

Sierra One Training Area

MCB Camp Pendleton

Advocacy Position

San Mateo Creek Conservancy, *preserving Trestles Watershed*

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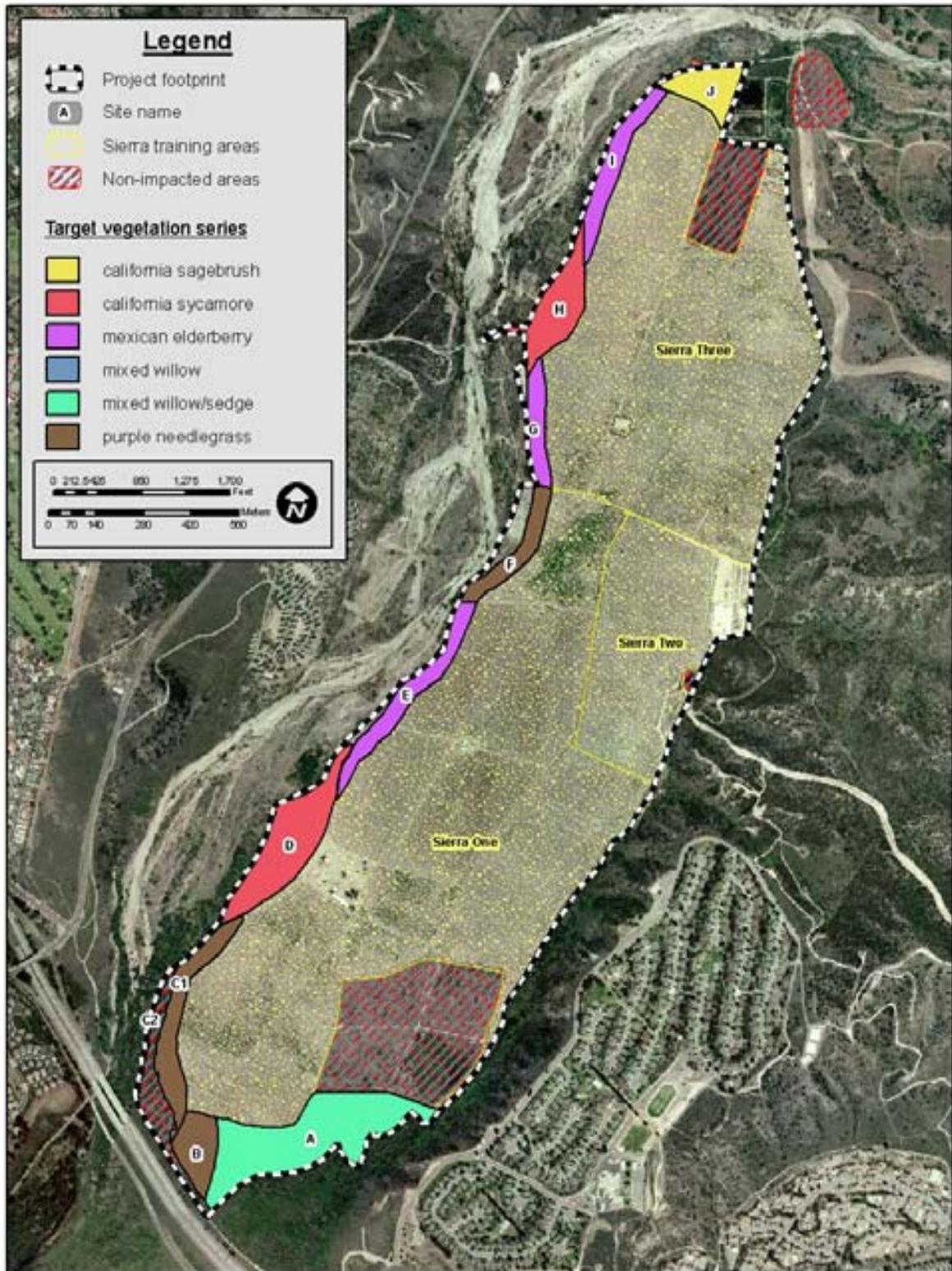


San Mateo Creek above, San Mateo Canyon Wilderness Area in background

“Long experience by the Department of Defense (DoD) with the management of the natural resources...has shown that the environmental health of these lands is absolutely essential for realistic and sustainable military testing and training. ...Maintaining that level of biological diversity, which contributes to the ability of the land to withstand both natural and man-made disturbances, is critical to our national military preparedness.” --- Alex A. Beehler, Assistant Deputy Under Secretary of Defense (DoD, 2008)

Our environmental programs are designed to ensure that our Marines are still training at Camp Pendleton in the year 2042 on the same pristine land we obtained in 1942.
-Official Website for MCB Camp Pendleton

When the amount of use (load or military training) placed on the natural system exceeds the carrying capacity, a critical threshold is reached. Subsequently, without adequate time and effort to allow natural and human-induced recovery, accelerated degradation and permanent ecosystem change may occur. - Brockus, John, et al. Desert Analysis: The Quest for Training Areas, Center for Environmental and Geographic Sciences, U.S. Military Academy.



Proposed Sierra One Training Area

Abstract:

The mission of San Mateo Creek Conservancy is to preserve and enhance the unique watershed, riparian habitat, and stunning viewscape of San Mateo Creek (SMC), the most pristine of the unchannelized coastal watersheds in Southern California. Coastal habitats and resources of this quality on the Southern California coast are extremely rare and are at risk. The SMC watershed is a unique and a vital legacy to California's natural history.

Staff at MCB Camp Pendleton is planning a training grounds and facility known as **Sierra One Training Area (SOTA)**, located within the approximately 633 acre former agricultural fields (Ag Fields) adjacent to the San Mateo Creek floodplain. The fields were once part of the flood plain and alluvial terrace of SMC until the historic grading of the fields for crops and construction of a levee to prevent the creek from flooding or changing course.

We feel the proposed Sierra One Training Area will have a significant negative impact on the middle reach of SMC, the critical link between the SMC Wilderness Area and Trestles Wetlands Natural Preserve.

According to the *FY 2008 Environmental Award Nomination* ("the EAN") (Secretary of Defense, 2008): The new Sierra One Training Area would allow for "**(1) heavy equipment and assault breacher vehicle training (2) Military Operations in Urban Terrain training, and (3) convoy operations and counter Improvised Explosive Device training.**" We acknowledge that the USMCB Camp Pendleton's mission is to train marines and win battles. However, the training area proposed for SOTA can be provided in other less sensitive areas within Camp Pendleton. For example, the fields north of the Las Pulgas Gate are expansive and relatively level. In any event, The Ag Fields should be converted to native habitat and could then be used as a training area for exercises that take advantage of a heterogeneous, natural environment.

We believe that the EAN may be misleading when it states that "*from a natural resources conservation perspective, the conversion of once unsuitable habitat to a higher quality and more productive habitat is an exciting prospect. To achieve this goal, the base is restoring vegetation that benefits sensitive natural resources and is compatible with training needs.*" SOTA, as proposed, would provide approximately 100 acres of habitat restoration, much of which is located at the South East Corner adjacent to an already existing Willow/Reed Plant Community. But this is not sufficient to offset the intensive impact created by the heavy vehicular and weapons proposed for the remaining 500+ acres. We believe the proposed restoration of a narrow band of habitat on western edge of the Ag Fields is a red herring.

The development of SOTA would create many impacts by:

- Building training facilities and operating heavy equipment, convoy trucks, and armored personnel carriers which will be fully within view of the San Mateo Campground, San Onofre Park trails along the upper Christianitos Creek watershed, passengers driving on the 5 Freeway, and the San Onofre One Military Housing. SOTA will greatly diminish this critical viewshed.
- Creating a "parade ground" surface sterile and empty of plant life and habitat.

- Increasing the noise impact on animal life in the SMC Riparian Habitat, including Endangered and Listed Species.
- Increasing Noise and Light Impact on San Onofre One Military Housing which directly overlooks SOTA.
- Increasing dust and runoff in the SMC Riparian Habitat.

The opportunities in developing the Ag Fields into a natural habitat include:

- Maintaining compliance with the mission of the DoD, the EPA, CEQA, *et al*, which promotes the increase of biodiversity and encourages development in areas that would have the least environmental impact.
- Decreasing the environmental impact by locating high impact training to the relatively level fields north of Las Pulgas Gate.
- Employing “best practices” in military training by utilizing a natural setting for exercises: Expanding on the historic plant communities of Willow Woodland, Alluvial Terrace, Mulefat Scrub and Coastal Sage Scrub which would replicate potential conflict geographies such as North Africa and the coastal Mediterranean Mideast. The Training Area could then be used for sniper training, observation exercises, and field orientation instruction.
- Preserve and Enhance the unique and stunning viewscape and riparian habitat of San Mateo Creek, the most pristine of the only three unchannelized coastal watersheds in Southern California. Habitats and resources of this quality on the Southern California coast are rare and are at risk. The SMC riparian habitat is unique and a vital link to California’s coastal natural history.
- Provide more habitat for listed species and unique riparian habitat that are adjacent to the field.
- Create a “buffer” and maintain a unique, riparian viewscape for residents of Base Pt. San Mateo Housing and the San Onofre Housing Unit One, the 2.5mm+ visitors to San Onofre State Park, and commuters on the 5 Freeway.
- Support the Mission of the Marines and the DoD to maintain biodiversity and insure “*that our Marines are still training at Camp Pendleton in the year 2042 on the same pristine land we obtained in 1942*”. (Official Website)



Historic Picture (1970's): San Mateo Creek in full flow, Agricultural Fields in production, Trestles Wetlands Natural Preserve, a part of San Onofre State Park, in foreground. Note San Onofre Housing Unit One overlooking Ag Fields, upper right.

San Mateo Creek:

San Mateo Creek is the most pristine, intact coastal stream in Southern California. The streambed and floodplain are in a natural state and the riparian habitat is uniquely native. Several distinct tributaries collect winter rains which flow unimpeded to the ocean. It is the last remaining coastal stream in our region to manifest such singular, pre-European features. The watershed is 139 square miles and the primary streambed runs 22 miles from its headwaters in the Santa Ana Mountains to the Pacific Ocean. The headwaters lie within the federally-protected San Mateo Canyon Wilderness Area. The middle reach runs through the Camp Pendleton Marine Corps Base (CPMCB) and the creek mouth is within the 150+/- acre Trestles Wetlands Natural Preserve (TWNP) within San Onofre State Park.

Sierra One Training Area:

Sierra One Training Area is planned for the Ag Fields which lay directly east of the SMC creek bed, running from the 5 freeway north to the confluence of SMC and Christianitos Creek. These fields have lain fallow since September 11, 2001, reportedly due to the difficulty of hiring farm labor with proper documentation.

Public information that is currently available as to the proposed use of the Training Area is quite limited. A draft Plan has been delivered to the California State Parks and the California Coastal Conservancy, but not available to the public. According to the *FY 2008 Environmental Award Nomination* (Secretary of Defense, 2008): The new Sierra One Training Area would allow for “(1) *heavy equipment and assault breacher vehicle training (HE and Assault Breacher VT)*, (2) *Military Operations in Urban Terrain training (MOUTT)*, and (3) *convoy operations and counter Improvised Explosive Device training (Convoy Operations & IED)*.”

Communities and Stakeholders adjacent to Sierra One Training Area:

Military housing is adjacent to and within the view shed of SOTA. San Mateo Point Housing Area is sited on the south side of the 5 freeway and the large single-family San Onofre One Housing Area directly overlooks SOTA. The Christianitos Unit of San Onofre State Park lies directly to the north of SOTA, which makes up a significant portion of the SOSF viewshed.

Original Flora of the Sierra One Training Area:

The native plant communities that existed prior to the grading for the agricultural fields were similar to the habitat immediately up and down stream. 40 acres +/- adjacent to the southeast corner of this area is a healthy Willow Woodland community, of similar density and coverage as the large Willow community on the south side of the 5 freeway in the TWNP. The SMC runs underground for most of the year, surfacing near the creekmouth and forming a 6 acre lagoon. Because of the lagoon and a higher water table near the terminus, the surrounding lands are moist year round, creating the hydrology required for willows, cottonwoods and sycamores. **The southern portion of the fields was primarily Willow Woodland. As the fields transition northward, a Mule Scrub transitioning inland to Coastal Sage Scrub were the dominant communities, again consistent with the current border and upstream communities.**

Natural Resources and Listed Species Adjacent to Sierra One:

Feldmeth's definitive *Biological Resources of The San Mateo Creek Area* was limited to the approximately 350 acres found bounded by the first mile and a third of San Mateo Creek, a significant portion adjacent to SOTA. **The study documented over 315 plant species, 40 probable-breeding avian species, and numerous reptiles, amphibians and mammals.**

The *Draft Environmental Statement for Basewide Utilities Infrastructure, at Marine Corps Base Camp Pendleton (2009)* referenced studies that found the **following listed species in or adjacent to Sierra One Training Area:**

Arroyo Toad	p. 3.3-57
Southwestern Willow Flycatcher	p. 3.3-61
Least Bell's Vireo	p. 3.3-61
Coastal California Gnatcatcher	p. 3.3-65
Pacific Pocket Mouse	p. 3.3-10a

The *Draft Environmental Statement for Basewide Utilities Infrastructure, at Marine Corps Base Camp Pendleton (2009)* referenced studies that found the **following non-federally rare plant species presence or potential to occur near or within the Ag Fields:**

Western dichondra	P. B2-3
San Diego tarplant	P. B2-3
Many-stemmed dudleya	P. B2-3

Palmer's grapplehook	p. B2-4
Sticky dudleya	p. B2-4
Engelmann's oak	p. B2-6
Fish's milkwort	p. B2-6
San Diego County Viguiera	p. B2-7

The natural resources of the lower San Mateo Creek (SMC) contain an extraordinary diversity of biota in this relatively small area. Of equal importance to the listed and rare species listed above are the 315 plant species, 40 probable-breeding avian species, and numerous reptiles, amphibians and mammals that are within and surround SOTA. The San Mateo Creek and Riparian Corridor is the least impacted coastal stream in Southern California, has a relatively undeveloped creek bed, floodplain and alluvial valley, and represents the most intact watershed in Southern California. It's preservation to date has primarily been due to the fortunate inclusion of this watershed in the 1942 acquisition by the Department of the Navy, and the difficulty of development by Rancho Mission Viejo of the Talega and La Paz Creek watersheds

Groundwater and the Agricultural Fields:

MCB Camp Pendleton has not addressed the use of groundwater in the San Mateo Creek valley. According to the California Coastal Conservancy:

“... after 1942, the Marine Corps started pumping groundwater from the area for base use. Based on a yearly average from the years 1984 to 1989, approximately 2,105 acre-feet of groundwater were being removed from the lower valley aquifer. Of this total, 1,634 acre-feet is a net discharge from the aquifer and is lost through evapotranspiration and other consumptive uses. Camp Pendleton currently pumps approximately 2,500 acre-feet per year of groundwater from the San Mateo, San Onofre, and Las Flores alluvial aquifers (SDCWA, 1997). Withdrawn groundwater serves as the source of potable and irrigation supply for the northern portion of Camp Pendleton. The concentrated pumping near the creek has lowered the water table below the creek channel and has dried up reaches of the creek that in the past had flow part of the year. Reduced stream flow in San Mateo Creek also hinders or eliminates steelhead migrations. Excessive pumping can also trap adult and smolt steelhead in upstream pools by eliminating the flows necessary for the fish to return to the sea.” (California State Coastal Conservancy)

Department of Defense and Military Position on Natural Habitat:

The DoD and MCB Camp Pendleton strive to stay in compliance with all Federal environmental laws, when such laws do not conflict with national security. The DoD recognizes “*the environmental health of [military] lands is absolutely essential for realistic and sustainable military testing and training.*” As such the DoD has sponsored a *Biodiversity Conservation Handbook* as a reference for military base Natural Resource Managers. Under the Sikes Act (1997 amendment), the DoD is required to prepare and implement an Integrated Natural Resources Management Plan in DoD installations. Camp Pendleton’s INRMP is comprehensive and specific. Among many requirements, the Plan integrates conservation measures and military operations and reflects cooperation between the FWS, the State of California, and installations consistent with the proper management

of fish and wildlife resources. The preservation of natural resources must be “consistent with the use of Military Installations to ensure the preparedness of the Armed Forces.” The restoration and use of the Agriculture Fields as training grounds on a natural setting satisfies the intent and spirit of the Sikes Act and MCBCP’s INRMP.

Environmental Law and Sierra One Training Area

The DoD has long recognized and complied with the requirements of a wide array of national environmental laws to protect its land, water and air resources and the organisms they support. Indeed, the department has become a leader in compliance with major natural resources laws such as the Endangered Species Act, the Clean Water Act, the Migratory Bird Treaty Act, and many others. (Introduction, Biodiversity Conservation Handbook).

As Sierra One has parts of its area in the historic floodplain and arguably its entire area influencing the SMC Riparian Corridor, the proposed development would be under the jurisdiction of several Federal Environmental Laws and Orders.

National Environmental Protection Act (NEPA): *“The purposes of this Act are: To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation.”*

Included in the many orders are two directives to:

- *attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;*
- *preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice.*

The SMC Valley and watershed is an important “historic and natural aspect of our national heritage.”

EO 11988, Floodplain Management: directs all federal agencies to refrain from conducting, supporting, or allowing any activity that would significantly encroach into a floodplain unless it is the only practicable alternative. Significant portions of the borders of the Ag Fields were in the floodplain, as is evidenced by the construction of historic levees. Construction or “activities” in these areas would not be consistent with Executive Order 11988 (Carter, Jimmy).

EO 11990 (Protection of Wetlands) 1977: *Section 1. (a) Each agency shall provide leadership and shall take action to minimize the destruction, loss or*

degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands...

...each agency shall consider factors relevant to a proposal's effect on the survival and quality of the wetlands. Among these factors are:...

*(b) maintenance of natural systems, including conservation and long term productivity of existing flora and fauna, species and habitat diversity and stability, hydrologic utility, fish, wildlife, timber, and food and fiber resources; and
(c) other uses of wetlands in the public interest, including recreational, scientific, and cultural uses.*

As can be seen in the accompanying photograph, the southeast (and southwest) corner of the Ag Fields contains a Willow Woodland plant community, a continuation of the Willows from the Trestles Wetlands Natural Preserve south of the 5 Freeway. This community can only exist in a wetland community, and proves that a portion of the Ag Fields is a wetland, and certainly was more extensive prior to development of the Ag Fields.



California Coastal Act in conformance with the **Coastal Zone Management Act** (1972, as amended) states:

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.

Endangered Species Act (1973, as amended) 16 U.S.C. §§ 1531-1544

As documented in numerous EISs, the Ag Fields are adjacent to and were once part of the unique SMC riparian corridor a habitat of and nesting area for the numerous listed and important species listed above.

Highest and Best Use: A Training Area, a Buffer, and Preservation of Habitat

“Vegetation plays a critical role in providing concealment resources for soldiers and equipment in the field. In addition, the occurrence of vegetation in the landscape creates visual heterogeneity. The sustainability of military lands can be assessed using the concept

of carrying capacity....When the amount of use (load or military training) placed on the natural system exceeds the carrying capacity, a critical threshold is reached. Subsequently, without adequate time and effort to allow natural and human-induced recovery, accelerated degradation and permanent ecosystem change may occur.” (Brockus)

Allowing Sierra One Training Area to become a flat, featureless “parade ground” is squandering an opportunity to create a high quality natural setting for quality Mediterranean environment that the Marines would encounter in North Africa, coastal Syria, Persia and other Mediterranean ecosystems.

SUMMARY

Allowing the Ag Fields to be restored to native plant communities would satisfy the law and intent contained in numerous federal laws, executive orders, and DoD directives, as outlined above. As so well stated in NEPA, it is our duty “*to promote efforts which will enrich the understanding of the ecological systems and natural resources...*”

Restoration to native habitat would not turn this section of MCBCP into a “park”. On the contrary, it would add a Training Area in a natural setting free of the Fennel and *Arundo* monocultures found elsewhere on the Base. It would provide a unique matrix for training in orientation, sniper set up, observation deployment and other activities. In addition, the watershed still has several vital marine training areas and housing units including Camp Talega, Camp San Onofre, upstream firing ranges, and a medical compound.

Our land is the foundation of our country. It is the most elemental part of what defines us. Nature and Wilderness, our natural habitats and native species, have been an essential part of the American psyche and reality. The Wild West, the Mississippi River, Yellowstone, the Lewis and Clark Expedition, the Great Basin and much more are all touchstones to our national personality. In a real sense, our land is what we fight for.

Coastal Southern California, because of its high density population growth, has experienced far higher environmental degradation than most of the US coastline. San Mateo Creek, as outlined above, is the best of our last relatively natural coastal creeks south of Point Conception. **The opportunity and responsibility to enhance and maintain this unique treasure, this special sense of place, should not and cannot be squandered. The rehabilitation of the SMC riparian corridor would be a fitting tribute from the Marines to the State and all of its citizens, while still satisfying the vital mission of the Marine Corps. Sierra One Training Area can be a Training Ground which reaps all the benefits of training in a natural setting home to native species.**

References and Resources:

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Secretary of Defense and Secretary of the Navy, 2008, *FY 2008 Environmental Award. Nomination Natural Resources Conservation – Large Installation Marine Corps Base Camp Pendleton, Nomination Submission Page*

APPENDIX

From the FY 2008 Environmental Award. Nomination Natural Resources Conservation – Large Installation Marine Corps Base Camp Pendleton, Nomination Submission Page. This is the only publicly available source outlining the proposed use of SOTA by the Marine Corps.

CONVERSION OF AGRICULTURAL LANDS TO TRAINING LANDS

The mission of MCB Camp Pendleton is to promote combat readiness of Marines and Sailors by providing necessary facilities and services. As lessons learned are brought back from the current war efforts, it is clear that training activities must be adapted to meet the needs of the troops requiring counter-insurgency tactics being used in Afghanistan and Iraq. The 633-acre former agricultural field adjacent to San Mateo Creek is an ideal location to create a large training area due to the flat topography, a limiting factor in other parts of the base. The new training area would allow for (1) heavy equipment and assault breacher vehicle training, (2) Military Operations in Urban Terrain (MOUT) training, and (3) convoy operations and counter Improvised Explosive Device training.

From a natural resources conservation perspective, the conversion of once unsuitable habitat to a higher quality and more productive habitat is an exciting prospect. To achieve this goal, the base is restoring vegetation that benefits sensitive natural resources and is compatible with training needs. San Mateo Creek is home to many sensitive and federally listed species. Tidewater gobies (*Eucyclogobius newberryi*) live in the lower reaches of the creek, while arroyo toads (*Bufo californicus*), least Bell's vireos (*Vireo belli pusillusi*), and southwestern pond turtles (*Actinemys marmorata pallida*) all live in the creek proper. Additionally, San Mateo Creek was the last known site for a run by southern steelhead trout (*Oncorhynchus mykiss*), an anadromous fish living in the ocean but using freshwater streams and creeks for spawning. San Mateo Creek is considered the creek most suitable potential future steelhead runs on base. The operation of the former agricultural field posed a threat to the viability of these species in San Mateo Creek through water draw down, chemical run-off into the creek, and increased sedimentation from the tillage practices.

In an effort to improve the natural conditions of the land formally under tillage, while improving training capabilities, the base is embarking on a large-scale restoration project. The project will have many approaches, including (1) exotics control, (2) passive recovery, (3) restoration of main training area to compatible land cover, and (4) reducing environmental stressors on San Mateo Creek.

Exotic Control – This site has been in continuous agricultural use since the inception of the base in 1942. Non-native, invasive plants quickly covered the site. In 2007 and 2008, the base aggressively treated non-natives by mowing and herbicide spot treatments. As a result, the eradication and/or severe reduction of many exotics are underway. Invasive weed management will continue into the future to ensure successful restoration of native habitats and to deplete the weed seed bank.

Passive Restoration – Because of the rich soils and high water table, many areas within the footprint are being re-colonized by native vegetation typical of the local soil conditions. These

areas are managed through exotics control and allowed to recover naturally. This method reduces the amount of work necessary to restore the area and save restoration costs.

Restoration of Training Area – Due to the diverse training activities planned for this area, the restoration project considers soil type and military use to select the appropriate vegetation cover to plant. The goal of this approach is to determine what native vegetation cover is suitable for each area within the footprint and select the cover type that will be compatible with military use (*e.g.*, re-grow after disturbance, fire tolerable).

Reduce Stressors on San Mateo Creek – To reduce the stressors imposed on San Mateo Creek by the former agricultural production; the restoration of this area will reduce visual and noise disturbances and decrease sedimentation into the creek. In order to reduce these stressors and improve the habitat conditions, the base has committed to moving the road that parallels San Mateo Creek farther inland and away from the creek. Moving the road reduces noise and visual disturbances, reduces the threat of road mortality to wildlife, and will reduce dust in the creek. Additionally, a 100-acre buffer will be restored between the road and the creek. This buffer will consist of habitats that are suitable for the soil conditions and likely improve the quality of several rare habitats in San Diego County.

This large-scale restoration effort is an example of how natural resources conservation can be compatible with Marine Corps training needs. The project fulfills two necessary and beneficial goals outlined in the INRMP. First, it adds to the Marine Corps capabilities and allows real-world situational training and second it creates new habitat and protects sensitive natural resources.