa A. Booker, who is the Navy's Wildlife Biologist on San Clemente Island. "It is the legally required thing to do and practical for supporting the mission, although it involves costs and can be cumbersome to the mission."

"San Clemente Island harbors more endangered species than most states, with six plants, three birds, as well as the island night lizard," Booker added.

Through the years, several thorough reviews have been done with analysis to determine the true status of the island night lizard. The findings showed the population is stable and viable. Because of these finding, the U.S. Navy petitioned for the removal of the island night lizard from the endangered species list.

"When the island night lizard was first discovered it was considered to be rare because of the absence of information and not enough data," said Andy Yatsko, senior archaeologist for Environmental Operations and Planning, Natural and Cultural Resources, Naval Facilities Engineering Command, Southwest, San Diego. "For the Navy to be able to delist a species from a threatened category is good for the Navy's statistics. It is a prime example of the Navy's good stewardship. The delisting will save on costs and allow less impact to training," Yatsko said.

The night lizard lives in areas throughout the island, many of which are in close proximity to the Navy's operational areas and facilities that support both research and operational training for ships and aircraft of the Pacific Fleet.

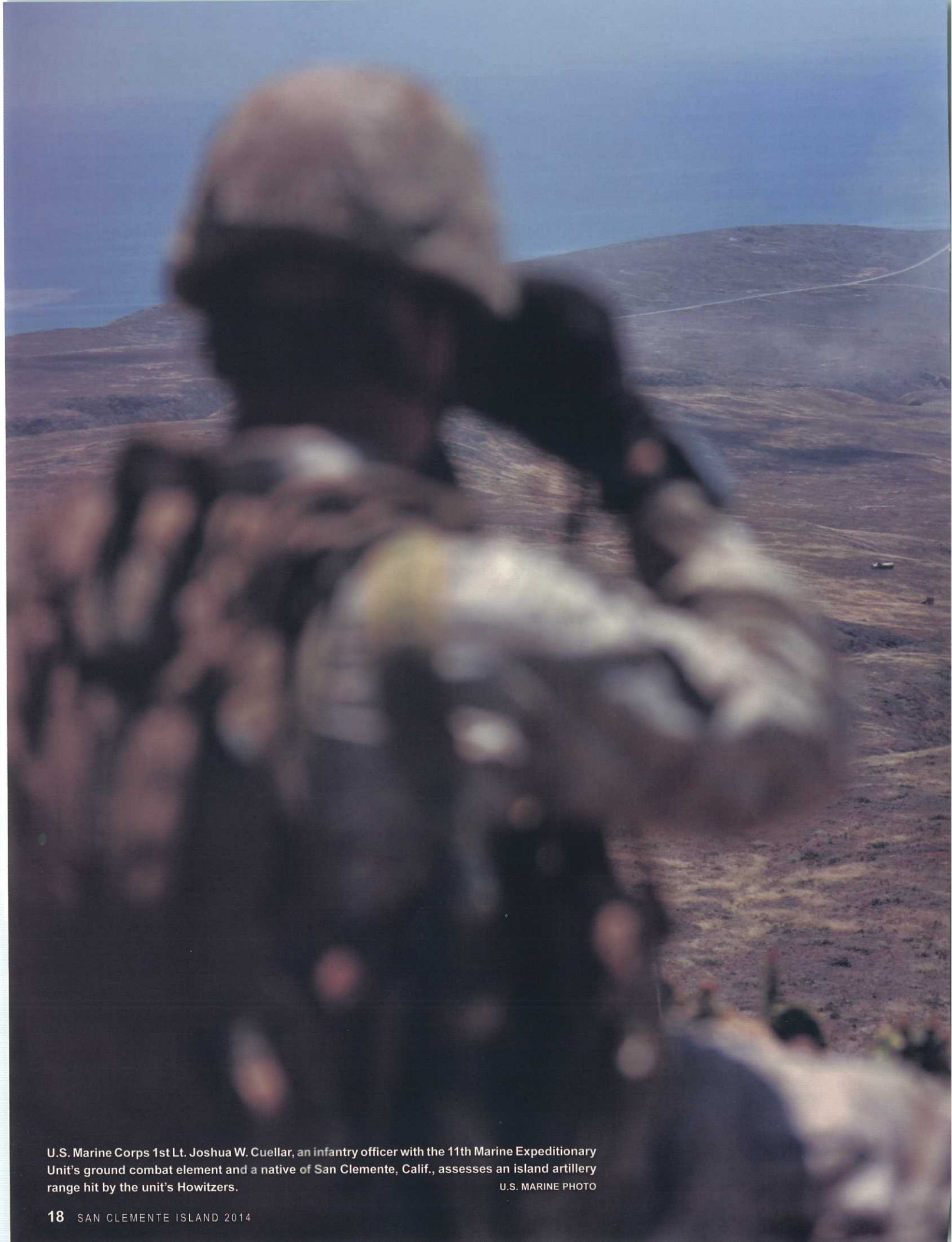
"After years of research used to evaluate the island night lizard, it indicates that the lizards' population is stable and Navy activities do not have an adverse effect on these inhabitants," Yatsko said. "The success in achieving the removal of the island night lizard from the endangered list reflects on both Naval Base Coronado's regulatory accomplishments in reaching this milestone and the command's effective stewardship responsibilities."

"As the federal landowner, the Commander Navy Region Southwest, San Diego, and Commander Naval Base Coronado's compliance with the Endangered Species Act for listed species on San Clemente Island is the element that has continued to allow the military mission to be achieved," Yatsko added.

The Navy's commitment to its environmental responsibilities with proactive work toward conservation and recovery of listed species is how the delisting of the island night lizard is made possible. Once the night lizard is taken off the endangered list, mission encumbrances will be lessened. The Navy will continue with its stewardship efforts to take into account this species' needs in addition to the partnership for outreach and awareness. The night lizard's recovery is a perfect example of a winning partnership between our country's national defense and environmental requirements that have maintained a successful habitat of restoration and conservation actions.

Now that the night lizard has been removed from federal listing this little, sneaky, long-lived reptile gets to continue living on its island resort home. ■

PHOTO BY SHARON STEPHENSONPINO



U.S. Marine Corps 1st Lt. Joshua W. Cuellar, an infantry officer with the 11th Marine Expeditionary Unit's ground combat element and a native of San Clemente, Calif., assesses an island artillery range hit by the unit's Howitzers. U.S. MARINE PHOTO

SHOBA –
Ship-to-Shore Bombardment Training Range

The land, air and sea ranges provide the U.S. Navy, U.S. Marine Corps and other military services space and facilities which are used to conduct readiness training, research, development, test and evaluation activities.

San Clemente Island is a 57-square mile volcanic island approximately 75 miles northwest of San Diego that is the only live fire ship-to-shore bombardment training range in the United States. The Navy has operated San Clemente Island for over 70 years as a tactical training range and testing area where the U.S. military forces can conduct exercises in a controlled, safe environment.

The Navy has succeeded in managing Natural Resources and maintains one of the highest training tempos on DOD lands. The primary purpose of San Clemente Island is to meet the national strategy of forward presence and global engagement by providing readiness training for units and personnel who deploy overseas.

Ship-to-shore bombardment training ranges (SHOBA) remain on the southern end of the island where submarines surface offshore near Navy destroyers and small vessels topped with rotating radar dishes. Ramps are used to support LCAC landings while preventing beach erosion and threatened western snowy plovers persist and have bred successfully alongside the LCAC landing ramp. The Navy has taken measures to make sure the wildlife is safe by reconfiguring training ranges as feasible. ■

The San Clemente Island Range Complex (SCIRC) is the center of the Pacific Fleets primary training area.

SHOBA

Ship-to-shore/air-to-ground bombardment range known as SHOBA is on the south end of Navy owned San Clemente Island, it's considered to be the beaches for amphibious assault training down the spine of the heavily traveled 22-mile-long island.

The Navy accelerated the use of the Shore Bombardment Area (SHOBA) following the commencement of WWII hostilities in 1942, where the southern end of the island was used for fleet training. Nine explosive ordnance magazines were placed mid-island.

The only surface fire support range on the West Coast is at San Clemente Island and is the Navy's last ship-to-shore live-fire range. Since the terrorist attacks of September 2001, training on the island has increased with the construction of a simulated U.S. embassy compound to train troops in rescuing Americans.

Target Area Surveillance System (TASS) Shelter

U.S. NAVY PHOTO BY LCDR ERIC GATLEY

U.S. NAVY PHOTO BY LCDR ERIC GATLEY

THE NAVY'S CHALLENGE ...

Conduct Vital Naval Training Operations and Provide for Natural Resources Conservation!

U.S. NAVY PHOTO

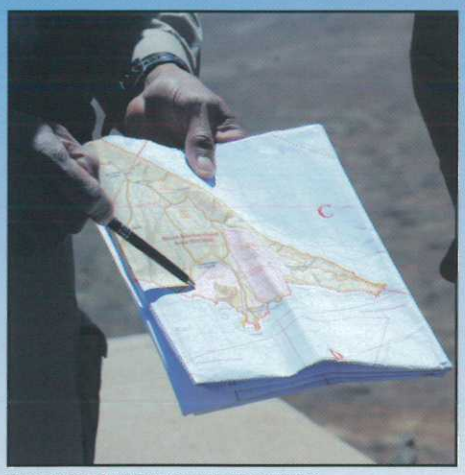


PHOTO BY SHARON STEPHENSONPINO

PHOTO BY SHARON STEPHENSONPINO

A Tactical Tomahawk Cruise Missile launches from the guided missile destroyer USS Stethem (DDG 63) during a live-warhead test. The missile traveled 760 nautical miles to successfully impact its intended target on San Clemente Island.

U.S. NAVY PHOTO

Simulated village for training.

PHOTO BY SHARON STEPHENSONPINO

No shell games on San Clemente Island

By Bill Franklin, Public Affairs

Along the shoreline of San Clemente Island, the Navy is striving to protect an endangered shellfish that clings to life in wave-washed rocky crevices.

The Navy signed an Integrated Natural Resource Management Plan (INRMP) amendment June 9, 2011, to help protect and save the black abalone while also preserving invaluable training areas at SCI the Navy uses to ready seaborne combat forces to defend the nation.

Once plentiful along the West Coast, the black abalone is now an endangered species and scientists fear it could face extinction.

The black abalone has long been under attack by poachers and commercial and recreational fishermen, but a cruel disease dubbed "Withering Syndrome" has decimated its population to 5 percent of its historic high.

"Although a comprehensive estimate of the total number of black abalone has not been determined in Southern California, a long-term survey of select locations indicated a pre-disease average population of 30 individuals per 10 square foot area and after the disease had struck, less than one, and more often than not, zero abalone were found in the same areas," said Fisheries Biologist, Melissa J. Neuman, with the National Marine Fisheries Service.

This disease prevents an abalone from digesting nutrients. As a result, it literally withers and dies from lack of nourishment or its foot atrophies and the abalone falls off the rock and becomes easy prey for enemies such as the sea otter.

"The abalone utilizes its foot to move between cracks and crevices to feed and is not able to survive if it can't hold onto the rock," said Jacqueline D. Rice, California-based natural resources program manager for Commander, U.S. Pacific Fleet.

The challenge facing the Navy has been how to manage the black abalone and support warfare training on San Clemente Island.

The answer lies in managing the population by implementing an INRMP to help protect the species, said Jessica J. Bredvik, a marine biologist with Naval Facilities Engineering Command Southwest.

According to the Endangered Species Act, the Secretary of Interior is not allowed to designate DoD land as critical habitat where an INRMP is in place. This is only if the Secretary determines that the INRMP provides a benefit to the species where critical habitat is proposed for designation.

The plan involves establishing a partnership with each regulator including: the National Marine Fisheries Service, U.S. Fish and Wildlife Service and the California Department of Fish and Game, which also signed off on the INRMP, Bredvik added.

In 2009, the National Marine Fisheries Service designated the black abalone as endangered.

In anticipation of and in response to this designation under the Endangered Species Act, Bredvik said, "In 2008 and 2011 the Navy spent approximately $120,000 to conduct field surveys and identify habitat for black abalone along the SCI shoreline."

"Navy biologists counted more than 30 black abalone in a few remote survey areas of the rocky intertidal habitat around SCI. This number is used to make an educated guess that over 200 abalone likely exists along the coastal area of SCI," said Rice.

"Surveys currently in progress this year, estimated at $220,000, demonstrate the Navy's commitment to protect the black abalone," said Bredvik.

San Clemente and San Nicolas Island, both administered by the Navy, are among the eight Channel Islands, a chain stretching along the coast of Southern California in the Santa Barbara Channel.

"The Channel Islands are the last strongholds for the abalone species because they are and have been less accessible for harvesting, are further off-shore than other existing habitat, and less susceptible to the affects of pollution," said Bredvik.

According to new regulations issued by the National Oceanic and Atmospheric Administration, approximately 22 miles have been designated critical habitat along the California shoreline. NOAA spared San Clemente and San Nicolas islands from designation as critical habitat.

"This is based on determinations that the U.S. Navy's revised INRMPs for these areas provide benefits to black abalone," said Bredvik.

Rice said, "The fact that we received an exclusion from critical habitat is the real success story."

Had the islands been designated as critical habitat it would have changed how the Navy could train at SCI or SNI," Rice added.

The 2011 INRMP amendment describes what the Navy will do to protect the black abalone.

This amendment requires the Navy to annually manage black abalone, which could include, counting the number of abalone near the shoreline, educate island personnel to prevent poaching and continue enforcement of safety zone closures that prohibit or limit public access to species habitat at SCI. The Navy will also continue data collection efforts with state and federal agencies to develop a management plan using adaptive strategies that help the species survive.

"Adaptive management is the ability to change our management strategies as we continue to collect data and adjust our approach to best manage the species," said Bredvik.

The other key to success in protecting the black abalone is found in the collaboration between the regulatory agencies and the Navy.

Bredvik said, "We have always had an open-door policy with the regulators and work closely with them in the development and continued management of the program."

"It was important that we talked and worked together to coordinate efforts that help the black abalone at SCI. We were able to work with the Navy in drafting an INRMP amendment that resulted in positive steps to manage and protect the black abalone and its habitat," said Neuman.

"I think it's a little too soon to say whether the INRMP, in effect less than a year, is the best recovery tool over a Critical Habitat designation," said Neuman.

"But," she added, "whatever the Navy can do at SCI, using its resources and staff to train and inform others, stressing that black abalone are an endangered species and it's illegal to poach them, could go much further in protecting the species than a NMFS critical habitat designation at SCI."

"We don't have it all figured out for black abalone. Currently NMFS is engaged in a recovery planning process that's required under the Endangered Species Act; it's a five-year process and will serve as a guide for recovering the species. We hope the Navy will be an integral part of developing that plan," said Neuman.

"We're doing the best we can to be good stewards and support the recovery of this species. Our other role is to ensure that warfighters continue to train as they need to at SCI and SNI. These roles are not mutually exclusive," said Rice. ■

Quick Facts

Description: The black abalone shell's exterior is dark blue, dark green or black, smooth and usually epiphyte-free; up to 20 cm. in length. There are usually five to nine open respiratory pores sitting flush with the shell's surface. Shell interior is pearly, with pink and green iridescence. The mantle and tentacles are black.

Historically, the most important grazer and scavenger in the intertidal: The black abalone lives on rocky intertidal and shallow subtidal reefs, being most abundant in the intertidal. The intertidal is a place of environmental extremes: strong waves that can dislodge organisms; air and sun exposure during low tides that can dry and heat; runoff of nutrients and freshwater from the land that alters the chemical environment. The abalone finds its shelter in crevices, under boulders, and on walls of surge channels of wave exposed shores. Adult abalone eat seaweeds that grow and drift algae that accumulate in the crevices.

Predators threaten survival: Other than humans, only the southern sea otter regularly eats adult black abalone. Illegal poaching continues to threaten healthy adult abalone. The expansion of the threatened (but not endangered) sea otter south of Point Conception, Cali. presents additional threat to the abalone recovery efforts. It is yet unclear how resource managers will deal with sea otters colonizing areas with endangered black abalone.

Important ecosystem engineer: When in healthy abundance, its feeding activities knock-off encrusting invertebrates and remove small algae and thus maintain open areas of crustose coralline algae and bare rock. In the abalone's absence, the open areas are overgrown by invertebrates such as sponges, tunicates, barnacles and fleshy algae. Young (larval) black abalone do not typically settle into these invertebrate-dominated areas.

DID YOU KNOW?
The blood of the white abalone is blue-green.

Conservation efforts a lifeline to the endangered White Abalone

Historically, San Clemente Island (SCI) had some of the highest catch landings of white abalone in southern California. However, after 1975 the population suffered a sharp decline throughout its entire range. Intense commercial and recreational over-fishing is attributed as the main cause for the decline. Following the dramatic decrease in population, white abalone were federally listed as endangered under the Endangered Species Act in 2001. Currently, very few white abalone can be found in the deep rocky reef habitats offshore from the banks of SCI, along with green and pink abalone making SCI an important area for monitoring and recovery for many species of abalone.

Coming from the same class as snails and slugs, the white abalone has an oval-shaped shell and attaches to the rocky ocean bottom with their strong, muscular foot. The bottom of their foot is orange with blotchy orange-tan sensory extension which has tentacles. On average, white abalone are generally 5-8 inches long, but can grow up to 10 inches and weigh approximately 1.7 pounds.

White abalone have a complex life cycle which attributes to their slow population recovery. They reproduce by broadcasting their eggs and sperm into water column, once fertilized, the eggs hatch after only one day into larvae. Eventually, those larvae will change into the adult form settling out from the plankton to a hard surface where it will attach. Because white abalone are broadcast spawners, they need to be within three feet of a member of the opposite sex in order to have successful fertilization. Since the decline, white abalone are frequently found alone, and thus have little chance for successful fertilization because the males and females are too far apart to be able to reproduce.

Although commercial and recreational abalone fishing laws have been put into place that do not allow taking white abalone, there are still extremely low numbers of isolated survivors. National Marine Fisheries Service recovery and conservation efforts are underway with a captive breeding program and a four-step restoration plan. Navy-funded surveys for white abalone around SCI have provided population information in waters that have historically supported large numbers of this species. Navy natural resource managers are committed to continue to aid in the recovery of white abalone. ■

DID YOU KNOW?
The white abalone was the first marine invertebrate to be listed as endangered and to receive federal protection under the Endangered Species Act.

Endangered plants live on

By Aaron E. Sims and Danny Slakey

It is not often that we get to celebrate stories of success regarding the recovery of rare California plants. When asked to provide such stories in the past, we often drew a blank and could only think of the few successful rediscoveries of plants that had been presumed extinct in the past decades.

Although tremendously exciting and significant in and of themselves, these are not the stories of recovery of rare plant populations through effective land management and rehabilitation that people were asking about. Today, however, we are happy to report on one such story. It is the successful recovery of most of the native plants of San Clemente Island.

San Clemente Island is one of the eight Channel Islands located off the coast of Southern California. Together they encompass an exceptional flora with many rare and endemic plant species. Of all the Channel Islands, San Clemente Island has a particularly unique flora, hosting 15 plants that are known from nowhere else in the world, and an additional 48 plants that are only known from the Channel Islands as a whole.

This is due, in large part, to its long history of isolation, being one of the Channel Islands that was not completely submerged during sea level rise in the late Pleistocene Era. This isolation, however, also came with great costs in terms of pressures imposed on the island's flora throughout its recent history.

Feral goats were introduced onto the island at least by the early 19th

San Clemente Island has the highest number of endemic species of all the California Channel Islands. There are 15 plants found on SCI that are found nowhere else on earth. San Clemente Island also has an additional 48 species of plants that are only found on the Channel Islands.

Pictured below: Castilleja grisea
San Clemente Island India Paintbrush

Dudleya virens ssp. Virens
Bright Green Dudleya

Acmispon dendroideus var. traskiae
San Clemente Island Lotus

Munzothamnus blairii
San Clemente Island Chicory

century, and by 1840 it was said that the goat population was prolific. Feral pigs were also introduced at an unknown date, and by 1877, sheep and cattle were raised on the island for commercial production. The devastation to the flora caused by these herbivores was immense. A number of plants were extirpated from the island, and it is possible that some plants never known to science became extinct before botanists were able to explore it.

Due in part or entirely from this damage, there are currently 61 plants on the island that are included in the CNPS Inventory of Rare, Threatened, and Endangered Plants of California. Over half of them are California Rare Plant Rank (CRPR) 1B taxa, meaning they are rare in California and throughout their entire known range.

In 1934 the U.S. Navy took acquisition of the island, and by 1972 began removing the feral herbivores in response to the threats they posed. By 1991 the feral goats and pigs had been completely eradicated, with a total of over 29,000 goats removed. Several studies were initiated after the removal of feral animals to determine the status of the island's vegetation. Today the U.S. Navy actively manages San Clemente Island to promote successful recovery of its native vegetation through continued rare plant surveys, revegetation of natives, weed eradication, and erosion control.

A total of 15 CRPR 1B plants from San Clemente Island have been proposed for down-ranking to CRPR 4 (watch list) due to their recovery.

ED NOTE: While the article speaks about the California Native Plant Society (CNPS) ranking process, the Endangered Species Act is most relevant to the Navy and its ability to carry out its mission on San Clemente Island.

Eriogonum giganteum
var. formosum
San Clemente Island Buckwheat

Six of these 1B plants are endemic to the island itself, and two of them — the San Clemente Island lotus (Acmispon dendroideus var. traskiae) and San Clemente Island paintbrush (Castilleja grisea) — are additionally being proposed for downlisting from Federally Endangered to Threatened. These downlistings are particularly significant as they were among the very first plants to gain protection under the Environmental Species Act back in the late 1970's.

The CNPS Rare Plant Program and the California Department of Fish and Wildlife's Natural Diversity Database (CNDDB) began initiating the status review process for these plants last year, starting with San Clemente Island paintbrush. (For an explanation of the review process, see the CNPS Bulletin, Vol. 42, No. 1, Jan.-Mar. 2012.) While the paintbrush did not qualify for downranking to CRPR 4, its threat rank was changed from 0.2 (moderately threatened) to 0.3 (not very threatened) in order to reflect its recovery and effective management by the U.S. Navy.

Although many of the other proposed plants might not qualify for downranking mostly due to their restricted distributions, they have recovered remarkably in terms of increased numbers of plants and distribution, as well as active recruitment, throughout the island.

The CNPS Rare Plant Program and the CNDDB staff applaud the U.S. Navy for their commitment to environmental stewardship and conservation. ■

Brodiaea kinkiensis Niehaus
San Clemente Island brodiaea
Lily Family

Green Navy barracks at San Clemente Island

San Clemente Island has state-of-the-art barracks that consist of 44 two-person apartments per building that houses permanent party military members.

The buildings feature energy efficient and environmentally friendly designs with solar electricity and wind power generators designed to make life as comfortable as possible for the Sailors and civilians who are residing on the remote island.

"With these forward-thinking designs, we are not only reaffirming our commitment to renewable, self-sustaining energy solutions, but also enhancing the quality of lives of our Sailors here on San Clemente Island," said Capt. Gary A. Mayes, commanding officer of Naval Base Coronado. "Making this project even more significant is that it offers sustainable features such as a wastewater treatment plant. This is all moving us toward the goal of reducing our energy consumption by 35 percent by 2015."

San Clemente Island is located approximately 70 miles west of San Diego. The range facility is home to 300 military and civilian personnel. The facility provides training for naval surface fire support, air to ground tactics and special operations. ■

The new bachelor enlisted quarters at Naval Auxiliary Landing Field, San Clemente Island feature wind generators and solar panels.

U.S. NAVY PHOTO BY MASS COMMUNICATION SPECIALIST 2ND CLASS DOMINIQUE PINEIRO

Navy, Marines, Japan conduct Amphibious Training

By Mass Communication Specialist 3rd Class Corey T. Jones

The U.S. Navy, Marine Corps and Japan Self-Defense Force (JSDF) conducted amphibious training during exercise Dawn Blitz June 17-28, 2013.

The events included troop insertions on San Clemente Island by U.S. Marines aboard three MV-22 Ospreys and Japanese soldiers aboard Japanese Ground Self-Defense Force (JGSDF) CH-47s, Marine AH-1 Cobra maneuvers and a Japan Maritime Self-Defense Force (JMSDF) landing craft air cushion (LCAC) offloading armored vehicles.

The activities culminated after two years of extensive planning by Sailors and Marines from Commander, U.S. 3rd Fleet, Expeditionary Strike Group 3 (ESG 3), I Marine Expeditionary Force (I MEF), 1st Marine Expeditionary Brigade, and was part of a series of live training events. Dawn Blitz also includes forces from Canada and New Zealand.

"We have six ships, about 25 aircraft and 2,500 personnel participating in a variety of operations that are wrapped under the umbrella of Dawn Blitz," said Rear Adm. Gerard P. Hueber, commander, ESG 3. "It is an opportunity for the U.S. Navy to work with coalition partners and exercise on these training regions in Southern California to our operational readiness," Hueber added.

"Exercising our core amphibious capabilities is something that we, the United States Marine Corps have been working very closely with many of our allies in the Pacific, to include Australia, New Zealand, India and, of course, Japan," said Marine Lt. Gen. John A. Toolan, I MEF commanding general.

Hueber referenced the state-of-the-art ranges owned by the Navy that are available for training.

"We are fortunate to have unparalleled amphibious training ranges

Landing Craft Air Cushion (LCAC) 56, assigned to Assault Craft Unit (ACU) 5, Foxtrot Detachment, approaches San Clemente Island to embark members of the 13th Marine Expeditionary Unit (13th MEU) for transport to the amphibious assault ship USS Boxer (LHD 4).

U.S. NAVY PHOTO BY MASS COMMUNICATION SPECIALIST SEAMAN CONOR MINTO

SAN CLEMENTE ISLAND, Calif. (June 17, 2013) — Marine Lt. Gen. John A. Toolan, left, commanding general of the 1st Marine Expeditionary Force (1st MEF), and Japan Sel-Defense Force Lt. Gen. Koichi Isobe, vice Chief of Joint Staff, receive information before a troop insertion during exercise Dawn Blitz. Dawn Blitz is a scenario-driven exercise led by U.S. 3rd Fleet and 1st MEF that tests participants in the planning and execution of amphibious operations through a series of live training events. U.S. NAVY PHOTO BY MASS COMMUNICATION SPECIALIST 3RD CLASS COREY T. JONES

located here in Southern California that enable us to provide realistic, relevant training that strengthens our ability to operate together, whether to respond to natural disasters, crises or conducting operations throughout the Pacific," said Hueber.

JSDF Lt. Gen. Koichi Isobe, vice chief of joint staff, expressed similar sentiments alongside his U.S. counterparts.

"On this occasion, I would like to express my deepest appreciation to the U.S. forces and other organizations participating in this exercise," Isobe said. "As we all know, the United States and Japan have a strong alliance and share the same values like democracy, freedom, the rule of law, the freedom of navigation and [we] also share the same common Pacific interests."

Throughout the last week of the exercise, New Zealand and Canadian forces conducted diving and mine clearance training off the coast of Camp Pendleton and Port Hueneme.

Joint, interagency and international relationships strengthen U.S. 3rd Fleet's ability to respond to crises and protect the collective maritime interests of the U.S. and its allies and partners. ■

A Japan Self-Defense Force landing craft air cushion approaches San Clemente Island during exercise Dawn Blitz. Dawn Blitz is a multilateral amphibious exercise designed to strengthen international partnerships by improving the ability to respond to crises and protect the collective maritime interests of the U.S. and its allies and partners.

U.S. NAVY PHOTO BY MASS COMMUNICATION SPECIALIST 3RD CLASS COREY T. JONES

Rare artifact found on San Clemente Island

By Mass Communication Specialist 2nd Class Shawnte Bryan

The Navy discovered a significant prehistoric artifact 90 miles west of San Diego on San Clemente Island (SCI) located mid-island at a newly discovered archeological site.

A boat effigy made of submarine volcano lava was spotted at the surface of the site during an archeology survey. The boat effigy represents a type of boat used by the California Indians who occupied the California Channels and adjacent southern California mainland at the time of the Spanish "discovery" in the 1500s.

Dr. Andy Yatsko, Senior Archaeologist and Region Southwest Archaeologist for the Naval Facilities Engineering Command Southwest in San Diego, who has over 40 years' experience in prehistoric and historic archaeology finds the boat effigy to be an uncommon find.

"Boat effigies like the one found are exceedingly rare in the archaeological record, with this being my first one recovered during my 30 year tenure with SCI," said Dr. Andy Yatsko, Senior Archaeologist

Andy Yatsko, senior archaeologist and Region Southwest Archaeologist for the Naval Facilities Engineering Command Southwest in San Diego, holds a small boat carving, or effigy, discovered 90 miles west of San Diego on San Clemente Island on the surface of a newly discovered archaeological site. The carving represents a canoe that was used by the California Indians who occupied the California Channels and adjacent southern California mainland at the time of the Spanish "discovery" in the 1500s.

U.S. NAVY PHOTO BY MASS COMMUNICATION SPECIALIST 2ND CLASS SHAWNTE BRYAN

and Region Southwest Archaeologist for the Naval Facilities Engineering Command Southwest in San Diego. "Finding artifacts on the surface of archaeological sites at the island is not unusual, but a rare one like this is always exciting to come across."

The effigy was created from submarine volcano lava. This lava differs from the lava that flows on the mainland because the vesicles are smaller, making it more brittle and more difficult to handle.

"The vesicle volcanic material used is hard and brittle but somehow they were able to craft a fine little carving out of it to represent an important part of their culture," said Yatsko. "This is something someone made representing a high skill level. This guy wasn't just a technician he was an artist. You can hold it and think about someone from 500 to 1000 years ago."

As a federal agency, the Navy has responsibilities to understand what it owns, in the way of property; in order to meet their expectations the navy contracts archeologist to survey the land to protect rare gems and parts of history such as the boat effigy.

"Naval Base Coronado (NBC) takes great pride in making this discovery that adds to our knowledge of the Native Americans that once called SCI home," said Capt. Gary Mayes, commanding officer, NBC. "Our cultural and natural resource programs are such that we continue to excel in protecting the natural and man-made treasures entrusted to our care while allowing our operational forces to train as they fight on SCI."

"If you were to draw a straight line in any direction on the landscape of SCI you would hit an archaeology site within 100-150 meters," said Yatsko. "But even with the high density of archaeology sites on the island, it's increasingly used for training without any real constraints on how that is done."

SCI has the last remaining shore bombardment range, in and out of the continental U.S., where Navy ships can qualify for naval gunfire support by actually shooting from ships to targets on land. It is also the last place where Marine Corps and Navy fire support forward observers can directly train for naval gunfire support roles making SCI critical because the physical dynamics of high-velocity naval gunfire are significantly different. ■

BOMB Technicians:
A partnership between FBI and Navy

By FBI Office of Public Affairs

Special Agent James Verdi has traveled to Afghanistan, Iraq, and the Horn of Africa to study battlefield explosives. The FBI bomb technician embedded with the military and applied his specialized skills there to find signatures and forensic material on bomb fragments and unexploded devices that helped the military piece together a clearer picture of its adversaries.

As a certified bomb technician in the Bureau's San Diego Field Office, Verdi is a long way from the battlefield today. But he still rolls out regularly with a Navy explosive ordnance disposal (EOD) unit — this one based on Coronado Island just outside San Diego. During training missions, Navy ships and planes drop live ammo on San Clemente Island 70 miles off the coast. Clearing the remnants is the job of the EOD technicians. Verdi often joins them so he can see firsthand how current military technicians operate in the field and what they are likely to encounter on the ground.

"They invite us along on a lot of their training exercises to do range clearance operations," said Verdi. "That teaches us the military ordnance side of the house: what bombs, artillery rounds, and munitions look like, so we can deal with them better if we see them."

The working relationship in San Diego started about a decade ago when the wars in Iraq and Afghanistan were ramping up and the military and FBI saw mutual benefits to sharing their unique skills and knowledge. For the FBI, which has played a growing investigative role in the war theaters by analyzing improvised explosive devices (IEDs) to help pinpoint their sources, the relationship is key because the military most frequently encounters IEDs. For EOD technicians, training with the FBI has opened a window on how explosives can be exploited for evidence like at a crime scene.

"Our jobs are very similar, although we have more experience with military ordnance and they have much more expertise in the counterterrorism portions of the job like explosives chemical analysis, explosives precursor knowledge, and so forth," said Lt. Abe Kim, of the Navy's

Navy EOD & FBI SABTs prepare unexploded ordnance for range clearance.

PHOTOS BY APRIL LANGWELL

Blasting caps are used to initiate the explosion of the Composition C4 used in detonating the unexploded ordnance.

EOD detachment on Coronado Island. "We each bring different things to the table."

Training together is a rule in the tight community of 468 bomb squads and more than 3,200 non-military bomb technicians across the country. To ensure consistency, every bomb technician is certified — and recertified every three years — through the Hazardous Devices School at Redstone Arsenal in Alabama, run by the FBI and the Army. Training with EOD techs, said Special Agent Steve Diaczyszyn — who supervises all of the Bureau's special agent bomb technicians — is a key facet of the job.

"You never know when the public safety bomb techs and the EOD technicians are going to have to work together in the interest of public safety," Diaczyszyn said. He said every field office bomb technician knows their EOD counterpart because the military takes the lead when a case involves ordnance without a terrorism nexus.

Verdi and his team respond to more than 200 calls a year for incidents or suspicious packages. Every experience is unique, he said. So it's important to share what you learn. Your life — and the lives of your partners — depends on it.

"That's one of the most important things we get out of working and training together with the Navy," said Verdi. "You have to earn their trust. And they have to know exactly how you're going to perform downrange in stressful environments, especially when you're in the combat theater. We train regularly so they know exactly how we are going to react. And they can depend on us when they need to." ■

Navy Explosive Ordnance Disposal and FBI Special Agent Bomb Technicians rig explosives to render safe unexploded ordnance on San Clemente Island.


San Clemente Island Fox
Urocyon littoralis
See stories starting on page 12

DISCLOSURE OF EX PARTE COMMUNICATIONS

Name or description of project:

United States Navy Federal Consistency Review for development of a Coastal Campus on Naval Base Coronado that would include 1.5 million square feet with 24 projects across a 10-year period.

Date and time of receipt of communication:
September 5, 2014 at 9:00am

Location of communication:
San Diego

Type of communication:
Meeting

Person(s) in attendance at time of communication:
Mary Kay Faryan, Gretchen Sosbee and Deborah McKay

Person(s) receiving communication:
Greg Murphy for Greg Cox

Detailed substantive description of the content of communication:
(Attach a copy of the complete text of any written material received.)

Greg Murphy on my staff had a meeting with representatives of the US Navy as a way to make introductions. Over the course of the meet-and-greet, Deborah McKay, the NEPA Coordinator for Navy Region Southwest, briefly described the Navy's proposed Coastal Campus project at Naval Base Coronado. She described the project as a necessary component of the Navy's strategic shift to the Pacific, and would include 24 projects that would create 1.5 million square feet built over 10 years. She provided handouts that were previously distributed at a recent public workshop. Those handouts are attached to this disclosure.

Date: 9/5/14

Signature of Commissioner: Greg Cox

NAVAL BASE CORONADO COASTAL CAMPUS

Environmental Impact Statement

Welcome

to the Public Meeting for Naval Base Coronado (NBC) Coastal Campus Draft Environmental Impact Statement (EIS)

www.NBCCoastalCampusEIS.com

PURPOSE AND NEED FOR THE PROPOSED ACTION

Currently, Naval Special Warfare Command (NSWC) facilities at Naval Base Coronado (NBC) are:

- **too small**
- **functionally obsolete**
- **too scattered**

- The majority of Congressionally-mandated growth of NSWC has already occurred at NBC.
- Most of the facilities supporting NSWC were built during World War II.
- NSWC and supporting commands are spread throughout 60 facilities that are divided by State Route 75 (SR-75).

Development of NBC Coastal Campus is an opportunity to create facilities that:

- **are state-of-the-art**
- **provide for mandated growth**
- **are co-located for more efficiency**

- Ensure that NSWC facilities are secure and private to develop necessary skills.
- Optimize the use of facilities and space within existing NBC boundaries.

RESOURCES STUDIED AND ENVIRONMENTAL CONSEQUENCES

BIOLOGICAL RESOURCES

All alternatives, except the No Action Alternative, would result in permanent direct impacts and temporary impacts to biological resources, as follows:

- Permanent and temporary impacts to plant communities and vegetation cover types within the footprint of the proposed NBC Coastal Campus. This includes temporary impacts to 0.02 acre of jurisdictional waters.
- There is 0.01 acre of vernal pool habitat located on the site. Permanent direct impacts would be avoided using trenchless construction technology.
- Loss of 0.15 acre of critical habitat for Western Snowy Plover from construction of the entry control point and related road improvements.

Plant Communities and Other Cover Types	Permanent Impact *	Temporary Impact **
Coastal and Valley Freshwater Marsh	–	0.03 acres
Southern Coastal Salt Marsh	–	0.05 acres
Vernal Pool	–	0.01 acres
Diegan Coastal Sage Scrub	0.35 acres	0.07 acres
Nonnative Grassland	0.02 acres	1.34 acres
Southern Foredunes	0.23 acres	2.62 acres
Urban / Developed		3.26 acres
Alternative 1	52.04 acres	-
Alternative 2 Same as Alternative 1, but Building 99 is retained.	47.44 acres	-
Alternative 3 Same as Alternative 2, but includes development on NASNI and NAB Coronado.	56.39 acres	-
Disturbed Habitat	114.06 acres	2.7 acres
Total		10.08 acres
Total - Alternative 1	166.7 acres	
Total - Alternative 2	162.1 acres	
Total - Alternative 3	171.06 acres	

[illegible]

CULTURAL RESOURCES

Alternative 1 would include demolition of Building 99 on SSTC-South. Alternatives 1, 2, and 3 all have the potential to impact cultural resources as a part of off-site improvements, as follows:

- Alternative 1 proposes the demolition of Building 99 on SSTC-South. Building 99 is a contributor to the National Register of Historic Places-eligible Fort Emory Coastal Defense Historic District.
- All alternatives avoid ground-disturbance to a prehistoric archaeological site that lies adjacent to, but buffered from the development footprint of NBC Coastal Campus. The site is eligible for listing on the National Register of Historic Places.
- All alternatives would include ground-disturbing off-site traffic, access, and utilities improvements that have the potential to impact archaeological resources.

RESOURCES STUDIED AND ENVIRONMENTAL CONSEQUENCES

Land Use and Recreation

No significant impacts related to land use and recreation are anticipated to occur as a result of any of the alternatives analyzed in the Draft EIS.

- All alternatives would expand the density and area of developed uses on SSTC-South but would not introduce incompatible land uses or be incompatible with existing land uses. (Including the facilities proposed at NAB Coronado and NASNI as part of Alternative 3).

- All alternatives include off-site improvements that would occur within infrastructure rights-of-way and would not have a significant land use impact.
- No recreational facilities on or off the installation would be adversely affected.

Air Quality

No significant impacts related to air quality are anticipated to occur as a result of any of the alternatives analyzed in the Draft EIS.

- All alternatives would conform to the State Implementation Plan for the San Diego Air Basin.
- The estimated annual emissions of all criteria pollutants for all alternatives in 2015 through 2024 would be less than the annual emissions rate thresholds.

- Volatile organic compounds (VOCs), nitrogen oxide (NO_x), carbon monoxide (CO), oxides of sulfur (SO_x), and particulate matter (PM_{10} and $PM_{2.5}$) were all analyzed in the Draft EIS.
- Estimated annual greenhouse gas emissions would be temporary, primarily from construction and substantially below applicable GHG guidelines.

Geology and Soils

No significant impacts related to geology and soils are anticipated to occur as a result of any of the alternatives analyzed in the Draft EIS.

- Changes to topography would be relatively minor involving construction site leveling.
- As with all of Southern California, strong seismically induced ground motion and associated ground shaking could occur.

- Adverse effects attributable to liquefaction and settlement are considered minor.
- Development would mostly occur outside the tsunami inundation area. No significant risk of seiches (standing waves) and landslides occurring.

Hazardous Materials and Waste

No significant impacts related to hazardous materials and waste are anticipated to occur as a result of any of the alternatives analyzed in the Draft EIS.

- The quantity of hazardous materials transported to SSTC-South and the hazardous materials at SSTC-South would increase. However, the maximum quantities of these materials stored on-site would not increase.
- Potential disturbance in the area around former underground storage tanks increases the risks to human health and the environment during excavation, transportation, and disposal.

- There are 2 Installation Restoration (IR) sites on SSTC-South that pose a minimal risk to health and environment There are also 4 IR sites on NAB Coronado and 1 on NASNI that are near the proposed development in Alternative 3.
- There would be a temporary increase in production of hazardous waste due to demolition and construction activities and it would be handled according to local, state, and Federal regulations.

AESTHETICS

All alternatives would modify viewsheds from State Route 75, the Bayshore Bikeway, the Coronado Cays, and Silver Strand State Beach.

- NBC Coastal Campus would result in a more noticeable visual appearance, including increased nighttime lighting conditions, primarily from southbound SR-75 approaching the proposed entry control point in the northern portion of SSTC-South.
- Design of buildings would include context-sensitive architectural treatments; low-reflectivity building materials in natural, earth-tone colors; shielding of permanent outdoor lighting; and context- and water-sensitive landscape treatments to buffer and screen the proposed development.

Conceptual rendering of a typical facility at the Coastal Campus.

Figure 1.1: Before

Figure 2.1: Before

Figure 3.1: Before

Figure 4.1: Before

Figure 1.2: After

Northbound SR-75 view from southern boundary of SSTC-South.

Figure 2.2: After

Southbound SR-75 view of beach and dunes north of SSTC-South, and Wallops Antenna Array in the distance.

Figure 3.2: After

Southbound SR-75 view of the northern portion of SSTC-South.

Figure 4.2: After

Southbound SR-75 view of northern portion of SSTC-South and Hooper Boulevard entrance.

ALTERNATIVES

Alternative 1 includes consolidation of Naval Special Warfare Command (NSWC) facilities at Silver Strand Training Complex-South (SSTC-South) and includes the demolition of Building 99 (a bunker eligible for the National Register of Historic Places.)

Alternative 2 includes all the components of Alternative 1, except Building 99 would be retained rather than demolished.

Alternative 3 includes all the components of Alternative 1, except Building 99 would be retained rather than demolished. Alternative 3 would be located on three separate Navy installations: Naval Amphibious Base (NAB) Coronado, Naval Air Station North Island (NASNI), and SSTC-South.

No Action Alternative

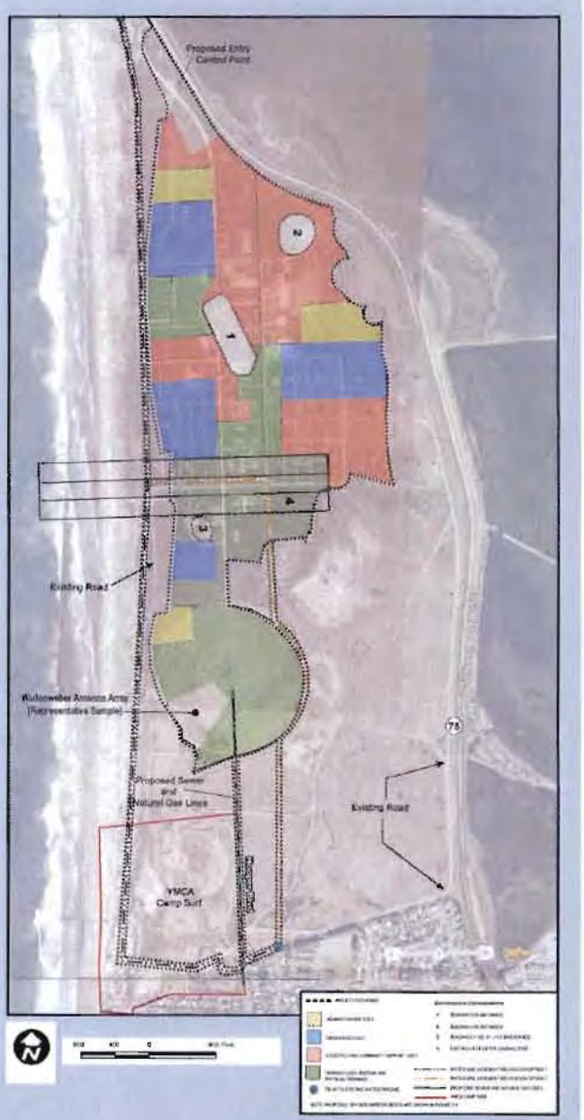
- Maintain existing land uses and training facilities currently used at Naval Base Coronado (NBC).
- None of the Proposed Action construction or improvements would occur.
- Current programmed levels of use (type, tempo, location), including requirements for planned force growth, would continue.
- NSWC would continue to have limited space for current and future training and operations support, as well as an inability to accommodate Congressionally-mandated expanded training needs.
- Dispersed and functionally obsolete facilities would continue to cause inefficiencies in the planning, execution, and support of NSWC missions.
- This alternative is studied as a baseline of current land and facilities use and is compared to the other alternatives.

Alternative 1: Silver Strand Training Complex-South (SSTC-South) Bunker Demolition Alternative

Alternative 1 includes consolidation of NSWC facilities at SSTC-South and includes the demolition of Building 99 (a bunker eligible for the National Register of Historic Places).

Alternative 2: SSTC-South Bunker Retention Alternative

Alternative 2 includes all the components of Alternative 1, except Building 99 would be retained rather than demolished.



INTRODUCTION TO NAVAL BASE CORONADO

NBC is a group of eight Navy installations stretching from San Clemente Island to the Remote Training Site at Warner Springs. NBC has a long relationship with its local community, extending over 100 years. NBC has a proud history as the birthplace of naval aviation.

Our mission is to provide the highest quality logistical support and quality-of-life services to U.S. Navy operating forces and other commands as needed, and to provide the right support, at the right time, in the right amount, enabling operating forces to produce the right level of combat readiness; that is, support the Fleet, Fighter, and Family.

We manage more than **30** listed species of plants and animals.

Through smart conservation methods, we have conserved more than **12** million gallons of water and reduced energy use by **22%**.

We have partnered with the City of Coronado and the City of Imperial Beach in various community outreach efforts, such as beach cleanups.

NAVAL BASE CORONADO COASTAL CAMPUS

Draft Environmental Impact Statement

PROPOSED ACTION

The proposed NBC Coastal Campus would include construction, operation, and maintenance of a campus that would include a mix of instructional and administrative facilities to support logistics, operations, training, and administration.

- NBC Coastal Campus would be constructed over a 10-year period at a cost of approximately $700 million.
- The Navy is proposing 24 projects that would provide 1.5 million square feet for the following:
  - 3 projects for administrative facilities
  - 4 projects for logistics and military community
  - 7 projects to sustain indoor and physical training
  - 9 projects for operational unit needs
- A new entry gate and off-site improvements to traffic and utilities are also identified.
- All buildings would be limited to 45 feet in height, with the exception of a paraloft (an approximately 50-foot-long by 80-foot-wide by 120-foot-tall parachute drying tower).

The NBC Coastal Campus would include logistical support buildings, equipment use (and equipment maintenance), training facilities, classroom and tactical skills instruction buildings, storage and administrative facilities, utilities, fencing, roads, and parking. The proposed action also includes:

- A food service facility, fuel dispensing facility, and a "mini-mart" type of store for military use only
- Demolition of infrastructure, site grading, and leveling for site preparation
- Construction of a new entry gate providing immediate access to the northern portion of Silver Strand Training Complex-South (SSTC-South) from State Route 75. Ingress/egress to the Coastal Campus would require signalization.
- The existing southern controlled access gate would remain open; however, use of this gate would be limited to current traffic volumes.
- Additional traffic improvements would be required at eight intersections by 2040.
- Additional off-site utility improvements would also be required.
- Incorporation of sustainable design into new and existing facilities when practicable.

About Naval Base Coronado

Naval Base Coronado (NBC) is a group of eight Navy installations, stretching from San Clemente Island to the Remote Training Site at Warner Springs. NBC has a long relationship with the community extending over 100 years and includes a proud history as the birth place of naval aviation.

Our mission is to provide the highest quality logistical support and quality of life services to U.S. Navy operating forces and for assigned activities and other commands as needed, and to provide the right support, at the right time, in the right amount, enabling operating forces to produce the right level of combat readiness; that is, support the Fleet, Fighter and Family.

Understanding Naval Special Warfare Command

NBC is home to several tenant commands, including Naval Special Warfare Command (NSWC). NSWC leads the Navy's special operations force and the maritime component of United States Special Operations Command. NSWC is comprised of active-duty Special Warfare Operators (known as SEALs), Special Warfare Boat Operators (also known as Special Warfare Combatant-craft Crewmen), reserve personnel, support personnel, and civilians.

NSWC has facilities on several NBC installations, including Naval Air Station North Island (NASNI), Naval Amphibious Base (NAB) Coronado, and Naval Outlying Landing Field Imperial Beach (NOLFIB).

Purpose and Need for the Proposed Action

Congress mandated U.S. Special Operations Forces to grow, which required NSWC to increase personnel and expand operational training capabilities at NBC. The majority of Congressionally-mandated growth has already occurred at NBC. However, most of the facilities supporting NSWC were built during World War II and are now:

- **functionally obsolete;**
- **too small;**
- **too scattered.**

Development of the Coastal Campus is the opportunity to create facilities that:

- are state-of-the-art;
- provide for mandated growth;
- are co-located for more efficiency;
- ensure that NSWC facilities are secure and private to develop necessary skills;
- optimize the use of facilities and space within existing NBC boundaries

SITE CONSIDERATIONS

Existing Development Considerations

On-Site Project Footprint Alternatives 1, 2, and 3

SIERRA CLUB
FOUNDED 1892

California Coastal Committee

7 November 2014

California Coastal Commission
Attn: Mark Delaplaine
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219

Re: CD-0003-14 Consistency Determination for proposed Naval Base Coronado Coastal Campus, Coronado, California

Chair Kinsey and Honorable Commissioners :

The Sierra Club strongly supports the Commission staff recommendation of objection to this consistency determination.

Commission staff has done an outstanding job of summarizing the many ways in which the proposed project is inconsistent with various Coastal Act policies.

In short, the proposed project is not an appropriate use of what is essentially a low-elevation dune field. In addition to the many impacts to sensitive resources, the project site is highly vulnerable to the effects of sea level rise.

The lack of analysis of less environmentally damaging alternatives, failure to consider the hazards of sea level rise, and lack of wetlands delineation are particular concerns.

We believe that the Commission should object to the consistency determination, for all of the reasons stated in the staff report.

Thanks,

David Grubb, Chair

Sierra Club California Coastal Committee

CALIFORNIA COASTAL COMMISSION
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Filed:	8/21/14
60th Day:	10/20/2014
75th Day:	11/3/2014
Extended to:	11/14/2014
Staff:	J. Street-SF
Staff Report:	10/31/14
Hearing Date:	11/12/14

STAFF REPORT: REGULAR CALENDAR

Consistency Determination No.: **CD-0003-14**

Federal Agency: **Department of the Navy (Navy)**

Location: Silver Strand Training Complex - South, Coronado, San Diego County (**Exhibits 1 and 2**)

Project Description: Coastal campus development comprising 24 projects and 1.5 million square feet of new facilities, constructed over a 10-year period

Staff Recommendation: Objection

SUMMARY OF STAFF RECOMMENDATION

The Navy has submitted a consistency determination for the construction of a new Coastal Campus at Naval Base Coronado (NBC), located on Coronado Island and the Silver Strand peninsula, San Diego County (**Exhibit 1**). The project involves the construction, operation and maintenance of a developed campus providing approximately 1.5 million square feet of new facilities to support the operations, logistics, field and classroom training, and administration of Naval Special Warfare Command (NSWC). The project would be located on the northern and central portions of the Silver Strand Training Complex – South (SSTC-S) (**Exhibits 1 – 4, 5**). The project also includes road and utility improvements, including a new northern entrance to

the site, road upgrades, and a new right-turn lane on State Highway 75 (SR-75). Full build-out of the NBC Coastal Campus would result in new development covering approximately 162 acres of the SSTC-S site, with construction occurring over a period of approximately ten years.

The project site contains multiple environmentally sensitive habitats areas (ESHA) and wetlands, including vernal pools, southern foredunes on the seaward margin of the training complex, Diegan coastal sage scrub and maritime succulent scrub, and coastal freshwater and saltwater marshes, along with a number of California Native Plant Society (CNPS)-listed rare and endangered plant species (**Exhibit 6**). The project has been sited to avoid many, though not all, of these environmentally sensitive habitat areas (ESHA). The development footprint coincides with previously disturbed and developed areas that nonetheless support large numbers of Nuttall's lotus (*Acmispon prostratus*), an annual herb considered by the CNPS to be critically-imperiled in California, and at high risk of extinction, and which the staff recommends the Commission determine to be ESHA under the Coastal Act. Staff therefore recommends the Commission find that the proposed siting of the Coastal Campus, within ESHA, would be **inconsistent** with the environmentally sensitive habitat policies of the California Coastal Management Program (CCMP) (Coastal Act Section 30240), because it would result in the removal of: (a) a large fraction of the Nuttall's lotus currently inhabiting the project site; (b) several individuals of other CNPS-listed plants; and (c) a small patch of coastal sage scrub supporting sensitive plant species within the project footprint.

In addition, several road improvements would be located within ESHA, and a new water line would disturb several acres of southern foredunes along the western boundary of the site. The water line would also involve trenching and pipe installation in a wetland, and while this pipeline installation may be an allowable use under Coastal Act Section 30233(a), the Navy has not established that alternatives avoiding wetland fill are infeasible. The Navy has also not conducted wetland delineations using Coastal Act criteria in the area potentially affected by the water line. The staff therefore recommends that the Commission find the project **inconsistent** with the wetland policy of the CCMP (Coastal Act Section 30233) based on lack of information.

Available sea level rise projection tools indicate that the project site will become increasingly vulnerable to flooding as sea level increases (**Exhibit 13**); this hazard could be exacerbated by on-going beach recession along the southern Silver Strand. The combination of sea level rise and coastal erosion could threaten the stability of the site and, in the future, necessitate the installation of shoreline protection devices. Because the Navy has not provided sufficient substantive analysis of these hazards, the staff recommends that the Commission find that the proposed project is **inconsistent** with the hazards policies of the CCMP (Coastal Act Section 30253(a) – (b)) based on lack of information.

Visual modifications would be most prominent from the northern approach along SR-75 and the Bayshore Bikeway. While most of the new structures would be similar in height and scale to existing structures, the project also includes a 120-foot tall parachute drying tower that would be highly obtrusive. To date, the Navy has not provided any visual impact or feasibility analysis of alternative locations for this structure, or to enable the Commission to determine whether the design features and appearance of Coastal Campus would be compatible with the surrounding

area. The staff thus recommends that the Commission find that the proposed project is **inconsistent** with the visual and scenic resources policy of the CCMP (Coastal Act Section 30251) based on lack of information.

Public access would not be directly affected. However, increases in traffic congestion accompanying the project could limit public access to the coast during periods of high visitation (e.g., weekends, holidays, summers) during the ten-year construction period. The Navy proposes to carry out a number of traffic improvements (e.g., signal and lane adjustments) at key intersections to reduce congestion, but has not committed to implementing a full suite of measures to reduce the number of single-occupancy vehicles traveling to and from the campus, such as a carpooling program and public transit extensions. Thus the staff recommends that the Commission find that the proposed project is **inconsistent** with public access and recreation policies (Coastal Act Sections 30210-30212, 30220, 30252) and the energy and vehicle miles traveled policy (Coastal Act Section 30253(d)) of the CCMP.

The staff recommends that the Commission find that the proposed project consistent with the relevant water quality policy (Coastal Act Section 30231) and cultural resource policy (Coastal Act Section 30244) of the CCMP.

For the above reasons, Commission staff recommends **objection** to CD-0003-14.

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Exhibit 14 – City of Coronado comment letter
Exhibit 15 – View modifications
Exhibit 16 – Water quality measures

I. FEDERAL AGENCY'S CONSISTENCY DETERMINATION

The Navy has determined that the project is fully consistent with the California Coastal Management Program (CCMP), and thus, that it satisfies the standard of being consistent to the maximum extent practicable.

II. MOTION AND RESOLUTION

MOTION:

I move that the Commission concur with consistency determination CD-0003-14 that the project described therein is fully consistent, and thus is consistent to the maximum extent practicable, with the enforceable policies of the California Coastal Management Program.

Staff recommends a **NO** vote on the motion. Failure of this motion will result in an objection to the determination and adoption of the following resolution and findings. An affirmative vote of the majority of the Commissioners present is required to pass the motion.

RESOLUTION:

*The Commission hereby **objects** to the consistency determination CD-0003-14 made by the Navy for the proposed project, finding that: (1) the project is not consistent with the California Coastal Management Program (CCMP); (2) the project is not consistent to the maximum extent practicable with the CCMP; and (3) the consistency determination for the proposed project does not supply sufficient information to determine the project's consistency with certain aspects of the CCMP.*

III. APPLICABLE LEGAL AUTHORITIES

Standard of Review

The federal Coastal Zone Management Act ("CZMA"), 16 U.S.C. § 1451-1464, requires that federal agency activities affecting coastal resources be "carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs." Id. at § 1456(c)(1)(A). The implementing regulations for the CZMA ("federal consistency regulations"), at 15 C.F.R. § 930.32(a)(1), define the phrase "consistent to the maximum extent practicable" to mean:

… fully consistent with the enforceable policies of management programs unless full consistency is prohibited by existing law applicable to the Federal agency.

This standard allows a federal activity that is not fully consistent with California's Coastal Management Program ("CCMP") to proceed, if full compliance with the CCMP would be "prohibited by existing law." In its consistency determination, the Navy did not argue that full consistency is prohibited by existing law or provide any documentation to support a maximum extent practicable argument. Therefore, there is no basis to conclude that existing law applicable to the Federal agency prohibits full consistency. Since the Navy has raised no issue of practicability, as so defined, the standard before the Commission is full consistency with the enforceable policies of the CCMP, which are the policies of Chapter 3 of the Coastal Act (Cal. Pub. Res. Code §§ 30200-30265.5).

Procedure if the Commission finds that the proposed activity is inconsistent with the CCMP.

Section 930.43(a) of the federal consistency regulations (15 CFR § 930.43(a)) requires that, if the Commission's objection is based on a finding that the proposed activity is inconsistent with the CCMP, the Commission must identify measures, if they exist, that would bring the project into conformance with the CCMP. That section states that:

> *(a) In the event the State agency objects to the Federal agency's consistency determination, the State agency shall accompany its response to the Federal agency with its reasons for the objection and supporting information. The State agency response shall describe: (1) How the proposed activity will be inconsistent with specific enforceable policies of the management program; and (2) The specific enforceable policies (including citations).(3) The State agency should also describe alternative measures (if they exist) which, if adopted by the Federal agency, would allow the activity to proceed in a manner consistent to the maximum extent practicable with the enforceable policies of the management program. Failure to describe alternatives does not affect the validity of the State agency's objection.*

As described in Sections IV. C. – J. of this report, the Commission finds that the proposed project is not consistent to the maximum extent practicable with the CCMP. Pursuant to the requirements of Section 930.43 of the federal regulations implementing the CZMA, the Commission is responsible for identifying measures, if they exist, that would bring the project into compliance with the CCMP to the maximum extent practicable. Assuming the informational deficiencies identified in the following procedural discussion below (and elaborated on in Sections IV. D., E. and F. of this report) can be resolved, the Commission believes that it would be possible to bring this project into compliance with the CCMP to the maximum extent practicable if the Navy were to implement the following measures:

1. **Avoidance of Nuttall's lotus, CNPS Rank 1 and 2 plant species and Coastal sage scrub:** The proposed development shall be redesigned to avoid the removal of all occurrences of Nuttall's lotus (*Acmispon prostratus*), other CNPS Rank 1 and 2 rare and endangered plant species, and existing stands of Diegan coastal sage scrub supporting rare plants at these sites. The redesigned project shall also include adequate buffers between development and ESHA, including buffers of at least 100 feet from wetlands, vernal pools, coastal sage scrub and maritime succulent scrub, and southern foredunes, and at least 25 feet from stands of Nuttall's lotus.

2. **Minimization of construction-related traffic during peak recreation periods:** To the extent feasible, the Navy shall avoid or minimize construction activities that would generate significant traffic flows during weekends, holidays and other peak recreation periods (e.g., summer months).

3. **Transportation Demand Management Plan:** The Navy shall develop and implement a set of concrete measures to reduce the demand for single occupancy vehicle travel to and from the SSTC-S Coastal campus and new facilities at NAB and NASNI. The Plan shall analyze the traffic effects of implementing a variety of demand management measures, including (but not limited to) the following:

   - a carpool or vanpool program for personnel commuting to the SSTC-S campus;
   - shuttle service between SSTC-S and other Navy facilities, within SSTC-S itself, and between the campus and entry gates;
   - construction of a bus stop at the SSTC-S entrance(s) and extension of municipal transit service from Coronado, Imperial Beach, San Diego and other communities;
   - on-site shuttle service within the SSTC-S campus serving the bus stop(s), to enable the use of public transit for commuting;
   - bicycle- and pedestrian-friendly design within the SSTC-S campus, including bicycle parking;
   - charging of on-site parking fees;
   - reinstatement of San Diego Bay ferry service.

   Any such measures projected to reduce traffic congestion shall be incorporated into the project and implemented.

Procedure if the Commission Objects Based on Lack of Information

Section 930.43(b) of the federal consistency regulations (15 CFR §930.43(b)) requires that, if the Commission's objection is based on lack of information, the Commission must identify the information necessary for it to assess the project's consistency with the CCMP. That section states:

> *If the State agency's objection is based upon a finding that the Federal agency has failed to supply sufficient information, the State agency's response must describe the nature of the information requested and the necessity of having such information to determine the consistency of the Federal agency activity with the enforceable policies of the management program.*

As fully described in Sections IV. C., D., F. G., and I. of this report, below, the Commission has found this consistency determination to lack the information that the Commission has requested from the Navy to enable the Commission to determine whether the proposed project is consistent to the maximum extent practicable with Sections 30233, 30251, and 30253(a) and (b) of the Coastal Act. In order to determine the project's consistency with the CCMP, the Commission has requested that the Navy provide it with the following necessary information:

1. **Wetland delineations:** The Navy shall conduct additional wetland delineations, using the Coastal Act definition of "wetland" (Coastal Act Section 30121 and 14 CCR §13577(b)(1)), for areas adjacent to the proposed Option 1 water line easement, and for any additional water line route alternatives (see below) passing close to previously-identified wetlands.

2. **Analysis of water line route alternatives:** The Navy shall conduct an environmental impacts and feasibility analysis of alternative configurations of the proposed water line that would avoid the dredging and fill of wetlands (as defined under the Coastal Act). The considered alternatives shall include the placement of the water line beneath Hooper Blvd. and previously developed portions of the site.

3. **Coastal Flooding and Erosion Hazards Analysis:** The Navy shall prepare a site-specific analysis of coastal flooding and erosion hazards at SSTC-S over the full anticipated life of the proposed project. The analysis should project the extent of flooding or inundation that could occur over the anticipated life of the project under both low and high sea level rise scenarios, and under a range of conditions that should include high tide, storm surge, elevated water levels due to El Niño events and warm phases of the Pacific Decadal Oscillation, and 100-year storm events. Projections of flooding and inundation should take into account wave run-up during high wave events, and the combination of seasonal beach erosion and long-term erosion under future high sea level conditions. The study should also analyze the extent of beach and dune erosion that could occur from current processes as well as future sea level rise over the life of the project. In combination, the flooding/inundation and erosion analyses should be used to delineate the areas of the site that can be safely developed, assuring geological stability, without reliance on future shoreline protection devices. The study should also analyze potential future migration of the coastal dune system, taking into account both sea level rise and erosion trends, and project the location of the dune system in relation to the proposed development footprint.

4. **Alternatives Analysis for Siting and Design of Paraloft Facility**: The Navy shall provide a detailed analysis of potential alternatives for off- and onsite relocation of the parachute tower, including consideration of the visual impacts and feasibility of each alternative.

5. **Building Design Criteria and Plans:** The Navy shall provide an ongoing review mechanism that will enable the Commission to be assured that its building siting and design, and final plans for structures, would be visually-compatible with the surrounding area. Ideally, this mechanism should include an agreement to seek the review of the City of Coronado's Design Review Commission, or otherwise demonstrating that its design criteria are consistent to the maximum extent practicable with local visual resource policies.

Specifically, the information is needed to fully analyze the project under the wetland (Section 30233(a)), hazards (Section 30253(a), (b)), and visual resources (Section 30251) policies of the CCMP.

Federal Agency Response to Commission Objection
Section C(a)(i) of Chapter 11 of the CCMP requires federal agencies to inform the Commission of their response to a Commission objection. This section provides:

> *If the Coastal Commission finds that the Federal activity or development project … is not consistent with the management program, and the federal agency disagrees and decides to go forward with the action, it will be expected to (a) advise the Coastal Commission in writing that the action is consistent, to the maximum extent practicable, with the coastal management program, and (b) set forth in detail the reasons for its decision. In the event the Coastal Commission seriously disagrees with the Federal agency's consistency determination, it may request that the Secretary of Commerce seek to mediate the serious disagreement as provided by Section 307(h) of the CZMA, or it may seek judicial review of the dispute.*

The federal consistency regulations reflect a similar obligation; 15 CFR §930.43 provides:

> ***State agency objection. …***
>
> *(d) In the event of an objection, Federal and State agencies should use the remaining portion of the 90-day notice period (see §930.36(b)) to attempt to resolve their differences. If resolution has not been reached at the end of the 90-day period, Federal agencies should consider using the dispute resolution mechanisms of this part and postponing final federal action until the problems have been resolved. At the end of the 90-day period the Federal agency shall not proceed with the activity over a State agency's objection unless: (1) the Federal agency has concluded that under the "consistent to the maximum extent practicable" standard described in section 930.32 consistency with the enforceable policies of the management program is prohibited by existing law applicable to the Federal agency and the Federal agency has clearly described, in writing, to the State agency the legal impediments to full consistency (See §§930.32(a) and 930.39(a)), or (2) the Federal agency has concluded that its proposed action is fully consistent with the enforceable policies of the management program, though the State agency objects.*
>
> *(e) If a Federal agency decides to proceed with a Federal agency activity that is objected to by a State agency, or to follow an alternative suggested by the State agency, the Federal agency shall notify the State agency of its decision to proceed before the project commences.*

IV. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION & BACKGROUND

The Navy has submitted a consistency determination for the proposed construction and operation of a new developed campus ("Coastal Campus") within the Silver Strand Training Complex-South (SSTC-S), Naval Base Coronado (NBC), in San Diego County (**Exhibits 1, 2**). The Navy proposes to add approximately 1.5 million square feet of new instructional and administrative facilities at SSTC-S over a ten-year period in order to support logistics, operations, classroom training and administration for the Naval Special Warfare Command (NSWC).

Site Description & Project Purpose

NBC comprises eight separate installations in San Diego and Los Angeles counties, including several on the Silver Strand peninsula and Coronado Island. SSTC-S consists of 548 acres of land located on the southern end of Silver Strand, bordered by the City of Imperial Beach to the south, Silver Strand State Beach to the north, State Route 75 ("SR-75") and San Diego Bay to the east, and the Pacific Ocean to the west. SSTC-S also includes offshore training areas below the mean high tide line which are owned by the State of California.

In its consistency determination, the Navy describes the mission of Naval Special Warfare Command as follows:

> *… to organize, train, man, equip, educate, sustain, and maintain combat readiness and deploy Naval Special Warfare (NSW) forces to carry out special warfare missions worldwide. NSW is composed of active duty Special Warfare Operators or Sea, Air and Land (SEALs) team personnel; Special Warfare Boat Operators, also known as Special Warfare Combatant-Craft Crewmen (SWCC), reserve and support personnel and civilians. Since 11 September 2001, U.S. Special Operation Command (USSOCOM), of which NSWC is the maritime component, manpower has nearly doubled, the budget has nearly tripled and overseas deployments have quadrupled. These increases are primarily in response to ever-increasing wartime requirements.*

The Navy's consistency determination goes on to explain that the proposed Coastal Campus is necessary to support this expanded role of special warfare in its worldwide mission, and that the campus would allow for the consolidation of NSWC's operations, training and administration at a single site:

> *The purpose of the proposed project is to (1) provide adequate facilities to support growth of NSWC on the west coast and (2) maintain the required levels of operational readiness of special warfare forces as mandated by Title 10 U.S.C. Section 167 and 5062. This is necessary because:*
>
> *1. Congress mandated an expansion of Special Operations Force capabilities and NSWC has experienced and continues to experience substantial growth to meet the global operational demands for special operatives.*

2. *Many NSW facilities are functionally obsolete and do not meet current or future requirements without expansion and renovation;*

3. *NSWC and its subordinate commands are located at five separate installations of NBC (NASNI, NAB Coronado, SSTC, Naval Outlying Landing Field Imperial Beach (NOLFIB), and Naval Auxiliary Landing Field San Clemente Island (NALF SCI);*

4. *On NAB Coronado alone, NSWC and supporting commands are spread throughout 60 facilities that are divided by SR-75;*

5. *Consolidation of multiple commands into one geographic location will provide for more efficient operations and improve readiness; …*

The following table from the Navy's Draft Environmental Impact Statement (DEIS, p. 1-5), illustrates NSWC's unmet facility needs:

Table 1

NSWC Functional Areas	***Current Assets*** *(square feet)*	***Requirements*** *(square feet)*	***Percent of Requirements Met***
Administration	*49,000*	*90,000*	*54%*
Operations	*310,000*	*737,000*	*42%*
Logistics/Community Support	*102,000*	*292,000*	*35%*
Training (Indoor/Physical)	*120,000*	*340,000*	*35%*

The Navy has been conducting its activities on its NBC bases for more than 60 years, including maritime and field training exercises at SSTC-S. In 2010 the Commission reviewed a consistency determination covering the proposed expansion and intensification of the Navy's training activities at SSTC-S and other installations (CD-033-10); the present project, while directly related to special warfare training, would not result in additional outdoor training activities that were not covered by that consistency determination. At present, SSTC-S contains four oceanside beach and boat training lanes as well as inland training areas and facilities within a fenced perimeter. Existing structures at the site include a handful of World War II-era buildings and structures, a grid of streets on the northern half of the base laid out in the late 19th century, remaining portions of the National Radio Receiving Facility (NRRF) Wullenweber Antenna Array, and several defunct bunkers and batteries included in the Fort Emory Coastal Battery Historic District. On the whole, however, the site is sparsely developed and contains large expanses of open space and habitat areas. The proposed development would result in the removal of a number of the existing structures and the placement of high density development over approximately 162 acres of the northern and central portions of SSTC-S.

A map of existing development at SSTC-S is provided in **Exhibit 3**. Aerial photos of the site are shown in **Exhibit 4**.

Project Description
The Navy's consistency determination describes the project as follows:

> *The proposed project includes the construction, operation and maintenance of a developed campus encompassing 24 military construction (MILCON) projects over a 10-year period of time. Three administrative facilities projects would establish a command-and-control core for oversight of subordinate commands. Nine facilities projects would be for operational unit needs for five West Coast SEAL teams and other operational units that provide communications and intelligence, surveillance, and reconnaissance (ISR) support. Five logistics and community support projects would provide a variety of support to operational units. Seven projects would sustain indoor training and training support for operational units. The proposed project includes related site improvements, such as upgraded utilities, fencing, roads, parking; site preparation such as demolition of existing infrastructure as well as site grading and leveling … the project also involves off-site traffic, access, and sewer infrastructure improvements … No additional outdoor training is proposed.*

The square footage of the 24 MILCON projects included in the proposal would match the unmet requirements listed in Table 1, above. The Navy has not provided specific site or build-out plans for the project; however, the general project footprint and a conceptual plan of the land uses proposed for the SSTC-S site are shown in **Exhibits 5a** and **5b**, respectively.

Project Alternatives
The Navy initially considered fifteen project alternatives, including several for locating the project at an alternate site in Southern California (**Exhibit 1**) or spreading the new facilities among multiple sites. The criteria used to select the alternatives were:

> *(1) to provide a location in proximity to existing federal facilities and military lands used by NSWC within the existing footprint of NBC; (2) to avoid adversely affecting current Navy missions; and (3) co-location of NSWC facilities to the extent feasible to optimize efficiency and primacy of use.*

The Navy rejected twelve of the alternatives on the basis that they would not fulfill one or more of the selection criteria. In particular, locating the project at many of the alternate military installations would place it at too great a distance from existing NSWC facilities at NBC, or would interfere with current Navy missions at those sites. Dividing the project components among multiple sites outside of NBC would also run counter to the Navy's goal of consolidating NSWC activities within a single geographic location. The Navy ultimately analyzed three project alternatives, each placing the majority of the new facilities at SSTC-S, as well as a "no action" alternative (DEIS, pp. 2-1 to 2-68). Alternative 1, the Navy's "preferred alternative," would be to place all facilities at SSTC-S, and would include the demolition of Building 99, the largest existing historic battery on site. Key elements of the preferred alternative include the following:

- ***Consolidation of necessary NSWC facilities to one location on SSTC-South***

  The campus would be concentrated in the northern and previously disturbed and developed portion of SSTC-S. Co-locating administrative, operational support, logistics, indoor training and training support, equipment and equipment maintenance functions into one area will optimize organizational efficiency, provide synergy as well as enable effective command and control. The consolidation of NSWC functions and facilities at SSTC-S would replicate similar NSW concentrations on the East Coast.

- ***Design and construction of logistical support buildings, equipment use (and equipment maintenance) training facilities (including an approximately 50-foot long by 80-foot wide by 120-foot tall parachute drying tower or paraloft), classroom and tactical skills instruction buildings, storage, and administrative facilities infrastructure; utilities; fencing; roads; and parking.***

  SSTC-S occupies 2.5 miles of coastline (approximately 1.2 miles of bay and 1.3 miles of ocean) and is approximately 548 acres in size. The Coastal Campus' 24 building footprint would be limited to 161.8 acres in the northern portion of SSTC-S. Considerations for site development include a historic bunker complex in the northern portion, an extensive network of vernal pools and wetlands in the southern portion, a portion of the historic Wullenweber Antenna Array that is being preserved, Western Snowy Plover nesting areas on the beach area beyond the perimeter fence, and various utility lines and easements (see Figure 8). All buildings, with the exception of the paraloft at 120 feet, would be limited in height to 45 feet, which is the highest structure currently existing in the northern portion of SSTC-S. Projects would use applicable sustainability and energy efficiency guidelines as well as conform to the NSWC MILCON Development Plan and the NBC Installation Appearance Plan to ensure cohesive and compatible development.

- ***Construction of a new entry control point providing immediate access to SSTC-S from State Route 75 (SR-75).***

  The main gate access to SSTC-S is located in the southern portion and requires transit through a residential area of the City of Imperial Beach. Construction of a new entry control point in the northern portion of SSTC-S will provide direct access to the Coastal Campus from SR-75. Establishing the entry control point at the point where Hooper Boulevard intersects SR-75 would require road improvements, a new traffic signal on SR-75, a new southbound right-turn lane, a new northbound left-turn lane and construction of a 600 square foot sentry house. A temporary entry control point will be established initially to provide construction traffic access to the northern portion until the permanent gate and road improvements can be completed.

- ***Demolition of Building (Bldg) 99 (Bunker) as well as 20 other existing structures.***

  Bldg 99 is part of a bunker complex eligible for listing on the National Register of Historic Places (NRHP). Bldg 99 is 4.6 acres in size, has a 17-foot thick armored roof

with approximately 49,900 cubic yards of reinforced concrete and steel. It is located in the middle of the northern portion of SSTC-S and, once removed, would provide additional buildable space. Its demolition is subject to the Section 106 process of National Historic Preservation Act (NHPA). The bunker is the tallest structure in the northern portion of SSTC-S at 45-foot high. Comparatively, the existing Wullenweber antenna array, the most prominent structure on SSTC-S, is 100-feet high on the southern portion of SSTC-S. Demolition would be conducted with the use of small commercial explosives and/or diamond saws to initially break up the structure followed by drilling and hammering. Demolished concrete and steel will be reused as part of the construction material or removed to a local landfill. Demolition is expected to take 24 months; however the majority of debris removal would be concentrated over a 2 to 3 month period.

- ***Traffic, Access and Utility Improvements***

  Future traffic improvements to five intersections along Palm Avenue (SR-75) in Imperial Beach would be required in order to improve traffic flow during heavy commute times once the Coastal Campus is fully developed. On site water storage and tapping into existing 16-inch water main line for purposes of a 10-inch fire main and a 6-inch potable water service to the new buildings would be required. There may be a requirement to relocate a 16-inch water main within a 30-foot water easement. A new wastewater conveyance system along with a wastewater storage facility and pump station would be constructed. There may be a requirement to improve the City of Imperial Beach's sewer system. The current electrical system at SSTC-S would be placed underground.

Alternatives 2 and 3 considered by the Navy would be similar to the preferred alternative in that all or most of the new development would occur at SSTC-S. However, under Alternative 2, the Building 99 battery would be retained; under Alternative 3, the battery would be retained, and three new buildings would be constructed at the Naval Amphibious Base (NAB) Coronado and one new building at the Naval Air Station North Island (NASNI) instead of at SSTC-S (**Exhibit 5c**). This would require the demolition of ten existing buildings at NAB.

Access Road & Utility Improvements

Primary access to the project site during construction and operation would be from SR-75 along an improved northern access road (**Exhibits 5a-b, d**). The existing northern access road would be realigned and widened up to 72 feet, including additional turn lanes and improved ingress and egress from SR-75 in the Caltrans right-of-way. The existing northern access gate would also be replaced with a 600-square foot sentry house (plus permanent visual and noise barriers) to serve as the new entry control point.

The proposed project includes several utility improvements (including water, wastewater, natural gas and electrical service) at SSTC-S and within the City of Imperial Beach (**Exhibits 5a-b, e**). The Navy examined two options for upgrading water service to the Coastal Campus site. Under the proposed option (Option 1) a new 16-inch diameter water pipe would be installed in the coastal dune area just inside the western perimeter fence, east of the SSTC-S beach. The new

water line would run approximately 9,875 feet from near the northern site boundary to the southern boundary of the YMCA Camp, and then extend eastward to connect back to an existing water line that extends into SSTC-S from Imperial Beach. (An "Option 2" water line route would have followed the Option 1 route across the northern portion of SSTC-S, but would then have turned eastward into the development footprint to connect with the existing water line. Under Option 2, the existing water line, running from the development footprint southward into Imperial Beach, would be abandoned in place and replaced along the same easement.) Upgrades and/or replacement of existing natural gas and wastewater lines are also proposed. These service lines run beneath Hooper Blvd. between Imperial Beach and the development footprint, across the southern portion of SSTC-S. Upgrades to the City of Imperial Beach's sewer system may also be necessary at two locations (**Exhibit 5e**). The Navy has also proposed several traffic signal and lane improvements at intersections along SR-75 in order to offset projected increases in traffic congestion (*see* Subsection G, below) **Exhibit 5e**).

Project Schedule and Future Operations

Project construction is expected to begin in 2015 and be completed by 2024, with approximately 10% of construction occurring each year. Upon completion, an estimated 3,045 Navy personnel would be rerouted for training from NAB Coronado to SSTC-S, increasing the total number of personnel onsite from about 300 at present to about 3,350.

Environmental Baseline

The 548-acre SSTC-S site contains a patchwork of land cover types and habitats (**Exhibit 6a**). Much of the northern and central portions of the site are characterized by the Navy as "urban/developed" or "disturbed habitat." Existing structures at the site include a handful of World War II-era buildings and defunct batteries included in the Fort Emory Coastal Battery Historic District several, a grid of streets on the northern half of the base laid out in the late 19th century for the planned Coronado Heights community, and the NRRF antenna array. Developed areas (62 acres) are comprised of existing buildings, bunkers and other structures, roads and paved areas, and areas occupied by and surrounding the remnant foundations of old buildings. Areas identified as disturbed habitat (174 acres) are dominated by non-native iceplant, which was planted in the 1950s to control erosion and wind-blown sand, but which has since invaded large areas of native vegetation, including the southern foredune habitat. It is important to note, however, that both the urban/developed and disturbed habitat types at SSTC-S continue to support native plant species, in particular Nuttall's lotus (*Acmispon prostratus*), an annual herb known to colonize sandy soils which have been disturbed or otherwise cleared of competing vegetation. Nuttall's lotus is especially abundant in the open sandy areas surrounding the abandoned building pads and in other breaks in the iceplant cover at SSTC-S, as well as in disturbed habitat areas at NASNI (**Exhibit 6b**).

B. OTHER AGENCY APPROVALS AND CONSULTATIONS.

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) has responsibilities over the proposed project under the Endangered Species Act and the Fish and Wildlife Coordination Act. The Navy requested consultation with the USFWS regarding potential project impacts on the federally endangered salt marsh bird's beak, San Diego fairy shrimp, and light-footed clapper rail, and on

the threatened Western snowy plover and its designated critical habitat. The consultation concluded on September 12, 2014, and the Navy has incorporated a number of required conditions and modifications into the proposed project.

San Diego Regional Water Quality Control Board
The San Diego Regional Water Quality Control Board (RWQCB) regulates waste discharges into receiving waters in the project area under the federal Clean Water Act (33 U.S.C.§1251 et seq.). The NBC operates under a National Pollutant Discharge Elimination System (NPDES) permit issued by the RWQCB, which would be modified as necessary to take into account changed conditions with the addition of the Coastal Campus. The Navy will also apply for NPDES General Construction permits for the individual MILCON projects included in the Coastal Campus.

Section 106 Consultation – State Historic Preservation Office
The Navy is engaged in formal consultation with the State Historic Preservation Officer under the National Historic Preservation Act (NHPA) for historic, cultural and archaeological resources at the project site, which is expected to be completed in February 2015.

C. ENVIRONMENTALLY SENSITIVE HABITAT AREAS

Coastal Act Section 30240 states:

> *(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those 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 those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

Coastal Act Section 30107.5 defines environmentally sensitive area:

> *"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.*

The southern and eastern portions of the SSTC-S site support extensive natural land covers and vegetation types, including non-native grassland (104 acres), wetlands, including coastal salt marsh (21 acres), vernal pools (11 acres) and freshwater marsh (0.16 acres), and small, scattered patches of coastal sage scrub (8 acres) and maritime succulent scrub (4.6 acres) communities (**Exhibit 6a**). The western shoreline of SSTC-S is covered by Southern foredune (41.8 acres) and beach (12.4 acres) habitats. These natural areas provide habitats for numerous plant and animal species, including several listed as threatened or endangered under the federal Endangered Species Act (*see* Subsection C, below).

The proposed development footprint under the preferred alternative has been sited to occur largely within urban/developed and disturbed habitat areas of SSTC-S, within the existing perimeter fence, in part to limit the impacts on sensitive habitats. However, some impacts will still occur. The direct impacts of the proposed project to plant communities and land cover types at SSTC-S are summarized in Table 2, below:

Table 2: Direct Plant Community and Land Cover Impacts of Coastal Campus Project

Plant Community/ Cover Type	***Permanent Impacts from Coastal Campus*** *(acres)*	***Water Line Impacts Option 1 / Option 2*** *(acres)*	***Sewer & Natural Gas Line Impacts*** *(acres)*
Southern coastal salt marsh	--	*0.05 / --*	--
Freshwater marsh	--	*-- / 0.03*	--
Vernal pools	--	*-- / 0.01*	--
Diegan coastal sage scrub	*0.35*	*-- / 0.07*	--
Non-native grassland	*0.02*	*0.13 / 1.10*	*0.11*
Southern foredunes	*0.23*	*2.61 / 0.18*	--
Disturbed habitat	*114.06*	*2.12 / 1.87*	*0.01*
Urban/developed	*52.04*	*1.90 / 1.49*	*1.22*
Totals	***166.7***	***6.81 / 4.75***	***1.34***

Sources: DEIS, pp. 3.7-78 to 3.7-79; USFWS Informal Consultation, 9/12/14.

In order to avoid, minimize, and mitigate potential impacts to environmental resources during construction and maintenance of the proposed development, the Navy will undertake a number of general conservation measures, including:

- Appointment of qualified project biologists to oversee avoidance and minimization measures, surveys, monitoring, construction activities, and permit compliance;
- Biological monitoring of ground-disturbing activities, as determined necessary by the NBC Natural Resources Office (NBC NRO);
- Restriction of construction activities to the defined project footprint;
- Provision of digital and hardcopy maps of the project footprint and locations of sensitive species and habitats to the project contractor;
- Establishment of a zero storm water discharge target (100% capture); if this proves infeasible, a stormwater pollution prevention plan (SWPPP) will be developed containing measures to minimize and treat runoff and control erosion;
- Implementation of standard dust control best management practices (BMPs);
- Environmental training for construction and maintenance personnel;
- Installation of construction fencing around project footprint where necessary to protect sensitive habitats;
- Exclusion of domestic pets from the project site during construction and future operation;
- Restoration of natural areas impacted by construction of the water pipeline;

- Compliance with federal law (e.g., EO 13112, National Invasive Species Act, Federal Noxious Weed Act, and Noxious Plant Control Act) intended to prevent the spread of invasive plants;
- Requirement of written approval from the NBC Wildlife Biologist and NBC Botanist prior to final project implementation.

Conservation measures specific to individual species or habitat types are discussed in more detail below. All general and specific conservation measures required by the USFWS informal consultation have been incorporated into the proposed project and are listed in **Exhibit 7**.

Given the above siting and habitat protection measures, the Navy would avoid direct impacts to many of the habitats the Commission would consider environmentally sensitive areas (ESHA) at SSTC-S. In most cases, the proposed proposed also includes adequate buffers (greater than 100 feet) between sensitive habitats and new development.

Nevertheless, as described below, the project still involves development within and affecting ESHA. The Coastal Act establishes a high standard for protection of areas that are identified as environmentally sensitive. Only resource-dependent uses, such as habitat restoration, are allowed within ESHA, and all development within or adjacent to an ESHA must be sited and designed to prevent significant disruption of ESHA.

The Coastal Act protections for ESHA are different in approach from certain other environmental laws. For example, the California Endangered Species Act, administered by the Department of Fish and Wildlife (CDFW), allows the "incidental take" of a state-listed species if the impacts of the take are minimized, fully mitigated, and would not result in jeopardy to the species.[1] Similarly, the U.S. Fish and Wildlife Service may issue incidental take permits under the federal Endangered Species Act for a listed species if the impacts are offset through a Habitat Conservation Plan.[2] However, with a few limited exceptions, Section 30240 of the Coastal Act does not allow development within ESHAs, even with mitigation. The primary exception applies if the proposed development is "a use dependent on the resource." This fundamental requirement of the Act was confirmed in the *Bolsa Chica* case, wherein the Court found the following:

> *Importantly, while the obvious goal of section 30240 is to protect habitat values, the express terms of the statute do not provide that protection by treating those values as intangibles which can be moved from place to place to suit the needs of development. Rather, the terms of the statute protect habitat values by placing strict limits on the uses which may occur in an ESHA …*[3]

The only other exceptions would be: (1) if a Commission action were to result in a Constitutional "taking" of private property rights; (2) if the Commission were to find that a project posed conflicts between one or more Coastal Act policies, in which case the Commission could invoke

[1] California Fish and Game Code Section 2081.
[2] Federal Endangered Species Act, Section 10.
[3] *Bolsa Chica Land Trust v. Superior Court* (1999). 71 Cal.App.4th 493, 507.

the conflict resolution policy and authorize an activity that it determined met the requirements of Section 30007.5 of the Coastal Act because the conflict was being "… resolved in a manner which on balance is the most protective of significant coastal resources" (Section 30007.5); or (3) if the "consistency to the maximum extent practicable" standard applicable to federal agencies (and described above in Section III) presented a situation where avoiding development within ESHA was prohibited based on existing law.

Defining ESHA

ESHA, as defined in Section 30107.5 of the Coastal Act, is "…any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities." Thus, Section 30107.5 sets up a two-part test for determining what constitutes ESHA. The first of these tests is whether an area includes plants, animals or their habitats that are either: (a) rare; or (b) especially valuable because of their special nature or role in an ecosystem. If it does, then the second test is whether such plants, animals, or habitats could be easily disturbed or degraded by human activities. If both tests are met, then the area where such plants, animals, or habitats are located is deemed ESHA by Section 30107.5.

In many instances when the Commission determines that a habitat qualifies as ESHA on the basis of a particular plant species, the Commission is guided in large part on whether the species is listed as a Rank 1 or Rank 2 species by the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Plants of California*. The CNPS California Rare Plant Ranking system defines Rank 1B plants as "rare, threatened, or endangered in California, and elsewhere" (Rank 1A plants are those presumed extinct in California). Rank 2 plants are those that are "rare, threatened, or endangered in California, but more common elsewhere." A threat code extension following the ranking (*e.g.*, Rank 1B.1, 1B.2, or 1B.3) further rates the species' in terms of the percentage of occurrences that are "threatened" in California (with ".1" being the most threatened and ".3" being the least threatened). All plants appearing on CNPS Ranks 1 and 2 meet the definitions within the Native Plant Protection Act and the California Endangered Species Act as species eligible for state listing as a rare, threatened, or endangered plant. In addition, pursuant to the California Environmental Quality Act (CEQA) guidelines (Cal. Code Regs., Title 14, Section 15380), the effects of a development project on species which meet the criteria for listing, even if not currently included on any list, must be fully considered during project environmental review.

Given the significance of the CNPS ranking as a threshold for determining the relative significance of potentially adverse impacts on biological resources and for setting requirements for formulating related mitigation and monitoring programs, the Commission typically finds that plant species that are listed as Rank 1B or 2 and the area in which they grow meet the Coastal Act definition of an ESHA as they are both: (1) "*an area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem*;" and (2) "*which could easily be disturbed or degraded by human activities or developments*." Species with CNPS Rank 3 are those for which more information is needed before an appropriate list ranking can be assigned (*e.g.*, Rank 3 species may, after further review, be moved to Rank 1B or Rank 4). Rank 4 species are effectively on a "watch list," comprising

those plants which are of limited distribution or infrequent throughout a broader area in California. Plants in Ranks 3 or 4 may, in some instances, meet the criteria for listing and may, in some instances, meet the Coastal Act definition of ESHA.

Nuttall's Lotus & "Disturbed" Habitat Areas

As shown in Table 2 (above) and **Exhibit 6b**, large areas of the proposed development footprint at SSTC-S are characterized as "Urban/Developed" or "Disturbed Habitat." Developed areas at SSTC-S include existing buildings, bunkers and other structures, roads, paved parking areas, and the abandoned foundation pads of former buildings. However, a comparison of the Navy's land cover designations (**Exhibit 6a**) with aerial photographs of the site (**Exhibit 4**) show that "Urban/Developed" areas at SSTC-S also include unpaved areas, some of which support native vegetation, in close proximity to structures or pavement. Disturbed habitat areas at SSTC-S are described as being dominated by non-native iceplant (*Carpobrotus spp.*), yet in places still support sensitive native plant species (**Exhibit 6b**). The most widespread of the rare plants occurring in developed and disturbed areas within the proposed development footprint is Nuttall's lotus (*Acmispon prostratus*) (**Exhibit 8**).

Nuttall's lotus is an herbaceous member of the pea family native to the dunes, beach, and coastal sage scrub communities of southern California. At present, the distribution of Nuttall's lotus is restricted to a narrow strip of coastal habitats in San Diego County, where it is known from just 33 locations between Tijuana and Carlsbad, including at SSTC-S and NASNI (CNPS 2014). Of these occurrences, all but six are small populations varying from a few to a few hundred plants; larger populations have been observed San Luis Rey River, San Elijo Lagoon, Mission Bay, NASNI, Silver Strand, and Border Field State Park, with by far the largest population found on the Silver Strand between NAB and SSTC-S (**Exhibit 9**, p. 5; Landis 2012). At this handful of locations, the plant can be very abundant, conforming to a common pattern among endangered species to be globally rare but locally abundant. The survival of such species may be at elevated risk because localized impacts may affect a large proportion of the population. Nuttall's lotus has undergone serious decline within its endemic range due to habitat destruction and fragmentation, and continues to be threatened by development, the spread of non-native plants and other land management activities. The existing population of Nuttall's lotus is severely fragmented, and has been estimated to have declined by 50 – 70% in the last ten years (Contu 2012; NatureServe 2014).

Due to these on-going threats and its extremely restricted range, Nuttall's lotus has been listed as a CNPS Rank 1B.1 rare and endangered species (see above), and is considered "critically imperiled" on both a state-wide and global basis. Nuttall's lotus is locally abundant at several NBC installations, with many thousands of individuals occurring within both natural and disturbed areas of SSTC-S and NASNI (**Exhibits 6b**, **6c**). The apparent association of this species with developed areas at the project sites may reflect the absence of iceplant, which tends to out-compete native species for light, water, and space in coastal environments; periodic disturbance, clearing or exclusion of iceplant near development may have enabled Nuttall's lotus to persist in or colonize these areas. The local abundance of Nuttall's lotus at SSTC-S highlights the importance of this sub-population to the species continued existence; given the few known locations where Nuttall's lotus occurs, the recent declines in the population, and continued

threats from development and invasive species, the sub-population at SSTC-S is especially valuable (*see* **Exhibit 9,** p. 4-5). Due to the extreme rarity of Nuttall's lotus and the ease with which it could be disturbed or degraded by human activities and development at the sites of the proposed project, the Commission's staff ecologist has determined that areas within SSTC-S and NASNI supporting this species meet the definition of ESHA under Coastal Act Section 30107.5 (**Exhibit 9,** p. 5). The staff ecologist (whose findings are incorporated by reference) states:

> *At the Silver Strand Training Center – South the population of Nuttal's lotus is very significant for the species' persistence, the species is rare and declining due to loss of habitat, and the area supporting the species clearly could be easily disturbed or further degraded by human activities and developments. Therefore, the area supporting the species meets the definition of Environmentally Sensitive Habitat Area in Section 30107.5 of the Coastal Act, despite the unusual, degraded landscape setting*[4]*. With the few data available, it is difficult to define the extent and boundary of this ESHA. The rare plant surveys noted the approximate locations of groups of individuals (Figure 3), but did not estimate the number of individuals represented by each filled circle or polygon. Also, this is an annual plant and a significant portion of the population is represented by the seed bank. In fact, the 2004 rare plant survey report suggested that, "[t]he fact that the lotus is found in…open areas, which historically supported dune and coastal sage scrub vegetation and now is overrun with ice plant, suggests that there may be a native seed bank still present underneath the ice plant." (Sauceda-Ortiz 2004). In the absence of detailed distributional data, the most conservative approach to the ESHA boundary would be to create a convex polygon that encompasses the documented locations of Nutall's lotus on the sandy flats above the beach and foredunes but that excludes existing development that is in use. Such a polygon would also encompass most of the area proposed for future development.*

The staff ecologist has also indicated that a 25-foot buffer between new development and occurrences of Nuttall's lotus is needed to protect the species (**Exhibit 9**, p. 6):

> *The area supporting Nuttall's lotus is unusual due both to the extensive remains of prior development and the extensive vegetative cover of the invasive iceplant. In order for this plant to survive and thrive, a management plan should be developed to remove the iceplant, restore native habitat, and provide a mosaic of sparsely vegetated areas, and control runoff. With such a plan in place, a 25-foot buffer would be adequate to protect the Nuttall's lotus ESHA.*

<u>Project Impacts to Nuttall's lotus and other CNPS-listed plants</u>

As shown in **Exhibit 6b** construction of the proposed Coastal Campus at SSTC-S would result in the permanent removal of large stands of Nuttall's lotus in the central and western portions of the proposed development footprint, and the removal of numerous individual plants throughout the

[4] In Bolsa Chica Land Trust v. Superior Court (1999), 71Cal.App.4th at p. 508, the Court of Appeal found that "…ESHA's, whether they are pristine and growing or fouled and threatened, receive uniform treatment and protection." The Nuttal's lotus habitat at the training complex could aptly be described as "fouled and threatened" but nonetheless meets the definition of ESHA in the Coastal Act.

site, including at the new northern entry point to the base (**Exhibit 6d**). The installation of a new waterline in the "Option 1" configuration would also result in the removal of several individual lotus plants. Based on the plant survey results summarized in **Exhibit 6b** Nuttall's lotus would likely persist in the western dunes and several locations in the central and eastern portions of the site, but it appears that most occurrences of this species at SSTC-S, in any given year corresponding to many thousands of individuals, would be extirpated. Under project Alternative 3, which would place an unmanned aerial vehicle maintenance and storage facility at NASNI rather than SSTC-S, Nuttall's lotus plants growing in a developed/paved area would also be permanently removed (**Exhibit 6c**).

In addition to these direct impacts on Nuttall's lotus, the proposed project would result in the permanent removal of several other CNPS-ranked rare and endangered plant species at SSTC-S (**Exhibits 6b, 6d**). The project would result in the removal of at least one individual of San Diego barrel cactus (*Ferocactus viridescens* var. *viridescens*) (Rank 2B), several Coast woolly-heads (*Nemacaulis denudata* var. *denudata*) (Rank 1B.2), and two individuals of California box thorn (*Lycium californicum*) (Rank 4) occurring within the proposed development footprint; and one or more individuals of Coast woolly-heads and Orcutt's pincushion (*Chaenaactis glabriuscula* var. *orcuttiana*) (Rank 1B.1) occurring along the proposed route of the Option 1 water line.

Commission staff requested that the Navy assess whether alternative facility configurations and building placements exist that would avoid the destruction of sensitive species and ESHA within the project footprint, and has requested that the Navy provide site build-out plans to allow the Commission to independently evaluate these alternatives.[5] The Navy has declined to release site plans, providing the following response:

> *The Navy is in the preliminary site planning stages during which some preliminary plans have been developed. However, and most importantly, the Navy does not feel it appropriate to release those publicly given the sensitivity of the uses at the site and Naval Special Warfare Command's security concerns. Also, the Navy does anticipate that site development may change throughout the duration of the 10-year construction program, which is also a reason we opted to present a land use map with development envelope to the public, as opposed to providing a very specific site plan with building layout.*
> …
>
> Acmispon prostratus *(ACPR) is found across much of Coastal NBC. It is found in multiple locations on NASNI, as well as both the bayside and ocean-side areas of NAB Coronado and on SSTC-S. It is one of the focal species for management per the NBC Integrated Natural Resource Management Plan (INRMP). NBC does annual surveys to monitor its presence across the properties. The plant is very common on NBC, growing in the dune and foredune areas, disturbed and ruderal areas, and even within parking lots and pavement cracks and potholes of developed areas. Some areas where it is relatively common include: south of the runway on NASNI, within the tern nesting colony on bayside NAB Coronado, and along the fence and dunes of SSTC-S. Due to the Navy's need for*

[5] September 5, 2014, correspondence between U.S. Navy and Commission staff.

> *open space and buffer areas around the three previously mentioned areas, and the presence of listed wildlife species in these areas (CLT and WSP), successful management of ACPR within those areas is highly likely. A population estimate doesn't exist for this species due to the large area it occupies and the sheer number of plants within those areas. However, every year a focused survey is done within the NASNI study area. The NASNI Study Area is situated just east of Southeast Runway 36 on NASNI, and is approximately 7.13 acres in size. Depending on rainfall, the ACPR population fluctuates between 15,000 and 80,000 individuals. The total ACPR population on NBC is unknown, but is in the tens of thousands of individuals, and is found in areas with little development potential. Due to this fact, the Navy is likely able to manage tens of thousands of individuals of ACPR across multiple installations. ACPR will continue to persist along the fence line and dune/fore dune habitat of SSTC-S. ACPR may be able to persist in some ruderal and even developed areas within the proposed footprint as well. However, these areas are unknown, and most/all occurrences within the proposed footprint have the potential to be developed. Specifically, the developable area at the site is roughly 70 acres, when accounting for the various development considerations at the site, and the Navy is looking to maximize development of the proposed action within that area while striving to avoid designated resources and other areas of the site used for other operational elements. Due to the consolidation of facilities and the project footprint to avoid site resources, including WSP and SDFS, there may be very little flexibility to site buildings within the project footprint. Regarding* Lycium californicum*, there appear to be very few affected, and for* Nemacaulis denudata*, very few, if any, would likely be affected.*

In the absence of detailed plans, and in light of the Navy's statement that most or all occurrences of Nuttall's lotus (and other CNPS-listed plants) within the proposed project footprint have the potential to be developed, the Commission can only conclude that the project is located within ESHA and would result in, at a minimum, the loss of all individual plants located within the development footprint.

The Commission agrees that the presence and local abundance of Nuttall's lotus at other NBC installations and in areas of SSTC-S not slated for development indicates the potential for the species to persist outside of the proposed development footprint. However, in causing the removal of a significant portion of the extant population at the most important of the few locations known to support the lotus, the project would directly contribute to the trend of habitat destruction and alteration that has caused the species' decline. In other words, the cumulative impacts of development, including this project, threaten the continued existence of Nuttall's lotus throughout the coastal zone.

The Commission staff has also asked whether the Navy has evaluated alternative routes for the new water line that would avoid the impacts to ESHA of the "Option 1" configuration, which would require trenching in southern foredune and wetland habitats along the western fenceline (*see* below), and the removal of CNPS-listed plant species as discussed above. Commission staff suggested that an alternative location of the water line beneath Hooper Blvd. in the southern end

of SSTC-S and beneath developed areas in the central and northern portions of the site would avoid disrupting ESHA.[6] In response, the Navy has stated:

> *This option was considered, but the two options presented in the Draft EIS were considered desirable because they relocated the waterline outside of the proposed action footprint, which is preferable due to security concerns from NSW.*

The Commission recognizes the Navy's efforts to manage environmentally sensitive resources, including CNPS-listed rare and endangered plants, at its NBC bases, as exemplified by the 2013 Integrated Natural Resources Management Plan (INRMP 2013). The Commission is also sensitive to the unique security concerns present at a military base. However, the removal of a CNPS Rank 1B.1 species, which the Commission's staff ecologist has determined constitutes ESHA, is clearly inconsistent with the resource protection requirements of Section 30240 of the Coastal Act, both because the proposed development is not a resource dependent use, and because it does not protect against the significant disruption of habitat values. The same reasoning applies to the lesser, but still significant, disruption of ESHA that would occur with the installation of the "Option 1" water line. It is conceivable that all alternative water line locations could be precluded by federal law related to military security, in which case the Option 1 water line could be found to be consistent with the enforceable policies of the CCMP "to the maximum extent practicable." However, the Navy has not provided an adequate explanation of the security concerns that would rule out placing the water line beneath Hooper Blvd and within the developed footprint, nor has it cited any federal law or regulation that would require that this or any other potential alternatives be discarded. It is unclear why placing a water line beneath Hooper Blvd and portions of the developed footprint would present security concerns when similar placement of the natural gas and sewer lines, and of the Option 2 water line route (which passes through portions of the developed footprint), would not.

Diegan Coastal Sage Scrub & Maritime Succulent Scrub

Diegan coastal sage scrub (CSS) is an endangered native plant community occurring in the coastal areas of Orange County, San Diego County and Baja California. Once widespread in coastal Southern California, this plant community has lost between 50 and 85% of its former area to agriculture and urban development, with the remainder highly fragmented (Rubinoff 2001; Taylor 2005). Remaining CSS habitat continues to be threatened by development, grazing pressure, altered fire regimes, and air pollution. Coastal sage scrub provides vital native habitat for indigenous and sensitive flora and fauna, including the federally-listed Coastal California Gnatcatcher, though this species is not known to inhabit the SSTC-S site.[7] Several small stands of CSS are scattered across the eastern portion of the SSTC-S site.[8] On drier sites, CSS grades into maritime succulent scrub, a related (and even rarer) plant association with higher

[6] September 17, 2014, correspondence between U.S. Navy and Commission staff.

[7] The Navy reports a single sighting of a California gnatcatcher traversing the site in 2012 (DEIS, p. 3.7-52).

[8] Coastal sage scrub at SSTC-S is dominated by native species including coast California buckwheat (*Eriogonum fasciculatum*), broom bacccharis (*Baccharis sarothroides*), coast sagebrush (*Artemisia californica*), lemonade berry (*Rhus integrifolia*), and California encelia (*Encelia californica*); maritime succulent scrub at the site is dominated by coast cholla (*Cylindropuntia prolifera*), San Diego barrel cactus (*Ferocactus viridescens*), California boxthorn and variegated dudleya (*Dudleya variegata*).

frequencies of cacti and other succulents.[9] Maritime succulent scrub occurs at SSTC-S in two locations (**Exhibit 6b**) in the eastern and southwestern portions of the site. Together, Diegan coastal sage scrub and maritime succulent scrub cover almost 13 acres of the site.

The Commission's determination as to whether any particular Diegan coastal sage scrub or maritime succulent scrub habitat constitutes ESHA has historically been made on a site-specific basis. In a number of past cases, the Commission has ruled that small stands of CSS do not constitute ESHA due to their isolation and distance from larger, more contiguous areas, and due to the fact that the stands did not support California gnatcatcher or other rare species. At SSTC-S, while the individual stands of these communities are relatively small, several support the CNPS-listed rare and endangered species Nuttall's lotus (Rank 1B.1), variegated dudleya (Rank 1B.2), San Diego barrel cactus (Rank 2B.1), and California box thorn (Rank 4.2). Stands of Diegan coastal sage scrub and maritime succulent scrub supporting these rare species are especially valuable for their role in the ecosystem, and are easily disturbed or degraded by human activities. The Commission's staff ecologist has determined that these areas meet the definition of an ESHA in Coastal Act Section 30107.5 (**Exhibit 9**, p. 3-4).

The proposed Coastal Campus project would result in the permanent removal of 0.35 acres of Diegan coastal sage scrub ESHA (CSS supporting rare and endangered species) occurring at two locations in the northeastern portion of the development footprint. The removal of the stand of coastal sage scrub falling entirely within the northern development footprint would result in the removal of an occurrence of Nuttall's lotus, a special-status native plant species. These areas are shown in **Exhibit 6b**. The removal or disturbance of coastal sage scrub habitat determined to be an ESHA would be inconsistent with the resource protection requirements of Section 30240 of the Coastal Act, both because the proposed development is not a resource dependent use, and because it does not protect against the significant disruption of habitat values.

San Diego Fairy Shrimp &Vernal Pools

The San Diego fairy shrimp (*Branchinecta sandiegonensis*) is a small freshwater shrimp that inhabits vernal pools (seasonal shallow pools that are typically filled by winter and spring rains between November and May) in coastal southern California and south to northwestern Baja California. San Diego fairy shrimp (henceforth referred to as fairy shrimp) are habitat specialists found in small, shallow vernal pools and ephemeral (lasting a short time) basins with specific water chemistry and temperature conditions. All known occupied localities are below 2,300 feet and are within 40 miles of the Pacific Ocean.

In the vernal pools in which they occur, adult San Diego fairy shrimp are usually observed between January and March, hatching and maturing within a one to two week period, and persisting for about a month prior to reproduction and senescence. The length of the hatching

[9] The CDFW assigns Diegan coastal sage scrub a ranking of S3.1 ("vulnerable in the state due to a restricted range, relatively few populations, recent and widespread declines, or other factors"); maritime succulent scrub is ranked S1.1 ("critically imperiled because of extreme rarity or other factors"). Both are considered threatened and vulnerable to extirpation. (CDFG 2010). Note: At the time the most recent list of vegetation alliances and associations was published, in 2010, the CDFW was still known as the California Department of Fish and Game (CDFG).

period is dependent on hydrologic conditions, and may be extended during rainier winters. Fairy shrimp eggs are either dropped to the pool bottom or remain in the brood sac until the female dies and sinks. Resting eggs, or "cysts," are capable of withstanding temperature extremes and prolonged drying, and may remain dormant in the soil for several years. Studies have shown that vernal pools and ephemeral wetlands that support fairy shrimp, and occur in areas with variable weather conditions or filling periods (such as southern California), may hatch only a fraction of the total cyst bank (organisms in a resting stage) in any given year. Thus, reproductive success is spread over several seasons.

San Diego fairy shrimp has been listed as endangered on the federal Endangered Species Act list since 1997 due to extensive loss and degradation of habitat from development and urbanization. At the time of listing, FWS estimated that less than 200 of the original 500 acres of vernal pool habitats suitable for fairy shrimp occupation in San Diego County remained. An estimated 70% of the remaining suitable habitat occurs on lands managed by the Department of Defense.

Due to the rarity, sensitivity and importance of vernal pools as well as the fact that these areas support sensitive species, such as the fairy shrimp, the Commission has determined on previous occasions that vernal pools containing San Diego fairy shrimp and/or characteristic vernal pool plant species meet the Coastal Act definition of ESHA. At the time of surveys conducted during the winters of 2010 and 2011, the SSTC-S site contained 59 vernal pools and ephemeral basins (with a total area of 11.11 acres), of which 45 were surveyed, 26 were observed to support San Diego fairy shrimp (**Exhibit 10**) and 22 were found to support characteristic vernal pool plant species (ICF 2012). There was no correlation between the presence of vernal pool vegetation and the presence of fairy shrimp. The Commission's staff ecologist has determined that the seasonal ponds at SSTC-S that support characteristic vernal pool vegetation and/or the federally-listed San Diego fairy shrimp are rare and especially valuable for their role in the ecosystem of providing habitat for a rare and unique biota, and are easily degraded by human activities, and thus meet the definition of an ESHA under Coastal Act Section 30107.5 (**Exhibit 9**, p. 3).

<u>Potential Effects on ESHA and San Diego Fairy Shrimp; Mitigation</u>

In its consistency determination and Draft EIS, the Navy contends that the San Diego fairy shrimp and vernal pool habitats would not be directly affected by the proposed project due to the fact that all of the vernal pools at SSTC-S are located outside the project footprint. The "Option 2" alignment of the proposed water utility line would, if implemented, cross a ditch connected to vernal pool #10 (**Exhibits 6b, 10**), but the Navy has since abandoned this configuration after its informal consultation with the U.S. Fish and Wildlife Service (FWS) raised concerns about potential impacts to fairy shrimp. The consistency determination states:

> *Focused wildlife habitat assessments concluded that the area is suitable habitat for the Federally-listed San Diego fairy shrimp … Surveys conducted in 2003, 2010 and 2011 confirmed presence of San Diego fairy shrimp, and one basin (vernal pool 10) is occupied and within the proposed Option 2 alignment of the water line relocation element. The main part of the basin is outside the proposed water line relocation; however, a small drainage feature that heads west toward the beach from basin 10 would be impacted by construction of Option 2 alignment … During consultation discussions, USFWS … raised concerns over*

> *impacts to fairy shrimp from the proposed directional drilling under vernal pool 10 for Option 2 … Accordingly, the Navy has decided to remove work on the southern portion of the water line relocation to avoid these impacts.*

Although the Navy expects no direct impacts to San Diego fairy shrimp and vernal pool habitat, the construction and future operation of the SSTC-S Coastal Campus could result in a variety of indirect adverse effects due to increased dust, storm water runoff, erosion, sedimentation, and the introduction of new invasive plant species. To minimize indirect impacts during construction and operation, the Navy has proposed several impact minimization and avoidance measures through its Informal Section 7 Consultation with the USFWS. General conservation measures are summarized in Subsection A, above, and listed fully in the USFWS consultation letter (**Exhibit 7,** pp. 12-15); measures specific to the San Diego fairy shrimp include the following:

> *CM 16. Avoidance and minimization of indirect effects to fairy shrimp-occupied habitat adjacent to the project footprint will occur through BMPs for dust and erosion control as outlined above. In addition, NBC NRO will review specific BMPs (e.g., sediment fencing intended to protect vernal pools) before measures are implemented to avoid potential adverse effects (e.g., altered hydrologic regime) of the BMP and determine whether special post-BMP measures are warranted (e.g., revegetation of areas temporarily impacted). No trenching will occur within vernal pool watershed areas in association with BMPs. Additionally, storm water coming from the project footprint, both during and after construction, will be directed away from occupied basins and their watersheds to prevent contaminants and sediment from flowing off the project footprint and into adjacent habitat. All storm water coming from the project will be captured, directed to storm drains, and prevented from entering vernal pools or their watersheds.*
>
> *CM 17. To avoid effects to fairy shrimp-occupied habitat, known occurrences within 500 feet of project boundaries will be identified on project demolition and construction plans and, if determined necessary by NBC NRO or the project biologist, occupied habitat will be clearly indicated in the field with markers or exclusion fencing. Known populations and restricted areas will be monitored by the project biologist (familiar with the habitat of species) during construction phases, as determined necessary by NBC NRO. If deemed necessary by NBC NRO, a 100-foot non-disturbance buffer will be established around each vernal pool watershed and exclusion fencing, markers, or BMPs will be established around the non-disturbance buffers to prevent construction-related runoff and sedimentation from entering the pools.*
>
> *CM 18. To avoid impacts to vernal pools resulting from unauthorized trespass during construction, operation, and maintenance activities, signs and/or gates will be installed at all locations that could provide potential access to the vernal pool watershed (i.e., dirt access roads or foot paths) prior to the initiation of project construction. The type and placement of signs and/or gates will be determined by NBC NRO. Signs and/or gates will be regularly maintained and remain in place for the life of the project.* [10]

[10] "NBC NRO" in this selection stands for "Naval Base Coronado Natural Resources Office."

With these measures in place, the USFWS concluded that "all potential impacts on the … fairy shrimp … will be avoided or reduced to a level of insignificance (i.e., unable to be meaningfully measured, detected, or evaluated)" (**Exhibit 7**, p. 10).

The Commission agrees with the Navy's conclusion that the proposed project, as modified to eliminate the "Option 2" water line alignment, would avoid direct impacts to San Diego fairy shrimp and vernal pool habitat. In all cases, the limits of the proposed development footprint are more than 100 feet from the vernal pools, a buffer distance that is in conformance with the staff ecologist's recommendation (**Exhibit 9**, p. 5-6) and past Commission actions, and that would provide some defense against indirect effects if the proposed development were built. The Navy's proposed conservation measures would also avoid indirect effects on this species and habitat during construction and operation.

As is discussed in greater detail in Subsection I (Water Quality), below, Commission staff had expressed concern that the Navy's approach to storm water management, including the capture, rerouting and infiltration of all or most of the runoff from the proposed development footprint, could have the unintended consequence of altering the hydrologic regimes of the vernal pools in the southern portion of SSTC-S.[11] In subsequent discussions, the Navy has clarified that the proposed development would occur outside the drainages of existing vernal pools under most conditions, and that the goal of storm water management at the proposed campus would not be to divert all runoff at the site, but to capture the *additional* runoff resulting from the new development. Based on the information provided, the Commission concludes that the proposed handling of storm water runoff from the proposed project would avoid significant disruption of the San Diego fairy shrimp and its vernal pool habitat.

Southern Foredunes

SSTC-S contains 42 acres of southern foredune habitat on the western, seaward boundary of the site, occurring on either side of the western perimeter fence (**Exhibits 6a, 6b**). The southern foredune community is recognized by the CDFW in the California Natural Diversity Database as a rare natural community of highly limited distribution due to its scarcity and declining status in southern California (CDFG 2010). Southern foredunes have been greatly reduced by urban and other development between Point Conception and the Mexican border; it is estimated that less than 2,000 total acres of this habitat remain in California. Remaining areas of intact southern foredunes are ranked by CDFW as S2.1 ("imperiled, seriously threatened in California"), and are of high priority for conservation.

Given the rarity of dune habitats across the state, the Commission has considered dune plant communities, even those that are significantly degraded, to meet the definition of ESHA, if they retain some connection to the beach or other dune areas, or if they are inhabited by plants or animals that are rare, endangered, or have other special status. In this case, the dunes at SSTC-S, though in places degraded by foot and vehicle traffic and invasive ice-plant, remain largely intact, and together with the dunes directly to the north at Silver Strand State Beach, represent

[11] September 17, 2014, correspondence between U.S. Navy and Commission staff.

the largest contiguous stretch of dunes remaining on the Silver Strand peninsula and Coronado Island, and the most intact of this habitat remaining in San Diego County (AECOM 2012). The dune system at SSTC-S retains its connection to the beach and provides many important ecosystem functions, including nesting habitat for the federally-listed Western snowy plover, and habitat for rare native plant species, including Nuttall's lotus, Coast woolly-heads, California box thorn, Orcutt's pincushion, and Red sand-verbena (*Abronia maritima*), which are listed as "rare and endangered" species by the CNPS,[12] and the rare globose dune beetle (CDFW 2014b). Based on the rarity of southern foredune habitat in California, the high quality of the habitat and the presence of rare plant and animal species at SSTC-S, and the fact that these resources could easily be disturbed or degraded by human activities or development, the Commission's staff ecologist has determined that the southern foredune habitat at SSTC-S meets the definition of ESHA in the Coastal Act (**Exhibit 9,** p. 4).

Direct Impacts to Southern Foredunes

The proposed project would result in the permanent removal of 0.23 acres of southern foredune habitat, including areas inhabited by Nuttall's lotus and Coast woolly-heads, as a result of the construction of the new northern entryway and access road (**Exhibits 5d, 6d**). The construction of a new right-turn lane on SR-75, within the Caltrans right-of-way on the approach to the northern entrance, would also permanently remove 0.15 acres of southern foredunes that are within the designated critical habitat of the Western snowy plover. In addition, the installation of a new water line along the Option 1 route (*see* above) would require trenching and fill within 2.61 acres of foredune habitat along the western boundary of the site. Based on its location (as shown in **Exhibit 6b**)**,** the initial installation of the pipe would result in the removal of numerous occurrences of CNPS-listed plant species, including Nuttall's lotus, Coast woolly-heads, Orcutt's pincushion, Red sand-verbena, and Southwestern spiny rush,[13] growing along the Option 1 water line easement. While it is possible that the dune vegetation removed during the pipe installation would eventually recover, future maintenance activities along the water line easement would guarantee some degree of periodic disturbance. As discussed previously, there appear to be feasible alternative configurations of the water line that would place it beneath an existing road (Hooper Blvd.) across the southern portion of the site and through previously developed or disturbed areas within the proposed Campus footprint (**Exhibit 6e**). These configurations would avoid disturbance of southern foredune ESHA and special status plant species.

The proposed removal and disturbance of southern foredune habitat that has been designated as ESHA by the Commission's staff ecologist, as described above, would be inconsistent with the resource protection requirements of Section 30240 of the Coastal Act, both because the proposed development is not a resource dependent use, and because it does not protect against the significant disruption of habitat values.

Western Snowy Plover

[12] Nuttall's lotus, Orcutt's pincushion and Coast woolly-heads are CNPS Rank 1B.1 species ("critically endangered in California"), while California box thorn and Red sand-verbena are CNPS Rank 4 species ("limited distribution")

[13] Southwestern spiny rush (*Juncus acutus leopoldii*) is a CNPS Rank 4.2 species ("limited distribution") commonly found in wetlands.

The western side of the dunes at SSTC-S provides breeding and nesting habitat for the Western snowy plover (*Charadrius nivosus nivosus*), a federally-threatened shorebird species. Western snowy plover is a small shorebird that uses sandy beaches for nesting and roosting from southern Washington to Baja California. The estimated population of adult plovers that may breed along the U.S. Pacific Coast has varied between approximately 1000 to 2000 birds over the last 30 years, with approximately 1000 birds breeding along the Baja California coast (USFWS 2007; Thomas et al. 2012). Research has indicated that there has been a general decline the West Coast population of snowy plover over past decades, including a substantial decrease in the abundance of wintering plovers in southern California (USFWS 2007). Among the factors linked to the regional decline in snowy plovers includes predation, beach erosion, encroachment of exotic vegetation and disturbance from recreation. A small breeding population of plovers is known to occur in the foredunes at SSTC-S. Based on surveys from 2011 to 2013, there has been an average of six breeding pairs of plovers, and 20 nests and 13 fledges, per nesting season on the SSTC-S beach and dunes. The locations and outcomes of recent Western snowy plover nests at SSTC-S are shown in **Exhibits 5d** and **10**.

As summarized above, the proposed project would result in the permanent destruction of 0.38 acres of foredune habitat associated with the construction of the new northern entrance, and the substantial disturbance of 2.61 acres of habitat due to the installation of the Option 1 water line. However, none of these areas are known to serve as habitat for Western snowy plovers. The southern foredune areas that would be removed or disturbed due to the entrance and water line construction are located inland of the SSTC-S perimeter fence, 100 feet or more from the nearest known nesting site, and are thus not accessible to snowy plovers. Moreover, the USFWS has determined in its informal Section 7 consultation letter that the 0.15 acres of critical habitat that would be removed is not suitable snowy plover habitat:

> *Approximately 0.15 acre of plover critical habitat (Subunit CA 55F) will be directly impacted by construction of the new access road in Caltrans ROW along SR-75 (Figure 2). Of the four primary constituent elements (PCEs) outlined in the final critical habitat designation (Service 2012), PCEs 1 to 3 are related to habitat required by the plover for feeding, breeding, and sheltering, and PCE 4 relates to the plover's requirement for habitat with minimal human disturbance for survival and reproduction. The 0.15-acre impact area consists of southern foredune habitat that is vegetated with nonnative ice plant (Carpobrotus chilensis) and some coastal sage scrub species, is disturbed by vehicle traffic on SR-75, and does not provide suitable habitat for plovers. Therefore, this area does not currently contain the PCEs of plover critical habitat, although it could be restored to support PCEs.*

In order to mitigate for the loss of this small area of marginal habitat, the USFWS's determination that a formal Section 7 consultation is not necessary is contingent on the Navy agreeing to undertake the following measure:

> *CM 32. To offset permanent impacts to plover critical habitat, the Navy will restore/enhance 0.15 acres of plover habitat through removal of ice plant along the western SSTC-South boundary (outside of the fence line) within 12 months of the*

> *completion of construction activities in plover critical habitat. All ice plant removal will be accomplished during the non-nesting season and will be completed using a work crew with hand tools or machinery (i.e., a bobcat or loader with grappler attachment).*

Based on this USFWS analysis, and on the locations of the directly affected dune areas in relation to known plover habitat, the Commission agrees that the proposed project would not result in direct impacts to the Western snowy plover, and that the proposed ice plant removal and restoration of dune habitat outside of the SSTC-S fenceline has the potential to benefit the local plover population.

Indirect Effects on Western Snowy Plover

Although no direct impacts are expected, increased human disturbance (i.e., noise, lighting, and unauthorized trespass) and predation associated with the construction and future operation of the SSTC-S Coastal Campus could indirectly affect snowy plovers. The USFWS states:

> *Loud, irregular sounds during project construction may cause plovers to spend more time away from their nests, thereby increasing the potential for eggs to cool and for eggs and chicks to be predated. Artificial lighting during project construction and operation my cause disorientation, startling, disruption of inter-specific interactions, and increased predation of plovers (Longcore and Rich 2014).*
>
> *Project construction and operation could also…*
>
> *… provide additional perching habitat (i.e., towers, tall buildings, utility poles, trees, fences) for avian predators (e.g., hawks, falcons and ravens and crows), which may lead to increased plover predation*
>
> *…increase populations of mammalian and avian predators at SSTC-South by providing supplemental food (through trash)*
>
> *…increase human disturbance in the plover nesting areas.*

With regard to the night-lighting and noise generated by project construction and operation, the USFWS notes:

> *However, southern foredunes between the project footprint and plover nesting areas along the western fence line are about 6 to 12 feet higher than the plover nesting area and are expected to attenuate much of the noise and light from project construction, operation and maintenance. In addition, project construction, operation and maintenance noise levels reaching the nesting areas are expected to be similar to or less than the relatively high ambient noise levels from ocean surf.*

Noise analyses conducted by the Navy during preparation of the DEIS support this conclusion. In order to minimize the potential indirect effects of the construction and operation of the Coastal

Campus at SSTC-S, the Navy has agreed to implement the following measures, as summarized in the informal Section 7 consultation:

CM 19. The Navy will distribute educational materials and/or install interpretive panels to inform military and civilian personnel of the sensitive species on SSTC-South and measures in place to avoid effects (e.g., no recreational use of the beach, meaning activities not associated with approved training, is permitted).

CM 20. Construction during the breeding season within 300 feet of plover nesting locations will be avoided to the maximum extent feasible. The nesting season occurs from approximately 1 March through 15 September, but varies depending on species and environmental conditions for each year. The exact timing of construction to avoid the nesting season (when construction will occur within 300 feet of occupied habitat) will be agreed upon by NBC NRO and Service. If construction must occur during the nesting season within 300 feet of occupied plover habitat, NBC NRO, in coordination with the Service, will determine the locations to construct noise and visual attenuation barriers of plywood 12 feet tall to mitigate any potential temporary noise and visual effects to nearby plover breeding locations. NBC NRO may determine the need for additional noise attenuation and light reduction measures for any building or bunker demolition that may take place during the breeding season.

CM 21. In the event that nighttime construction work is required, prior approval will be required by NBC NRO. Any artificial lighting required will be shielded away from native vegetation communities, beaches, and SR-75.

CM 22. Other methods of reducing light pollution (e.g., dusk-to-dawn sensor activation, low lumen or limited-spectrum lighting) will be applied wherever possible. Light poles and light placement will be constructed at the lowest height possible (considering security constraints) to reduce effects to the surrounding natural resources by reducing raptor perching sites and to reduce light pollution.

CM 23. NBC NRO will review project design features (during the design phase) to ensure that building designs minimize effects to plovers and rails. Design features that prevent raptors and avian predators from perching near sensitive avian species nesting habitat may include the use of anti-perching devices on light poles, rooftops, and other perching locations. Anti-nesting devices will be installed on appropriate structures to prevent prey species from nesting on buildings, which may attract predatory avian species. Additional building design features may include minimizing building heights to reduce bird collisions, altering roof pitch designs to minimize perching, and limiting the number of new light poles or new perching structures. Light poles and light placement will be constructed at the lowest height possible (considering security constraints) to reduce effects to the plover and rail by reducing raptor perching sites and to reduce light pollution.

CM 24. During construction, equipment (such as cranes) that could provide temporary supplemental perches for birds of prey and predatory birds will be staged and stored when

not in use at least 500 feet away (inside the project footprint) from habitat occupied by plovers. Equipment staging and laydown areas will be approved in advance by NBC NRO to ensure the areas are far enough away from occupied habitat. The project biologist will monitor construction activities to determine if equipment is providing supplemental perches, and make recommendations to reduce perching opportunities for avian predators.

CM 26. New buildings and structures will incorporate a bird-friendly design to reduce and prevent birds from colliding with buildings. Bird-friendly design features include transparent passageways, corners, atria, or courtyards so that birds do not get trapped; appropriately shielded outside lighting that is directed away from native habitats to minimize attraction to light-migrating songbirds; interior lighting that is turned off at night or designed to minimize light escaping through windows; and landscaping that is designed to keep birds away from the building's façade. Use of non-reflective or opaque glass; external shades (or other devices to reduce glare, transparency, or reflectiveness) on windows; ultraviolet patterned glass; angled glass; and/or louvers can aid in reducing bird collisions. Additionally, night-time lighting will include bird friendly design features such as shielded lights (to reduce ambient light into nearby native habitats), use of motion detectors, dusk-to-dawn sensor activation and other automatic controls, low-lumen or limited-spectrum lighting, and lighting design that uses shields to prevent light from shining upward into the sky (Sheppard 2011). NBC NRO will be consulted to ensure the minimization measures are incorporated to prevent window strikes.

CM 27. To avoid impacts to plovers resulting from operation of the project (i.e., causal outdoor recreation such as walking or running within occupied plover habitat), the existing gate along the western perimeter fence allowing beach access will remain locked at all times during the plover breeding season except when authorized access is granted.

CM 28. All proposed planting palettes, landscape designs, and installation of trees will be submitted for review and approval by NBC NRO and Navy Landscape Architect and will use native, drought-tolerant plants appropriate for SSTC-South, NAB Coronado, and NASNI. Invasive plant species will not be included in landscape plantings. A list of suitable landscape plants (including trees) is included in the Landscaping and Installation Appearance Plan Approved Plant List in Appendix H of the Naval Base Coronado Integrated Natural Resources Management Plan (Navy 2013). To reduce the effects of nesting avian predators in trees within the project footprint, there will be a 1:1 ratio of trees removed to trees planted so there is no net increase in the number of trees from current conditions. Trees will not be placed within 300 feet of the western fence line. Trees will be spaced far enough apart so that when full grown their branches will not be touching. Trees will be trimmed or pruned to open up the canopy of the trees to prevent nesting of American crows (Corvus brachyrhynchos) and/or common ravens (Corvus corax).

CM 29. All trash generated from construction, operation, and maintenance of the project will be contained within covered, secured trash bins that are inaccessible to wildlife and emptied on a regular basis and prevented from overflowing. All exposed food waste or

trash generated from food products (e.g., wrappers, food containers) will be removed from the site on a daily basis to prevent attraction of predators (e.g., American crows or common ravens and mammalian scavengers such as rats [Rattus spp.], raccoons [Procyon lotor], and skunks [Mephitis mephitis]).

CM 30. A visual obstruction is necessary to obscure the proposed entry control point on the north end of the site and the vehicles using the deceleration lane from adjacent occupied critical habitat for the plover on Silver Strand State Beach and from adjacent occupied plover habitat at the north end of SSTC-South. Construction of the entry control point will require grading to access SR-75 due to existing topography, slope stability, and the need for suitable vehicle access associated with the entry control point. Pre-construction engineering may indicate that the grading and site preparation itself may create a topographic visual barrier that adequately obscures the entry control point from the adjacent critical habitat for the plover. However, if engineering design for the entry control point does not create conditions that obscure the site from critical habitat for the plover, a permanent stonewall, concrete wall, or earthen berm or screening fence will be constructed within the project footprint along the west side of the entry gate road prior to the initiation of construction of the traffic and entry gate improvements. The height and length of the wall or fence will be determined by NBC NRO and USFWS. The wall or fence will have anti-perching devices installed on the top to prevent birds of prey from using the wall or fence for perching.

CM 31. During the design phase, NBC NRO will be consulted regarding the exact location of the entry control point. If feasible, the entry control point will be located as far south along SR-75 as possible to reduce the potential for disturbance to plovers within critical habitat from humans and vehicles entering and leaving SSTC-South. To the maximum extent feasible, construction of the new proposed entry control point and adjacent security fence will take place outside of the plover nesting season (which generally occurs from 1 March through 15 September, but this may vary slightly from year to year).

The Commission staff has expressed concern to the Navy that CMs 20 and 31 (above), would not prohibit construction activities within 300 feet of occupied snowy plover habitat during the breeding season, if such a restriction were deemed infeasible. In response, the Navy has clarified that the only construction activity with the potential to occur within 300 feet of plover nesting sites is the improvement of the northern entrance; all other projects, including installation of the water line, would occur more than 300 feet from nesting sites and/or outside the breeding season. The Navy has successfully used the proposed sound and visual barriers to protect snowy plovers during previous construction projects, and has through its management policies maintained and enhanced the breeding population of plovers at NBC installations over the past decade. [14]

The Commission's staff ecologist has reviewed this information and agrees that properly designed and sited barriers would attenuate much of the noise and visual disturbance associated with constructing the entrance improvements (J. Dixon, pers. comm.). He has also noted that the

[14] October 29, 2014, correspondence between U.S. Navy and Commission staff, "#3 & #9 Plover habitat."

entrance construction would take place on a relatively small area of the SSTC-S site, and would potentially affect only a relatively small number of plover breeding sites (**Exhibit 10**). The Commission thus concludes that the plover conservation measures, in combination with the biological monitoring requirements of CMs 1 and 7 (**Exhibit 7**, p. 12-13) and USFWS oversight, would minimize the potential for indirect effects on the Western snowy plover from the proposed project.

Conclusion

For the reasons discussed above, the Commission finds that the proposed development is not consistent with the resource protection requirements of Section 30240 of the Coastal Act. In order to be found consistent with Coastal Act Section 30240, the project would need to be modified as follows:

1. **Avoidance of Nuttall's lotus, CNPS Rank 1 and 2 plant species and Coastal sage scrub:** The proposed development at SSTC-S and NASNI shall be redesigned to avoid the removal of all occurrences of Nuttall's lotus (*Acmispon prostratus*), other CNPS Rank 1 and 2 rare and endangered plant species, and existing stands of Diegan coastal sage scrub supporting rare plants at these sites. The redesigned project shall also include adequate buffers between development and ESHA, including buffers of at least 100 feet from wetlands, vernal pools, coastal sage scrub and maritime succulent scrub, and southern foredunes, and at least 25 feet from stands of Nuttall's lotus.

In the absence of these project modifications, the Commission concludes that the proposed project's permanent and/or temporary use of multiple ESHAs, including extensive areas occupied by Nuttall's lotus and other CNPS-ranked rare and endangered plant species, 2.8 acres of southern foredunes supporting Western snowy plover, and 0.35 acres of Diegan coastal sage scrub, is not a use allowable within such habitat, and that use and the use of adjacent areas would not protect such habitat, and is therefore inconsistent with the requirements of the ESHA policies of the CCMP (Coastal Act Section 30240). The Commission therefore objects to the Navy's consistency determination based on its inconsistency with the ESHA policies of the CCMP.

D. WETLANDS

Coastal Act Section 30233 states:

> *(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:*
>
> …
>
> *(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*

…

(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 30121 of the Coastal Act defines a wetland as follows:

"Wetland" means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

In addition, Section 13577(b)(1) of the Commission's Administrative Regulations (Title 14, Division 5.5) provides:

Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats.

Wetland Delineations

The Navy performed wetland delineations at SSTC-S as part of a biological resources inventory completed in 2004 (Saucedo-Ortiz 2004), and revisited the delineations in the preparation of the Draft EIS. The Navy's consultants followed the procedural guidelines and criteria outlined in the U.S. Army Corps of Engineers Wetlands Delineation Manual. Several wetland areas were identified areas within SSTC-S (**Exhibit 6a**). The largest tract of wetlands on site, consisting of Southern coastal salt marsh and several small vernal pools, occurs in and adjacent to YMCA Camp Surf in the southwestern corner of the site. Other substantial wetland areas are located in the southeastern quadrant of the site, including numerous vernal pools, two areas of coastal salt marsh, and a few small patches of freshwater marsh. In total, the Navy's surveys identified 20.70 acres of coastal salt marsh, 11.11 acres of vernal pools, and 0.16 acres of freshwater marsh on the SSTC-S.

The Commission staff has advised the Navy that Coastal Act-defined wetlands may be more extensive than Army Corps-defined wetlands, and requested that the Navy identify any differences in the wetland delineation that would result if a Coastal-Act ("one parameter") definition were applied.[15] The Navy responded as follows (in relevant part):

[15] September 5, 2014, correspondence between U.S. Navy and Commission staff.

> *A one parameter wetland delineation has not been done for SSTC-S that we are aware. The one parameter wetland delineation may expand the area mapped as wetland, but it would not include any of the area within the proposed footprint. The entire proposed footprint is within disturbed or upland habitat. Standing water or wetland vegetation is not present to classify the proposed footprint as one parameter wetland. Hydric soils, the third parameter, are not considered present on site … The only exception to this is the water line that runs through USACE wetlands (Coastal and Valley Freshwater Marsh). This is not USACE jurisdictional, as the marsh was only present due to a leaky pipe which was fixed in fall 2013. This would likely be considered a one parameter wetland. However, this area is no longer impacted, as the project has been revised to avoid new pipe within this area, so no development there is anticipated.*

The Commission's staff ecologist agrees that, while a wetland delineation based on the Coastal Act definition may have identified additional wetland areas, these areas would likely occur in the same general (i.e., the low-lying southern portions of SSTC-S) as the Army Corps-defined wetlands rather than in the proposed development footprint (**Exhibit 9**, p. 2-3). The freshwater marsh referenced in the Navy's response, though not an Army Corps jurisdictional wetland, was nonetheless correctly identified as a wetland in the Navy's analysis.

However, given that the Option 1 water line configuration would disrupt wetland areas in the southwestern corner of the site, near the YMCA Camp, the Commission's staff ecologist believes that this and other areas potentially affected by proposed water and other utility lines should be surveyed for wetlands meeting the state one-parameter definition (**Exhibit 9**, p. 3). For example, Commission staff notes that a small stand (100-200 individuals) of Southwestern spiny rush (*Juncus acutus*), a plant often associated with salt marsh habitats, occurs in the extreme northwestern corner of the SSTC-S, within the proposed Option 1 water line easement. *Juncus acutus* is considered a facultative wetland plant meaning that this species usually occurs in wetlands, but can at times occur in other areas (Lichvar et al 2014). Its presence is an indication that this area could comprise of "land where the water table is at, near or above the land surface long enough … to support the growth of hydrophytes" (14 CCR §13577(b)(1)), and could thus qualify as a wetland under the Coastal Act definition. A one-parameter wetland survey would be necessary to determine whether this area contains a wetland or "upland" occurrence of this species for the purposes of Coastal Act Section 30233 analysis.

Dredging and Fill of Coastal Wetlands

Coastal Act Section 30233 restricts the Coastal Commission from authorizing a project that includes the dredging and fill of coastal wetlands unless it meets three tests. The first test requires that the proposed activity fit into one of seven use categories enumerated in Coastal Act Section 30233(a). The second test requires that there be no feasible less environmentally damaging alternative. The third and last test mandates that feasible mitigation measures be provided to minimize the project's adverse environmental effects.

1) Allowable Use Test: One of the seven allowable uses of dredging and fill under 30233(a) is "incidental public service purposes." To qualify as an incidental public service purpose, the dredging and fill of coastal waters being undertaken must demonstrate that: (1) it provides a

"public service" insofar as it confers benefits to the public, either at large, or to those served by the public entity; and (2) is "incidental," within the meaning of that term as it is used in the Coastal Act (i.e. is ancillary and appurtenant to an existing public service purpose). The example used in Section 30233(a)(4) also specifies that temporary effects, such as those associated with a pipeline burial, can qualify as "incidental." In the present case, the waterlines proposed to be laid through wetland areas on the project site would serve to connect the development to the public water supply, and can be considered both incidental to the campus project, as well as temporary. The Commission thus concludes that the water lines qualify as an "incidental public service" and are an allowable use under Section 30233(a)(4).

2) Alternatives Test: Pursuant to Section 30233(a), the Commission must additionally find that there are no feasible less environmentally damaging alternatives to the proposed dredging and fill in coastal wetlands. In its consistency determination and Draft EIS, the Navy considered two alternatives for locating the water line. The first alternative ("Option 1") would run along the southern and western perimeter of SSTC-S between Imperial Beach and the northwestern corner of the site (**Exhibits 5a**, **6b**). Option 1 would require trenching and burial of a new water pipe in 0.05 acres of southern coastal salt marsh wetland in the area adjacent to the YMCA camp and, possibly, through a small area of potential wetland (as indicated by the presence of *Juncus acutus*) at the northern end of the site. The second alternative ("Option 2") would involve the replacement of an existing water line across the center of the southern portion of the site, between 3rd St. in Imperial Beach and the developed footprint, and installation of a new water line following the western perimeter fence along the northern half of SSTC-S. Option 2 would result in the fill of 0.03 acres of a freshwater wetland located near the northeastern edge of the NRRF antenna array and an unknown area of potential *Juncus acutus* wetland at the northern end of the site (**Exhibit 6d**). Option 2 would also require directional drilling beneath a ditch connected to a vernal pool (pool #10, **Exhibit 10**) supporting the federally-listed San Diego fairy shrimp. The Navy has since abandoned this alternative following its informal consultation with the U.S. Fish and Wildlife Service under Section 7 of the federal Endangered Species Act (*see* **Exhibit 7**)**,** and proposes to implement Option 1 for placement of the water line.

The Commission is aware of at least one other alternative for locating the water line that appears to avoid filling coastal wetlands altogether, and may thus represent a less environmentally damaging alternative. As discussed in the Draft EIS, the Coastal Campus project also includes the new installation and/or upgrade of natural gas and wastewater service lines along an existing easement running between Imperial Beach and the developed footprint beneath Hooper Blvd., a paved road which currently serves as the primary access road into SSTC-S. Routing the proposed water line beneath Hooper Blvd. into the developed footprint would avoid all wetland areas, and because the road crosses the vernal pool extension ditch over previously-installed fill, would avoid impacts to vernal pool #10 (**Exhibit 6e**). Commission staff has suggested this water line alignment to the Navy as a potential alternative, and more generally, has inquired whether the Navy has considered alternative alignments other than Options 1 and 2.[16] The Navy responded as follows:

[16] September 17, 2014, correspondence between U.S. Navy and Commission staff.

This option was considered, but the two options presented in the Draft EIS were considered desirable because they relocated the waterline outside of the proposed action footprint, which is preferable due to security concerns from NSW.

It is possible that specific security concerns exist that would render the Hooper Blvd. water line alternative infeasible, but if so, the Navy has not provided adequate information to support this conclusion. It is notable that "security concerns" do not rule out locating natural gas and sewer lines beneath Hooper Blvd. and developed portions of the site, nor the Option 2 alignment, which would also pass beneath the proposed development footprint.

If for some reason it proves infeasible to co-locate the water line alongside the wastewater and gas service lines beneath Hooper Blvd., it is possible to envision several more circuitous routes through non-native grassland areas in the southern portion of SSTC-S that would avoid wetlands and ESHAs. Similarly, the broad footprint targeted for development in the central and northern portions of SSTC-S would seem to contain numerous potential options for locating the water line that would avoid the presumed wetland area near the northern site boundary, as well as other sensitive habitats. To date, the Navy has not provided Commission staff with any analysis of these alternatives for locating the water line, nor any evidence that these alternatives are either infeasible or more environmentally damaging that the proposed Option 1 water line.

3) Mitigation: The final requirement of Coastal Act Section 30233(a) is that the dredging and fill of coastal wetlands may be permitted if feasible mitigation measures have been provided to minimize any adverse environmental effects associated with that fill. The Commission has typically considered pipeline burial in a wetland to qualify as a "temporary effect" not requiring mitigation (Coastal Act Section 30607.1). However, if the proposed wetland dredging and fill fails the alternatives test (i.e., the proposed dredging/fill does not comprise the least environmentally damaging feasible alternative), as is the case here, then discussion of mitigation is premature.

Conclusion

In conclusion, though the Commission finds that the dredging and fill of coastal wetlands for the purpose of installing a water line to serve the proposed SSTC-S Coastal Campus is an allowable use under Section 30233(a)(4), the Navy has not provided sufficient information on the delineation of on-site wetlands using the Coastal Act definition, or the availability, feasibility, and environmental impacts of alternatives. The Commission therefore concludes that it lacks sufficient information to determine that (1) there is no feasible less environmentally damaging alternative to the proposed action, and (2) that the adverse environmental effects of the proposed dredging and fill of coastal wetlands have been minimized. In order to determine the project's consistency with Section 30233, the following information is necessary:

1. **Wetland delineations:** The Navy shall conduct additional wetland delineations, using the Coastal Act definition of "wetland" (Coastal Act Section 30121 and 14 CCR §13577(b)(1)), for areas adjacent to the proposed Option 1 water line easement, and for any additional water line route alternatives (see below) passing close to previously-identified wetlands.

2. **Analysis of water line route alternatives:** The Navy shall conduct an environmental impacts and feasibility analysis of alternative configurations of the proposed water line that would avoid the dredging and fill of wetlands (as defined under the Coastal Act). The considered alternatives shall include the placement of the water line beneath Hooper Blvd. and previously developed portions of the site.

Without this information, the Commission is unable to determine whether the proposed project is consistent with the wetlands policy of the CCMP (Coastal Act Section 30233). The Commission therefore objects to the Navy's consistency determination, based on lack of adequate information to determine the project's consistency with the wetlands policy of the CCMP.

E. HAZARDS

Coastal Act Section 30253 states in part:

> *New development shall do all of the following:*
>
> *(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
>
> *(b) Assure stability and structural integrity, and neither 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.*

Though not the legal standard of review in this case, the City of Coronado's certified Local Coastal Program (LCP) provides locally-relevant guidance with regard to coastal erosion hazards:

> LCP Policy E.4: *Require that any permanent building, or other structure proposed for construction be set back from an eroding beach coastline a distance sufficient to assure that the development will not be threatened by natural erosion processes during the lifetime of the structure without requiring shoreline protection structures. The builder, at the discretion of the City, shall provide a certification by a civil engineer that the proposed construction site meets this criteria* [sic].

The Navy's consistency determination does not examine whether the proposed project would place life or property in areas of high geologic, flood, or fire hazard risk. However, the coastal location, relatively low elevation, and highly erodible soils of the SSTC-S raise the question of whether the proposed development at this site would be at risk from coastal erosion and flooding during its design life, and whether the stability and structural integrity of the development can be assured into the future without reliance on shoreline protective devices.

Low-lying coastal areas in San Diego Bay region, including portions of Imperial Beach, Coronado, and Silver Strand peninsula, are currently vulnerable to flooding during winter storms when heavy rainfall, storm surge and high waves coincide with high tide conditions. This

vulnerability is evident in flood zone maps produced by the Federal Emergency Management Agency (FEMA) (**Exhibit 11**) and tsunami inundation maps produced by the State of California (**Exhibit 12**). [17] The sandy ocean shorelines of Silver Strand, itself a sand spit deposited over time by the net northward sediment transport in the Silver Strand Littoral Cell, are also highly vulnerable to coastal erosion. Since the damming of the Tijuana River in 1937 and the loss of the greater part of the sediment supply to the littoral cell, along with decreased rates of artificial beach nourishment in recent decades, significant beach recession has occurred at the Tijuana River delta, Imperial Beach, and southern Silver Strand (Flick 1993; Hapke et al. 2006; U.S. Navy 2010). Over the last several decades, estimated rates of beach retreat at Imperial Beach and Silver Strand locations near SSTC-S range from 3 to 6 feet per year. Rising sea level associated with global warming will increase the exposure of at-risk areas to coastal flooding and erosion hazards, and over time extend the area of vulnerability inland.

Sea level rise

Projections of future sea level rise for a given location vary greatly depending on assumptions made about future greenhouse gas emissions, the magnitude of ocean warming and ice sheet loss, and local or regional factors such as land subsidence or uplift. Regionally-specific sea level rise projections for the California coast south of Cape Mendocino are contained in a 2012 National Research Council report examining sea level along the west coast (NRC 2012), and an updated state sea level rise guidance issued in 2013 by the Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT). The 2013 CO-CAT report, reflecting the updated science provided in the NRC 2012 report, projects sea level along the California coast to rise 2 to 12 inches (4 – 30 cm) by 2030, 5 to 24 inches (12 – 61 cm) by 2050, and 17 to 66 inches (42 - 167 cm) by 2100. The ranges in these projections are based on a range of modeling results and low, medium and high future greenhouse gas emission scenarios. The State Coastal Conservancy and the State Lands Commission have adopted the use of 55 inches (140 cm) of sea level rise for 2100 which is consistent with the average of the models of sea level rise for 2100 based on a high future greenhouse gas emission scenario.

Throughout the first half of the 21st-century, sea level rise alone is not expected to cause significant flooding, inundation, or erosion; rather the highest probability and most damaging events likely will take place when increasingly elevated sea level occurs simultaneously with high tides, storm surge and large waves (e.g., during winter storms, El Niño events). Between 2050 and 2100, the effects of sea level rise alone (flooding and inundation) and the combined effects of sea level rise and large waves (e.g., damage to coastal structures, cliff erosion, beach loss) are projected to have much greater impacts.

To comply with Coastal Act Section 30253 development must be planned, located, designed and engineered for the changing water levels and associated impacts that might occur over the life of the development. In addition, project planning should anticipate the migration and natural adaptation of coastal resources (beaches, dunes, wetlands, etc.) due to these future sea-level rise conditions in order to avoid future impacts to those resources from the new development. At

[17] The FEMA flood zone map is reproduced in the Draft EIS as Fig. 3.5-2; the tsunami hazard zone map is reproduced as Fig. 3.2-3.

SSTC-S, the proposed development would be located inland of an intact coastal dune system, that has been determined by the Commission to support ESHA (*see* Subsection C, above), and which, under natural conditions, would be expected to migrate inland with increasing sea level. If the Coastal Campus project, or any future shoreline protective device needed to protect the development, has the potential to limit the natural migration of the dune system and result in its eventual loss due to erosion, it could not be found consistent with Section 30253 in that it would contribute to the destruction of the site and surrounding area.

Topography of the Coastal Campus Site

The topography of southern Silver Strand is relatively flat, with elevations rarely exceeding 15 feet above mean sea level (MSL). The northern portion of the SSTC-S, where much of the proposed Coastal Campus development would be located, occurs on some of the highest ground in the area, a low plateau at about 30 feet (9 meters) above MSL. In contrast, the southern portion of the site, including the circular area currently occupied by the NRRF antenna array that is also slated for development, sits an elevation of approximately 10 feet (3 m) above MSL, and includes numerous small depressions forming ephemeral wetlands and vernal pools during the wet season. The western edge of SSTC-S is bounded by a system of coastal dunes, which provide a degree of natural flood protection to the SSTC-S site, but are subject to erosion from prevailing coastal winds, surf, storm surge, and military training maneuvers. (DEIS, p.3.2-1; U.S. Navy 2010).

SSTC-S Vulnerability to Coastal Flooding, Erosion & Sea Level Rise

In the Draft EIS, the Navy evaluates flooding hazards at SSTC-S as follows:

> *Although SSTC-South is outside the 100-year flood zone, some off-SSTC-South areas planned for traffic and utility improvements, are within the 100-year floodplain and are subject to flooding during a 100-year storm event (Figure 3.5-2). SSTC-South is susceptible to localized flooding and has been known to contain seasonal pools created by storm water runoff due to its low-lying, flat terrain; poor drainage; and high water table.*

However, the Navy acknowledges that military properties are exempt from flood zone mapping, and that the location of SSTC-S outside the mapped 100-year flood zone does not necessarily reflect the actual flooding risk that presently exists at the site.[18] While the relatively high elevations (about 30 feet above MSL) of the northern portion of SSTC-S are almost certainly above the 100-year flood zone, the lower-lying southern portion of the site, including the area around the NRRF Wullenweber antenna array, may be vulnerable to flooding under certain conditions. These southern areas are currently at risk of flooding during a large tsunami event, as indicated by the tsunami inundation maps produced by the California Emergency Management Agency (**Exhibit 12**).

As discussed in Subsection I (Water Quality), the Navy will implement a variety of measures to capture, reroute, and infiltrate storm water runoff (**Exhibit 16**), and in the Draft EIS, the Navy indicate that these measures would be adequate to handle a 100-yr storm event:

[18] September 17, 2014, correspondence between U.S. Navy and Commission staff.

> *By successfully complying with these measures, runoff during construction and postconstruction operations would be minimized and 100-year storm flows would be properly conveyed without impeding or redirecting flows that would potentially harm life or property. By incorporating these design standards, no significant impacts would occur with implementation of features of Alternative 1.*

However, the Navy does not address if, and under what circumstances, the lower-lying portions of SSTC-S would become vulnerable to coastal flooding, nor what measures would be necessary to mitigate this hazard.

Another deficiency of the Navy's analysis is the failure to evaluate hazards that may arise over the life of the Coastal Campus development from future sea level rise and shoreline erosion and retreat. The National Oceanic and Atmospheric Administration (NOAA) has developed a sea level rise visualization tool ("NOAA SLR Viewer") to demonstrate the potential of various levels of sea level rise to effect coastal areas. **Exhibit 13a** shows the output from this tool in the vicinity of SSTC-S at high tide (A) under present conditions, (B) with 3 feet of sea level rise, and (C) with 6 feet of sea level rise, respectively. Under present conditions, several of the existing pools and wetlands in the southern portion of the site are highlighted as "low lying areas" potentially at risk of flooding. With three feet of sea level rise, these at-risk areas have expanded toward the development footprint. With six feet of sea level rise, corresponding to "high emissions" scenarios for the year 2100, much of the southern portion of the site – including a portion of the development footprint – could be inundated. The NOAA SLR Viewer does not take into account higher frequency sea level variability due to storms, El Nino events, or high wave conditions. Another set of future flood risk projections, developed for the state of California, illustrates how storm conditions could amplify the potential for flooding under future sea level rise (Heberger et al. 2009) (**Exhibit 13b**).[19] Under these projections, which assume 55 inches (4.6 feet) of sea level rise in combination with a 100-year storm, the area of potential inundation at SSTC-S is similar to that shown in the NOAA SLR Viewer with 6 feet (72 inches) of sea level rise (**Exhibit 13a**).

These sea level rise projection tools make a number of unrealistic assumptions, most notably that present-day topographic features will remain fixed, and are not designed to substitute for robust, site-specific analysis. At SSTC-S, sea level rise is likely to exacerbate on-going beach erosion and shoreline retreat, and the sea level rise projection tools may thus underestimate future hazards. Nonetheless, these simple tools demonstrate the potential for sea level rise to contribute to coastal flooding and erosion hazards within the proposed development footprint, and the need for detailed analysis of these hazards over the design life of the project. It is also worth noting that the southern portion of the development footprint is presently within a tsunami hazard zone (**Exhibit 12**), and that future sea level rise would only expand the areas at risk of inundation during a tsunami.

[19] Coastal flood and erosion hazard zone maps associated with the Pacific Institute sea-level rise report (Heberger et al. 2009) are available at http://www2.pacinst.org/reports/sea_level_rise/hazmaps.html.

In the absence of a complete analysis of current and future hazards from coastal flooding and erosion, and without assurances that the project would not induce the need for shoreline armoring or endanger the existing coastal dune system, the Commission concludes that it lacks sufficient information to determine whether the proposed project would minimize risks to life and property from flood hazards, assure stability and structural integrity over the life of the development, and avoid contributing to the erosion or destruction of the site and the need for shoreline protective devices that would substantially alter natural landforms. In order to determine the project's consistency with Section 30253, the following information is necessary:

1. **Coastal Flooding and Erosion Hazards Analysis:** The Navy shall prepare a site-specific analysis of coastal flooding and erosion hazards at SSTC-S over the full anticipated life of the proposed project. The analysis should project the extent of flooding or inundation that could occur over the anticipated life of the project under both low and high sea level rise scenarios, and under a range of conditions that should include high tide, storm surge, elevated water levels due to El Niño events and warm phases of the Pacific Decadal Oscillation, and 100-year storm events. Projections of flooding and inundation should take into account wave run-up during high wave events, and the combination of seasonal beach erosion and long-term erosion under future high sea level conditions. The study should also analyze the extent of beach and dune erosion that could occur from current processes as well as future sea level rise over the life of the project. In combination, the flooding/inundation and erosion analyses should be used to delineate the areas of the site that can be safely developed, assuring geological stability, without reliance on future shoreline protection devices. The study should also analyze potential future migration of the coastal dune system, taking into account both sea level rise and erosion trends, and project the location of the dune system in relation to the proposed development footprint.

Without this information, the Commission is unable to determine whether the proposed project is consistent with the hazards policies of the CCMP (Coastal Act Section 30253). The Commission therefore objects to the Navy's consistency determination, based on lack of adequate information to determine the project's consistency with the hazards policies of the CCMP.

F. Scenic and Visual Resources

Coastal Act Section 30251 states:

> *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. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.*

Although not the standard of review in this case, the visual resource policies of the City of Coronado's certified LCP can provide context, since the NBC installations where the proposed project would be located are nominally within the Coronado city limits.

> LCP Policy B.6*: Maintain high standards for visual aesthetics and preserve these scenic qualities as recreational resources.*
>
> LCP Policy H.2: *Require that permitted development be sited and designed to safeguard existing public views to and along the ocean and bay shores of Coronado, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.*
>
> LCP Policy H.5: *Reaffirm the Scenic Highway Element of the City's General Plan which designates the Silver Strand and San Diego Coronado Bay Bridge portions of State Highway 75 as Scenic Highway, and the Scenic Highway Modifying Chapter of the City's Zoning Ordinance which regulates land use adjoining Scenic Highways.*
>
> LCP Policy H.7c: *Require that development in the entire community generally be compatible in height and bulk with existing development to preserve the scale and character of the community.*

Existing Views

Views to and along the shoreline at SSTC-S are available from a variety of public vantage points south, east, and north of the site. However, due to the size (approximately 1.5 miles long, 0.4 – 0.6 miles wide in most places) and topography of the site (see below), views of the ocean from eastern vantage points are very limited (**Exhibit 15**, p. 3-6). Thus, the most significant shoreline views in the immediate vicinity SSTC-S are from the public beaches north and south of the site and from southbound SR-75, approaching the training complex from the north.

Existing views at the site encompass a mix of natural and man-made features. Natural features include flat, low-lying grassland, marsh, and scrub plant communities, a handful of old, planted cypress trees in the more developed portions of the site, and the coastal dune system along the seaward margin. Most existing buildings and structures are located in the northern half of the site, and due to their relatively low heights, generally do not present significant visual barriers (**Exhibits 3, 4**, **15**). The most notable exception to this rule is the decommissioned NRRF and its Wullenweber Antenna Array, consisting of a 1200-foot diameter concentric ring of 100-foot tall poles, with a 12,000 square foot control building at the center, located on the southern portion of the site (**Exhibits 3, 4, 15,** p. 2, 6-9). The antenna array is the most prominent visual feature of SSTC-S from distant vantage points due to its height, and from the neighborhoods and beaches of Imperial Beach due to proximity; however, most of the array is slated for removal prior to the construction of the Coastal Campus. Other prominent features include the 700 foot long Building 99 bunker and two other historic batteries (Bldg. 98 and Bldg. 100) on the northern portion of the site (**Exhibit 3**). Though the batteries are approximately 45-feet tall, they are covered with earth and vegetation, and more closely resemble low hills than man-made structures (**Exhibits 4**, **15**, p. 3, 5). The northeastern boundary of the site along SR-75 is

bordered by a mile-long earthen berm (approximately 25 feet in height) that obstructs most views across the northern portion of the site from the east, including from the SR-75 and the Bayshore Bikeway (**Exhibit 15**, p. 4).

The Silver Strand Highway (SR-75) is a state designated Scenic Highway providing views of the coast along portions off its length, including the segment just to the north of SSTC-S. Drivers, bicyclists or pedestrians approaching SSTC-S from the north have relatively unobstructed views of the coastal dunes and shoreline, with existing trees and structures on the site (most prominently the antenna array) and developed areas of Imperial Beach in the background (**Exhibit 15**, p. 2). As one nears the northern boundary of the SSTC-S, the highway bears east, and the foreground view becomes dominated by the site perimeter fence and the beginning of the berm, with the Building 98 battery, trees, and a handful of existing structures in the background, while views of the coastal dunes and ocean gradually diminish (**Exhibit 15**, p. 3). The roadside berm obstructs all views of the coast from the east across SSTC-S from just south of the northern entry to a point about mid-way down the length of the site. Views across the southern portion of SSTC-S from SR-75 and the Bikeway are relatively unobstructed, but the width of site and the western dunes ensure that the ocean is visible only on the horizon (**Exhibit 15**, p. 5-6). Looking to the northwest, trees and a few structures (most notably the Building 99 bunker) are visible in the distance (**Exhibit 15**, p. 7); to the west and southwest, the dominant structure is the antenna array (**Exhibit 15**, p. 6).

The Silver Strand shoreline adjacent to SSTC-S is publically-accessible from Silver Strand State Beach to the north and Imperial Beach to the south. At present, views along the shoreline from these vantage points are relatively open, containing a mix of natural and man-made features. Looking southward from Silver Strand SB, the foreground is dominated by the beach, dunes and ocean, with some existing SSTC-S development, including the antenna array, visible in the background (**Exhibit 15**, p. 1-2). Viewshed features are similar looking northward from Imperial Beach city beaches, though the antenna array is much more prominent (**Exhibit 15**, p. 9).

Effect of Proposed Project on Views

The proposed Coastal Campus project would place approximately 1.5 million square feet of new facilities at SSTC-S, including 24 major buildings or structures, and convert the northern half of the site to a heavily-developed campus. All new structures, with the exception of a 120-foot high parachute drying tower, would be 45-feet tall or less in order to match the maximum height of the existing development. Although the Navy has not provided a detailed site plan, the proposed project footprint would, for the most part, concentrate new development on the northern portion of SSTC-S (**Exhibits 5a, 5b**).

In its consistency determination, the Navy summarizes the proposed project's effects on scenic resources as follows:

> *The existing visual setting of SSTC-S would change as a result of the proposed project but the buildings would not obstruct any scenic public viewsheds. The Coastal Campus would modify viewsheds from SR-75, the Bayshore Bikeway, the Coronado Cays, and Silver Strand State Beach … It would create a more concentrated visual appearance, including*

increased nighttime lighting conditions, primarily from southbound SR-75 approaching the north gated entry control point. However, viewshed modifications are not anticipated to be perceived as substantial, dramatic, adverse, or controversial. SSTC-S is currently used for military activities and consists of 548 acres of federal-owned military property.

…

Most construction activities would be visible to military and government personnel working on SSTC-S, boaters transiting near the project area, and from multiple view corridors (SR-75, Coronado Cays, Imperial Beach residents near the southern boundary, YMCA Surf Camp and IB Pier). Construction activities for the traffic, access and utilities will be visible to the general public on SR-75 and within the City of Imperial Beach. However, construction activities would be temporary. After construction, the project would be visually consistent with existing buildings in the foreground and adjacent areas.

The Navy also concludes that the project would be visually-compatible with its surroundings due to design features:

Design of the buildings would complement the appearance of surrounding areas by including:

- *Context-sensitive architectural treatments applied consistently throughout the development.*
- *Low reflectivity building materials in natural, earth-tone colors.*
- *Shielding of permanent outdoor lighting that limit light trespass and ambient pollution to achieve dark sky compliance to the extent possible. Additional methods to reduce light pollution, such as dusk-to-dawn sensors, low-lumen or limited spectrum lighting applied as possible and light poles at lowest height possible considering security constraints;*
- *Context- and water-sensitive landscape treatments, including visual buffers such as earthen berms, vegetated buffers, screening trees, and right-of-way landscape improvement along public-facing areas*

With regard to the potential addition of structures at NAB and NASNI under Alternative 3, the Navy states:

Further, modification to views at NAB Coronado and NASNI would not be substantial as those base locations are currently characterized as nearly built out. The addition of one or two new facilities at these locations would not be a change in character or perceptible to the average viewer.

The Navy's assessment of the project's visual impacts are largely echoed by a visual review conducted by the California Department of Transportation , which evaluated visual changes along SR-75, a State Scenic Highway (Caltrans 2014a). In this memo, Caltrans states:

The height of the proposed structures would be consistent with the profile of the existing buildings; however, the location and number of buildings will increase the visibility of facilities from southbound SR-75. The design and appearance of all structures would fit the visual setting (character) and would be 'attractive, landscaped, and receive proper maintenance', in keeping with NBC policies and current practice. The view shed modifications are not anticipated to be perceived as substantial, dramatic, adverse, or controversial, and not result in significant adverse visual impact.

…

In addition, the post-construction conditions of SR-75 would continue to comply with the five (5) legislatively required elements for official scenic highways under Section 261 of the Streets and Highways Code.

Comment letters submitted by the City of Coronado on the Navy's Draft EIS and the Commission's federal consistency review (**Exhibit 14**) provide a counter-argument to the Navy's conclusion that the visual impacts of the proposed project would be insignificant. From the City's perspective, the number, volume and height of the new buildings, and the overall mass of the development, would represent a significant change from existing conditions and would not, as proposed, be visually compatible with its physical surroundings or the City's design guidelines. The City's comment letter on the DEIS includes the following points:

- The proposed project would greatly increase the bulk, mass and height of development in the northern portion of SSTC-S, and would be particularly visible from southbound SR-75. The entire project should be re-designed to be architecturally- and environmentally-sensitive and compatible with the project area and surroundings.
- Although the City does not have direct land use authority over the federal lands of SSTC-S, the proposed project is located in the Wildlife Preserve and Scenic Highway Overlay zones of the City's Land Use Plan (LUP), which include regulations designed to protect the aesthetic characteristics of land within the zones. The Navy should design the Coastal Campus in conformance with design guidelines for these zones, and submit conceptual plans to the City's Design Review Commission for review and comment.
- The Navy should analyze alternatives to the 120-foot high paraloft tower that would reduce visual impacts, such as placing the building partially below grade, redesigning the tower to be an "open" structure (allowing some visual transparency), or relocating it to the NAB where taller structures presently exist.
- The proposed modifications the SSTC-S northern entrance would include the addition of a new roadway, security gate, sentry building, lighting, traffic signal, and other structures which would change the visual appearance of the area and result in new night-time visual intrusions, especially headlight glare in the direction of the Coronado Cays neighborhood. These potential adverse effects should be analyzed and mitigated.

Analysis

It is clear that construction of the Coastal Campus would substantially alter the visual appearance of the SSTC-S, and would replace many of the natural aesthetic qualities of the site with a man-made, built environment. However, under the Coastal Act's visual resources policy, the Commission does not simply consider whether a development would change the aesthetics of a site, but whether the new development has been sited and designed to protect public views to and along the ocean, to minimize alteration of natural landforms and be visually compatible with the character of the surrounding area.

On one hand, much of the proposed Coastal Campus development would be clustered in the northern portion of the SSTC-S and set back from the edges of the site, thereby taking advantage of the size of the parcel to reduce visual impacts, maximize the shielding effects of the existing berm on the northeastern site boundary, and leave open much of the southern portion of the site. This broad-scale siting decision would protect views to the west from SR-75 and the Bayshore Bikeway along the southern portion of SSTC-S, and limit the project's intrusion into views along the shore from nearby public beaches.

The Commission agrees with the Navy's conclusion that the earthen berm would shield all but the tallest proposed structures from the view of SR-75 and the Bikeway along the northeastern portion of the project (**Exhibit 15**, p. 4), and that changes to the coastal view from the highway along the southern portion of SSTC-S would be minor due to the large distances between potential vantage points and the new structures (**Exhibit 15**, p. 5-7). Similarly, views to the coast from street ends in the northern neighborhoods of Imperial Beach would not be substantially degraded due to the distances involved and the presence of existing concrete walls separating the neighborhoods from the military installation (**Exhibit 15**, p. 8). The proposed development would be visible to beach-goers looking northward from Imperial Beach (**Exhibit 15**, p. 9) or southward from Silver Strand State Beach (**Exhibit 15**, p. 1-2), but due to the distances involved, and the planned setbacks from the beach (at least 400 – 600 feet), it would not obstruct views along the shoreline. At worst, new structures would be visible in the distance, but the more proximal inland views would be protected by the existing coastal dune system.

The trade-off of the proposed siting of the Coastal Campus is that the development would be highly visible from northern vantage points, in particular to viewers travelling southward on SR-75 and the Bayshore Bikeway. **Exhibit 15** (p. 3) illustrates how the proposed project would modify the view from southbound SR-75 near the northern entrance to SSTC-S. At present, the view contains a handful of structures, including the natural-seeming Bldg. 98 battery on the left, which is softened by clusters of tress and the visible horizon; post-project, these natural visual elements would be largely replaced by a solid mass of buildings. The 120-foot tall paraloft tower and a large structure composed of scaffolding on the right would be particularly obtrusive. However, even at present, the shoreline itself is not visible from this vantage point, and the ocean is only visible at the most distant horizon. Thus the potential effects of the project on views *to the ocean* are a relatively minor.

In the absence of specific site plans, it is difficult to evaluate whether an alternate arrangement of buildings and structures would reduce the visual impacts of the proposed project. However, the Commission concludes that, in general, the proposed concentration of development in the

northern portion of SSTC-S would protect most views to and along the ocean and minimize the alteration of natural land forms. The exception is the view to the south from SR-75 and the bikeway just north of SSTC-S, which would be substantially altered by the proposed project. In this instance, the adverse visual impacts could be minimized by eliminating, redesigning, or relocating the most obtrusive structure planned for the site, the 120-foot paraloft tower. Commission staff has asked the Navy whether the parachute tower could be relocated, for instance to a previously-developed installation that contains other tall structures. The Navy's response indicated that an offsite location would not meet the NSWC's operational needs, but that the "Navy intends to locate that tower to minimize its visual impact to the greatest extent feasible, recognizing that it would be a noticeable feature on the landscape." [20] While the Commission wishes to consider the Navy's operational needs, this response does not explain why these operational needs dictate this location, or provide enough information for the Commission to conclude that an offsite location would be truly infeasible, nor any specific information on the on-site alternatives the Navy is considering.

With regard to building design, the Navy proposes to incorporate several features, including "context-sensitive" architecture and landscaping, low-reflectivity building materials, and light-pollution reduction measures, into the Coastal Campus project in order to improve its visual compatibility with its surroundings. Detailed plans and/or simulations of individual buildings and structures are not yet available, and the development simulations provided by the Navy (included in **Exhibit 15)** contain few architectural details. One potential mechanism for ensuring that the Coastal Campus would be visually compatible with the surrounding area would be for the Navy to agree to conform, to the maximum extent practicable, to the City of Coronado's building design guidelines for the Scenic Highway Overlay zone, and to submit its development plans to the City's Design Review Commission for review and concurrence.

At present, the Commission does not have sufficient information to evaluate the feasibility of relocating the paraloft tower to another site, or whether alternative locations within the SSTC-S development footprint would have greater or lesser visual impacts. As a result, the Commission cannot fully evaluate the project's consistency with the visual and scenic resources policy of the CCMP (Coastal Act Section 30251). In order to determine the project's consistency with Section 30251, the following information is necessary:

1. **Alternatives Analysis for Siting and Design of Paraloft Facility**: The Navy shall provide a detailed analysis of potential alternatives for off- and onsite relocation of the parachute tower, including consideration of the visual impacts and feasibility of each alternative.

2. **Building Design Criteria and Plans:** The Navy shall provide an ongoing review mechanism that will enable the Commission to be assured that its building siting and design, and final plans for structures, would be visually-compatible with the surrounding area. Ideally, this mechanism should include an agreement to seek the review of the City of Coronado's Design Review Commission, or otherwise

[20] September 17, 2014, correspondence between U.S. Navy and Commission staff.

demonstrating that its design criteria are consistent to the maximum extent practicable with local visual resource policies.

Without this information, the Commission is unable to determine whether the proposed project is consistent with the visual resources policy of the CCMP (Coastal Act Section 30251). The Commission therefore objects to the Navy's consistency determination, based on lack of adequate information to determine the project's consistency with the visual resources policy of the CCMP.

G. PUBLIC ACCESS AND RECREATION

The Coastal Act provides for the protection and enhancement of coastal public access and recreation. Coastal Act Sections 30210, 30211 and 30212 state (in part):

Section 30210: In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211: Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212(a): Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or (3) agriculture would be adversely affected.

Coastal Act Section 30220 states:

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Coastal Act Section 30252 provides (in part):

The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, …

The Coronado peninsula, on which SSTC-S, NAB Coronado and NASNI are situated, is a major recreational destination, in large part due to its coastal location, which provides water-oriented recreational opportunities and access to numerous beaches. San Diego Bay and the Pacific Ocean are used extensively by tourists and residents for boating, fishing, bathing and other recreational activities. The ocean shoreline between Coronado and Imperial Beach consists of almost 10 miles of sandy beach, including popular municipal beaches and Silver Strand State Beach, immediately to the north of SSTC-S. The 24-mile Bayshore Bikeway runs between Coronado and downtown San Diego along the shore of San Diego Bay; a segment of the Bikeway runs along the eastern boundary of SSTC-S. State Highway 75 (SR-75), a state-designated scenic highway, also runs along the bay and is the primary access road for the entire peninsula. The YMCA Surf Camp, a seasonal day- and overnight camp for youth, is operated on 45 acres of land leased from the Navy in the southwestern corner of SSTC-S (**Exhibits 3, 5a**).

Public access to the proposed project areas, including SSTC-S, NAB and NASNI, is restricted to military personnel, and would remain so during and after project implementation. The beach area west of SSTC-S is currently accessible from Silver Strand SB to the north and Imperial Beach municipal beaches to the south. The Navy periodically restricts beach and ocean access at SSTC-S during training exercises; increases in the frequency of training activities and temporary beach closures at SSTC-S were reviewed by the Commission under a prior consistency determination (CD-033-10) and are not considered further here. In its consistency determination, the Navy states:

> *Implementation of the proposed action would not change public access to the sites and development of the Coastal Campus would have no effect on existing public access to the coast.*
>
> *Development of new facilities within SSTC-S, NAB Coronado and NASNI would not alter the availability, access to, or functions of the recreational areas including operation of and access to YMCA Camp Surf.*
>
> *Public access to all existing recreational facilities would be maintained and no changes to the recreational or adjoining land uses are proposed resulting in no effect to coastal recreation as a result of the proposed project.*

In response to staff questions about existing access to the beach area west of the proposed SSTC-S campus, the Navy additionally states:

> *The public currently is allowed access to the beach are immediately west of SSTC-S below the mean high tide line. The Navy does not currently close the beach except during select training events. This proposal would not change beach access.*

The Commission agrees with the Navy that the proposed project, which would occur almost entirely within the fenced perimeter of the Navy sites, would not directly encroach upon existing beach or shoreline access. However, as discussed below, the indirect effects of traffic congestion

stemming from the proposed development have the potential to impede shoreline access in the area.

Traffic Impacts on Coastal Access

The proposed project would increase traffic congestion at multiple intersections along Silver Strand Blvd. (SR-75) during both construction and operation of the Coastal Campus facility. Because of the popularity of the Coronado peninsula as tourist destination, and the status of SR-75 as the only coastal access corridor for much of the peninsula, increased traffic congestion on this road has the potential to restrict public access to the coast.

The traffic analysis contained in the Draft EIS concluded that "significant and unmitigatible" traffic impacts would occur along SR-75 due to the construction of the Coastal Campus (DEIS, pp. 3.9-31 to 3.9-35). Congestion at 14 - 17 intersections along the SR-75 corridor in Coronado (6 - 7 intersections), Imperial Beach (4 - 8 intersections) and the Egger Highlands district of San Diego (3 intersections) would become severe – falling to "level of service" (LOS) E or F -- at some point during the ten-year construction period (2015-2023), depending on the scenario analyzed.[21] Though the Navy refers to these impacts as "temporary", at many intersections the severe levels of traffic congestion would be sustained throughout all or most of the 2015 to 2023 period.

Operation of the new Coastal Campus and potential new facilities at NAB or NASNI would also introduce new traffic flows, generating an estimated 4000 to 4200 additional daily trips on SR-75 as compared to the present. Though the distribution of the new traffic flows depends in part on which project alternative is constructed, the proposed concentration of new facilities at SSTC-S ensures that virtually all the new trips will occur to and from this site, and that a portion of the current trips to and from the NAB in Coronado would shift southward to the new coastal campus. The traffic analysis contained in the Navy's Draft EIS examined current and projected LOS at 33 intersections along the SR-75 corridor, including scenarios with and without the proposed project alternatives, and with one to three aircraft carriers in port. Even without the proposed project, traffic congestion along SR-75 is expected to worsen over the coming decades, with numerous intersections declining to LOS E or F. Construction of the Coastal Campus would exacerbate this situation. The Draft EIS identifies five to eight key intersections in Coronado/Silver Strand (1 – 2 intersections), Imperial Beach (3 – 4 intersections) and San Diego (1 – 2 intersections), depending on the project alternative, number of carriers in port, and time frame (year 2024 or 2040), that would be significantly impacted with full implementation of the proposed project.

It is important to note that the Navy's traffic analysis is focused on peak morning and evening commute hours rather than weekends and holidays, when public access and recreation is most likely to be affected. However, as the Draft EIS notes:

[21] Under Transportation Research Board LOS criteria for intersections, LOS E is characterized as "operations where there is significant delay, extensive queuing, and poor progression"; LOS F is characterized as "operations that are unacceptable to most drivers, when the arrival rates exceed the capacity of the intersection".

> *Traffic patterns in Coronado are unique in that peak hours are spread over a longer time period because of the Navy's staggered work times and because of heavy tourism traffic that occurs outside of peak hours.*

Because of the area's popularity as a tourist destination, the effects of increased traffic congestion on public access may also become a concern on weekdays, particularly during the summer months.

The Navy has proposed a set of mitigation and impact avoidance and minimization measures to address increased traffic congestion at intersections where these impacts were deemed significant. Measures to address significant impacts associated with the construction phase of the proposed project are as follows:

- construct the new northern entry point to SSTC-S as soon as possible;
- include construction management in the design aspect of the project;
- monitor daily activity levels during construction;
- scheduling heavy periods of vehicle activity during non-peak hours;
- encourage carpooling and staggered work hours for construction workers;
- notify public stakeholders of times where abnormal construction activity would occur.

In addition to these measures, the Navy has proposed mitigation measures for the projected significant traffic impacts at key intersections during the operations phase of the project:

- modification of traffic signal timing and phasing;
- modification of lane configurations/lane restriping;
- addition of left-turn lanes, shared through- and right-turn lanes;
- removal of crosswalk to allow changes to signal phasing;
- removal of parking spaces to allow lane addition/reconfiguration.

These measures would be implemented over time at the various affected intersections, and based on the Navy's analysis in the Draft EIS, would reduce traffic congestion to the levels of service projected under the "no project" scenarios for the years 2024 and 2040. The Navy states in the Draft EIS that the proposed measures would be implemented by the Navy, Caltrans, and/or the City of Imperial Beach. In further discussion with Commission staff, the Navy has stated that:

> *The proposed action would implement a bike and pedestrian pathway onto the* [SSTC-S] *site from SR-75 and the Bayshore Bikeway … The Navy is also currently evaluating placement of a bus stop near or on the project site at the north entrance. In moving forward, the project design will also continue to evaluate this issue further and look for ways to reduce its traffic impact to the surrounding system.*

<u>Local Government Concerns</u>

The Cities of Coronado and Imperial Beach have submitted comment letters expressing strong concern over projected increases in traffic congestion resulting from the proposed project. Recommendations contained in these letters include (but are not limited to) the following:

- Do not implement the "construction north, operations south" construction scenario (*see* DEIS, p. 3.9-32), which would increase the number of Imperial Beach intersections experiencing significant increases in construction traffic, including in residential neighborhoods.
- Close the SSTC-S southern gate to regular vehicle use to avoid traffic impacts in residential neighborhoods of Imperial Beach and at the Silver Strand Blvd./Palm Ave. intersection.
- Fund and implement all traffic impact avoidance, minimization and mitigation measures prior to and/or in concert with construction activities.
- Coordinate with the cities of Coronado, Imperial Beach, and San Diego during the design and implementation of all traffic improvements.
- Partially or fully fund the costs of street and traffic signal improvements needed to avoid/minimize/mitigate traffic impacts.
- Work with Caltrans, Cities of Imperial Beach and San Diego on comprehensive traffic signal improvements along SR-75 corridor between Imperial Beach and I-5.
- Develop and implement a Transportation Demand Management Plan that would encourage and support the use of alternate modes of transportation; such plan could include a carpool/vanpool program; bicycle and pedestrian friendly campus design; inter-installation shuttle service; construction of bus stops and extension of municipal transit service to serve the northern site entrance; reinstatement of bay ferry service; charging of on-site parking fees; include carpool lanes at site entrance; etc.

To date, the Navy has not released its responses to comments received on the Draft EIS, so it is unclear to what degree these recommendations will be considered.

Conclusion

While it is likely that the proposed mitigation, avoidance and minimization measures would reduce the increase in traffic congestion in the SR-75 corridor stemming from the proposed project, it is not clear whether they are adequate to minimize effects on recreational traffic (and thus, public access to the shoreline). The construction-phase measures that the Navy has proposed, while recognizing the need to limit heavy periods of vehicle activity to non-peak hours, would not prevent or limit construction activity and associated traffic from occurring during peak *recreational* periods, including weekends and holidays. Additionally, the Navy's approach to mitigating traffic congestion associated with the future operation of the SSTC-S Coastal Campus (and potentially new facilities at NAB and NASNI) is focused almost exclusively on improving traffic flow rather than reducing the number of vehicles on the road and vehicle miles traveled. Coastal Act Section 30252 provides clear direction that new development, and in particular high-intensity development such as the proposed Coastal Campus, should maintain and *enhance* public access to the coast through the provision or extension of transit service, public transportation, and nonautomobile circulation within the development. While the Navy's proposal includes the encouragement of carpooling among construction workers and a pledge to evaluate the placement of a bus stop near the new northern

entrance, it falls short of making a firm commitment to developing alternative transportation measures that would displace the use of single-occupancy vehicles over the life of the development.

For these reasons, the Commission finds that the proposed project is not consistent with the public access and recreation policies of Sections 30210, 30211, 30212, 30220 and 30252 of the Coastal Act. In order to be found consistent with these Coastal Act policies, the project would need to be modified as follows:

1. **Minimize construction-related traffic during peak recreation periods**. To the extent feasible, the Navy shall avoid or minimize construction activities that would generate significant traffic flows during weekends, holidays and other peak recreation periods (e.g., summer months).

2. **Transportation Demand Management Plan**. The Navy shall develop and implement a set of concrete measures to reduce the demand for single occupancy vehicle travel to and from the SSTC-S Coastal campus and new facilities at NAB and NASNI. The Plan shall analyze the traffic effects of implementing a variety of demand management measures, including (but not limited to) the following:

   - a carpool or vanpool program for personnel commuting to the SSTC-S campus;
   - shuttle service between SSTC-S and other Navy facilities, within SSTC-S itself, and between the campus and entry gates;
   - construction of a bus stop at the SSTC-S entrance(s) and extension of municipal transit service from Coronado, Imperial Beach, San Diego and other communities;
   - on-site shuttle service within the SSTC-S campus serving the bus stop(s), to enable the use of public transit for commuting;
   - bicycle- and pedestrian-friendly design within the SSTC-S campus, including bicycle parking;
   - charging of on-site parking fees;
   - reinstatement of San Diego Bay ferry service.

   Any such measures projected to reduce traffic congestion shall be incorporated into the project and implemented.

Absent such modifications, the Commission cannot find the proposed project consistent with the public access and recreation policies of the CCMP (Coastal Act Sections 30210-30212, 30220, and 30252). The Commission therefore objects to the Navy's consistency determination based on its inconsistency the public access and recreation policies of the CCMP.

H. Energy Consumption and Vehicle Miles Traveled

In an effort to decrease the consumption of natural resources and reduce emissions of air pollutants, including greenhouse gases (GHG), the Coastal Act includes policies requiring that new development minimize energy consumption and vehicle miles traveled throughout the life of the project. Section 30253(d) of the Coastal Act provides:

New development shall … (d) Minimize energy consumption and vehicle miles traveled.

Energy Consumption

The Navy's consistency determination does not address the minimization of energy consumption associated with the construction and operation of the proposed Coastal Campus project. The Draft EIS addresses the issue indirectly when discussing the cumulative impacts of GHG emissions resulting from the project. The Navy concludes that annual GHG emissions from the proposed project "would not contribute substantially to cumulative impacts associated with global climate change" (DEIS, p. 4-10), and goes one to present a broad outline of Navy programs to reduce energy consumption and shift to renewable and alternative fuels:

The Secretary of the Navy established several goals for reducing the Navy's consumption of fossil fuels:

- *Mandate that energy usage, efficiency, life-cycle costs, and other such factors be part of the Navy's decision when acquiring new equipment or systems, as well as vendor efficiency or energy policies;*
- *Cut petroleum use by half in the Navy's fleet of commercial vehicles by 2015 by phasing in new hybrid trucks to replace older ones;*
- *Procure half the power at Navy shore installations from alternative energy sources, including wind or solar, by 2020 and, where possible, supply energy back to the grid, as the Navy does today at Naval Air Weapons Station China Lake, California; and*
- *Reach the point that half the energy used throughout the Navy, including in ships, aircraft, vehicles, and shore stations, comes from alternative fuel or alternative sources by 2020. Today that percentage is about 17 percent.*

These examples illustrate the leadership role that the Navy has in achieving energy reductions, which will contribute to the national effort to mitigate global climate change.

The DEIS describes measures to minimize energy consumption and GHG emissions at the SSTC-S Coastal Campus as follows:

The Proposed Action's buildings and facilities would be designed following established principles of sustainability, thereby meeting the standards set forth in EO 13423, EO 13514, and the EISA, as well as applicable Navy guidelines and regulations. The NBC Coastal Campus would include the design of an integrated layout, along with thermal and photovoltaic solar systems (on the rooftop of the proposed buildings and carports).[22]

In subsequent discussions with Commission staff, the Navy has further stated:

[22] Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management, George W. Bush, January 26, 2007; Executive Order 13514, Federal Leadership in Environmental, Energy and Economic Performance, Barack Obama, October 5, 2009; Energy Independence and Security Act of 2007 (EISA).

The Coastal Campus proposal would provide facilities at Naval Base Coronado for Naval Special Warfare Command that would use less energy and water and would be certified to LEED Silver. Projects included in the alternatives would be constructed in compliance with applicable sustainability and energy-efficiency guidelines and regulations (e.g., EO 13423, Strengthening Federal Environmental, Energy, Energy, and Transportation Management; EO 13514, Federal Leadership in Environmental, Energy, and Economic Performance; and the Energy Independence and Security Act of 2007 [EISA]). EO 13423 requires that Federal agencies improve energy efficiency, reduce greenhouse gas (GHG) emissions, and implement sustainable building practices (Department of Energy 2007a). It also requires Federal agencies to Comply with the Guiding Principles for New Construction and Major Renovation. EO 13514 requires that Federal agencies comply with the Guiding Principles for New Construction and Major Renovation. It also requires that at least 15 percent of each agency's facilities and building leases (more than 5,000 gross square feet) meet the Guiding Principles by 2015 for existing buildings. The Energy Independence and Security Act of 2007 (EISA) is an Act of Congress concerning the energy policy of the U.S. One of the stated purposes of the EISA is to increase the efficiency of buildings and to improve the energy performance of the Federal government (Department of Energy 2007b).

The Navy has since clarified to Commission staff that new Coastal Campus facilities would be designed to achieve energy and water efficiency equivalent to a LEED Silver rating, though the Navy may not pursue formal certification. The Commission supports the Navy's organizational goals for reducing fossil fuel consumption, and its commitment to implementing the proposed project in conformance with federal law. At this phase in the Navy's planning process, individual building designs are not yet available, and the exact mix of energy efficiency measures to be implemented will likely vary from project to project. Such measures may include the use of green roofs, window shading, low emissivity glass for windows, solid rain canopies, day-lighting of work spaces, light-colored building exteriors, PV solar panels, high efficiency lighting, solar tubes, natural ventilation, high quality insulation, and green and recycled building materials. The Commission therefore concludes that a framework is in place to assure that the proposed project will minimize energy consumption in the new buildings and facilities.

Vehicle Miles Traveled

As discussed in Subsection G above, the Navy estimates that the proposed project, including full operation of the proposed Coastal Campus, would generate over 4000 additional daily trips on SR-75, representing a substantial increase in vehicle miles traveled and associated energy consumption and emissions in comparison to the present. The Navy's traffic study (KHA 2014; Appendix D-2 to the DEIS) further estimates that 90% of the users of the SSTC-S campus will commute in a private vehicle. The Navy's proposed traffic minimization and mitigation measures (summarized in the previous section) are focused almost exclusively on road and signal improvements, largely ignoring measures that would improve traffic flow by reducing the number of vehicles on the road and vehicle miles traveled. The Navy has stated that the proposed project would include a bike and pedestrian pathway onto the SSTC-S site from SR-75 and the existing Bayshore Bikeway (see Subsection G, above), and that it would "evaluate" the placement of a new bus stop near the site entrance, but has not committed to implementing any

other measures that would reduce reliance on single-occupancy for accessing the Coastal Campus and potential new facilities at NAB and NASNI. The Commission therefore concludes that the proposed new development would not minimize the energy consumption or vehicle miles traveled related to vehicles accessing the subject sites.

Conclusion
Accordingly, the Commission concludes that the proposed project is not consistent with the energy and vehicle miles traveled policy of the CCMP (Coastal Act Section 30253(d)). In order to be found consistent with this policy, the project would need to be modified as follows:

1. **Transportation Demand Management Plan**. The Navy shall develop and implement a set of concrete measures to reduce the demand for single occupancy vehicle travel to and from the SSTC-S Coastal campus and new facilities at NAB and NASNI. The Plan shall analyze the traffic effects of implementing a variety of demand management measures, including (but not limited to) the following:

    - a carpool or vanpool program for personnel commuting to the SSTC-S campus;
    - shuttle service between SSTC-S and other Navy facilities, within SSTC-S itself, and between the campus and entry gates;
    - construction of a bus stop at the SSTC-S entrance(s) and extension of municipal transit service from Coronado, Imperial Beach, San Diego and other communities;
    - on-site shuttle service within the SSTC-S campus serving the bus stop(s), to enable the use of public transit for commuting;
    - bicycle- and pedestrian-friendly design within the SSTC-S campus, including bicycle parking;
    - charging of on-site parking fees;
    - reinstatement of San Diego Bay ferry service.

    Any such measures projected to reduce traffic congestion shall be incorporated into the project and implemented.

I. WATER QUALITY
Coastal Act Section 30231 states:

> *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 groundwater 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.*

The proposed Coastal Campus development would occur entirely on land, with no in-water construction or new training activities that have not previously been reviewed by the

Commission (e.g., CD-033-10). However, the construction and operation of the proposed Coastal Campus could adversely affect coastal waters, wetlands or vernal pools on or adjacent to SSTC-S. There are approximately 21 acres of wetlands and 11 acres of vernal pools on the SSTC-S. If not controlled, pollutants and runoff from the proposed development can be expected to reach these low-lying areas and nearby coastal waters. Conversion of the existing, largely undeveloped landscape to a developed landscape dominated by impervious surfaces could change the timing, volume, spatial pattern and quality of runoff, and thus degrade the quality of downstream receiving waters. In its consistency determination, the Navy summarizes the project's potential effects on water quality as follows:

> *The proposed action would increase impervious surfaces and associated stormwater runoff, including on-site and off-site drainage patterns compared to existing conditions. The impervious surfaces are roof areas, parking facilities, roads, and walkways. Increased vehicle traffic has the potential for additional pollutants in the runoff.*

The Navy's Draft EIS provides a more detailed picture of the project's potential water quality impacts, highlighting the following:

- Increased impervious surfaces and associated runoff;
- Increased vehicular traffic, increased potential for pollutants from vehicle use (e.g., copper, zinc, motor oil, PAHs, etc.) in runoff;
- Altered on-site and off-site drainage patterns, including undesirable increases in runoff flow rates or volumes;
- Mobilization of sediment during storm events due to excavation and other ground-disturbing construction;
- Spills and discharges of contaminants from heavy construction equipment.

The Navy has committed to addressing these potential adverse impacts by implementing a variety of water quality measures, summarized as follows in its consistency determination:

> *Implementation of avoidance and minimization measures would reduce or eliminate the amount of pollutants entering water resources and the volume and direction of runoff from the site. Although the Coastal Campus project has a goal of zero storm water discharge, should that not be achieved, runoff during construction and post construction operations would be minimized and treated through Low Impact Development (LID), site design, and/or structural Best Management Practices (BMPs). Drainage design would maintain existing runoff patterns to the maximum extent practicable, and retain all runoff on-site (zero discharge) for treatment. Runoff would be directed to different types of LID storm water treatment and storage facilities to remove various pollutants from the runoff and to store storm water for on-site infiltration and evaporation. These design features would reduce runoff volume, capture runoff pollutants on-site, provide groundwater recharge, and offer a supplemental resource for irrigation and/or graywater use in facilities.*
>
> *The project would adhere to the NBC National Pollutant Discharge Elimination System (NPDES) Permit and Construction General Permit requirements. As such, erosion and*

> *sediment controls would be used and a project specific Storm Water Pollution Prevention Plan (SWPPP) would be in place during construction activities to reduce the amount of soils disturbed and to prevent disturbed soils from entering runoff to surface/receiving waters.*
>
> *Based on the above analysis, all water quality impacts would be temporary and localized, therefore, there would be no effect to water quality.*

A detailed list of the various water quality protection measures the Navy has proposed is provided as **Exhibit 16**. The measures include (but are not limited to): Use of soft-bottom and vegetated detention basins and drainage features, with the goal of maximizing infiltration; use of pervious materials for necessary hardscapes; and implementation erosion, runoff, and sediment control BMPs during construction. As noted in the Draft EIS (p. 3.5-14), the proposed project must adhere to the requirements of both the NBC National Pollutant Discharge Elimination System (NPDES) Permit and a new NPDES Construction General Permit to be issued by the San Diego RWQCB. Any additional measures required under these permits can be expected to strengthen the water quality protections proposed in the DEIS.

The Commission staff has, in its discussions with the Navy, expressed concern that the proposed handling of storm water, in particular the project goal of "zero storm water discharge" (see above), has the potential to alter or disrupt the existing hydrologic regimes of the various wetlands and vernal pools occurring in the southern areas of SSTC-S.[23] While recognizing the need to avoid large increases in surface runoff to these aquatic habitats due to the emplacement of impervious surfaces within the development footprint, the Commission staff was concerned that too high a degree of storm capture could have unintended consequences, such as depriving the pools and wetlands of a necessary water source, or altering the seasonal cycles during which these habitats are wet or dry. In its response, the Navy's clarified that the vernal pool and wetland areas at SSTC-S do not presently receive runoff from the proposed project footprint, except under rare circumstances, and that the project will not substantially alter their hydrologic regimes:

> *The existing drainage on the northern portion of SSTC-South does not reach the vernal pools in the southern portion of the site, except under very rare storm events (i.e., 100-year storm). In that instance, drainage from the north may reach the area, but only for a very short period of time, and that runoff would not be substantial enough to permanently alter the vernal pool structure. Groundwater, rainwater, subsurface runoff, and surface runoff within the southern region itself presumably support the vernal pools.*
>
> *The intent of the drainage design for the proposed Coastal Campus is to keep the existing runoff patterns to the maximum extent practicable, retain all of the runoff on site and provide infiltration opportunities for all of the runoff that falls on impervious areas.*
>
> …

[23] September 17, 2014, correspondence between U.S. Navy and Commission staff.

> *The mitigation of all the impervious area by providing infiltration or water-reuse opportunities will also protect the existing biological sensitive areas by not directing more runoff to these areas than there is today.*

Based on this information, the Commission agrees with the Navy that the proposed handling of storm water from the development footprint will not substantially alter the hydrologic regimes of existing wetlands and vernal pools at SSTC-S.

In conclusion, the Commission agrees that the storm water runoff and water quality measures presented in **Exhibit 16** will protect the biological productivity and quality of coastal waters, wetlands, and vernal pools at SSTC-S, and will minimize waste water discharges, control runoff, prevent depletion of groundwater supplies, and avoid substantial interference with surface water flow. The Commission thus finds that the proposed project is consistent with the water quality policy of the CCMP (Coastal Act Section 30231).

J. CULTURAL RESOURCES

Coastal Act Section 30244 states:

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

The proposed project has the potential to adversely affect a number of cultural resources within the SSTC-S development footprint, including ten archaeological sites, the former landscape of the late-19th century Coronado Heights development, including the remnant street pattern, scattered cypress tree plantings along the streets, a segment of the former San Diego and Coronado Railroad, several batteries, bunkers and other structures included in the Fort Emory Coastal Battery Historic District, and the Wullenweber Antenna Array. No cultural resources would occur within the area of potential effects for possible projects at NAB and NASNI under Alternative 3.

Archaeological Resources

The archaeological resources within the SSTC-S development footprint consist of lithic and shell scatter and midden sites associated with Native American and pre-historic use of the Silver Strand for resource procurement. In all but one case, the Navy is recommending these sites as "not eligible" for listing on the National Registry of Historic Places (NRHP), and is seeking State Historic Preservation Officer (SHPO) concurrence with these evaluations as part of a pending Section 106 consultation under the National Historic Preservation Act (NHPA). The one recommended NHRP-eligible site has the potential to be affected by proposed electrical system upgrades. However, in its consistency determination the Navy states that "the upgrade would not require additional ground disturbance thus the cultural resources manager determined a no adverse effect to the historic property." With regard to the other sites not being recommended as eligible, the Navy concludes that these "are not historic properties and cannot be affected under Section 106" (DEIS, p.3.8-13).

The SSTC-S development footprint has been surveyed for cultural resources on several previous occasions, but areas outside the formal footprint, including areas slated for off-site traffic improvements, the right-of-way of the proposed northern access way, and utility improvements, have not been surveyed. The Navy proposes to address unknown or undiscovered cultural resources within these areas as follows:

> *Potential effects to cultural resources from proposed ground disturbing off-site traffic, access and utility improvements would be addressed through coordination with State Parks and Caltrans for cultural resource surveys, development of a monitoring and discovery plan, and required cultural resource monitoring during excavation activities. Any accidental discovery of human remains during excavation would be addressed under the Native American Graves and Repatriation Act for remains found on federal lands, and through consultation with the Native American Heritage Commission for remains found on nonmilitary Federal lands and non-Federal lands.*

Historic Structures

A 1997 historic resources evaluation of World War II-era structures at SSTC recommended that the Wullenweber Antenna Array and six other structures contributed to the Fort Emory Coastal Battery Historic District and were NRHP eligible (Herbert and Byrd 1997). These historic structures include two batteries, including the Building 99 bunker proposed for removal, concrete slabs and piers formerly supporting big guns, a plotting and sighting room, and two fuel tank pits. Neither the historic street grid nor the railroad remnants discussed above were recommended as NRHP eligible. Among these recommendations, only those involving the street grid, railroad remnants, and antenna array are subject to SHPO review. The Fort Emory structures are covered by the 2003 San Diego Metro Area Programmatic Agreement, and require only a finding by CNRSW, without outside Section 106 consultation, to be determined eligible. The Wullenweber Antenna Array was found eligible for the NRHP in 1999, and Section 106 consultation with the SHPO was completed in 2010 pertaining to the Navy's proposal to demolish the antenna. Under a 2010 MOA with the SHPO, the Navy is required to preserve the antenna array control building (Building 1) and a segment of the array, but may dismantle the remainder. The Navy is currently seeking SHPO concurrence on the non-eligibility recommendation for the street grid and railroad remnants as part of the Section 106 consultation for the Coastal Campus project.

Under the proposed project, the historic Fort Emory structures would be preserved, with the possible exception of the Building 99 battery, which would be demolished under the preferred alternative. In its consistency determination, the Navy states:

> *Potential demolition of Bldg 99, a contributor to the Fort Emory Coastal Defense Historic District, would constitute an adverse effect to this historic property. As such, resolution of the adverse effect would be defined with pending completion of Section 106 consultation with the State Historic Preservation Office and Advisory Council on Historic Preservation as required by Federal law. Any action pertaining to Bldg 99 would be taken in accordance with a Memorandum of Agreement for*

resolving the adverse effect. Such Memorandum of Agreement would be completed in advance of the demolition.

Conclusion

The Navy has initiated a Section 106 consultation with the SHPO, which is estimated to be completed by February of 2015. As part of this consultation, the SHPO will review the Navy's NRHP eligibility and adverse effect determinations for cultural resources at the proposed project site. Where necessary, the SHPO will require reasonable measures to mitigate for any adverse effects to cultural resources. With this review process in place, the Commission finds that the proposed project is consistent with the cultural resources policy of the CCMP (Coastal Act Section 30244).

APPENDIX A

SUBSTANTIVE FILE DOCUMENTS

Federal Consistency Determinations

1. CD-0003-14 (U.S. Navy, Naval Base Coronado Coastal Campus, San Diego County, CA, October 2013).

Coastal Commission Staff Reports

2. CD-033-10 (U.S. Navy, Silver Strand Training Complex, San Diego County, CA, June 2010).

Local Coastal Programs

3. City of Coronado certified Local Coastal Program (LCP) and Zoning Ordinance.
4. City of Imperial Beach certified Local Coastal Program (LCP).

Correspondence with the Navy

5. Correspondence between U.S. Navy and Commission staff, including:
    - September 5, 2014, "Coastal Commission Staff Questions & Concerns", e-mailed to Deborah McKay (Navy) from Joseph Street (CCC); September 12, 2014 Navy response.
    - September 17, 2014, "Coastal Commission Staff Questions & Concerns, Part II", e-mail to Deborah McKay (Navy) from Joseph Street (CCC); September 26 & 29, 2014 Navy responses.
    - October 29, 2014, "#3 & #9 Plover habitat" e-mail from Deborah McKay (Navy) to Joseph Street (CCC).
    - Other e-mail correspondence between Joseph Street and Mark Delaplaine (CCC), and Deborah McKay, Christopher Stathos, Teresa Bresler and Gretchen Sosbee (Navy), September – October 2014.

Other Documents, Reports, Articles & Consultations

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Source: ESRI; BLM 2011

12 6 0 12 Miles

Scale: 1:750,000; 1 inch = 12 miles

Regional Map and NBC Installations

Exhibit 1
CD-0003-14 U.S. Navy
NBC Coastal Campus
Page 1 of 1

Source: ESRI; BLM 2011

1.5 0.75 0 1.5 Miles

Scale: 1:95,040; 1 inch = 1.5 miles

Naval Base Coronado Vicinity Map

Exhibit 3
CD-0003-14
NBC Coastal Campus
Existing Development at SSTC-S

Image source: California Coastal Records Project

Exhibit 4
CD-0003-14 U.S. Navy
NBC Coastal Campus
Site Photographs
1 of 5

Image source: California Coastal Records Project

Exhibit 4
CD-0003-14 U.S. Navy
NBC Coastal Campus
Site Photographs
2 of 5

Image source: California Coastal Records Project

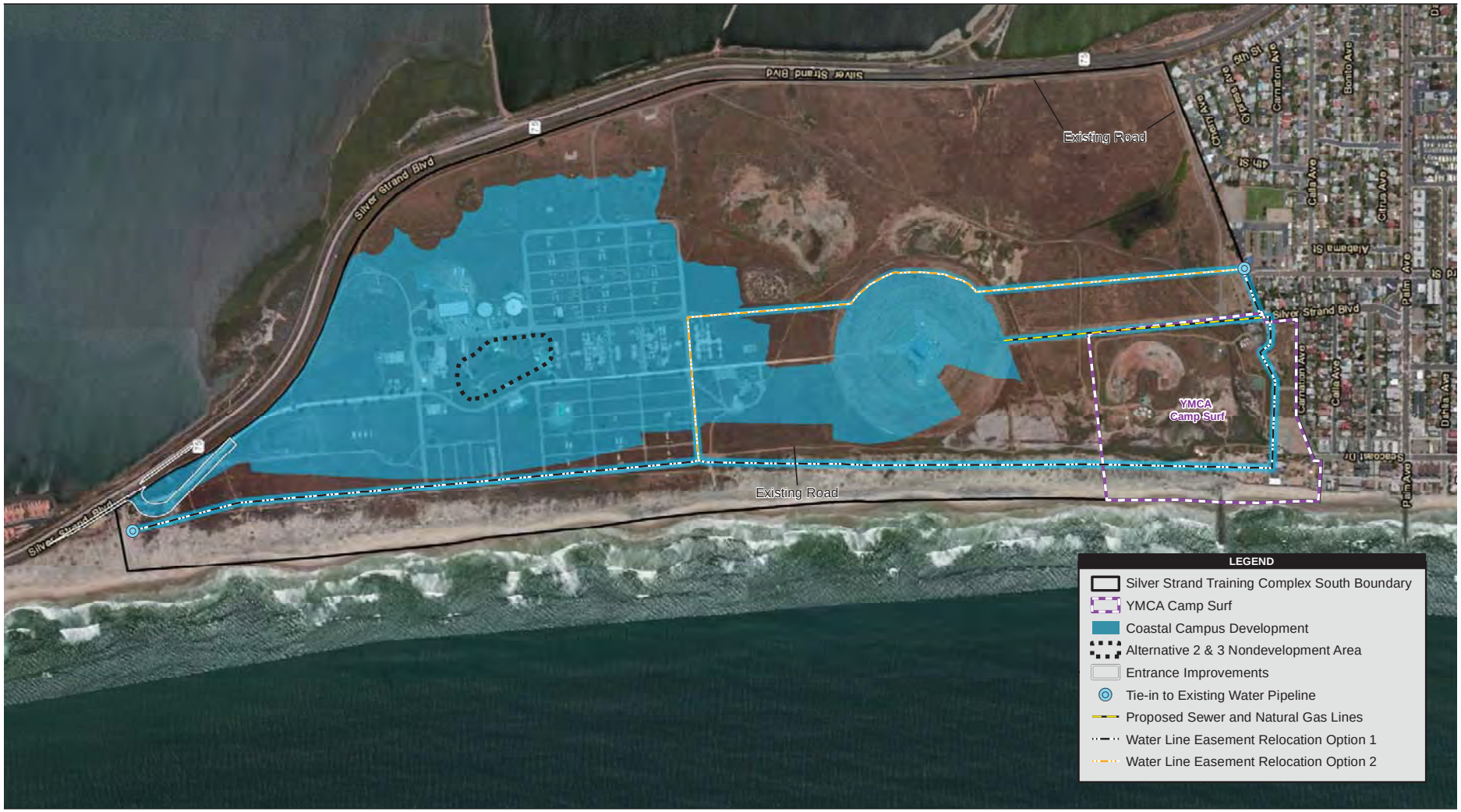
Exhibit 4
CD-0003-14 U.S. Navy
NBC Coastal Campus
Site Photographs
3 of 5

Image source: California Coastal Records Project

Exhibit 4
CD-0003-14 U.S. Navy
NBC Coastal Campus
Site Photographs
4 of 5

Image source: California Coastal Records Project

Exhibit 4
CD-0003-14 U.S. Navy
NBC Coastal Campus
Site Photographs
5 of 5

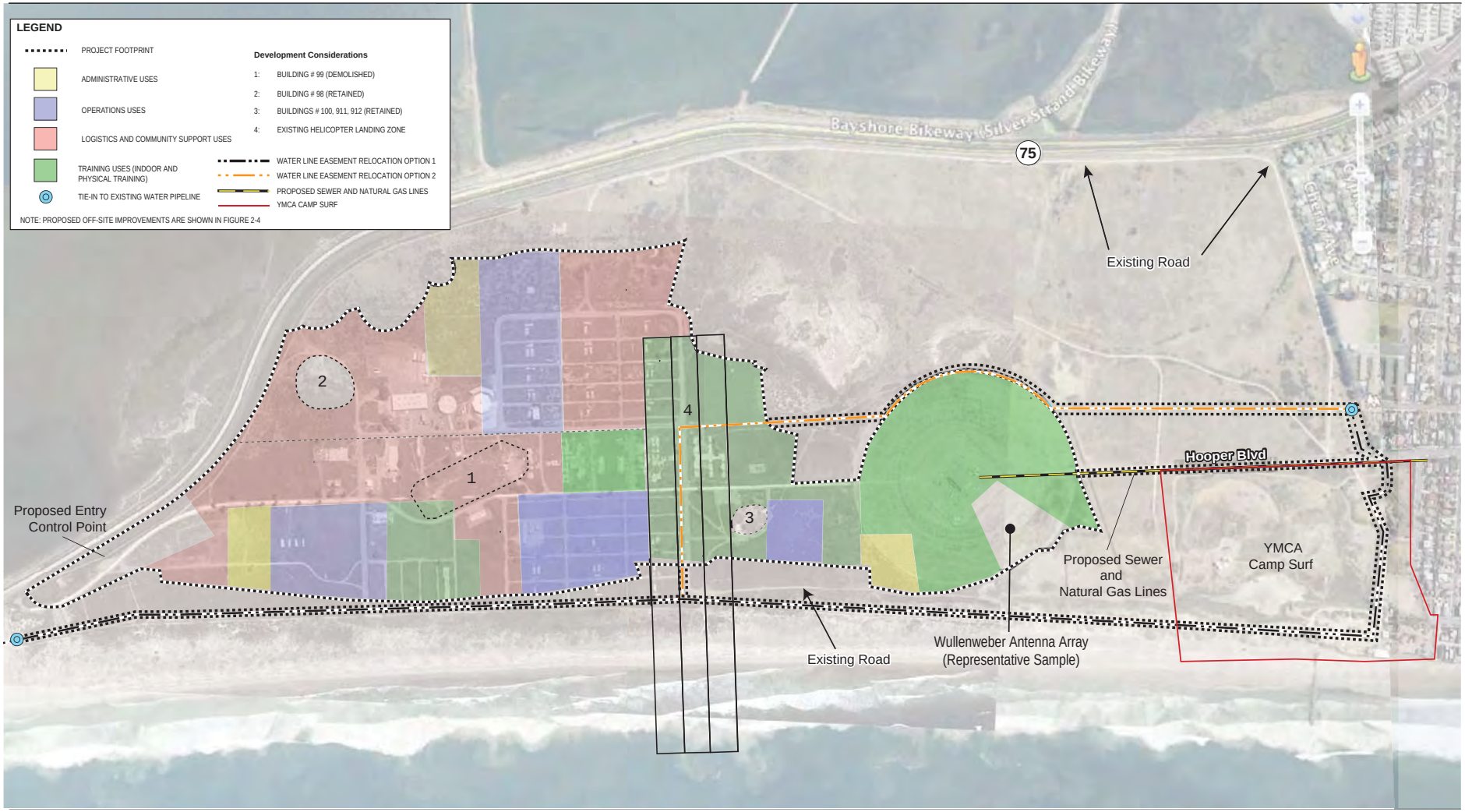


Source: TierraData 2011; U.S. Navy 2011, 2012; ESRI; AECOM 2012

700 350 0 700 Feet

Scale: 1:8,400; 1 inch = 700 feet

SSTC-South On-site Project Footprint



Source: FARR Associates

800 400 0 800 Feet

Alternative 1 Proposed Conceptual Land Uses and On-site Improvements

Source: ESRI 2013

Scale: 1:79,200; 1 inch = 1.25 miles
Inset Scale: 1:18,000; 1 inch = 1,500 ft

Alternative 3 Project Footprint

NBC Coastal Campus Environmental Impact Statement

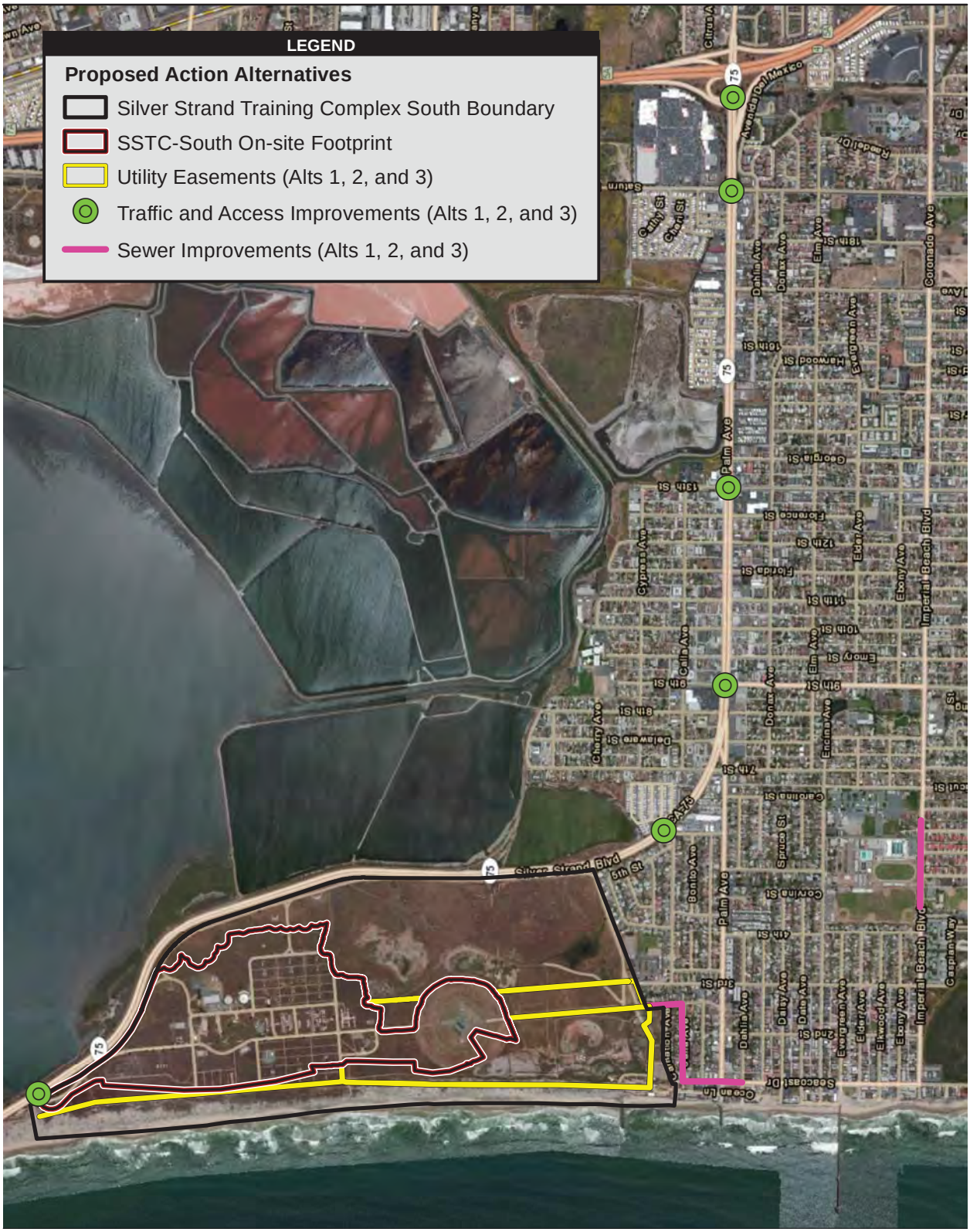
Exhibit 5c
CD-0003-14 U.S. Navy
NBC Coastal Campus

Source: TierraData 2011; U.S. Navy 2011, 2012; ESRI; AECOM 2012

150 75 0 150 Feet

Scale: 1:1,800; 1 inch = 150 feet

Indirect Impacts
Entrance Improvements and Alternatives 1 and 2



Source: ESRI 2013; U.S. Navy 2012

2,000 1,000 0 2,000 Feet

Scale: 1:24,000; 1 inch = 2,000 feet

Off-site Road and Utility Improvements

Source: ICF 2012; ESRI; CPEN; AECOM 2012

625 312.5 0 625 Feet

Scale: 1:7,500; 1 inch = 625 feet

Existing Vegetation and Cover Type Map

LEGEND

Proposed Action Alternatives
- Silver Strand Taining Complex-South Boundary
- Alternatives 1 and 2
- Alternative 2 & 3 Nondevelopment Area
- Utilities Easements (Alts 1, 2, and 3)
- Tie-in to Existing Water Pipeline
- Entrance Improvements
- YMCA Camp Surf
- South Bay Marine Biological Study Area

Study Area
- Biological Study Area Boundary

Species, Notes
- *Abronia maritima* (AECOM 2012) Red sand-verbena
- *Acmispon prostratus* (AECOM 2012) Nuttall's lotus
- *Chaenactis glabriuscula var. orcuttiana* (AECOM 2012) Orcutt's pincushion

- *Dudleya variegata* (Recon 2004) Variegated dudleya
- *Ferocactus viridescens var. viridescens* (Recon 2004) San Diego barrel cactus
- *Frankenia palmeri* (AECOM 2012) Palmer's frankenia
- *Juncus acutus ssp. leopoldii* (AECOM 2012) Southwestern spiny rush
- *Nemacaulis denudata var. denudata* (AECOM 2012) Coast woolly-heads

Species, Notes
- *Abronia maritima* (AECOM 2012) Red sand-verbena
- *Acmispon prostratus* (AECOM 2012) Nuttall's lotus

- *Chaenactis glabriuscula var. orcuttiana* (AECOM 2012) Orcutt's pincushion
- *Chloropyron maritimum ssp. maritimum* (Recon 2004) Salt marsh bird's beak
- *Ferocactus viridescens var. viridescens* (AECOM 2012) San Diego barrel cactus
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- *Juncus acutus ssp. leopoldii* (Recon 2004) Southwestern spiny rush
- *Lycium californicum* (AECOM 2012) California box thorn
- *Nemacaulis denudata var. denudata* (AECOM 2012) Coast woolly-heads

Vegetation Cover Type (AECOM 2012)
- Beach
- Coastal and Valley Freshwater Marsh
- Diegan Coastal Sage Scrub
- Disturbed Habitat
- Maritime Succulent Scrub
- Nonnative Grassland
- Southern Coastal Salt Marsh
- Southern Foredunes
- Urban/Developed
- Vernal Pool (ICF 2012)

Source: ESRI; AECOM 2012

625 312.5 0 625 Feet

Scale: 1:7,500; 1 inch = 625 feet

Special Status Plant Species

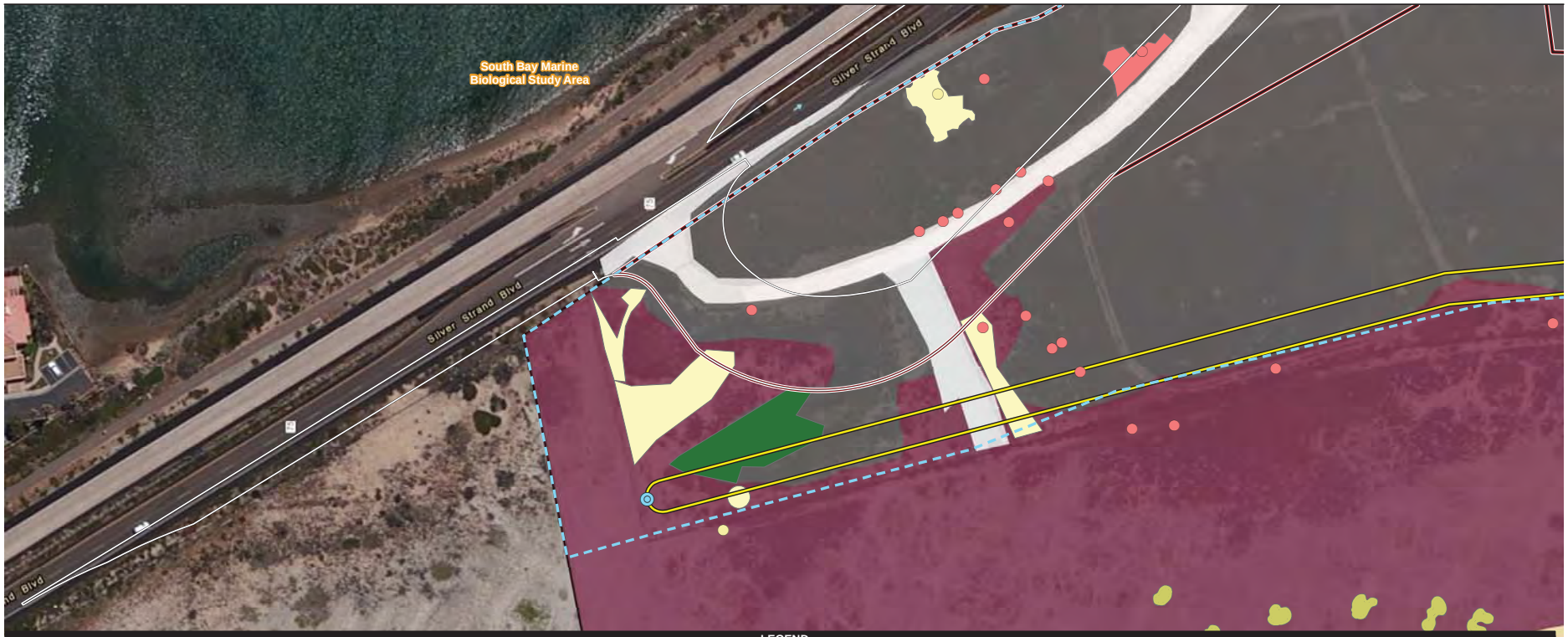
Source: ESRI 2013

Scale: 1:79,200; 1 inch = 1.25 miles
Inset Scale: 1:6,600; 1 inch = 550 ft

Special Status Plant Species on NASNI and NAB Coronado within Alternative 3 Boundary

NBC Coastal Campus Environmental Impact Statement

Exhibit 6c
CD-0003-14 U.S. Navy
NBC Coastal Campus



LEGEND

Proposed Action Alternatives
- Silver Strand Taining Complex-South Boundary
- Alternatives 1 and 2
- Alternative 2 & 3 Nondevelopment Area
- Utilities Easements (Alts 1, 2, and 3)
- Tie-in to Existing Water Pipeline
- Entrance Improvements
- YMCA Camp Surf
- South Bay Marine Biological Study Area

Study Area
- Biological Study Area Boundary

Species, Notes
- *Abronia maritima* (AECOM 2012) Red sand-verbena
- *Acmispon prostratus* (AECOM 2012) Nuttall's lotus
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Vegetation Cover Type (AECOM 2012)
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- Disturbed Habitat
- Maritime Succulent Scrub
- Nonnative Grassland
- Southern Coastal Salt Marsh
- Southern Foredunes
- Urban/Developed
- Vernal Pool (ICF 2012)

Source: ESRI; AECOM 2012

625 312.5 0 625 Feet

Scale: 1:7,500; 1 inch = 625 feet

Special Status Plant Species

Source: ESRI; AECOM 2012

625 312.5 0 625 Feet

Scale: 1:7,500; 1 inch = 625 feet

Potential Water Line Route Alternatives -- ESHA and Wetland Avoidance

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

In Reply Refer To:
FWS-SDG-14B0200-14I0295

SEP 12 2014

Captain C. E. Sund
Commanding Officer
Naval Base Coronado
P.O. Box 357033
San Diego, California 92135-7033

Attention: Tiffany Shepherd

Subject: Informal Section 7 Consultation on the Coastal Campus Project at Silver Strand Training Complex South, Naval Base Coronado, San Diego County, California

Dear Captain Sund:

This is in response to your April 23, 2014, letter requesting consultation pursuant to section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*) regarding the possible effects of the proposed Coastal Campus project (project) on the federally endangered salt marsh bird's beak (*Chloropyron maritimum* ssp. *maritimum*, bird's beak), San Diego fairy shrimp (*Branchinecta sandiegonensis*, fairy shrimp), light-footed clapper rail (*Rallus longirostris levipes*), rail[1]); and threatened western snowy plover (*Charadrius nivosus nivosus*, plover) and its designated critical habitat. Based upon review of the information you provided and discussions with your staff, we determined that an informal consultation would satisfy the interagency consultation requirements of section 7 of the Act. This determination is based on the site and species information described below and the U.S. Department of the Navy's (Navy) commitment to implement specific conservation measures (Enclosure).

The project will be constructed on the Silver Strand Training Complex South (SSTC-South bordered by the City of Coronado to the north, the City of Imperial Beach to the south, State Route (SR) 75 and San Diego Bay to the east, and the Pacific Ocean to the west (Figure 1). The purpose of the project is to provide adequate training facilities to: (1) support mandated force growth for Naval Special Warfare Command (NSWC) on the west coast and (2) maintain the required levels of operational readiness of special warfare forces. The project will consolidate NSWC training facilities to one location on SSTC-South.

[1] Please note that the American Ornithologists' Union now recognizes the clapper rail as the light-footed Ridgway's rail (*Rallus obsoletus levipes*) (Chesser et al. 2014).

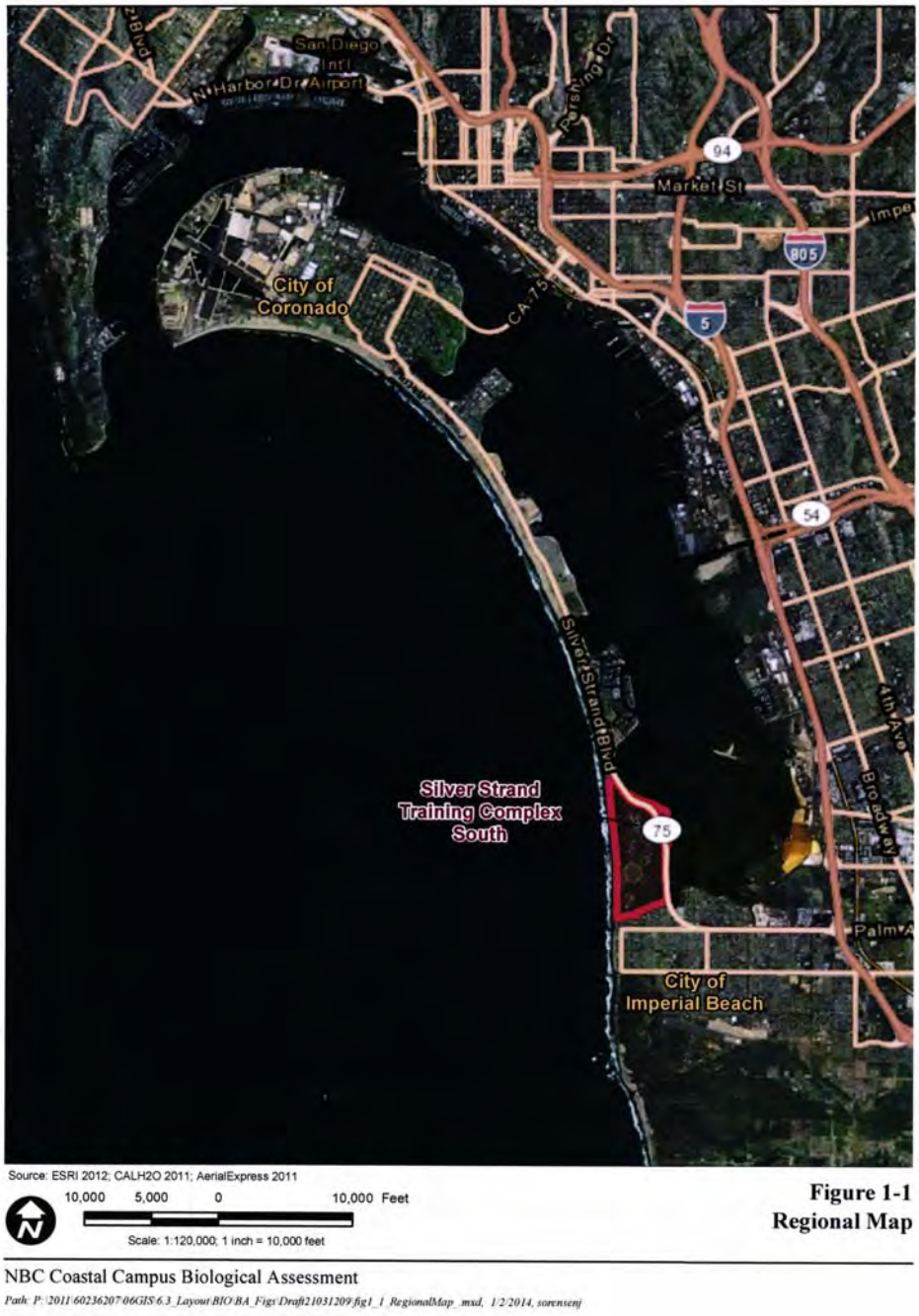

Figure 1. Location of Coastal Campus project in San Diego County, California.

DESCRIPTION OF THE PROPOSED ACTION

The project will include construction of buildings, training facilities and associated infrastructure (i.e., fencing, utilities, storm water systems, roads, walkways, and parking lots) (Figure 1). With the exception of 120-foot tall parachute drying tower (paraloft), the height of all buildings will be limited to 45 feet. The paraloft will be located nearly 1,100 feet east of beach habitat on SSTC-South. Prior to the initiation of construction, geotechnical borings may be conducted within the project footprint. A detailed description of each project component is provided in the Biological Assessment (BA) for the project (Navy 2014).

Project construction will include demolition of an existing military bunker, Building 99, and up to 20 other existing structures (Figure 2). Demolition will be done with small commercial explosives (Building 99 only), diamond saws, excavators and/or hydraulic pavement breakers (e.g., hoe-rams). Demolished concrete and steel will either be reused for project construction or removed to a local landfill. Demolition debris will be stockpiled adjacent to the demolition site until it is reused or removed.

New utilities and improvements to existing utilities (water, wastewater, electrical, and natural gas) will also be constructed to serve the Coastal Campus. The Navy is proposing two options for constructing a new water line to connect to an existing water line (Figure 2). Under Option 1, a new 16-inch diameter water line will be constructed just east of the SSTC-South beach for about 9,876 feet from near the northern SSTC-South boundary to the southern boundary of the YMCA Camp Surf then extend east to connect back to the existing water line. Option 2 will follow Option 1 to about the midpoint of SSTC-South then extend east through the project footprint to connect with the existing water line. Replaced portions of the existing waterline will be abandoned in place. For both options, water line construction along the western SSTC-South boundary will occur inside of the perimeter fence within a 30-foot utility easement. No new construction is being proposed along the portion of the existing water line extending from the Coastal Campus footprint to the southern SSTC-South boundary.

Primary access to the project site during construction and operation will be from SR-75. The existing northern access road will be realigned and widened up to 72 feet, including additional turn lanes and improved ingress and egress from and to SR-75 in California Department of Transportation (Caltrans) right-of-way (ROW). In addition, the existing northern access gate (currently gated and locked, allowing for limited authorized access only) will be improved, including a 600-square foot sentry house and permanent visual and noise barriers, to serve as the new entry control point (P-947) (Figure 2).

Project construction is expected to begin in 2015 and be completed by 2024, with about 10 percent construction occurring each year. Upon project completion, 3,045 additional personnel are anticipated to relocate from Naval Amphibious Base (NAB) Coronado to SSTC-South, increasing the total number of personnel currently onsite from approximately 300 to about 3,300.

Figure 5-1
Proposed Action Area Effects

NBC Coastal Campus Biological Assessment

Figure 2. Coastal Campus project footprint.

Exhibit 7
CD-0003-14 U.S. Navy
NBC Coastal Campus
USFWS Consultation Letter
Page 4 of 19

During operation of the Coastal Campus, all training will be confined to buildings and training facilities constructed as part of the project. Maintenance will be conducted regularly on the buildings, training facilities, and the associated infrastructure (i.e., gates, fencing, roads, walkways, parking facilities, storm water facilities, and landscaped areas) in the Coastal Campus footprint. Routine maintenance within the existing and proposed utility easements (water, wastewater, and natural gas) will include regular vegetation trimming and mowing. Any replacement of vegetation associated with maintenance will not include the use of nonnative invasive plant species.

All maintenance activities, including staging areas for vehicle and equipment parking, vehicle refueling, materials storage, and general personnel support will be conducted within established roads (paved and unpaved) in the Coastal Campus footprint and utility easements. In addition, vehicles/equipment will be transported to the site using established roads. Therefore, routine maintenance is not anticipated to result in additional impacts beyond those anticipated during construction activities.

The project has a goal of zero storm water discharge (capture 100 percent of the discharge). However, if this goal cannot be achieved, runoff during construction and operation will be minimized and treated site design and/or structural BMPs.

ENVIRONMENTAL BASELINE/EFFECTS OF THE ACTION

Most of the project site consists of disturbed habitat and urban/developed area with existing buildings, training facilities and a radar array which are surrounded by a fence (Table 1, Figure 2). With the exception of the access/traffic improvements along SR-75, construction, operation, and maintenance of the project will stay within the existing perimeter fence, and permanently impact about 114.81 acres of vegetation and temporarily impact about 2.05 acres or 4.89 acres of vegetation depending on the chosen water line option. No federally listed species, and only 0.15 acre of plover critical habitat, occur in the project impact footprint. However, bird's beak, fairy shrimp, rails and plovers occur adjacent to the project impact footprint as described below (Figure 2).

Table 1. Temporary and permanent direct impacts (acres) from the Coastal Campus project.

Plant Communities and Other Cover Types	Permanent Impacts (Coastal Campus)	Temporary Impacts (Water Line)	
		Option 1	Option 2
Southern Coastal Salt Marsh	0	0.03	0
Diegan Coastal Sage Scrub	0.35	0	0
Nonnative Grassland	0.02	0.13	0
Southern Foredunes	0.38[1]	2.61	0.18
Disturbed Habitat	114.06	2.12	1.87
Urban/Developed	52.04	1.9	1.49
Totals	166.85	6.79	3.54

[1] Includes 0.15 acre of plover critical habitat.

Bird's Beak

Although project-specific surveys were not conducted, bird's beak was observed in 2012 in an area of a known historical occurrence at the YMCA Camp Surf, immediately south of the project footprint (Figure 2). While potential habitat for this species occurs on SSTC-South, none of it occurs in the project footprint. Water line Option 1 will be constructed inside of the existing fence and pass through the back side of southern foredunes, approximately 100 feet west of the know bird's beak locations. The water line footprint is periodically disturbed by vehicles and does not contain suitable bird's beak habitat.

Although no direct impacts are expected, increased dust, runoff, erosion, sedimentation, and introduction of new invasive plant species from construction and maintenance of water line Option 1 could indirectly impact bird's beak. To minimize indirect impacts to the bird's beak during construction and maintenance of water line Option 1, the Navy will implement conservation measures including: ensuring a project biologist familiar with the species is onsite during construction activities to ensure compliance with all avoidance and minimization measures; ensuring all construction personnel receive environmental training before commencing work; implementing standard best management practices (BMPs) to minimize runoff, erosion, and sedimentation from the project footprint into the species' occupied habitat; washing and cleaning all equipment and vehicles prior to entering the project footprint to prevent the introduction of new invasive plants; and restoring temporary impact areas.

Fairy Shrimp

The southern half of SSTC-South supports 59 vernal pools, road ruts, drainage channels, and other features that pond water (referred to collectively as basins) (Figure 2). Fairy shrimp were detected in 29 basins on SSTC-South during surveys in 2010/2011. However, none of these fairy shrimp-occupied basins are within the project footprint.

Water line Option 2 includes maintenance of an existing water line that is immediately adjacent to a vernal pool, and crosses a drainage ditch, occupied by fairy shrimp. However, no maintenance of the existing water line will occur in the vernal pool (or its watershed) or drainage ditch as part of the project. If maintenance is necessary in the vernal pool (or its watershed) or drainage ditch, the Navy will reinitiate consultation to address any potential impacts to fairy shrimp.

Although no direct impacts are expected, increased dust, runoff, erosion, sedimentation, and introduction of new invasive plant species from project construction and maintenance of water line Option 2 could indirectly impact fairy shrimp. To minimize indirect impacts to fairy shrimp during construction, the Navy will implement conservation measures including ensuring a project biologist familiar with the species is onsite during construction to ensure compliance with all conservation measures; installing fencing around the outer perimeter of the project limits to reduce human disturbance, as needed; ensuring all construction personnel receive environmental training before commencing work; implementing BMPs to minimize runoff,

erosion, and sedimentation from the project footprint into the vernal pool watersheds; washing and cleaning all equipment and vehicles prior to entering the project footprint to prevent the introduction of new invasive plants; and restoring areas temporarily impacted by construction and maintenance to minimize the spread of invasive plants and prevent blowing dust.

All construction, including staging areas for vehicle and equipment parking, vehicle refueling, materials storage, and general personnel support will be conducted within the project footprint as identified and outside of the vernal pool watersheds. All maintenance activities, including staging areas for vehicle and equipment parking, vehicle refueling, materials storage, and general personnel support will be conducted within established roads (paved and unpaved) in the Coastal Campus footprint and utility easements but outside of the vernal pool watersheds and will not result in additional ground disturbance beyond the areas disturbed during construction.

While maintenance (i.e., vegetation trimming and mowing) will not result in additional ground disturbance, maintenance along the existing and proposed utilities easements could result in the introduction of new invasive plant species into adjacent fairy shrimp habitat. However, this impact will be minimized since maintenance personnel will receive environmental training before commencing work and all maintenance equipment and vehicles will be washed and cleaned prior to entering SSTC-South.

In addition, to avoid and minimize impacts to vernal pools and their watersheds resulting from unauthorized trespass during construction, operation, and maintenance, the Navy will install permanent signs and/or gates at all locations that could provide access (i.e., dirt access roads or foot paths) to the vernal pool watersheds prior to the initiation of construction and maintain signs and/or gates for the life of the project.

Plover

Although not known or expected to occur on the project site, plovers are known to nest on the SSTC-South beach west of the project site (Figure 2). Based on surveys from 2011 to 2013, there has been an average of six breeding pairs of plovers, and 20 nests and 13 fledges, per nesting season on the SSTC-South beach. From 2011 to 2013, the closest nest was approximately 310 feet to the west of the project footprint; however, nests generally occur about 450 feet west of the project footprint.

Although no direct impacts are expected, increased human disturbance (i.e., noise, lighting, and unauthorized trespass) and predation associated with project construction, operation, and maintenance could indirectly impact plovers. Loud, irregular sounds during project construction may cause plovers to spend more time away from their nests, thereby increasing the potential for eggs to cool and for eggs and chicks to be predated. Artificial lighting during project construction and operation may cause disorientation, startling, disruption of inter-specific interactions, and increased predation of plovers (Longcore and Rich 2004). However, southern foredunes between the project footprint and plover nesting areas along the western fence line are about 6 to 12 feet higher than the plover nesting area and are expected to attenuate much of the noise and light from

project construction, operation and maintenance. In addition, project construction, operation and maintenance noise levels reaching the nesting areas are expected to be similar to or less than the relatively high ambient noise levels from ocean surf.

To minimize impacts to plovers, construction within 300 feet of plover nesting areas will be avoided during the nesting season to the maximum extent feasible. Where the nesting season cannot be avoided, NBC Natural Resources Office (NRO), in coordination with the Service, will determine the locations to construct noise and visual attenuation barriers to mitigate any potential temporary noise and visual effects to nesting plovers. In addition, temporary construction and permanent outdoor lighting will be shielded and directed away from plover nesting areas.

Project construction and operation could also provide additional perching habitat (i.e., towers, tall buildings, utility poles, trees, fences) for avian predators (e.g., hawks, falcons, and ravens and crows), which may lead to increased plover predation. To minimize the availability of perching habitat during construction, the Navy will stage and store construction equipment that may allow for perching at least 500 feet away from plover nesting areas when not in use. To minimize the availability of perching habitat during operation, the Navy will: install anti-perching materials on light poles, rooftops, and other perching locations; locate the 120-foot-tall parachute drying tower about 1,100 feet east of plover nesting areas; ensure no net increase in the number of trees on SSTC-South (trees removed during construction will be replaced at the same ratio with native trees); trim and prune tree branches to open up the canopy of the trees to prevent avian predator nesting; space trees to prevent touching when full grown; place trees as far back from beach habitat as possible; and coordinate landscaping with NBC NRO to reduce the potential for use by avian predators.

Project construction and operation could also increase populations of mammalian and avian predators at SSTC-South by providing supplemental food (through trash). However, these impacts will be minimized by ensuring that all trash generated from project construction and operation is contained within covered, secured trash bins that are inaccessible to wildlife, and emptied on a regular basis/ prevented from overflowing. In addition, to minimize mammalian and avian predation on plovers, the Navy will continue predator control in occupied plover habitat along Silver Strand beaches, as required by the biological opinion on the Navy's SSTC Operations (FWS-SDG-08B0503-09F0517), which are anticipated to minimize any increases in predation associated with the project.

Project construction and operation could also increase human disturbance in the plover nesting areas. To minimize these impacts, the existing gate along the western perimeter fence allowing beach access will remain locked, and project personnel will not be allowed beach access during the plover nesting season.

Plover Critical Habitat

Approximately 0.15 acre of plover critical habitat (Subunit CA 55F) will be directly impacted by construction of the new access road in Caltrans ROW along SR-75 (Figure 2). Of the four primary constituent elements (PCEs) outlined in the final critical habitat designation (Service 2012), PCEs 1 to 3 are related to habitat required by the plover for feeding, breeding, and sheltering, and PCE 4 relates to the plover's requirement for habitat with minimal human disturbance for survival and reproduction. The 0.15-acre impact area consists of southern foredune habitat that is vegetated with nonnative ice plant (*Carpobrotus chilensis*) and some coastal sage scrub species, is disturbed by vehicle traffic on SR-75, and does not provide suitable habitat for plovers. Therefore, this area does not currently contain the PCEs of plover critical habitat, although it could be restored to support PCEs. To minimize impacts to plover critical habitat associated with increased human disturbance during project construction and operation, the Navy will construct permanent visual and noise barriers to obscure the proposed entry control point on the north end of the site from adjacent occupied plover critical habitat. The Navy will also offset the permanent loss of 0.15 acres of critical habitat through restoration of plover habitat on SSTC-South, outside of the existing perimeter fence.

Rail

Although not known or expected to occur on the project site, rails are known to occur east of SSTC-South in the San Diego Bay in the South Bay Marine Biological Study Area and at the nearby San Diego Bay National Wildlife Refuge (Figure 2). SR-75 separates SSTC-South from rail-occupied habitat in the South Bay Marine Biological Study Area. Navy-owned lands that are part of the South Bay Marine Biological Study Area have historically supported up to five pairs of rails, and the closest known rail was recorded approximately 620 feet from the SSTC-South boundary in 2005.

Although no direct impacts are expected, increased noise and predation associated with project construction and operation could indirectly impact rails. Construction, including demolition and associated debris removal, will result in increased construction-related traffic from SSTC-South along SR-75 to the City of Imperial Beach. Complete demolition will occur at a rate of about 10 percent each year, resulting in an increase in truck traffic along SR-75 adjacent to the South Bay Marine Biological Study Area where rails occur year-round. According to the BA, the maximum number of construction-related trips estimated for project construction is not anticipated to double the existing traffic on area roadways (i.e., doubling traffic volume increases noise levels by 3 dBA [A-weighted decibels (dB)], which is a less than perceptible change to the human ear). Thus, traffic noise levels generated by construction traffic will not result in a substantial increase in noise levels (i.e., +5 dBA) along project roadways. Therefore, despite an increase in vehicle traffic associated with project construction, the effects to rails are anticipated to be minimal.

Upon completion of construction of the Coastal Campus, it is anticipated that 3,045 personnel will relocate to SSTC-South, which will result in a permanent increase in vehicle traffic along

SR-75. However, according to the BA, this increase in traffic along SR-75 is not likely to increase noise levels above current conditions.

Rails could also be indirectly impacted by construction and operation of the project due to increased predation resulting from the addition of new structures (i.e., construction equipment, tall buildings, utility poles, fences, and trees) that provide perches for avian predators. However, implementation of the general and species-specific measures proposed to minimize indirect impacts of increased avian predation on the plover during construction and operation will also minimize such impacts on the rail. Such measures include ensuring no net increase in the number of trees onsite; trimming/pruning of all trees onsite to reduce nesting by predatory birds; and incorporating design features such as anti-perching devices on light poles, rooftops, and other perching locations to minimize perching by avian predators. The trash control and ongoing predator control required by biological opinion FWS-SDG-08B0503-09F0517 discussed above for plovers will also benefit rails.

CONCLUSION

In summary, the Navy will implement significant conservation measures (Enclosure) as part of the project to avoid, minimize, and/or offset potential impacts to federally listed species and designated critical habitat. Based on the site and species' information described above, and the Navy's commitment to implement the conservation measures, we conclude that all potential impacts on the bird's beak, fairy shrimp, plover, plover critical habitat, and rail will be avoided or reduced to a level of insignificance (i.e., unable to be meaningfully measured, detected, or evaluated) warranting our concurrence with the Navy's determination that the project is not likely to adversely affect these species or critical habitat. Therefore, the interagency consultation requirements of section 7 of the Act have been satisfied. Should project plans change or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered and further section 7 consultation may be required.

Thank you for your coordination on this project, and your continued efforts to conserve federally listed species and their habitats while supporting the Navy's military mission. If you have any questions or concerns regarding this informal consultation, please contact Tannika Engelhard at 760-431-9440, extension 202.

Sincerely,

Karen A. Goebel
Assistant Field Supervisor

LITERATURE CITED

Chesser, R. T., Banks, R. C., Cicero, **C.,** Dunn, J. L., Kratter, A. W., Lovette, I. J., Navarro-Sigüenza, A. G., Rasmussen, P. C., Remsen, Jr., J. V., Rising, J. D., Stotz, D. F., and K. Winker. 2014. Fifty-fifth supplement to the American Ornithologists' Union Check-list of North American Birds. The Auk 131 (4):CSi-CSxv.

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Navy [U.S. Navy]. 2014. Final Biological Assessment for Naval Base Coronado Coastal Campus Project at Silver Strand Training Complex-South. April 2014.

Service [U.S. Fish and Wildlife Service]. 2012. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Pacific Coast Population of the Western Snowy Plover; Final Rule. Federal Register 77(118):36728–36869.

Enclosure

The Coastal Campus project includes the following general and species-specific conservation measures (CMs) that the Navy will implement to avoid, minimize, and/or offset impacts to the bird's beak, fairy shrimp, rail, plover, and plover critical habitat. These measures support the Service's concurrence with the Navy's determination that the project may affect but is not likely to adversely affect the bird's beak, fairy shrimp, rails, plovers, or plover critical habitat in accordance with section 7 of the Endangered Species Act of 1973 (ESA).

General Conservation Measures – Construction and Maintenance

CM 1. A project biologist contracted by the Navy and approved by NBC NRO will oversee the avoidance and minimization measures, including any required surveys and monitoring activities. The project biologist will be knowledgeable of the federally listed species and associated habitats known or potentially occurring in the project area. Different project biologists may be designated for specific measures based on the qualifications necessary to satisfy the specific measure. If multiple project biologists are required, their activities will be coordinated through one primary project biologist. The project biologist(s) will have the experience and training necessary to conduct tasks described in the BA. Minimum standards for experience and training will be determined in advance by the Navy and will be dependent on the specific task being addressed by the biologist. A statement of qualifications, including a resume of experience and training for each designated project biologist, will be submitted for review and approval to NBC NRO. Generally, when a project biologist is needed, the biologist will (1) be familiar with the federally listed species and associated habitats that require the survey or monitoring activity; (2) have a bachelor's degree with an emphasis in ecology, wildlife science, or related science; and (3) have previous experience with applying measures to avoid and minimize impacts to the listed species in the project area. In addition, where applicable, the project biologist will possess an ESA section 10(a)(1)(A) permit specific to the species and type of surveying or monitoring required. The biologist's resume, qualifications statement, and permit number, if required, will be submitted to NBC NRO. The correct number of appropriately trained biological monitoring staff will be present during all construction (pre-construction, construction, and post-construction) activities (i.e., vegetation clearing, grading, trenching, drilling) to ensure that ESA and Clean Water Act avoidance and minimization measures are carried out correctly.

CM 2. If, during the design phase of the proposed action, ground-disturbing activity within the footprint, such as geological testing, is conducted, NBC NRO will be notified at least 15 days before the activity is scheduled to occur. NBC NRO approval will be required for any such activity, and the location of the activity will be reviewed to determine if it should be monitored by a biological monitor who is approved by NBC NRO because the location is near a sensitive biological resource. Monitoring of such sites will occur to ensure minimal damage to sensitive resources and adequate restoration of disturbed areas. All temporary effects associated with the geotechnical boring surveys will remain within the footprint of the project area, as described in the BA. The project

biologist will work with the boring crews to avoid and minimize risks to listed resources to the maximum extent practicable, including approving driving routes to reach the boring sites. If it is determined that the geotechnical borings will potentially result in permanent effects to listed species, NBC NRO will coordinate accordingly with the Service. If ground-disturbing activity will take place outside of project limits as described in the BA, an analysis of potential effects to listed species will be required and additional consultation with the Service will occur for areas outside those described in the BA.

CM 3. All construction will take place within the project footprint defined in the BA contractor(s) will be informed that construction activity must be confined within established limits.

CM 4. Contractor(s) will be provided with digital files showing the project limits used for the environmental analyses in the final version of the BA. Digital files and hardcopy maps will include the locations of federally listed species and sensitive habitats (including vernal pools and their watersheds). Contractor(s) will be required to coordinate with NBC NRO during design and construction to ensure that projects stay within the limits identified.

CM 5. The project has a goal of zero storm water discharge (capture 100 percent of the discharge). However, if this goal cannot be achieved, runoff during construction and post-construction operations will be minimized and treated through measures which include but are not limited to preparing a storm water pollution prevention plan; applying soil stabilizers or other measures for erosion control on unpaved access roads; and implementing low impact development features.

CM 6. Standard BMPs to control dust, such as watering site during construction, covering truckloads and stockpiles, and applying soil stabilizers on unpaved access roads will be implemented during construction.

CM 7. The project biologist will monitor construction activities to ensure compliance with required avoidance and minimization measures, and will keep the project manager and NBC NRO informed about construction activities that may threaten sensitive biological resources. The project biologist will record daily construction activities and provide an electronic version of all weekly biological monitoring reports to NBC NRO and the Navy Construction Manager. The project biologist will have the ability to halt activities to avoid effects to listed species.

CM 8. All construction and maintenance personnel will receive environmental training from the project biologist or NBC NRO before commencing work. The environmental training will be on the resources and avoidance and minimization measures involved in the project and the requirements and boundaries of the project. Environmental training will include a description of sensitive species and habitats potentially occurring on or

near the project site or greater project area, details on each species' habitat requirements, the protective measures to be implemented for each species, the role of the project biologist and the responsibilities of those on site to protect biological resources, the importance of complying with avoidance and minimization measures, the method for reporting problems, and the steps to take for problem resolution.

CM 9. The project will have a designated footprint and the project biologist will ensure that all construction personnel remain within the limits of the project footprint for the duration of project activities. The project footprint is considered the project limits and no construction will be permitted outside of this footprint.

CM 10. Where adjacent to native plant communities and determined necessary by NBC NRO, construction fencing will be installed around the outer perimeter of the project limits to reduce human disturbance to these adjacent natural habitats.

CM 11. Construction and maintenance workers and Navy and civilian personnel who use the facilities in the future will not be permitted to bring any domesticated pets to any of the construction sites or facilities to ensure that domestic pets do not affect wildlife through harassment or predation in adjacent natural habitats. This does not apply to military working dogs as training impacts on wildlife from military working dogs have already been analyzed in the biological opinion FWS-SDG-08B0503-09F0517 which contains specific conservation measures for military working dogs at SSTC-S that must be followed.

CM 12. Natural areas temporarily impacted by construction of the water pipeline (Option 1 or 2) will be restored to native vegetation following construction. A restoration plan will be submitted and approved by NBC NRO before initiating any restoration work. Restoration will be initiated with 12 months of the completion of water pipeline construction.

CM 13. To comply with EO 13112, National Invasive Species Act, Federal Noxious Weed Act, and Noxious Plant Control Act, construction and maintenance contractors will ensure that all equipment and/or vehicles will be clean and free of mud, dirt, and weeds before entering SSTC-South. When washing wheeled vehicles, the front wheels will be turned from lock-to-lock to allow for exposure of surfaces that may hold weed seeds. Invasive plants with an overall moderate or high ranking in the most current California Invasive Plant Council Inventory will be considered as "weeds". The project biologist will be knowledgeable of and able to identify weed species listed in the California Invasive Plant Council Inventory. Additional qualifications may be specified by NBC NRO for the project biologist handling weed management. The project biologist will report all new weed species invasions (whether they are new to SSTC-South or new to the specific project site) to NBC NRO.

CM 14. Avoidance and minimization measures adopted as part of individual projects will

include all those described in this informal consultation. Where in conflict, conservation measures listed in the informal consultation will supersede those listed elsewhere.

CM 15. Written approval by the NBC Wildlife Biologist and NBC Botanist is required prior to finalization and implementation. Engagement and coordination with the aforementioned subject matter experts in the Request for Proposal (RFP) and design process must occur from the beginning to ensure timely coordination so as to afford appropriate opportunities for project review and modification to comply with Federal laws and regulations, to protect endangered/threatened species and habitats in close proximity to the project site, and to comply with the Secretary of the Interior Standards for Rehabilitation. Subject matter experts must be contacted during RFP development and prior to the kickoff-meeting of the project design.

Species-Specific Conservation Measures – Construction, Operation, and Maintenance

In addition to the general CMs outlined above, the Navy will implement the following species-specific CMs to minimize impacts to fairy shrimp, rail, plovers, and plover critical habitat.

Fairy Shrimp

CM 16. Avoidance and minimization of indirect effects to fairy shrimp-occupied habitat adjacent to the project footprint will occur through BMPs for dust and erosion control as outlined above. In addition, NBC NRO will review specific BMPs (e.g., sediment fencing intended to protect vernal pools) before measures are implemented to avoid potential adverse effects (e.g., altered hydrologic regime) of the BMP and determine whether special post-BMP measures are warranted (e.g., revegetation of areas temporarily impacted). No trenching will occur within vernal pool watershed areas in association with BMPs. Additionally, storm water coming from the project footprint, both during and after construction, will be directed away from occupied basins and their watersheds to prevent contaminants and sediment from flowing off the project footprint and into adjacent habitat. All storm water coming from the project will be captured, directed to storm drains, and prevented from entering vernal pools or their watersheds.

CM 17. To avoid effects to fairy shrimp-occupied habitat, known occurrences within 500 feet of project boundaries will be identified on project demolition and construction plans and, if determined necessary by NBC NRO or the project biologist, occupied habitat will be clearly indicated in the field with markers or exclusion fencing. Known populations and restricted areas will be monitored by the project biologist (familiar with the habitat of species) during construction phases, as determined necessary by NBC NRO. If deemed necessary by NBC NRO, a 100-foot non-disturbance buffer will be established around each vernal pool watershed and exclusion fencing, markers, or BMPs will be established around the non-disturbance buffers to prevent construction-related runoff and sedimentation from entering the pools.

CM 18. To avoid impacts to vernal pools resulting from unauthorized trespass during construction, operation, and maintenance activities, signs and/or gates will be installed at all locations that could provide potential access to the vernal pool watershed (i.e., dirt access roads or foot paths) prior to the initiation of project construction. The type and placement of signs and/or gates will be determined by NBC NRO. Signs and/or gates will be regularly maintained and remain in place for the life of the project.

Plover and Rail

CM 19. The Navy will distribute educational materials and/or install interpretive panels to inform military and civilian personnel of the sensitive species on SSTC-South and measures in place to avoid effects (e.g., no recreational use of the beach, meaning activities not associated with approved training, is permitted).

CM 20. Construction during the breeding season within 300 feet of plover nesting locations will be avoided to the maximum extent feasible. The nesting season occurs from approximately 1 March through 15 September, but varies depending on species and environmental conditions for each year. The exact timing of construction to avoid the nesting season (when construction will occur within 300 feet of occupied habitat) will be agreed upon by NBC NRO and Service. If construction must occur during the nesting season within 300 feet of occupied plover habitat, NBC NRO, in coordination with the Service, will determine the locations to construct noise and visual attenuation barriers of plywood 12 feet tall to mitigate any potential temporary noise and visual effects to nearby plover breeding locations. NBC NRO may determine the need for additional noise attenuation and light reduction measures for any building or bunker demolition that may take place during the breeding season.

CM 21. In the event that nighttime construction work is required, prior approval will be required by NBC NRO. Any artificial lighting required will be shielded away from native vegetation communities, beaches, and SR-75.

CM 22. Other methods of reducing light pollution (e.g., dusk-to-dawn sensor activation, low-lumen or limited-spectrum lighting) will be applied wherever possible. Light poles and light placement will be constructed at the lowest height possible (considering security constraints) to reduce effects to the surrounding natural resources by reducing raptor perching sites and to reduce light pollution.

CM 23. NBC NRO will review project design features (during the design phase) to ensure that building designs minimize effects to plovers and rails. Design features that prevent raptors and avian predators from perching near sensitive avian species nesting habitat may include the use of anti-perching devices on light poles, rooftops, and other perching locations. Anti-nesting devices will be installed on appropriate structures to prevent prey species from nesting on buildings, which may attract predatory avian

species. Additional building design features may include minimizing building heights to reduce bird collisions, altering roof pitch designs to minimize perching, and limiting the number of new light poles or new perching structures. Light poles and light placement will be constructed at the lowest height possible (considering security constraints) to reduce effects to the plover and rail by reducing raptor perching sites and to reduce light pollution.

CM 24. During construction, equipment (such as cranes) that could provide temporary supplemental perches for birds of prey and predatory birds will be staged and stored when not in use at least 500 feet away (inside the project footprint) from habitat occupied by plovers. Equipment staging and laydown areas will be approved in advance by NBC NRO to ensure the areas are far enough away from occupied habitat. The project biologist will monitor construction activities to determine if equipment is providing supplemental perches, and make recommendations to reduce perching opportunities for avian predators.

CM 25. Project design for all electrical upgrades and associated facilities will follow the Avian Power Line Interaction Committee's Reducing Avian Collisions with Power Lines: The State of the Art in 2012 (APLIC 2012).

CM 26. New buildings and structures will incorporate a bird-friendly design to reduce and prevent birds from colliding with buildings. Bird-friendly design features include transparent passageways, corners, atria, or courtyards so that birds do not get trapped; appropriately shielded outside lighting that is directed away from native habitats to minimize attraction to light-migrating songbirds; interior lighting that is turned off at night or designed to minimize light escaping through windows; and landscaping that is designed to keep birds away from the building's façade. Use of non-reflective or opaque glass; external shades (or other devices to reduce glare, transparency, or reflectiveness) on windows; ultraviolet patterned glass; angled glass; and/or louvers can aid in reducing bird collisions. Additionally, night-time lighting will include bird-friendly design features such as shielded lights (to reduce ambient light into nearby native habitats), use of motion detectors, dusk-to-dawn sensor activation and other automatic controls, low-lumen or limited-spectrum lighting, and lighting design that uses shields to prevent light from shining upward into the sky (Sheppard 2011). NBC NRO will be consulted to ensure the minimization measures are incorporated to prevent window strikes.

CM 27. To avoid impacts to plovers resulting from operation of the project (i.e., causal outdoor recreation such as walking or running within occupied plover habitat), the existing gate along the western perimeter fence allowing beach access will remain locked at all times during the plover breeding season except when authorized access is granted.

CM 28. All proposed planting palettes, landscape designs, and installation of trees will be submitted for review and approval by NBC NRO and Navy Landscape Architect and

will use native, drought-tolerant plants appropriate for SSTC-South, NAB Coronado, and NASNI. Invasive plant species will not be included in landscape plantings. A list of suitable landscape plants (including trees) is included in the Landscaping and Installation Appearance Plan Approved Plant List in Appendix H of the Naval Base Coronado Integrated Natural Resources Management Plan (Navy 2013). To reduce the effects of nesting avian predators in trees within the project footprint, there will be a 1:1 ratio of trees removed to trees planted so there is no net increase in the number of trees from current conditions. Trees will not be placed within 300 feet of the western fence line. Trees will be spaced far enough apart so that when full grown their branches will not be touching. Trees will be trimmed or pruned to open up the canopy of the trees to prevent nesting of American crows (*Corvus brachyrhynchos*) and/or common ravens (*Corvus corax*).

CM 29. All trash generated from construction, operation, and maintenance of the project will be contained within covered, secured trash bins that are inaccessible to wildlife and emptied on a regular basis and prevented from overflowing. All exposed food waste or trash generated from food products (e.g., wrappers, food containers) will be removed from the site on a daily basis to prevent attraction of predators (e.g., American crows or common ravens and mammalian scavengers such as rats [*Rattus* spp.], raccoons [*Procyon lotor*], and skunks [*Mephitis mephitis*]).

Plover Critical Habitat

CM 30. A visual obstruction is necessary to obscure the proposed entry control point on the north end of the site and the vehicles using the deceleration lane from adjacent occupied critical habitat for the plover on Silver Strand State Beach and from adjacent occupied plover habitat at the north end of SSTC-South. Construction of the entry control point will require grading to access SR-75 due to existing topography, slope stability, and the need for suitable vehicle access associated with the entry control point. Pre-construction engineering may indicate that the grading and site preparation itself may create a topographic visual barrier that adequately obscures the entry control point from the adjacent critical habitat for the plover. However, if engineering design for the entry control point does not create conditions that obscure the site from critical habitat for the plover, a permanent stonewall, concrete wall, or earthen berm or screening fence will be constructed within the project footprint along the west side of the entry gate road prior to the initiation of construction of the traffic and entry gate improvements. The height and length of the wall or fence will be determined by NBC NRO and USFWS. The wall or fence will have anti-perching devices installed on the top to prevent birds of prey from using the wall or fence for perching.

CM 31. During the design phase, NBC NRO will be consulted regarding the exact location of the entry control point. If feasible, the entry control point will be located as far south along SR-75 as possible to reduce the potential for disturbance to plovers within critical habitat from humans and vehicles entering and leaving SSTC-South. To the maximum

extent feasible, construction of the new proposed entry control point and adjacent security fence will take place outside of the plover nesting season (which generally occurs from 1 March through 15 September, but this may vary slightly from year to year).

CM 32. To offset permanent impacts to plover critical habitat, the Navy will restore/enhance 0.15 acres of plover habitat through removal of ice plant along the western SSTC-South boundary (outside of the fence line) within 12 months of the completion of construction activities in plover critical habitat. All ice plant removal will be accomplished during the non-nesting season and will be completed using a work crew with hand tools or machinery (i.e., a bobcat or loader with grappler attachment).

LITERATURE CITED (ENCLOSURE)

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Navy [U.S. Navy]. 2013. Final Integrated Natural Resources Management Plan. Naval Base Coronado, California. July.

Sheppard, C. 2011. Bird-Friendly Building Design. American Bird Conservancy, The Plains, Virginia, 58 pp. Available at http://www.abcbirds.org/newsandreports/BirdFriendlyBuildingDesign.pdf.

Nuttall's lotus *(Acmispon prostratus)*

Source: Saucedo-Ortiz (2004). *Photo Credit*: Harry Price

Exhibit 8
CD-0003-14 U.S. Navy
NBC Coastal Campus
Photos of Nuttall's lotus

M E M O R A N D U M

FROM: John D. Dixon, Ph.D.
Ecologist

TO: Joseph Street

SUBJECT: Navy Base Coronado Coastal Campus

DATE: October 31, 2014

Documents reviewed:

Department of the Navy (DofN). 2014. Draft NBC Coastal Campus Environmental Impact Statement. Volume I with Appendices A-C.

AECOM. 2012. Rare plant survey report for Silver Strand Training Complex, Naval Base Coronado, San Diego County, California. In Appendix C of Draft EIS, above.

Goebell, K.E. (USFWS). 2014. Letter report dated September 12, 2014 to C.E. Sund (USN) regarding "Informal Section 7 Consultation on the Coastal Campus Project at Silver Strand Training Complex South, Naval Base Coronado, San Diego County, California."

ICF International. 2012. Results of protocol surveys for listed fairy shrimp, Silver Strand Training Complex-South, Naval Base Coronado. Final report to Naval Facilities Engineering Command Southwest. In Appendix C of Draft EIS, above.

RECON. 1998. Final wetland delineation report for Naval Radio Receiving Facility. A report dated November 6, 1998 to Southwest Division, Naval Facilities Engineering Command. (Cited in Saucedo-Ortiz 2004a).

Saucedo-Ortiz, D. (RECON). 2004a. Final wetland delineation report for the Naval Radio Receiving Facility, Naval Base Coronado, San Diego, California. A report to the Natural Resource Office, Environmental Department, Commander Navy Region Southwest.

Saucedo-Ortiz, D. (RECON). 2004b. Final biological resources survey report for the Naval Radio Receiving Facility, Naval Base Coronado, San Diego, California. A report to the Natural Resource Office, Environmental Department, Commander Navy Region Southwest.

Sund, C.E.(USN). 2014. Letter dated August 21, 2014 to M. Delaplaine (CCC) transmitting "Coastal Consistency Determination (CCD) for Navy Base Coronado (NBC) Coastal Campus."

The land upon which the Silver Strand Training Complex – South is located is a mixture of open space, development in the form of buildings and other infrastructure that are in current use, and the remains of prior development, mostly in the form of roads and

foundations (Figure 1). Most development took place in the northern half of the property. Although invasive iceplant covers much of the land, especially in areas where construction took place, the site also supports large areas of wetlands and native vegetation communities, and significant populations of several rare native plant species. Wetlands include vernal pools (many occupied by the federally Endangered San Diego fairy shrimp), southern coastal salt marsh, and the intertidal sandy beach. Rare terrestrial vegetation communities[1] that are present are Diegan coastal sage scrub (S3.1), maritime succulent scrub (S1.1) and southern foredunes (S2.1). Rare plant species[2] that are present are Nuttal's lotus (1B.1), Orcutt's pincushion (1B.1), variegated dudleya (1B.2), San Diego barrel cactus (2B.1), Palmer's frankenia (2B.1), and coast wooly-heads (1B.2). The southern foredunes support populations of Nuttal's lotus, Orcutt's pincushion, and coast wooly-heads and provide nesting habitat for the federally Threatened western snowy plover. The southern foredunes immediately adjacent to the north on Silver Strands State Beach have been designated "critical habitat" for the plover. The rare plant survey (AECOM 2012) noted that, "The Southern foredunes habitat is some of the most intact of this habitat remaining in San Diego County even considering its encroachment by iceplant. Diegan coastal sage scrub that persists on the site is also unique in this portion of San Diego County. The small population of Orcutt's pincushion is one of the few places where it is known to occur in San Diego County."

Wetlands

The only wetland delineations that have been reported were conducted based on federal definitions of "Wetlands" and "Jurisdictional Non-Wetland Waters of the U.S." The federal definition requires evidence of three "parameters": wetland vegetation, wetland soils, and wetland hydrology. The jurisdictional non-wetland waters of the U.S. are areas that were adjacent to delineated 3-parameter wetlands and had wetland vegetation but no field indicators of wetland hydrology or hydric soils. Both these categories would be "wetlands" as defined by the Coastal Act and the Commission's

[1] These include vegetation communities ranked by the California Department of Fish and Wildlife (CDFW) as S1, S2, and S3, which are defined as follows: S1 - Critically imperiled because of extreme rarity or other factors, such as steep declines, making it especially vulnerable to extirpation in the state. S2 - Imperiled in the state because of rarity due to restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation in the state. S3 - Vulnerable in the state due to a restricted range, relatively few populations, recent and widespread declines, or other factors making it vulnerable to extirpation. Threat rank .1 indicates "very threatened." Communities ranked S1, S2, and S3 are considered "rare" by the CDFW (http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_background.asp).

[2] These include plant species ranked by the California Native Plant Society as ranks 1B or 2, which are defined as follows: 1B - Plants rare, threatened, or endangered in California and elsewhere. 1B plants are rare throughout their range with the majority of them endemic to California and all are eligible for state listing. Rank 2 - Plants rare, threatened or endangered in California, but more common elsewhere. Except for being common beyond the boundaries of California, plants with a rank of 2 would have been ranked 1B and all are eligible for state listing. Threat ranks: 0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat); 0.2-Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat) 0.3-Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known). Species ranked 1B and 2 meet listing criteria under the California Endangered Species Act, are considered rare under CEQA Section 15380, and areas supporting significant populations of these species meet the definition of Environmentally Sensitive Habitat Area in the Coastal Act.

Regulations. Had a delineation been conducted based on California state standards, some additional areas of wetland vegetation not adjacent to federal wetlands may have been discovered and mapped. However, all the mapped wetlands and waters of the U.S. are in the southern portion of the property outside the main area proposed for development and any addition state wetlands would likely be in the same general area. Identified wetlands include vernal pools and southern coastal salt marsh.

All the mapped seasonal wetlands are characterized as "vernal pools" in the Draft Environmental Impact Statement (DEIS; DofN 2014). Fifty-nine depressions that pond water were examined in 2011-2012 (ICF 2012). Of these, 45 were sampled for vegetation and 22 were found to support characteristic vernal pool plant species, and hence can be considered vernal pools in the narrow sense[3]. Twenty-six basins were occupied by the federally Endangered San Diego fairy shrimp. There was no correlation between the presence of vernal pool vegetation and the presence of the fairy shrimp. Seasonal ponds that support characteristic vernal pool plants or the federally Endangered San Diego fairy shrimp are of very high conservation value.

Non-tidal southern coastal salt marsh is present in three closed basins in the southern half of the site. They are maintained by rainwater but support characteristic southern salt marsh vegetation due to the high levels of dissolved salt in the soil. The basin in the southwestern corner of the training complex that includes the YMCA Camp Surf also supports populations of rare plants (salt marsh bird's beak and Palmer's frankenia).

Although no wetlands occur within the boundary of the proposed new development (Figure 2), associated utility lines could directly impact non-vernal pool wetlands delineated based on the federal 3-parameter wetland definition (which are also state wetlands). The areas proposed for utility lines should be surveyed for wetlands that meet the state 1-parameter definition.

Terrestrial Environmentally Sensitive Habitat Areas

The vegetation communities Diegan coastal sage scrub and it's variant, maritime succulent scrub, are both considered rare habitats by the California Department of Fish and Wildlife. However, small, isolated patches of these habitats, such as those persisting at the training complex, are not rare in coastal southern California. Despite their small size and insular nature, some patches of these vegetation communities are especially valuable for their role in the ecosystem of providing habitat for rare species, including Nutall's lotus, variegated dudleya, and San Diego barrel cactus, and are easily disturbed or degraded by human activities. Therefore, these area meet the definition of Environmentally Sensitive Habitat Area (ESHA) in Section 30107.5 of the Coastal Act.

[3] "Vernal pool" is generally regarded as a special type of seasonal wetland that occurs in areas of Mediterranean climate in a landscape with basins underlain by a relatively impermeable substrate and defined by a unique biota. However the term is sometimes used more broadly to indicate any depressional area where ephemeral ponds form in the spring or even more generally to any seasonally ephemeral pond.

The southern foredunes along silver strand, including the training complex, was noted in the rare plant survey to be some of the most intact foredunes in San Diego County. All the sandy habitat above the beach that is seaward of the western fence line and Rowcliff Boulevard of the training complex is southern foredune, including the area mapped as "disturbed habitat" in Figure 3.7-3a in the DEIS. This habitat is rare and provides many important ecosystem functions, including nesting habitat for the federally Threatened western snowy plover, and habitat for rare plants and insects, such as Orcutt's pincushion, Nutall's lotus, coast wooly-heads, and the globose dune beetle[4]. It is easily disturbed or degraded by human activities and thus meets the definition of ESHA in the Coastal Act. The Proposed Action would impact southern foredunes at the entry control point. A potential utility easement would also impact this habitat.

In addition to rare habitats, ESHA may also be defined by the significant presence of a rare species within an area that is easily disturbed by human activities. At the training complex, Nuttal's lotus (a rare and threatened CNPS 1B.1 species) is found in openings within a sea of exotic iceplant, especially along dirt roads, the edges of paved roads, around old concrete foundations and other cleared areas (Sauceda-Ortiz 2004, AECOM 2012). Were there simply a few 10s or 100s of scattered plants within this highly degraded landscape and were there many records of significant populations elsewhere in more natural surroundings, the degraded area supporting these plants at the training complex would not appear particularly rare. However, this is not the case.

The DEIS describes the status of this species and the populations at the Silver Strand Training Complex – South as follows:

> Nuttall's lotus is a CNPS List 1B.1 species. It is an herbaceous member of the pea family that forms large mats with long branches that radiate out from a mostly perennial root base. It is naturally found in openings between shrubs of sage scrub or in stabilized sand dunes. The distribution of this plant is coastal Southern California and northern Baja California, Mexico. Most locations are in San Diego County, where it is currently thought to be restricted to a few populations at the Santa Margarita River, Ocean Beach, Pacific Beach, North Island, and Silver Strand. While Nuttall's lotus is not a federally listed species, it has been a candidate in the past and has a very limited distribution in the coastal dune habitats of San Diego County. It is relatively abundant at NASNI and SSTC-South, occupying the edges of dirt roads, old cement foundations, and other disturbed sites of urban/developed areas; many thousands of individual plants occur in Alternatives 1, 2, and 3. The total acreage covered by Nuttall's lotus at SSTC south is approximately 10 acres, most of which occurs within the Proposed Action footprint.

Of the few populations of this species left in California, the most significant includes the plants at the training complex. Of the 38 element occurrences listed by the California Natural Diversity Database, all but six are small populations that varied from a few plants to a few hundred plants. Only the following six sites had periodic observations of large populations: San Luis Rey River, 500 to 9,000; San Elijo Lagoon, <100 to 42,000;

[4] A rare species included in: California Department of Fish and Wildlife, Natural Diversity Database. September 2014. Special Animals List. Periodic publication. 52 pp.

Mission Bay Mariner's Cove, 1,000 to 2,500; North Island Naval Air Station Coronado, >5,000 among 12 locations; silver strand from Naval Amphibious Base to Silver Strand Training Center South, tens of thousands to around 900,000 in degraded southern foredunes and adjacent degraded sandy flats; Border Field State Park, 100s to tens of thousands. In 2012, "many thousands of plants" were present at the training complex, especially in openings within iceplant dominated areas (AECOM 2012). The threat to the species and the importance of this population is suggested by the following note[5] for Nuttal's lotus (*Acmispon prostratus*) on the California Native Plant Society's Inventory of Rare and Endangered Plants: "Threatened by development, non-native plants, and land management activities; particularly by U.S. Navy at Silver Strand and Imperial Beach."

At the Silver Strand Training Center – South the population of Nuttal's lotus is very significant for the species' persistence, the species is rare and declining due to loss of habitat, and the area supporting the species clearly could be easily disturbed or further degraded by human activities and developments. Therefore, the area supporting the species meets the definition of Environmentally Sensitive Habitat Area in Section 30107.5 of the Coastal Act, despite the unusual, degraded landscape setting[6]. With the few data available, it is difficult to define the extent and boundary of this ESHA. The rare plant surveys noted the approximate locations of groups of individuals (Figure 3), but did not estimate the number of individuals represented by each filled circle or polygon. Also, this is an annual plant and a significant portion of the population is represented by the seed bank. In fact, the 2004 rare plant survey report suggested that, "[t]he fact that the lotus is found in…open areas, which historically supported dune and coastal sage scrub vegetation and now is overrun with ice plant, suggests that there may be a native seed bank still present underneath the ice plant." (Sauceda-Ortiz 2004). In the absence of detailed distributional data, the most conservative approach to the ESHA boundary would be to create a convex polygon that encompasses the documented locations of Nutall's lotus on the sandy flats above the beach and foredunes but that excludes existing development that is in use. Such a polygon would also encompass most of the area proposed for future development.

Development Setbacks or "Buffers"

In order to protect the integrity and functioning of wetlands and terrestrial ESHA, there must be space between the habitat and development. This habitat buffer keeps disturbance at a distance, improves water quality, and provides important ecological services, such as nesting habitat for wetland pollinators and additional foraging habitat for many species primarily dependent on wetlands or upland ESHA. I recommend that development be set back at least 100 feet from wetlands and from vernal pool watersheds, and 100 feet from the terrestrial ESHAs that are present on or adjacent to

[5] California Native Plant Society. 2014. Inventory of Rare and Endangered Plants (online edition). Accessed on Monday, October 20, 2014 from http://www.cnps.org/inventory

[6] In Bolsa Chica Land Trust v. Superior Court (1999), 71Cal.App.4th at p. 508, the Court of Appeal found that "…ESHA's, whether they are pristine and growing or fouled and threatened, receive uniform treatment and protection." The Nuttal's lotus habitat at the training complex could aptly be described as "fouled and threatened" but nonetheless meets the definition of ESHA in the Coastal Act.

the training complex property. The area supporting Nuttall's lotus is unusual due both to the extensive remains of prior development and the extensive vegetative cover of the invasive iceplant. In order for this plant to survive and thrive, a management plan should be developed to remove the iceplant, restore native habitat, and provide a mosaic of sparsely vegetated areas, and control runoff. With such a plan in place, a 25-foot buffer would be adequate to protect the Nuttall's lotus ESHA.

Figure 1. A portion of the northern half of the Silver Strand Training Complex – South showing existing buildings and other infrastructure, roads and foundations from earlier development, and open space. The dominant terrestrial vegetation in this portion of the complex is invasive iceplant. The areas containing existing infrastructure and the abandoned remains of earlier development are mapped as “Urban/Developed” in the EIS (DofN 2014). Oblique aerial photo Number 10000 dated October 30, 2002 from the Coastal Records Project.

Figure 2. U. S. Army Corp of Engineers wetlands and non-wetland jurisdictional waters of the U. S. (Figure 3.7-2 from DofN 2014). Both categories are wetlands as defined by the Coastal Act and the Coastal Commission's Regulations. Expanded Legend inset for readability.

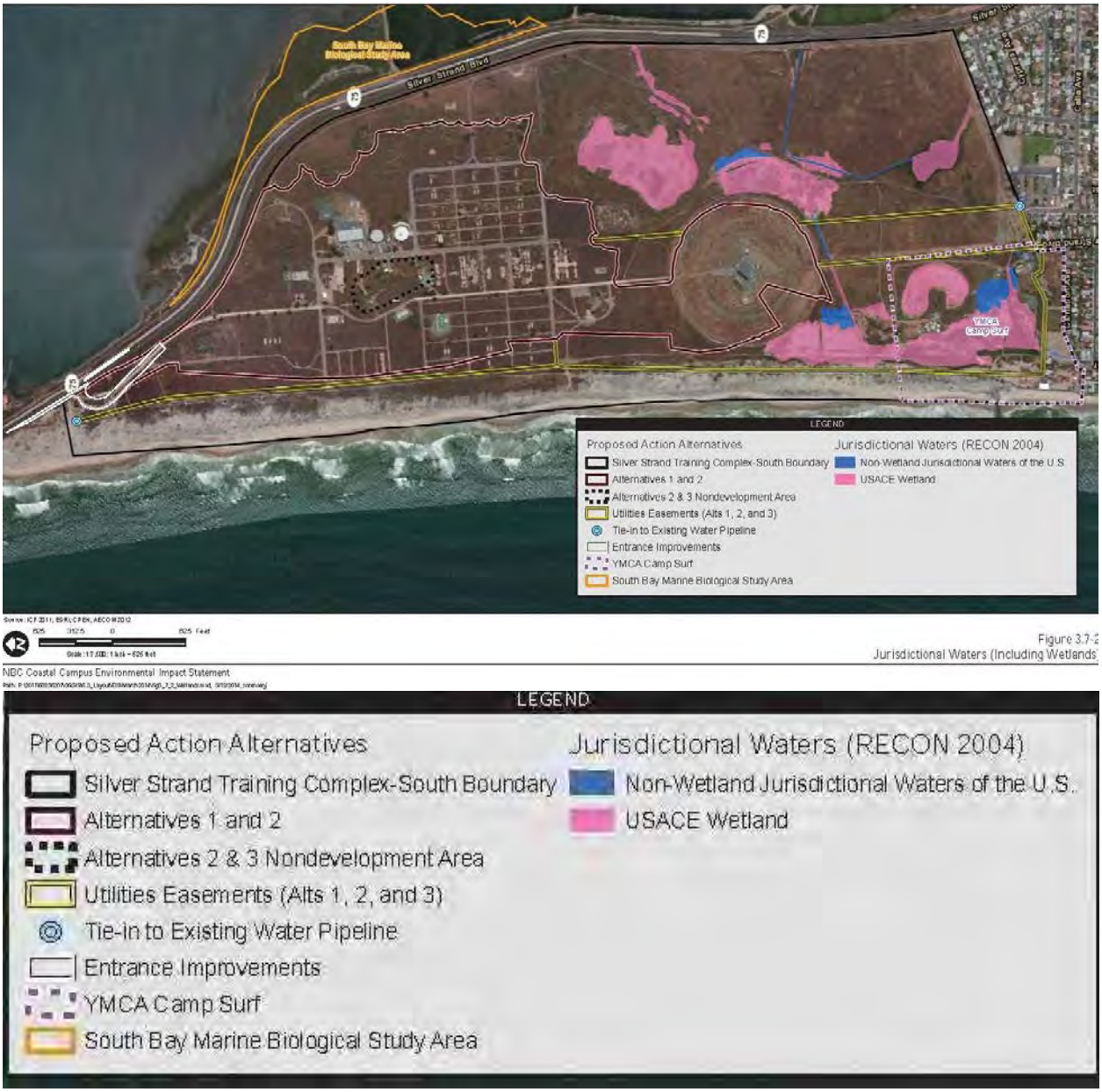


Figure 3. Silver Strand Training Complex – South (Figure 3.7-3a from DofN 2014). A portion of the legend is expanded for readability. The orange filled circles and polygons are “Nuttal’s lotus,” the dark blue filled circles are “San Diego barrel cactus,” and the light blue filled circles are “California box thorn” (CNPS 4 species

Figure 3.7-3a
Special Status Plant Species

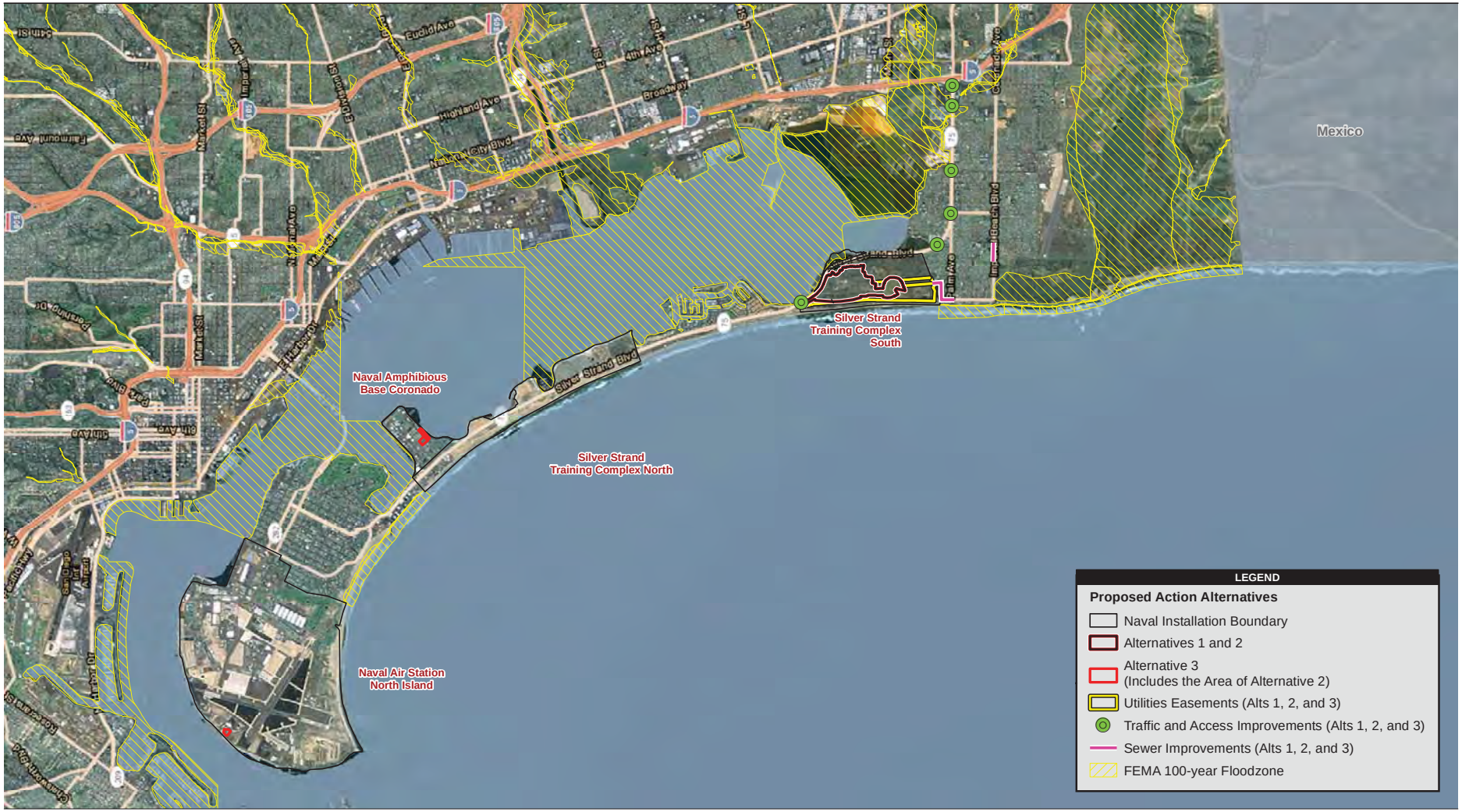
Occurrences of Fairy Shrimp and Western Snowy Plover

Source: TierraData 2011; U.S. Navy 2011, 2012; ESRI; AECOM 2012

700 350 0 700 Feet

Scale: 1:8,400; 1 inch = 700 feet

Indirect Impacts
Alternatives 1 and 2

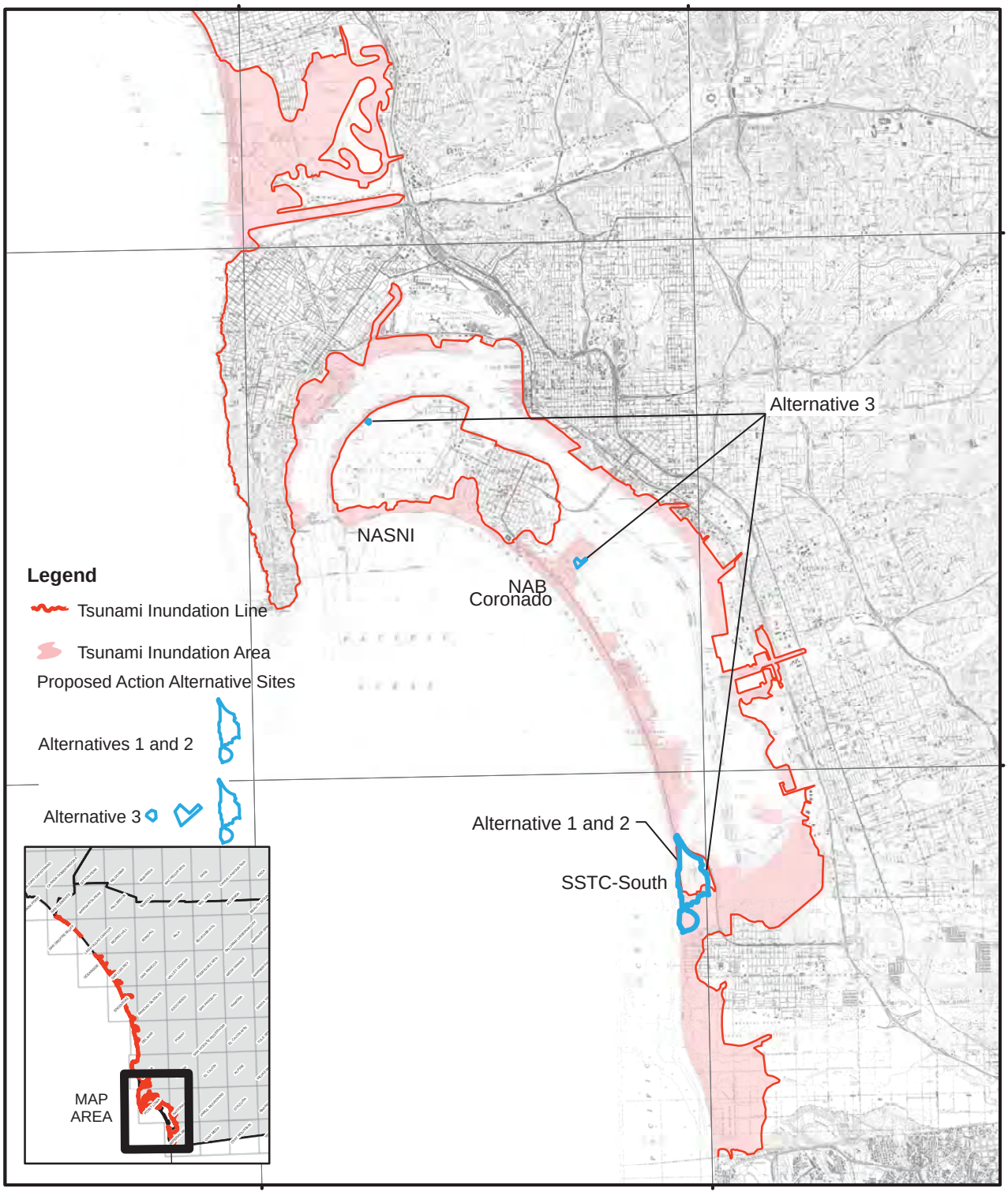


Source: ESRI 2012; CALH2O 2011; AerialExpress 2011

6,000 3,000 0 6,000 Feet

Scale: 1:72,000; 1 inch = 6,000 feet

Naval Base Coronado Floodzone Map



Not to Scale

Tsunami Inundation Map

Sea Level Rise & Potential for Coastal Flooding at SSTC-S

NOAA Sea Level Rise Viewer

http://coast.noaa.gov/slr/

Legend

Water Depth — **Inundation area**

Low-lying area (high flood risk)

Water depths at mean high high water (MHHW)

Exhibit 13a
CD-0003-14 U.S. Navy
NBC Coastal Campus
Projected Sea Level Rise

PACIFIC INSTITUTE

California Flood Risk: Sea Level Rise
Imperial Beach OE W Quadrangle

Interstate
US Highway
State Highway
County Highway

Current Coastal Base Flood (approximate 100-year flood extent)
Sea Level Rise Scenario Coastal Base Flood + 1.4 meters (55 inches)
Landward Limit of Erosion High Hazard Zone in 2100
Coastal Zone Boundary

0 0.25 0.5 1 1.5 2
Miles
0 0.5 1 2 3
Kilometers

Created by the Pacific Institute, Oakland, California, 2009.
Project funded by the California Energy Commission's Public Interest Energy Research Program, CalTrans, and the California Ocean Protection Council

Grid coordinates:
UTM Zone 11N meters
NAD83 GCS degrees

Adjoining Quadrangles:

1	2	3
4		5
6	7	8

1: Point Loma OE W
2: Point Loma
3: National City
4: *not printed*
5: Imperial Beach
6: *not printed*
7: *not printed*
8: *not printed*

Map extents match USGS 7.5 minute topographic maps

Data Sources: US Geological Survey, Department of Commerce (DOC), National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Coastal ServicesCenter (CSC), Scripps Institution of Oceanography, Philip Williams and Associates, Inc. (PWA), US Department of Agriculture (USDA), California Coastal Commission, and National Aeronautics and Space Administration (NASA). Imagery from ESRI and i-cubed.

Exhibit 13b
CD-0003-14 U.S. Navy
NBC Coastal Campus
Projected Sea Level Rise

CITY OF CORONADO

1825 STRAND WAY
CORONADO, CA 92118

OFFICE OF CITY MANAGER
(619) 522-7335
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October 3, 2014

California Coastal Commission
Mr. Steve Kinsey and Honorable Commissioners
Attn: Mark Delaplaine, Coastal Staff
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219

Re: CD-0003-14 Consistency Determination for proposed Naval Base Coronado Coastal Campus, Coronado, California.

Dear Mr. Kinsey and Honorable Commissioners:

The City of Coronado has received notice that the Consistency Determination Public Hearing for the Navy's "Coastal Campus" scheduled for October 10, 2014 has been postponed. The City supports the U.S. Navy's mission, associated training requirements and facility needs; however, the City would like the Coastal Commission to first consider the Navy's response to Coronado's coastal related issues before make a Consistency Determination.

The City's main concerns are as follows: First, the City's main corridors – the Coronado Bridge, Orange Avenue and the Silver Strand Highway (SR 75) - provide direct linkages to the city's bay front, beachfront, and State Parks public beach. The roadways have become significantly impacted by traffic and will continue to worsen and serve as a deterrent to the public's access to these resources. The Navy needs to develop and implement a Transportation Demand Program. This plan needs to identify implementation measures in both qualitative and quantitative ways to reduce traffic along the City's main corridors. Second, the proposed signalized intersection leading to the new base entry gate off of SR 75 (a state designated Scenic Highway) must be designed and engineered to prevent queuing of vehicles along the State Highway. Without such a design, the public's access to the coast (State Parks Beach, Coronado Beach and Bayfront public facilities), will be further impacted. Third, the design of the complex, its location, massing, and height, must protect the Scenic Highway view corridors along North and Southbound SR 75. As presently designed, there are significant visual impacts. The City's Design Review Commission could provide input and assistance on this matter. Lastly, the Coastal Commission should retain final approval of all of these items to ensure the coastal issues raised in this letter have been addressed. Following the Navy's coordination with the Cities of Coronado and Imperial Beach, the Coastal Commission should consider the final project.

The proposed "Coastal Campus" is the second part of the Navy's "master plan" intended for the Silver Strand Training Complex. In August of 2010, the Coastal Commission considered a Consistency Determination request for the "Silver Strand Training Complex" (SSTC). At that time, the City expressed its concerns to the Commission regarding the increased noise, traffic, coastal, recreational, water quality, habitat, and visual impacts associated with the planned activities for Silver Strand Training Complex. As the Silver Strand Training Complex has developed and continues to expand with this new project in terms of new facilities, infrastructure, and highway alterations, our concerns with regard to coastal access and increased traffic impeding access are being realized. A Draft Environmental Impact Statement (EIS) was prepared for this project and recently released for public review and comment. The City disagrees with the Draft EIS findings that conclude there will be no significant environmental impacts. The City's concerns focus on traffic, coastal, visual, public safety, and noise. While the City recognizes the NEPA process is separate from the Coastal Determination process, a copy of our comment letter is enclosed for your information. To date, the Navy has not released its responses to comments and it is uncertain whether mitigation plans will be developed or how the project will be modified.

The proposed project will have impacts to the coastal resources within this area. We hope the Commission considers the issues raised in this letter and the Navy's response to these concerns when evaluating the merits of the Coastal Consistency Determination. The attachment provides a summary of concerns and recommended actions by the Commission or conditions for the Consistency Determination.

The City of Coronado and the Navy have a long and proud history of working cooperatively together in support of each institutions' interests. I am confident if given the opportunity, this tradition of mutual understanding and support will continue. Thank you in advance for your consideration of our request.

Sincerely,

Blair King
City Manager

BK/amc

Attachments: Suggested Coastal Consistency Determination Conditions
City of Coronado letter on Draft EIS for Coastal Campus

cc: Mayor and City Council, Coronado
City Manager, Mayor and City Council Imperial Beach

CITY OF CORONADO RECOMMENDED COASTAL CONSISTENCY DETERMINATION CONDITIONS FOR NAVAL BASE CORONADO COASTAL CAMPUS

1. The Coastal Commission shall retain authority over the project's final design to include but not be limited to new intersection and roadway improvements; base entrance and structures; new facilities within the Scenic Highway View Corridor; traffic reduction programs and related coastal access improvements.

2. **COASTAL ACCESS, & COASTAL RESOURCES:** The City's Local Coastal Program (LCP) Land Use Policies speak to the preservation and enhancement of public access to the City's bay and coastal shorelines.

   Traffic: The community is already significantly impacted with traffic on its major arterials leading to and from the two existing naval sub-bases within the community (North Island and Amphibious Base). These arterials are also the primary means for the public to access the City's beach and bay waters and improvements. The access is currently impacted and will continue to become increasingly impacted unless the Navy takes proactive measures to reduce single vehicle occupancy use. The following condition is suggested:

   (1) Condition: The Navy shall develop, commit, and implement a Transportation Demand Program for Naval Base Coronado to reduce individual vehicle trips and incentivize alternative modes of transportation to and from Coronado, to reduce coastal access impacts and to result in a zero net gain in daily trips as a result of this project. Such items could include: 1) Design the Coastal Campus to be pedestrian/bicycle and or shuttle oriented rather than vehicular based with pedestrian/bicycle/shuttle alternative modes of transportation coupled with this basic design feature, 2) Establish and fund an Intra-Base shuttle system to provide transportation to and from sub-bases within NBC; 3) Provide additional bus stop in both directions at proposed Hooper signalized intersection and funding to improve service levels of mass transit between the sub-bases of NBC; 4) Provide a new bike and pedestrian path along the west side of SR-75 between the new gate and Imperial Beach to connect with intersection improvements to facilitate bicycle and coastal access to an area where connection does not exist; 5) Charge parking fees for vehicles parking at parking lots; 6) Create parking policies and reduce the availability of on-site parking to discourage single vehicle occupancy use and incentivize use of alternative modes of transportation; 7) Establish and further fund carpool and vanpool programs to encourage alternative modes of transportation for all sub-bases within NBC; 8) Reinstate the Ferry service directly to NASNI with active Navy funding participation in the program; 9) Implement mandatory alternating days of commuter carpooling; 10) Provide entry gate carpool/vanpool lane(s) and premium carpool/vanpool parking locations on base; 11) Provide additional funding to staff each entry point gate with sufficient security personnel to maintain a throughput capacity equal to the vehicles accessing the base (i.e. do not allow Navy vehicles to queue on Caltrans or City streets impacting mobility through Coronado; and 12) Incorporate base/bases into car share program service areas (for one-way car share programs) and/or provide car share vehicles and dedicate parking spaces on base (for round-trip car share programs).

Shoreline Access: The City's LCP states "*Preserve existing shoreline access over public lands; and 2) where appropriate, provide and encourage additional shoreline access over public lands.*" The proposed Coastal Campus raises concerns for the City relative to the public's access and usage of the ocean and beach. The following condition is suggested:

(2) Condition: The public's lateral coastal access along the beach from the Silver Strand State Beach to Imperial Beach, which has historically existed and been utilized, shall be maintained. The public shall not be impeded from accessing/walking along the beach in front of the coastal campus's "secured" (via metal fencing) base that parallels the public's lateral coastal access.

Visual Resources and Special Communities: A LCP Action Program under this category states that the "*City commence negotiations with the U.S. Navy and the California Department of Parks and Recreation to obtain one or more view point turn-outs for public use for each direction of traffic on the Silver Strand portion of State Scenic Highway 75.* An additional Action Program for Public Works states that "T*he City, in cooperation with the City of Imperial Beach, continues support of the new bus route up the Silver Strand.*" The new intersection and entrance gate provide an opportunity for these public access goals to be incorporated into the project and be achieved. The following condition is suggested:

(3) Condition: The Navy shall incorporate a public access view point turn-out for the public's use coupled with the creation of the new intersection and Naval base entry gate. At this location, a new bus-stop and bicycle path should be provided to enhance public/commuter access to both bay and coastal areas in the South Bay region.

Visual Resources and Scenic Highway: The Silver Strand Highway (State Route 75) is a State designated Scenic Highway. The City's LCP recognizes SR-75 as a Scenic Highway and reaffirms the importance of the City's Scenic Highway Element and Scenic Highway Ordinance, which regulates land use adjoining Scenic Highways. One policy goal states, "*Maintain high standards for visual aesthetics and preserve these scenic qualities as recreational resources.* An additional policy states, "*Require that permitted development be sited and designed to safeguard existing public views to and along the ocean and bay shores of Coronado, to be visually compatible with the character of surrounding areas…*"

The City and Navy have worked cooperatively in the past to provide new nature trails, interpretive overlooks, elimination of overhead utility lines, unnecessary signs, dilapidated training equipment, and other vertical obstructions along the Silver Strand to improve coastal and recreational use and access along the Silver Strand, and assist with Least Tern and Snowy Plover preservation efforts. The project proposes numerous 40' tall buildings; a 120' tall, 50' x 80' paraloft structure; new 'tall entry gate' structure, and miscellaneous roads, lighting and improvements. The following conditions are suggested:

(4) Condition: The Navy as a neighboring community that is part of and within the jurisdiction of Coronado, shall submit conceptual plans for the Coastal Campus of those new facilities visible from the State Scenic Highway to the City's Design Review Commission for review and

comment, for consistency with the City's regulations contained within the Scenic Highway Overlay Zone.

(5) Condition: The new base checkpoint security entrance, road ways, vertical light poles, and other facilities along with associated vehicular activity should be positioned further south to minimize the visual obstructions the proposed on-base improvements would have along the State Designated Scenic Highway Corridor.

(6) Condition: The Navy shall design the roadway and intersection to mitigate any headlight glare into residential areas of the Coronado Cays.

(7) Condition: The Navy shall analyze alternatives to the paraloft tower structure to reduce visual impacts such as placing the building partially below grade; redesigning it to be an "open" rather than "enclosed" structure; or relocating it to the Naval Amphibious Base (NAB) Coronado on the bayside where taller structures presently exist.

(8) Condition: The existing State park dilapidated fence within the "project area" that will require removal to accommodate new deceleration lanes along SR-75 shall be replaced with fencing that is compatible with the natural coastal environment and consistent with the State Scenic Highway Corridor Guidelines, such as cabling.

Silver Strand State Beach near parking entry, looking south

Image source: U.S. Navy

Southbound SR-75, north of SSTC-S, looking south

Existing View

View with Proposed Project

Image source: U.S. Navy, DEIS 2014.

Southbound SR-75 past SSTC-S northern entrance, looking south

Existing View

View with Proposed Project

Image source: U.S. Navy, DEIS 2014.

View of SSTC-S eastern berm from Bikeway, looking south

Image source: U.S. Navy, DEIS 2014.

SR-75 near middle of SSTC-S, looking west

Image source: U.S. Navy

Southbound Bikeway, view to southwest across southern SSTC-S

Image source: U.S. Navy, DEIS 2014.

Northbound SR-75 view from SSTC-S southern boundary

Image source: U.S. Navy, DEIS 2014.

Imperial Beach street end (3rd St.), looking north

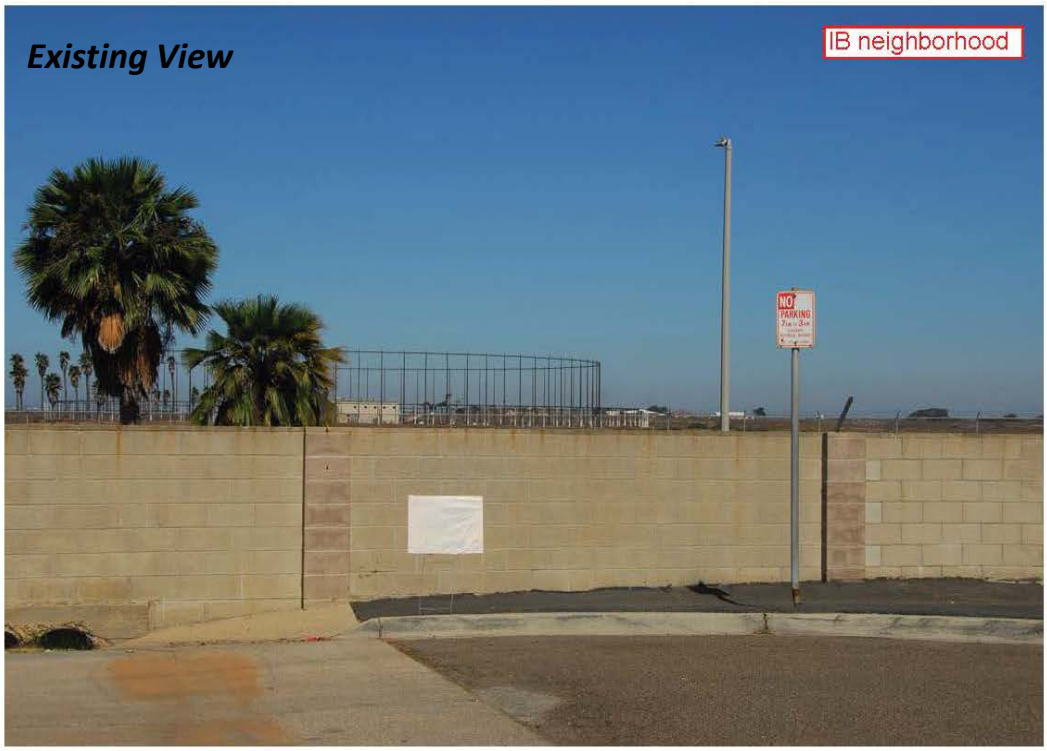

Image source: U.S. Navy

Imperial Beach city beach (near YMCA camp), looking northeast

Image source: U.S. Navy

5.5 WATER QUALITY AND HYDROLOGY

Mitigation Measures and Impact Avoidance and Minimization Measures

Mitigation Measures

No mitigation measures are proposed.

Impact Avoidance and Minimization Measures

Site design would incorporate the following:

W-1 Facilities would be situated as far as practicable from natural drainages to avoid or minimize impacts to water quality as a result of Proposed Action construction and operation.

W-2 Projects would implement LID features for the long-term postconstruction (operational) phase. Water-quality benefits would be provided through low-impact design, source controls, and treatment controls. Depending on site conditions, purpose, and surrounding landscape, features would include the following:

W-2.1 Integrating detention basins, biofiltration cells, vegetated swales, infiltration strips, or similar earth-based vegetated system for accepting and conveying runoff associated with new paved surfaces (e.g., walkways, roadways, hard deck areas, etc.) and other permanent impervious features. Designs would consider increasing the size of local flood control sites serving the project areas or including detention/retention systems in designs for parking areas or other sites.

W-2.2 Optimizing the use of suitable pervious materials for hardscaped surfaces (e.g., porous pavements, gravel walkways, grass pavers).

W-2.3 Maximizing soft-bottom drainage that is amenable to vegetative planting and natural treatment of runoff.

W-2.4 Integrating natural rock or similar material for protection against scour and sediment transport at discharge points and on soft-bottom drainages.

W-2.5 Integrating meandering pathways within soft-bottom watercourses for increased residence time and improved vegetated runoff treatment.

W-2.6 Incorporating low-flow pathways for new hardscaped impervious drainages (e.g., concrete channels) to concentrate dry-weather flows along the thalweg (i.e., lowest point of flow), minimize vegetative growth, and reduce long-term maintenance.

W-2.7 Enhancing storm water infiltration in areas of poor soil permeability by incorporating buried percolation conveyance components (e.g., buried roof downspouts, subdrains for vegetated areas).

W-2.8 Selecting and designing access routes to minimize impacts to receiving waters, in particular the discharge of identified pollutants to an already impaired water body.

W-2.9 Designing projects located within the 100-year flood zone to minimize the risk of property loss, injury, or death from flooding events.

W-2.10 Maximizing the use of underground or aboveground cisterns for the capture and reuse of rain water.

Construction would implement the following:

W-3 Before initiation of projects, compliance with the planning requirements established by the Construction General Permit Order 2012-0006-DWQ, NPDES CAS000002 (amending Order 2009-0009-DWQ as amended by 2010-0014-DWQ), would be established for traditional construction sites and LUPs. LUP activities include those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits; substructures; pipelines; towers; poles; cables; wires; connectors; and switching, regulating, and transforming equipment). These projects, as well as any other construction project disturbing more than 1 acre, would be covered by the Construction General Permit. This new permit supersedes and consolidates the requirements of the previous Construction General Permit (Order 99-08-DWQ) and Linear Permit (Order 2003-0007-DWQ), and has been effective since 1 July 2010. Under this Construction General Permit, the following are required:

W-3.1 The contractor would provide a Qualified SWPPP Developer (QSD) to complete a risk determination and prepare a draft SWPPP in accordance with the risk-level requirements in the Construction General Permit. The SWPPP would be prepared by a QSD certified by the California Stormwater Quality Association.

W-3.2 The contractor would obtain coverage under the Construction General Permit by uploading Permit Registration Documents (i.e., NOI, SWPPP, and other compliance-related documents required of Order 2012-0006-DWQ) to the California Stormwater Multi-Application and Report Tracking System (SMARTS) website. A Waste Discharge Identification number would be received from SMARTS before initiation of any soil disturbance.

W-3.3 Project construction would comply with all provisions described in the Construction General Permit, and would strictly follow the SWPPP under the direction of a Qualified SWPPP Practitioner (QSP) provided by the contractor. The QSP would maintain and update the SWPPP as necessary to track modifications, BMP locations and implementation, training, and other requirements. The certification statement would be included in the on-site SWPPP. The QSP would be a separate individual from the QSD.

W-3.4 The contractor would be responsible for conducting all required inspections, sampling, recordkeeping, and corrective actions.

W-3.5 After completion of construction activities, the contractor would prepare the Notice of Termination and supporting documentation to submit to the SWRCB via the SMARTS website. To terminate coverage, the project would have to meet permanent stabilization requirements specified by the Construction General Permit, and an acceptance of the Notice of Termination would have to be received from the SMARTS system.

W-3.6 The contractor would submit an Annual Report to the SWRCB through SMARTS. The Annual Report would have to be accepted by the SWRCB before the contractor could be released from the contract.

W-4 The SWPPP would specify measures to avoid or minimize construction-related surface water pollution to include proper runoff controls, pollutant source controls, and runoff treatment controls (when other nontreatment controls are insufficient for reducing runoff pollutant loads). Project construction would comply with all provisions described in the Construction General Permit and would strictly follow the SWPPP. The QSD would provide SWPPP updates for the QSP to implement so that conditions at the project site are in compliance as site conditions change, BMP locations and types are modified as necessary, and evolving training needs are met.

W-5 The construction SWPPPs for all of the projects would include the water quality protection and monitoring measures required in the Construction General NPDES Permit (Order 2012-0006-DWQ), but would also address the following project-specific practices:

W-5.1 Clearing and grading of native vegetation would be limited to the minimum amount needed to construct, allow access to, and provide fire protection for if earthwork is conducted during the wet season.

W-5.2 Advanced BMP treatment controls (e.g., active treatment systems employing sedimentation traps/ponds with flocculant addition, redundant BMPs, or treatment trains) would be considered when construction sites are less than 500 feet from sensitive receiving waters (i.e., the Pacific Ocean and San Diego Bay).

W-5.3 Materials and waste management programs would be implemented during construction within the project limits and on equipment/material laydown areas. Programs would be for solid, sanitary, septic, hazardous, contaminated soil, concrete, and construction waste management; spill prevention; appropriate material delivery and storage; employee training; dust control; and vehicle and

equipment cleaning, maintenance, and fueling. Each of these programs would address proper secondary containment requirements, spill prevention and protection, structural material storage needs, proper concrete washout design and containment, perimeter and surface protection for laydown and maintenance areas, and relaying all such requirements to construction staff. Storage, use, and disposal of hazardous materials would be conducted in accordance with local, state, and Federal guidelines pertaining to handling, storage, transport, disposal, and use of such materials.

W-5.4 The SWPPP and storm water BMPs would consider design, placement, and discharge locations to avoid impacts to listed species and their habitats (i.e., discharge, dewatering).

W-6 Storm water BMPs would include the following practices, which would be detailed in the SWPPP:

W-6.1 Storm water and erosion controls would be installed prior to soil disturbance on the construction site. Where determined necessary, silt fencing, straw wattles, temporary earthen berms, or similar runoff barriers would be placed along the perimeter of the project site using methodologies and orientations appropriate to control erosion. The fence would be buried at the bottom and staked. Points of discharge from these BMPs or other points of concentrated runoff would employ scour/erosion control. Silt fencing, straw wattles, earthen berming, or a similar barrier would be placed around the perimeter of the project site and be properly installed and maintained.

W-6.2 Stockpiles of soil, concrete, and other materials would be covered with a tarp or blanket and/or surrounded with straw wattles or gravel bags. Slopes would be protected with straw wattles or blankets. All straw wattles would be certified as weed-free.

W-6.3 Whenever possible, grading would be phased to limit soil exposure and minimize potential sediment transport. Finished areas would be revegetated and/or hydroseeded as soon as possible with native species known to exist in the project area.

W-6.4 Storm drain inlets would be protected using gravel bags or certified weed-free straw wattles, filter fabrics, absorbent socks, rubber covers, or other materials appropriate for the location. Construction entrances and laydown areas would be stabilized. Materials that could impact storm water runoff would be stored in lockers, on pallets, inside rubber berms, indoors, or under a cover. Material storage areas would be located away from existing storm drains and surface waters.

W-6.5 Sedimentation basins would be constructed where appropriate and would include standpipe design discharge outlets that allow collected water to drain off at a controlled rate (i.e., drain within 72 hours). Supplemental BMPs for scour protection and erosion control would also be integrated at discharge outlet points, overflow spillways, or similar areas prone to concentrated flow.

W-6.6 Check dams would be used to reduce runoff velocities where necessary.

W-6.7 BMP structural facilities would be regularly inspected and repaired. Damaged or worn silt fences, wattles, gravel bags, and other BMPs would be replaced when they are found to be inadequate or ineffective.

W-6.8 Fueling and maintenance of equipment would take place within existing paved areas or the identified laydown area, but not closer than 100 feet to drainages. Cleaning of vehicles and equipment would take place off-site to the greatest extent possible. If it is necessary to clean vehicles on-site, vehicles may be rinsed with water, and designated bermed areas would be used to prevent rinse water contact with storm water and other water bodies. Soaps or detergents would not be used. Collected rinsate would be used on-site for construction water needs or transferred to a temporary holding tank or a vactor truck (a vacuum truck with a tank on board for collecting wastewater and sediment) for discharge off-site (e.g., batch discharge to a sanitary sewer with proper authorization and clearance).

W-6.9 Construction equipment staging and access, and disposal or temporary placement of excess fill within drainages or other wetland areas, would be prohibited.

W-6.10 Solar-degradable plastic will not be used on the construction project site.

W-7 If the proposed activity would involve groundwater extraction (dewatering), dewatering permits would be obtained for areas where the groundwater level is high and groundwater is likely to be encountered during construction. If encountered, dewatering waste would be disposed of in accordance with RWQCB Order No. R9-2008-0002, General Waste Discharge Requirements for Discharges from Groundwater Extraction and Similar Discharges to Surface Waters within the San Diego Region except for San Diego Bay, and RWQCB Resolution No. R9-2007-0104, Conditional Waivers of Waste Discharge Requirements for Specific Types of Discharge within the San Diego Region, depending on the method of disposal.

The following postconstruction measures would be implemented:

W-8 Once construction of each project is completed, an operations and maintenance program would be implemented in accordance with the NBC NPDES Permit Order No. R9-2009-0081, as modified by Order No. R9-2010-0057 (CA0109185), which would be implemented for the life of the facility/project to ensure the continued effectiveness of postconstruction BMPs. Maintenance activities would vary from area to area depending on the BMPs in place, but would include the following:

W-8.1 Cleaning and removing debris from BMP inlets, outlets, or catchments after major storm events.

W-8.2 Mowing and maintaining vegetated BMPs (e.g., maintaining swales and/or detention/retention systems to original cross sections and infiltration rates).

W-8.3	Removing accumulated trash, debris, and/or sediment from BMPs before each wet season (i.e., September).
W-8.4	Seeding or sodding to restore or maintain ground cover.
W-8.5	Repairing erosion areas and stabilizing repairs with additional erosion-control measures.
W-8.6	Removing and replacing all dead and diseased vegetation as necessary to maintain vegetation coverage and minimize erosion. Replacement vegetation would not include any invasive species.
W-8.7	Managing fertilizer use (particularly in the wet season) and minimizing or avoiding herbicide or pesticide applications during all times of the year.
W-8.8	Maintaining BMP vegetation health (i.e., periodic irrigation or batch watering) without causing runoff from overirrigation.
W-8.9	Implementing structural and nonstructural programs (i.e., routine procedures or practices) to prohibit the storage of uncovered hazardous substances in outdoor areas and implementing good housekeeping procedures on a routine basis.
W-8.10	Inspecting and replacing inlet protection/filters as necessary.