

Talega Creek Watershed

Proposal for Conservation Easement



Middle Reach of Talega Creek with north facing Coastal Sage Scrub plant community



SMC (left) and Talega Creek viewed from headwaters
Orange Co. on right of Talega Creek and San Diego to the left

OVERVIEW:

The California Sage Scrub plant community, the once dominant coastal community, is the most threatened in California. Vital to numerous threatened and endangered species, the CSS is listed as a threatened Floristic Province by Conservation International and numerous other organizations. Less than 15% of the original coverage remains, and in Orange County the only areas greater than 1,000 acres within 5 miles of the coastline are contained within Crystal Cove State Park and Rancho Mission Viejo (RMV). RMV has an approved development plan for 500 acres within Talega Canyon, the least disturbed tributary to the undammed, unchannelized San Mateo Creek, whose creekmouth fronts the world-renowned Trestles surfing area. Development of this canyon will be problematic for many reasons, including difficulty of access following the defeat of the Toll Road and the canyon's creekbed bordering Camp Pendleton, which requires conformance to the MCBCP's Range Compatibility Use Zone.

Talega Canyon is one of only two significant Coastal areas in Orange County with predominantly native habitat remaining. An environmental easement, prohibiting development of Talega Canyon must be negotiated with and purchased from RMV.

California Sage Scrub plant community: Threatened and Diminished

The dominant native plant canopy in coastal southern California is the Coastal Sage Scrub plant community. It is dominated by low-growing aromatic, and drought-deciduous shrubs adapted to the Mediterranean climate characterized by relatively wet (12+” of rain) winters followed by often 6 months of drought.

The native canopies of CSS plants are unique in the world. CSS often forms a thicket of shoulder high shrubs of numerous species, characterized by small, flowers and thicker, vertical leaves; morphologies that are water and energy efficient. The Asteraceae (Aster or Sunflower) family is well represented with California sagebrush (*Artemisia californica*), Coyote Bush (*Baccharis pilularis*), Mulefat (*Baccharis salicifolia*), and Goldenbush (*Isocoma menziesii*) among the dominant perennials. Other common plants are several Sages (*Salvia ssp.*), several Buckwheats (*Eriogonum ssp.*), California Sunflower (*Encelia californica*), and the larger shrub/trees Toyon (*Heteromeles arbutifolia*), Lemonadeberry (*Rhus integrifolia*), Sugarbush (*R. ovata*), Laurel Sumac (*Malosma laurina*) and other shrubs and herbaceous plants, grasses, and succulents.

As well as beautiful, aesthetic and unique in its own right, the CSS is home to many native animal species, including the federally listed Least Bell Vireo, California Gnatcatcher, the Arroyo Toad, Giant Kangaroo Rat and the California Condor. Coastal sage scrub supports more than 100 species of plants and animals that are considered rare, sensitive, threatened, or endangered by California or U.S. federal wildlife agencies. (CalPIF, 2004). It is characterized by low-growing, drought resistant shrubs adapted to the semi-arid climate of the coastal lowlands.

Talega Canyon and the San Mateo Creek Watershed

The San Mateo Creek headwaters are in the Santa Ana and Santa Margarita Mountains and its creekmouth fronts the world-famous Trestles surfing beach on the San Diego/Orange County border. Few realize that this watershed is the most untouched coastal watershed in Southern California. The creek is free flowing: free of dams, concrete channels and spillways; it enjoys a relatively low population of invasive species in its plant communities. San Mateo Creek and its floodplain, but not the tributary watersheds, lie wholly within public lands and as such have levels of environmental protection. The SMC watershed is a unique and irreplaceable resource in a region whose coastline has been almost entirely developed. The confluence of its largest tributary, Christianitos, lies 2 ½ miles from the mouth, and contributes 33% of the flow of the watershed. Christianitos creek is relatively short with most of its water flow contributed by its three main tributaries flowing generally in a southwesterly direction: Gabino, La Paz and **Talega**.

Talega Canyon is by far the most pristine and visually natural landscape in the *coastal* portion of not only the of the SMC watershed, but all coastal canyons in Orange and San Diego Counties excepting Crystal Cove State Park. It contains the most undisturbed coastal sage scrub, chaparral and riparian woodland plant communities within the coastal portion of the SMC watershed (< 6 miles from the coastal strand). It is an important wildlife corridor from the San Mateo Canyon Wilderness Area to Unit 4 of SOSF and to Donna O’Neil. It is also home to many listed species, with a notably high local concentration of Arroyo Toads. Approximately 9 miles in length, Talega is a beautiful, esthetic and remote coastal valley. The southwest flank of the 5,300 acre watershed lies within Camp Pendleton, and the northwest flank within Rancho Mission Viejo (RMV).



Side canyon looking down to middle Talega creekbed

The “Ranch Plan” developed by RMV and approved by County of Orange Supervisors in 2004 has designated a 500 acre residential and office development on the Talega “ridgeline”, currently called “Planning Area 8”. Ridgeline is placed in quotations because 48 million cubic yards of cut and fill would be required to grade the commercial and residential sites, entirely altering the character of the canyon, forever changing the esthetics of the canyon and highly stressing the entire ecosystem. [Development Environmental Statement, p. 3-29].

It is imperative that this last remaining natural and native canyon be preserved. A conservation easement must be obtained from RMV, and a comprehensive and responsible Management Plan for the Canyon developed and implemented with the Marine Corps.

Protection Status: SMC in relation to Christianitos and SMC

Talega Creek is a uniquely untouched *coastal* watershed only 5 miles inland from San Clemente, CA. It is a critical and important ecological, biological and esthetic resource because it is by far the least disturbed terrain in the adjacent and other coastal canyons and watersheds. Not only does it provide very high quality habitat for native flora and fauna, but it also provides the sense of place and historical context that undisturbed sage scrub and chaparral can provide.

It is the tertiary tributary of San Mateo Creek closest to the ocean. Talega has no environmental protection at this time, as opposed to San Mateo Creek itself. The headwaters of SMC are contained within the 40,000 acre San Mateo Canyon Wilderness Area, defined by the Wilderness Act of 1964 as “*an area where the earth and community of life are untrammelled by man, where man himself is a visitor who does not remain.*” Its middle reach lies wholly within the US Marine Corps Base Camp Pendleton, which has shown generally good stewardship under its Environmental Studies Guide. The creekmouth and last ½ mile are Section 3 of San Onofre State Park, and are protected under the Trestles Wetlands Natural Preserve designation. Much of Christianitos Creek lies within Pendleton or within Section 1 of SOSF. It should be noted that SOSF is contained within a leasehold from the Department of the Navy which expires in 2021. It would be highly unlikely this lease would not be renewed in perpetuity given public sentiment, as demonstrated in the successful “Stop the Toll Road” movement.

However this protection is not afforded to Christianitos’ tributaries at this time. On the contrary the RMV’s Ranch Plan envisions developments with the Christianitos sub-basin including Talega, La Paz and Gabino.



Unnamed canyon on north side of Talega Canyon

Talega Canyon: Uniquely Undisturbed

In Talega Canyon Coastal Sage Scrub, Chaparral and Riparian Woodland Plant Communities have NOT yet been displaced by Non-Native Invasive Species:

“The coastal sage scrub vegetation of southern California is becoming one of the most intractable vegetation types to restore. It is subject to weed invasion, fragmentation, frequent fire, nitrogen deposition, and other disturbances that have reduced the shrub density and increased the frequency of Mediterranean weeds.” (Allen, 2000)

CSS has been subject to urbanization, agriculture, and invasion by exotic annuals to such a large extent that one estimate gives only 10% of the original vegetation in good condition (Westman 1981).

Much of RMV and Camp Pendleton has been degraded by historical sheep and cattle grazing, man-made fires and more significantly in recent history, development. It is an accepted fact that once a CSS or Chaparral community has been disturbed and replaced by invasive species, restoration is economically prohibitive. The removal of invasive species is not particularly difficult. This may be accomplished by controlled burns, manual removal or mechanical disking. But the invasive species seed bank is often long-

lived and the growth rate of invasives much higher than CSS species. Any effort to remove exotic and invasive species in CSS habitat requires a multi-year commitment to remove re-sprouts of the historic invasive species and new exotics that have been lying in wait in dormant seed banks. Once cleared of invasive species native plants rarely re-establish by natural reseeding because of exotic competition. Using the Bradley Method, clearing invaded areas adjacent to well established native communities and allowing natural reseeding, just isn't applicable in CSS communities because of the relatively slower growth rate of natives to Poison Hemlock, Black Mustard, Fennel and Castor Bean. Weeding must be accomplished by hand (to avoid the native sprouts) over several years, or the natives will once more be out-competed. Natural reseeding is possible for small selected areas but not possible for the hundreds of thousands of acres of CSS and Chaparral that have been converted to unsightly, sterile exotic grasslands or monocultures of invasive shrubs such as fennel or poison hemlock. It is unlikely we will ever be able to reclaim our lost habitat. Preservation of what remains is our responsibility.

A Special Area Management Plan is a voluntary watershed planning and permitting process involving landowners and public agencies that seek permits under the Clean Water Act for actions affecting jurisdictional waters of the United States. In conjunction with the development of the Ranch Plan, and its EIS, the Army Corps of Engineers published in November, 2005 the *Draft Environmental Impact Statement, San Juan Creek and Western San Mateo Creek Watershed Special Area Management Plan (SAMP)*. The Army Corps of Engineers in their Special Area Management Plan (SAMP) identifies invasive species in all the sub-basins except Talega. Christianitos Creek has *Arundo donax* in its lower reaches, and all the sub-basins have Poison Hemlock (*Conium maculatum*), Black Mustard (*Brassica negra*), Castor Bean (*Ricinus communis*), Fennel (*Foeniculum vulgare*), Tree Tobacco, Tamarisk and Pampas Grass.

The ACE states regarding it's evaluation of Talega Canyon: "Invasive species were not previously documented within this drainage. The current investigation did not detect any occurrences." In fact, Talega Canyon has occurrences of almost all of the invasive species noted above. But the impact and density is small in comparison to other tributaries. It is imperative that Talega Canyon have environmental oversight now to stop the spread of invasives and other non-native species.

Talega Canyon has been left relatively undisturbed as the canyon walls are steep and not well adapted for grazers. The boundary separating Rancho Mission Viejo from Camp Pendleton following the DoD 1942 acquisition of the southern half of the ranch essentially bisects the canyon, following the streambed. To date, this has made the development and activity within the canyon awkward for both parties.

Talega Canyon: Sensitive Biological Resources

The ACE in its SAMP has comprehensive references and analysis of listed species as well as unique and native species, within the San Juan and Western San Mateo Watersheds. Talega Canyon is a habitat of most, of not all, of the referenced species for the entire RMV.

Species unique to or well represented in Talega Canyon:

Arroyo Toads: one of the major breeding grounds is within the Talega sub-basin.

Chaparral Beargrass: occurs in 5 locations; no other recorded sites within Ranch Mission Viejo.

Threadleaf Brodiaea- 4 locations

Many-stemmed Dudleya – 17 locations

California Gnatcatcher: 7 locations

Cactus Wren: 22 locations

Raptors:

White Tailed Kite

Long-eared Owl

Cooper’s Hawk

Red-tailed Hawk

Red-shouldered Hawk

Great Horned Owl

Barn Owl

Other sensitive species:

Red-diamond Rattlesnake

San Diego Ringneck Snake

Coastal Western Whiptail

Orange-Throated Whiptail

San Diego Horned Lizard

Rufus-Crowned Sparrow

Grasshopper Sparrow

Mammals that use Talega as a Wildlife Corridor

Mountain Lion

Bobcat

Grey Fox

Mule Deer

Coyote

Section 8 of “The Ranch Plan” sponsored by Rancho Mission Viejo

The Ranch Plan, was approved by the Orange County Board of Supervisors with a unanimous vote of support that allows development of several thousand acres within RMV subject to additional review and approvals. A lawsuit was settled with several environmental organizations that In August 2005, a settlement was reached with five conservation organizations to increase the protected open space and habitat and decrease development area. The compromise allows up to 500 acres of Talega Canyon to be developed into residences and commercial property. Development of Talega Canyon would include:

500 developable acres in Section 8: RMV has already stated the desire to develop as much as 1.2 million feet of office, industrial and commercial in section 8 which could require almost 100 acres of land. The remaining 400 acres could support 2,400 housing units (at 6/per acre) or significantly more if attached housing densities are permitted. 1.2mm of office/commercial and 2,400 residential units could support a permanent population of 7,200 residents and a daytime population as much as 10,000 people.

Mass Grading: As many as 48 million cubic yards of grading, cut and fill, would be required to develop the commercial and residential areas within Planning Area 8. [Development Environmental Statement, p. 3-29]. This is equivalent of a volume of earth two miles long, a half mile wide, and 50 feet tall. This is an enormous scar on the land.

Impacts of Toll Road Alternatives: The proposed Toll Road which would facilitate the development of the Ranch Plan has been repeatedly defeated, including an appeal to the Department of Commerce. However the Ranch Plan is not dependent on the Toll Road. But without the Toll Road, a lower-speed urban street network knitting the Plan's development area will be extraordinarily costly. Because of the environmental impact over sensitive areas and watersheds needed to link the communities, any toll road alternative will be vulnerable to multiple environmental challenges.

Commuting Time: Any alternative to the now defeated Toll Road route along San Mateo Creek increases the time for commuting for office and residential residents, making the developments less desirable.

Impact on Camp Pendleton: The boundary separating Rancho Mission Viejo from Camp Pendleton following the DoD 1942 acquisition of the southern half of the ranch essentially bisects the canyon, following the streambed. To date, this has made the development and activity within the canyon awkward for both parties. Firing Ranges and Training Maneuvers would be incompatible adjacent to privately held land. Similarly, residential development would seem to be incompatible adjacent to an active military base. The development of Section 8 will require a finding by the USMC Camp Pendleton that it is consistent with the Range Compatibility Use Zone (RCUZ). The RCUZ program is to ensure compatible land uses on-base and in the vicinity of the base as such uses relate to noise and safety hazards generated from training activities at MCB Camp Pendleton. "There is the potential that an updated RCUZ would identify the area within Planning Area 8 as being subject to impacts associated with training operations....[in this case] residential use would be considered a sensitive, incompatible use [although commercial/industrial use might be considered compatible]." It is difficult to conceive when, if ever, there would be a demand for a fragmented industrial/office at this location, isolated from any other development and with a very long commute time to population centers

Diminution of current value of Talega Canyon:

The development of Section 8 (Talega Canyon) is highly problematic and expensive for RMV for the following reasons:

- **Compliance with RCUZ:** The boundary separating Rancho Mission Viejo from Camp Pendleton following the DoD 1942 acquisition of the southern half of the ranch essentially bisects the canyon, following the streambed. To date, this has made the development and activity within the canyon awkward for both parties. The development of Section 8 will be affected and may be significantly compromised by the requirement to comply with the findings of Camp Pendleton's Range Compatibility Use Zone.
- **Defeat of the Toll Road** requires a greater surface road network between the planning areas, increasing environmental impact and potential legal challenges, assuming a viable trunk can ever be developed. To date, all proposals have been
- roundly opposed by a myriad of cities, governmental agencies, environmental advocates and the Department of the Navy.
- **The mass grading of 48 million cubic yards** that is contemplated is fraught with potential legal challenges. In addition, it is not economical. At \$5 per cubic yard for cut and fill, almost \$250mm!! For example, if the 500 acres were developed at 4 units per acre (typical density for 6,000 sq. ft. lots), that would equate to \$125,000 per home for grading alone!
- **Cost of Development versus Market Value:** The size and scope of the infrastructure development combined with the mass grading raises the development costs to a level where it the market values of office and housing may never equal cost.
- **Net Present Value calculations are logarithmically reduced by time.** Development is many years, perhaps decades, away. If one uses the current 14% cost of equity (COE) in a Discounted Cash Flow analysis, the property is worth 14% of it's future profit, *if any*, with an average development completion and sale centered about 2025 (15 years from present).
- **Higher than normal infrastructure development** raises risk from the norm because of higher risk of cost overruns and design errors.
- **Higher potential for successful future legal challenges**, because of the esthetic and biologically sensitivity of the site.

- **Development is inherently risky.** Property Development can result in investment losses, not gains.

Conservation Easement:

For these reasons the sale or donation of an Environmental Easement by RMV could provide an equal or higher return to development, be consistent with RMV's mission of balancing development with conservation, and enhance the esthetic value of their remaining property holdings.

We strongly urge RMV to communicate a value for an easement prohibiting development in Planning Area 8, and all canyon and ridgelines of Talega. This would allow environmental groups to have an opportunity to raise and allocate funds for this last great coastal watershed in Orange County.

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