

**APPENDIX L  
OPEN SPACE AND HABITAT PROTECTION PRECEDING  
FINAL ACTION ON THE SOUTHERN NCCP/MSAA/HCP**

The conservation planning landscape of southern Orange County has been heavily influenced by historic habitat/open space protection actions involving participating landowners, local jurisdictions and others prior to the NCCP Planning Agreement in 1993 (see *Figure 6 – Open Space Commitments Preceding the 1993 Planning Agreement for the Southern Subregion NCCP/MSAA/HCP* and *Figure 116 – Pre-NCCP/MSAA/HCP Open Space Protected as Part of Section 4(d)Permits and Section 7 Consultations*). These open space preservation actions include the donation of lands that became the National Audubon Society (NAS) Starr Ranch Sanctuary, the acquisition of lands for Caspers Wilderness Park north of San Juan Creek and major donations/dedications of lands in Arroyo Trabuco for O’Neill Regional Park. The pre-1993 open space protection actions, along with urbanization decisions that often were related to these open space protection measures, have had a marked influence on the planning landscape and must be acknowledged in order to understand their potential contribution to a Habitat Reserve. In turn, the review of these areas will help facilitate the *Chapter 8* and *Chapter 9* assessments of the manner in which the habitat Reserve Alternatives and Programmatic Alternatives relate to these prior open space commitments in creating a Habitat Reserve. These actions are summarized below.

**SECTION 1.0            OPEN SPACE PROTECTED PRIOR TO THE 1993 SOUTHERN  
SUBREGION PLANNING AGREEMENT**

Prior to the signing of the 1993 Planning Agreement significant open space protection actions had occurred within the Southern Subregion. These “pre-NCCP” open space protection actions included the creation of the NAS Starr Ranch, three County wilderness and regional parks and other open space, as summarized in the following discussion.

**1.1      National Audubon Society Starr Ranch Sanctuary**

In 1973, a major land donation was made to the NAS for a nature preserve that has become the Starr Ranch Sanctuary. The Starr Ranch Sanctuary comprises approximately 3,892 acres of important habitat resources located contiguous with the CNF and Caspers Wilderness Park. Major habitat types found within the sanctuary include coastal sage scrub (2,060 acres) and woodlands (350 acres).<sup>1</sup> The Starr Ranch Sanctuary also contains important populations of gnatcatchers, among many other sensitive wildlife and plant species.

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<sup>1</sup> The acreage totals, including acreage of vegetation communities, reported here and throughout this chapter are based the NCCP GIS database ownership and EDAW (2005) open space coverages. In some cases the acreage is different from “official” representations such as Starr Ranch, which is often referred to as a 4,000 acre Sanctuary. In addition, because the GIS database ownerships are somewhat generalized at the landscape level, acreages are rounded to the nearest 10 acres.

## **1.2 Caspers Wilderness Park – North of San Juan Creek**

In 1974, the County of Orange purchased about 5,500 acres south of the Starr Ranch Sanctuary for regional park purposes. The park has received a “wilderness” designation which limits recreational uses to passive recreation. Together with the CNF and the Starr Ranch Sanctuary, almost the entirety of the Bell Canyon watershed is encompassed within protected open space. Bell Canyon provides an important source of sand and gravel sediments for arroyo toad habitat within the Canyon and downstream to San Juan Creek. The lower portions of Bell Canyon contain an important population of arroyo toads that is functionally linked with a major population in San Juan Creek. Bell Canyon also supports a dense population of nesting raptors as well as many other sensitive wildlife species.

## **1.3 Caspers Wilderness Park – South and East of San Juan Creek/Ortega Highway**

In 1982, in conjunction with approvals for Plano Trabuco, RMV dedicated about 1,700 acres to be added to Caspers Wilderness Park, located south and east of San Juan Creek in the San Juan Creek Watershed. This area includes almost all of Lucas Canyon. This dedication area is an important natural source of sand and gravel sediment yield that helps to sustain downstream arroyo toad habitat in San Juan Creek and it also supports the easternmost important population of gnatcatchers in the Southern Subregion.

## **1.4 O’Neill Regional Park – Arroyo Trabuco**

Prior to 1993 approximately 1,020 acres of land were set aside as part of the O’Neill Regional Park. The 1,020 acres were assembled in three separate actions, including donations and a dedication:

- 260 acres donated by the O’Neill family in 1948 to establish O’Neill Regional Park;
- 130 acres donated by the O’Neill family in 1963; and
- 630 acres dedicated in Arroyo Trabuco in 1982, in conjunction with the Plano Trabuco (Rancho Trabuco) approval.

## **1.5 Chiquita Ridge/Tijeras Creek**

In conjunction with the Plano Trabuco approval in 1982, approximately 450 acres were dedicated along Tijeras Creek and Chiquita Ridge. The 1990 dedication required for the Las

Flores Planned Community also included additional dedication acreage along Chiquita Ridge and an important natural corridor that connects the Arroyo Trabuco and Chiquita Canyon.

**1.6 Total Acreage of Habitats and Listed Species Protected Prior to the 1993 Planning Agreement**

Habitat and open space areas protected within the planning area as a result of pre-1993 donation, acquisition and dedication actions total about 13,200 acres. These areas are depicted on *Figure 6* and include Caspers Wilderness Park (7,180 acres), O’Neill Regional Park (2,130 acres), and NAS Starr Ranch (3,892 acres).

The following is a summary of major vegetation communities protected within these lands.

Acres Protected	Coastal Sage Scrub	Chaparral	Riparian	Woodlands (non-riparian)	Grasslands
	6,320	2,150	1,840	960	1,640

Populations of listed species found on habitats within these lands include 48 California gnatcatcher locations and major and important populations in key locations of arroyo toads in San Juan Creek and Bell Canyon, respectively, within Caspers Wilderness Park.

**SECTION 2.0 SECTION 4(d) PERMITS, SECTION 7 CONSULTATIONS AND OTHER REGULATORY ACTIONS OCCURRING SUBSEQUENT TO THE 1993 PLANNING AGREEMENT AND PRIOR TO PREPARATION OF THE DRAFT NCCP/MSAA/HCP**

Execution of the 1993 Southern NCCP Planning Agreement brought with it the requirement that all projects involving conversions of coastal sage scrub habitat during and prior to completion of the NCCP planning process must be reviewed for consistency with prescribed “interim take” standards applied pursuant to the 4(d) rule for the coastal California gnatcatcher. The resulting issuance of 4(d) permits range from permits for individual residential lots to larger scale land subdivisions, including areas such as Coto de Caza, Forster Ranch and Talega. Additionally, a number of Section 7 consultations involving the USACE and USFWS have involved large-scale actions such as the Foothill Transportation Corridor-North extension to Oso Parkway and the San Juan Hills High School and Whispering Hills Estates project. The review of these actions (including both an assessment of habitat areas protected and habitat areas impacted) contributes to an understanding of the recent conservation planning landscape and the opportunities for habitat “connectivity” via habitat linkages and wildlife corridors that could be addressed during the review of the proposed Habitat Reserves Alternatives and Conservation Strategy identified

later in this Chapter and evaluated more fully in *Chapter 9*. Finally, some projects have proceeded with a combination of 4(d) permits and *Section 7* consultations for non-coastal sage scrub listed species. Open space set aside under these regulatory actions prior to preparation and approval of the NCCP/MSAA/HCP is shown in *Figure 116 (Pre-NCCP/MSAA/HCP Open Space Protected as Part of Section 4(d) and Section 7 Actions)*.

**2.1 San Juan Creek Watershed**

Due to the detailed information available, this section reviews impacts to listed species and associated habitats and species/habitats protected. A number of small-scale 4(d) permits were issued for small projects and individual lots with mitigation fee and other requirements. The analysis presented in this section focuses only on larger projects involving significant resource areas and protected areas or other mitigation commitments (*e.g.*, long-term funding commitments for future NCCP management) that are likely to contribute to implementation of the Southern NCCP/MSAA/HCP.

The following is a summary of impacted habitat/gnatcatcher pairs and mitigation requirements, including protected habitat and protected gnatcatcher pairs for the location and extent of each of the state/federal regulatory actions cited in this subsection that occurred between 1993 and 2004.

**a. Foothill Transportation Corridor North (FTCN) – Antonio Parkway to Oso Parkway Section 7 Consultation**

In 1996, the Foothill/Eastern Transportation Corridor Agency (F/ETCA) in cooperation with the ACOE processed a Section 7 consultation through the USFWS regarding potential impacts to the California gnatcatcher resulting from construction of the portion of the Foothill Transportation Corridor from Antonio Parkway to Oso Parkway. As a result of this consultation, approximately 1,174 acres of habitat within Upper Chiquita were protected through the F/ETCA acquisition of a conservation easement. Of the 1,182 acres, 855 acres were designated as mitigation for gnatcatcher impacts, with another 327 of the 1,174 acres identified as a mitigation bank for future projects (the Chiquita Canyon Conservation Bank). The 1,174 acres were made available by RMV for conservation easement acquisition by the F/ETCA.

Impacted Coastal Sage Scrub Acres	Protected Coastal Sage Scrub Acres	Impacted California Gnatcatcher Locations	Protected California Gnatcatcher Locations
68	507	12	101

**b. Las Flores Mitigation**

In 1990, about 473 acres were dedicated to be added to the O’Neill Regional Park as part of the Las Flores Planned Community approval by the County of Orange, a portion of which is within Arroyo Trabuco and other portions of which are along Chiquita Ridge. Because the actual dedication occurred subsequent to the 1993 Southern NCCP/MSAA/HCP Planning Agreement (in 1995) it is included for discussion in *Section 2* instead of *Section 1*.

**c. Ladera Ranch 4(d) Permit and Corps 404 Permit**

On February 10, 1998, USFWS issued its 4(d) permit for the 4,000-acre Ladera Master Planned Community. The 4(d) permit addressed impacts of the proposed development of about 2,400 acres on coastal sage scrub and the coastal California gnatcatcher. Total impacts on this habitat and species are indicated in the table below. Total protected habitat under the 4(d) permit is approximately 1,608 acres. The Chiquita Ridge portion of the dedication is contiguous with the prior Las Flores dedication. Another portion of the dedication area includes the slopes above Arroyo Trabuco.

Impacted Coastal Sage Scrub Acres	Protected Coastal Sage Scrub Acres	Impacted California Gnatcatcher Locations	Protected California Gnatcatcher Locations
29	315	2	43

Mitigation for the Ladera USACE 404 permit included the requirement for dedication of 201 acres in Arroyo Trabuco in an area contiguous with prior RMV dedications in Arroyo Trabuco.

**d. Antonio Parkway Extension 4(d) Permit**

The 4(d) permit was approved on August 5, 1996.

Impacted Coastal Sage Scrub Acres	Protected & Restored Coastal Sage Scrub Acres	Impacted California Gnatcatcher Locations
14	31	8

**e. Arroyo Trabuco Golf Course Section 7 Consultation**

On June 11, 2003 the USFWS issued a Biological Opinion on the Arroyo Trabuco Golf Course and its effects on the least Bell’s vireo and California gnatcatcher.

Impacted Coastal Sage Scrub Acres	Protected Coastal Sage Scrub Acres	Impacted California Gnatcatcher Locations	Protected California Gnatcatcher Locations
12	55	Up to 4	10

Total habitat protected is 310 acres (223 acres within Arroyo Trabuco to be dedicated for an addition to O’Neill Park, 38 acres of upland to be added to the Ladera Ranch Open Space Conservation Easement and 49 acres to be dedicated via a conservation easement in favor of CDFG) – see *Figure 116*.

Within the 310 acres protected, significant habitats and species protected through the dedication program included:

- 100 acres of riparian habitat that supported 11 nesting least Bell’s vireos and a single male vireo in year 2000 surveys;
- 29 acres of marsh/wetlands, 1.5 acres of freshwater swale, and 0.75 acre of open water; and
- 60 acres of valley needlegrass grassland, 29 acres of annual grassland and 4.6 acres of other grasslands.

**f. Coto de Caza 4(d) Permits**

Several 4(d) permits have been issued for subdivision development within Coto de Caza (as well as numerous individual home-site permits not analyzed here). Major elements of each of these permits are summarized below:

**1. July 1995 4(d) Permit for PA 10 (A-D)**

Total coastal sage scrub impacts in PA 10 (A-D) were approximately 40 acres. The County required protection measures included:

- **Re-Configure Project Design to Preserve Important Native Habitats:** The proposed plan removes development from within the side canyon areas between planning areas to minimize impacts to natural habitat resources including coastal sage scrub resources and other significant native plant communities.
- **Preserve and Enhance Important Secondary Wildlife Corridor Connections:** The proposed plan preserves wildlife corridor connections between the Bell Canyon Ridgeline and the Canada Gobernadora Valley north of Planning Area (PA) 10A (PA 10.1) and south of PA 10D (PA 10.4). These corridors will be enhanced through plantings of native

tree, shrub and groundcover species to provide additional habitat and cover to encourage continued wildlife use.

- A resource preservation easement was required to protect 130 acres of open space including: (a) 97 acres of coastal sage scrub, (b) 11 acres of chaparral, and (c) 21 acres of oak forest/woodland.
- Restoration of 20 acres of coastal sage scrub and native plant grassland communities within the south golf course connecting into the willow and oak riparian corridor extending the length of the Canada Gobernadora Valley within PA 11.

**2. April 7, 1997 4(d) Permit for PA 2, 8.2 and 17.3**

Impacts and mitigation included:

- 5.8 acres of coastal sage scrub and one gnatcatcher impacted; and
- 3.7 acres of coastal sage scrub preserved and 35.2 acres of exotic invasive weed eradication adjacent to open space in Dove Canyon and Starr Ranch.

**3. December 1997 4(d) Permit Application for PA 8.1, 10.5, 10.6, 14.0 and 17.2**

This 4(d) permit was rejected by the Wildlife Agencies for several reasons including impacts on regional wildlife corridor connectivity.

**4. February 1998 4(d) Permit for PA 8.1, 10.5, 10.6, 14.0 and 17.2**

According to the 4(d) permit:

The proposed project differs from the original IHLMP [Note: Interim Habitat Mitigation Plan] request in the following manner: (1) the project will be modified to remove lots along the western edge of PA 14.0 as well as contain fuel modification within the boundary of PA 14.0. A continuous strip of open space will remain in PA 14.0 adjacent to Sulphur Canyon. The ridgeline-to-ridgeline habitat linkage wildlife corridor between the Foothill Transportation Corridor-South alignment and PA 14 will be a minimum of about 2,000 feet wide; . . . (3) the wildlife corridor between PA 8.1 and PA 17.2 will be expanded by preservation and restoration. The southern boundary of development in PA 8.1 would be 150 feet from the southern edge of the tract; (4) if the County is successful in developing a Resource Conservation District or similar mechanism,

then Coto de Caza Ltd. would record a maximum of \$25 per unit per year assessment against PA 8.1 10.5, 10.6, 14.0 and 17.2. If the County was not successful, then the originally proposed 0.25 cent per square foot per year assessment would remain; and (5) a pro-rata share (a minimum of \$150,000, maximum of \$250,000) will be provided to the County to purchase 15 acres of coastal sage scrub on the Hunt Club Property between Coto de Caza and the Starr Ranch Audubon Sanctuary. The remainder of the Hunt Club Property will be purchased by County of Orange Harbors, Beaches and Parks as parkland.

Habitat protection lands included in the 4(d) permit to offset impacts to five pairs of gnatcatchers and other impacts included:

- 341-acre conservation easement in favor of Orange County;
- 25-acre conservation easement over wetlands in favor of CDFG; and
- 20-acre wetlands mitigation area.

**5. Total Open Space Areas and Conservation Easements in Coto de Caza**

The following is a summary of open space areas and conservation easements in Coto de Caza:

- Resource conservation easements in favor of Orange County (including 214 acres to Caspers Wilderness Park) 861 acres
- Homeowners Association open space easements 150 acres
- Wetlands protection and restoration areas 45 acres
- Golf course riparian areas 51 acres
- General Thomas F. Riley Regional Park 551 acres

The above areas are depicted in *Figure 116*.

**g. GERA Wetlands Mitigation/Conservation Easement Area**

From 1984 to the present, approximately 105 acres of wetlands/riparian habitat has been restored in the Gobernadora Ecological Restoration Area (GERA) as mitigation for various projects including initial sections of the FTCN, Rancho Santa Margarita, Ladera Ranch and others. These areas are permanently protected through a recorded conservation easement. Twelve to 15 pairs of least Bell's vireos and six pairs of willow flycatchers have been identified as occupying the GERA and Gobernadora Creek habitat areas in past surveys.

**h. Saddleback Meadows Section 7 Consultation**

A Biological Opinion (dated October 26, 2001) for a Section 7 consultation was prepared for this 225-acre residential project in the Foothill-Trabuco Specific Plan Area (FTSPA) to address potential impacts to the coastal California gnatcatcher and federally-listed endangered Riverside fairy shrimp. Approximately 97 acres of open space would be irrevocably dedicated under the terms of the Biological Opinion

Impacted Coastal Sage Scrub Acres	Protected/Restored coastal sage scrub Acres	Impacted Gnatcatcher Locations	Protected Gnatcatcher Locations
40.7 acres	64.7	0	2

**i. Live Oak Plaza Section 7 Consultation**

On September 13, 1999, a Biological Opinion was issued for a Section 7 consultation regarding the Live Oak Plaza project in the FTSPA. The consultation involved impacts to a 0.34-acre ephemeral pond providing habitat for the federally-listed endangered Riverside fairy shrimp. Mitigation involved the conservation of 10 acres (9 acres of grassland) and creation of a 0.15-acre seasonal pond and introduction of Riverside fairy shrimp from a vernal pool known to be occupied by the species on the Saddleback Meadows property. Mitigation also included creation of 0.30 acre of riparian scrub around the perimeter of the seasonal pond.

**k. San Juan Hills High School and Whispering Hills Estates Section 7 Consultation**

This January 3, 2003 Section 7 consultation and biological opinion was issued for the overall 546.74-acre site. In addition to the coastal sage scrub and gnatcatcher impacts and protection identified in the Table below, the Section 7 required minimization and mitigation measures, including the following:

- Avoidance of 21 acres of coastal sage scrub;
- Restoration and preservation of 102 acres of coastal sage scrub;
- Submittal of a final coastal sage scrub restoration plan to the Corps and Wildlife Agencies; and
- Preservation of a 160-acre open space onsite.

Impacted Coastal Sage Scrub Acres	Protected/Restored Coastal Sage Scrub Acres	Impacted Gnatcatcher Locations	Protected Gnatcatcher Locations
52	123	8-20	up to 6*

\* include 3 locations within proposed Whispering Hills Open Space and 3 locations within SCE/SDGE Easement.

**I. Summary of Significant Habitat Areas Protected Pursuant to 4(d) Permits and Section 7 Consultations between 1993 and 2003 in the San Juan Creek Watershed**

Section 6.3 has identified actions taken subsequent to the 1993 Planning Agreement and prior to preparation of the Draft NCCP/MSAA/HCP that were designed to protect significant habitat areas. Estimated total habitat protected pursuant to major 4(d) permits and Section 7 consultations between 1993 and 2003 is about 5,500 acres.

Significant protected habitat and species include:

Coastal Sage Scrub Acres*	Riparian Acres	California Gnatcatcher Locations	Least Bell's Vireo Nest Sites	Southwestern Willow Flycatcher Nest Sites	Riverside Fairy Shrimp Vernal Pool Complexes	San Diego Fairy Shrimp Vernal Pool Complexes
2,030	410	231	22-25	6	3 vernal pool complexes – Chiquita Ridge, Saddleback Meadows and Live Oak Plaza	1 complex on Chiquita Ridge

\* Acreage and species locations are based on the NCCP database where specific numbers are not reported for project and, as such acreage should be considered an approximation.

As a result of these prior actions several significant blocks of high quality habitat have been protected in the following portions of the San Juan Creek Watershed:

- Arroyo Trabuco has been preserved from west of Ladera all the way to the Cleveland National Forest, providing opportunities for wildlife movement and potential connectivity to the Central Subarea Reserve (part of the Central and Coastal Subregion NCCP/HCP) through the Foothill-Trabuco Specific Plan area.
- Connectivity from Arroyo Trabuco to Chiquita Canyon has been protected.
- Significant portions of Chiquita Canyon (upper Chiquita Canyon and Chiquita Ridge) have been preserved and, in conjunction with General Thomas F. Riley Wilderness Park, have protected a large portion of the major population of gnatcatchers as identified in the Species Accounts (*Appendix E*).
- Connectivity from upper Chiquita Canyon to the NAS Starr Ranch Sanctuary and Caspers Wilderness Park has been protected through conservation easements around the northern and eastern edges of Coto de Caza.

- Major wetlands/riparian areas have been protected in Arroyo Trabuco, GERA and Bell Canyon. These areas contain the key locations of least Bell’s vireo, willow flycatcher and arroyo toad in the planning area. Vernal pool habitat for San Diego and Riverside fairy shrimp is preserved on Chiquita Ridge and also for Riverside fairy shrimp in the FTSPA.

Due to the significance of the habitat areas and the presence of listed and unlisted planning species, each of the above habitat areas provides important elements of a Habitat Reserve both in terms of the habitat resources themselves and in terms of connectivity functions. Individually and collectively, these habitat areas provide significant elements of the San Juan Creek Watershed planning landscape for the consideration of Habitat Reserve Alternatives in *Chapter 9*.

With regard to the protection of listed species, the above habitat areas provide protection for:

- About 254 California gnatcatcher locations out of a total of about 641 locations in the San Juan Creek Watershed north of San Juan Creek;
- About 16 gnatcatcher locations out of a total of locations in the San Juan Creek Watershed south of San Juan Creek in Lucas Canyon;
- All arroyo toad breeding areas in the San Juan Watershed except a relatively small population in San Juan Creek on RMV are protected, including the vast majority of the important and major populations in a key location in the watershed;
- About 24-27 least Bell’s vireo nesting sites out of a total of about 40 sites in the San Juan Creek Watershed, including both key locations of the vireo in Arroyo Trabuco and GERA;
- All six southwestern willow flycatcher in the San Juan Watershed in GERA, including the only key location; and
- All remaining documented vernal pool habitats supporting the San Diego and Riverside fairy shrimp in the San Juan Creek Watershed, except for two pools supporting the Riverside fairy shrimp near the intersection of Antonio Parkway and FTC-N (**status of this area uncertain – in City of Rancho Santa Margarita**).

In addition, by virtue of the collection and retention of specified mitigation fees pursuant to the provisions of the several individual IHLMPs approved for the development of specific estate lots

within the Coto de Caza community, an identified amount of funding exists for the implementation of the management actions within the NCCP/MSAA/HCP Habitat Reserve.

## **2.2 San Mateo Creek Watershed**

In 1990, a land conservancy was established over approximately 1,161 acres of land in and adjacent to Cristianitos Canyon. This conservancy is now known as the Donna O’Neill Land Conservancy at Rancho Mission Viejo and it incorporates development rights that were sold to Talega for conservation purposes to fulfill County requirements in conjunction with the Talega Valley Development. This action is being discussed in this section (rather than in *Section 1*) because the actual transfer of land and commencement of management did not occur until 1995.

The 1,161-acre Donna O’Neill Land Conservancy contains significant habitat resources, particularly woodlands/riparian areas and coastal sage scrub habitat. The Conservancy does not contain documented coastal California gnatcatcher breeding territories (repeated surveys including as recently as 2003 have failed to detect gnatcatchers); however, with its 366 acres of coastal sage scrub vegetation, the Conservancy is strategically situated to provide connectivity as a potential dispersal habitat linkage between significant gnatcatcher populations to the west and immediately south of the planning area and a key location of gnatcatchers in upper Cristianitos Canyon.<sup>2</sup>

Preservation of the lands now in the Conservancy also helps protect the watershed of Cristianitos Creek, benefiting aquatic/riparian resources both within the San Mateo Creek Watershed inside the planning area and significant aquatic resources downstream of the planning area. According to the USFWS/CDFG 4(d) permit, “The conservancy lands will be a significant portion of the southern Orange County NCCP reserve.” (February 10, 1998)

Although the Donna O’Neill Land Conservancy is the only large block of habitat currently protected in the RMV portion of the San Mateo Creek Watershed through prior actions, the various 4(d) permits and Section 7 consultations within the adjacent San Juan Creek Watershed and San Clemente Hydrological Unit have created a series of connectivity “stepping stones” for the major gnatcatcher movement/dispersal areas south and west of the Donna O’Neill Land Conservancy. Areas subsequently protected through 4(d) permits and Section 7 consultations, and other open space protections include substantial portions of key locations of gnatcatchers south (Avenida Pico), west (West San Juan Capistrano and North San Clemente), and north (Lower Arroyo Trabuco, Chiquita Canyon/Western Gobernadora/Chiquadora [Ladera Open Space on Chiquita Ridge, the Upper Chiquita Conservation Area, Las Flores Open Space, Riley

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<sup>2</sup> Gnatcatchers have been documented as using various vegetation types, including chaparral and riparian and highly modified landscapes for dispersal. The lack of documented breeding activity in the Conservancy in no way precludes use of the area for dispersal. (Bailey and Mock 1998)

Wilderness Park and west Coto de Caza Open Space], East Coto de Caza/Starr Ranch, and East Caspers Wilderness Park) of the Donna O’Neill Land Conservancy. The Donna O’Neill Land Conservancy provides an important linkage within an overall area that provides connectivity for gnatcatcher movement from large populations to the south of the planning area to the major population/key location located north of San Juan Creek in Chiquita Canyon/Chiquadora and other key locations west of the Conservancy.

**2.3 San Clemente Hydrologic Unit**

**a. Talega Development Project 4(d) Permits**

As in the case of Coto de Caza, a series of 4(d) permits has been issued over time for the Talega Development which encompasses 3,510 acres that are located north and south of Pico Avenue in the jurisdictions of the County of Orange and City of San Clemente. Major elements of each of these permits are summarized below.

**1. February 10, 1998 4(d) Permit for Talega Development Subarea A**

Impacted Coastal Sage Scrub Acres	Restored Coastal Sage Scrub Acres	Protected Coastal Sage Scrub Acres
56	47	366*

\* (within the present Donna O’Neill Land Conservancy as overall mitigation for the entire Talega Development – see Section 6.3.2)

**2. October 20, 1999 4(d) Permit for Development of 214 Acres within Talega Subarea B**

Impacted Coastal Sage Scrub Acres	Restored Coastal Sage Scrub Acres	Protected Coastal Sage Scrub Acres	Impacted California Gnatcatcher Locations
23	23	23	0

The most significant aspect of the 4(d) permit for NCCP/MSAA/HCP purposes was the commitment of annual habitat management funding from the entire Talega Development. Permit Condition #4 requires:

“An annual \$25 per unit fee contribution from each residential unit within the entire Talega Development Area to be used for management of the Southern Subregion NCCP preserve upon its establishment. Assessment of the annual fee is to be implemented in perpetuity. In

the event that the Southern Subregion NCCP is not completed within 4 years of approval of this 4(d) permit request, then all funds collected and all future payments shall be transferred to an appropriate conservation organization, as directed by the Wildlife Agencies, to be used for habitat management purposes.” (emphasis added)

**3. March 20, 2001 4(d) Permit for Development of 73 Acres within Subarea B**

Impacted Coastal Sage Scrub Acres	Restored Coastal Sage Scrub Acres	Protected Coastal Sage Scrub Acres	Impacted California Gnatcatcher Locations
26	26	26	2

Talega proposed to “consolidate the restoration effort by planting the outstanding 31 acres of coastal sage scrub [from the October 20, 1999 4(d) permit requirements] adjacent to the [completed] 40 acre restoration site at Nob Hill.” With regard to the March 20, 2001 4(d) permit, “the final restoration sites will be approved by the Wildlife Agencies either onsite south of Avenida Pico and on Nob Hill in the center of the Talega development and/or offsite at Forster Ranch.”

**b. March 20, 1998 Forster Ranch (4d) Permit for Development of 904 Acres in San Clemente**

Impacted Coastal Sage Scrub Acres	Protected Coastal Sage Scrub Acres	Impacted California Gnatcatcher Locations	Protected California Gnatcatcher Locations
94	50*	16	2

\*(part of 250-acre native vegetation area for north/south wildlife corridor)

Impacted Thread-leaved Brodiaea Plants	Protected Thread-leaved Brodiaea Plants	Translocated Thread-leaved Brodiaea Plants
4,289	11	4,000 corms on 15 acres

Also required was a 75-acre revegetation plan with a maximum implementation cost of \$450,000 (equal to about \$6,000 per acre).

**c. August 29, 2003 Marblehead Coastal 4(d) Permit for Development of Portions of a 247-acre Parcel in San Clemente**

Impacted Coastal Sage Scrub Acres	Protected/Restored Coastal Sage Scrub Acres	Impacted California Gnatcatcher Locations	Protected California Gnatcatcher Locations
3	80	0	2

Marblehead Coastal was permitted to develop about 140 acres of the site. Under the 4(d) Permit, the applicant was required to protect about 101 acres within a biological conservation easement (BCE) as part of a Habitat Management Plan and provide long-term funding adequate to adaptively manage the BCE. The restored BCE would contain about 11.5 acres of wetlands/riparian/mixed riparian scrub habitat, 80 acres of coastal sage scrub, 4 acres of native grasslands, and a Blochman’s dudleya reserve.

**d. January 31, 1997 4(d) Permit for Pacific Point Project in San Juan Capistrano**

Impacted Coastal Sage Scrub Acres	Protected/Restored Coastal Sage Scrub Acres	Impacted California Gnatcatcher Locations	Protected California Gnatcatcher Locations
15	22	1	up to 2

The 4(d) permit requirements also included “a funding mechanism to provide for management in perpetuity” and a 5-year exotic vegetation control program on 23 acres “at an appropriate location within the Southern Subregion Planning Area.”

**e. August 21,1995 San Juan Villas 4(d) Permit for Development in San Juan Capistrano**

Impacted Coastal Sage Scrub Acres	Protected/Restored Coastal Sage Scrub Acres	Impacted California Gnatcatcher Locations	Protected California Gnatcatcher Locations
37	56	3	Unknown*

\* NCCP database includes 3 locations in open space associated with project.

The 4(d) permit also included a requirement for funding a 30-acre artichoke thistle removal program on public open space within the City of San Juan Capistrano.

**f. February 12, 1999 Glendale Federal (AKA Camino Ronda) 4(d) Permit for Development in San Juan Capistrano**

The Glendale Federal Open Space area (AKA Camino Ronda) in San Juan Capistrano includes about 930 acres of natural habitat, including 300 acres of coastal sage scrub and 565 acres of grassland, as well as 34 California gnatcatcher locations.

**g. Prima Deshecha Landfill Emergency Permit**

The following permits have been issued by the resource agencies to the IWMD for projects within the Prima Deshecha Landfill which occurred after the 1993 Planning Agreement and prior to the preparation of the draft NCCP/MSAA/HCP:

- Permit No. 980065200-ESL, June 17, 2002. An Individual Permit was authorized by the USACE for the implementation of the Prima Deshecha Landfill Landslide Remediation Project based on *Riparian Habitat Mitigation Program Prima Deshecha Landslide Remediation Project Modified Preferred Alternative* and the *Coastal Sage Scrub Mitigation Program Prima Deshecha Landslide Remediation Project Modified Preferred Alternative*. The intent of the project was to stabilize a large landslide immediately adjacent to the Prima Deshecha Cañada Creek and to re-align and restore the creek into an engineered bio-mitigation channel.
- USFWS Section 7 Consultation. Permit No. 980065200-ESL also included a Section 7 Consultation with the USFWS to address impacts to the least Bell's vireo, a federally- and state-listed Endangered species and California gnatcatcher, a federally-listed Threatened and state Species of Special Concern. The USFWS issued Biological Opinion (BO) 1-6-02-F-703 to the USACE on February 8, 2002.
- RWQCB Section 401 Water Quality Certification Permit No. WPN 18-2001 112.02 (File No. 01C-112). On February 11, 2002, the RWQCB issued a permit authorizing the Prima Deshecha Landfill Landslide Remediation Project.
- CDFG Streambed Alteration Agreement (SAA) R5-2001-0301. On February 19, 2001, CDFG issued an SAA for the project authorizing permanent impacts to 3.26 acres of stream and habitat. Mitigation for the loss of habitat was addressed in the *Riparian Habitat Mitigation Program Prima Deshecha Landslide Remediation Project Modified Preferred Alternative*.
- CDFG 2080.1 Consistency Determination. The least Bell's vireo is both a state and federal listed Endangered species. Since numerous meetings had been conducted with the

USACE, USFWS, RWQCB, and CDFG staff to avoid, minimize and adequately mitigate for the effects of the project on the vireo and IWMD had obtained authorizations from the USACE (Section 404 Permit No. 980065200-ESL), USFWS (Section 7 Consultation and subsequent BO No. 1-6-02-F-703), and RWQCB (Section 401 Water Quality Certification) based on conservation measures and mitigation measures contained in these permit authorizations, IWMD requested and obtained a consistency determination from CDFG on October 15, 2003, pursuant to the requirements of the California Endangered Species Act, as described in Section 2080.1 of the Fish and Game Code.

- Modification No. 1 to the USACE Permit No. 980065200-ESL. A modification to the original USACE Section 404 Permit was approved by the USACE on August 20, 2002, in response to inadvertent removal of 0.18 acre of mixed sage scrub as well as an additional requirement for the removal of 0.08 acre of mule fat scrub for soil stockpiling in an ephemeral tributary to Prima Deshecha Cañada Channel. As part of Modification No. 1, the original grading footprint was modified to avoid impacts to 0.30 acre of CSS and 0.04 acre of southern willow scrub habitat that was previously authorized for removal by the original USACE permit and associated USFWS to fully mitigate for the new impacts. In addition, the USACE requested re-initiation of the Section 7 Consultation (Amendment No. 1 to Biological Opinion No. 1-6-02-F-703) with the USFWS to address the proposed modifications to habitat that had the potential to affect the California gnatcatcher and least Bell's vireo. The USFWS determined in their Biological Opinion issued to the USACE on August 2, 2002, that the proposed action would not likely adversely affect the gnatcatcher or vireo.

Amendment No. 2 to Biological Opinion No. Biological Opinion 1-6-02-F-703. During the landslide remediation activities, the construction geologist observed movement of the landslide underlying the cut slope created by the Landslide Remediation Project indicating that the landslide was still active and could threaten the newly-created Prima Deshecha Cañada Bio-Mitigation Channel. IWMD prepared a Headscarp Grading plan and determined that approximately 0.75 acre of additional CSS habitat resources would require temporary removal. No areas under jurisdiction of the USACE (i.e., wetlands or waters of the U.S.) would be affected by this activity. However, since this activity was to occur within the project areas defined by the permit, the USACE took the lead and requested re-initiation of a Section 7 Consultation with the USFWS for proposed modification to 0.75 acre of CSS and potential effects on the California gnatcatcher. The USFWS issued Amendment No. 2 to BO 1-6-02-F-703 on October 31, 2003.

Extension of CDFG SAA No. R5-2001-0301. An extension of CDFG SAA No. R5-2001-0301 to December 31, 2007, was granted to the IWMD on December 15, 2004.

- Modification No. 2 to Corps Permit No. 980065200-ESL. Modification No. 2 to the original Corps permit was approved by the Corps on February 22, 2005, to address impacts to 0.26 acre of coastal sage scrub (CSS) and 0.04 acre riparian resources associated with the implementation of the A2/B1 Liner and Desilting Basin project.
- Amendment No 3 to USFWS Biological Opinion No FWS-OR-703.13. The Corps consulted with the USFWS as part of the request for Modification No. 2 980065200-ESL for the A2/B1 Liner and Desilting Basin project. The USFWS issued the amended BO on February 18, 2005.
- Amendment No. 1 to CDFG SAA No. R5-2001-0301. CDFG approved Amendment No. 1 to SAA No. R5-2001-0301 for the A2/B1 Liner and Desilting Basin project on February 1, 2005.
- Expansion of the Section 401 Water Quality Certification for the A2/B1 Liner and Desilting Basin Project. RWQCB approved the expansion of Permit No. WPN: 18-2001 112.02haasj on February 11, 2005, for the A2/B1 Liner and Desilting Basin project.

The construction portion of the Prima Deshecha Landslide Remediation Project was completed in March 2004. Implementation of the coastal sage scrub (CSS) mitigation program is complete. The riparian restoration construction was completed in the fall of 2004 and both programs will be monitored over the subsequent five years or until establishment pursuant to the performance criteria contained in the approved plans has been achieved and signed off by the state and federal resource agencies.

Regulatory permits were obtained from the USACE, USFWS, CDFG, and RWQCB for the A2/B1 Liner Project that included an approved mitigation program to offset the loss of 0.26 acre of CSS, 0.09 acre of mule fat scrub habitat, and 0.02 acre of jurisdictional waters of the U.S. Mitigation was authorized at a ratio of 1:1 through an expansion of the existing bio-mitigation program within and immediately adjacent to Prima Deshecha Cañada Channel.

Project	Impacts				Restored	
	Coastal Sage Scrub	Riparian	California Gnatcatcher	Least Bell's Vireo Territories Impacted <sup>1</sup>	Coastal Sage Scrub	Riparian
Landslide Remediation Project	5.50	3.26	0	6	11.00	11.46
Landslide Remediation Project Modification No. 1	0.98	0.08	0	0	0.30 avoided & 1.36 restored	0.04 avoided & 0.12 restored
Landslide Remediation Project Mod. No. 2 for Headscarp Grading	0.75	0.00	0	0	1.50	0.00

Project	Impacts				Restored	
	Coastal Sage Scrub	Riparian	California Gnatcatcher	Least Bell's Vireo Territories Impacted <sup>1</sup>	Coastal Sage Scrub	Riparian
Modification No. 3 Phase A2/B1 & Desilting Basin Project	0.25	0.09	0	0	0.25	0.90
<b>Totals</b>	<b>7.48</b>	<b>3.43</b>	<b>0</b>	<b>6</b>	<b>14.11</b>	<b>12.48</b>
Note: (!) In 2001, nine LBV territories were present. Six LBV territories were impacted by the landslide remediation project. 2005 surveys identified 10 LBV territories currently present at the site.						

## 2.4 Summary of Significant Habitat Areas Protected Pursuant to 4(d) Permits and Section 7 Consultations between 1993 and 2003 in the San Clemente Hydrologic Unit

Total habitat protected pursuant to 4(d) permits and Section 7 consultations between 1993 and 2003 in the San Clemente Hydrological Unit totals about 3,380 acres (including the 930 acres of the Glendale Federal/Camino Ronda Open Space). Significant protected habitat and species (protected gnatcatcher populations totals are derived from the NCCP/MSAA/HCP database rather than from the 4(d) permit summaries which tend to often not identify protected gnatcatcher pairs) include:

- 660 acres of coastal sage scrub
- 51 acres of riparian habitat
- 59 California gnatcatcher locations (34 locations on the Glendale Federal/Camino Ronda Open Space)

### SECTION 3.0 SUMMARY OF PRE-NCCP/MSAA/HCP HABITAT PROTECTION COMMITMENTS WITHIN THE PLANNING AREA

Based on the information presented in this Appendix, this section summarizes the overall open space, habitat and species impacts and protection related to actions taken before and subsequent to the signing of the 1993 Planning Agreement for the Southern Subregion, including 4(d), Section 7 consultations, and other actions resulting in open space dedications/acquisitions not specifically discussed in the preceding section.

The prior actions, individually and on a cumulative basis conserve approximately 29,970 acres and serve to protect significant areas of high quality habitat and protected gnatcatcher dispersal opportunities in the San Juan Creek and San Mateo Creek watersheds, and in the San Clemente

Hydrologic Unit (see *Figure 6 – Cumulative Open Space Protected Prior to Completion of the NCCP/MSAA/HCP – 1948 through 2003*). These actions also serve to protect habitat linkages and wildlife movement corridors, listed species sites and their habitat, and provide for improved conservation planning opportunities within the subregion. Using the GIS database, the range of benefits provided by these prior open space protection and regulatory actions is discussed in the following sections.

### **3.1 Habitat Protection and Connectivity for Wildlife Movement**

With regard to assembling a future NCCP/MSAA/HCP Habitat Reserve, prior actions by participating landowners and local jurisdictions, working with state and federal agencies, have contributed significantly to habitat protection and wildlife movement connectivity in the following portions of the planning area. *Figure 117* presents an overlay of the Habitat Linkages/Wildlife Corridors map on areas protected prior to the preparation of the draft NCCP/MSAA/HCP:

- Arroyo Trabuco has been protected from the area to the west of Ladera Ranch all the way to the Cleveland National Forest, protecting an important population in a key location of least Bell's vireo and an important population of gnatcatchers. The Arroyo Trabuco also provides habitat for a variety of raptors and other sensitive species such as coastal cactus wren, yellow warbler, yellow-breasted chat, orange-throated whiptail, arroyo chub, Cooper's hawk and white-tailed kite. Very significantly, wildlife movement connectivity from the planning area into the National Forest has been assured.
- A significant portion of the major population of gnatcatchers in upper Chiquita Canyon and on Chiquita Ridge has been protected. Connectivity between these populations and the important population in a key location around Coto de Caza into the Starr Ranch Audubon Sanctuary has been provided for through conservation easements (see *Figure 118 – Listed Species in Pre-NCCP/MSAA/HCP Open Space*).
- Major riparian habitat containing key locations of least Bell's vireo and willow flycatcher has been protected and expanded through GERA (see *Figure 118*). Together with the protected Arroyo Trabuco populations, both key locations of the least Bell's vireo in the planning area and the only key location of willow flycatcher have been protected.
- Actions leading to the creation of NAS Starr Ranch Sanctuary and Caspers Wilderness Park (both north and east of San Juan Creek) have created a very large block of protected habitat that links directly with the Cleveland National Forest [and with the San Mateo Wilderness]. This area encompasses all of the important population in a key location of arroyo toads within Bell Canyon and almost all of the major population in a key location

of arroyo toads in San Juan Creek (*i.e.*, all but the 1,600 feet of the key location extending downstream of the confluence of Bell Canyon with San Juan Creek). Important sources of coarse sediments essential to arroyo toad habitat emanating from Bell Canyon and Lucas Canyon have been protected (see *Figure 118*). These areas also contain the easternmost locations of gnatcatchers found within the planning area.

- The Donna O’Neill Land Conservancy contains important habitat resources, including several sensitive plant species (*e.g.*, a portion of a major population/key location of many-stemmed dudleya, protects a portion of the watershed of Cristianitos Creek and assures an important connectivity function for gnatcatcher movement between populations to the south outside of the planning area and the key location of gnatcatchers in upper Cristianitos Canyon.
- Important habitat “stepping stones” have been protected for gnatcatchers west, south and north of the Donna O’Neill Land Conservancy and provide connectivity to the major population of gnatcatchers in Chiquita Canyon/Chiquadora Ridge.

### **3.2 Protection for Listed Species**

As indicated in the above section and in *Figure 118*, significant populations of listed species have been protected through prior actions, including:

- Overall, about 386 California gnatcatcher locations out of 737 locations within the planning area have been protected.
- Overall, 25-27 least Bell’s vireo nesting sites out of 54 sites within the planning area have been protected.
- Overall, six southwestern willow flycatcher nesting sites out of seven sites within the planning area have been protected
- Overall, two of five vernal pool complexes supporting Riverside fairy shrimp have been protected (see earlier comment concerning the two pools near the intersection of Antonio Parkway and Ortega Highway).
- Overall, one of three vernal pool complexes supporting San Diego fairy shrimp has been protected.
- Substantial populations of non-listed planning species have also been protected.

### **3.3 Conservation Planning Opportunities**

Prior actions by participating landowners and jurisdictions have also created significant additional conservation planning opportunities for consideration in the review of Habitat Reserve Alternatives:

- The protection of Arroyo Trabuco and a portion of the Saddleback Meadows site create opportunities for wildlife movement connectivity through the FTSPA to the CNF and Central Subarea Reserve component of the Central/Coastal Subregion NCCP/HCP Habitat Reserve System.
- With the protection of the upper and western portions of Chiquita Canyon, opportunities have been created for the long-term protection of Chiquita Creek.
- Substantial portions of the major population in a key location of gnatcatchers within Chiquita Canyon/Gobernadora/Chiquadora Ridge have already been protected (*i.e.*, 210 of 404 locations), creating opportunities for achieving a high level of protection for the overall major population.
- The creation of General Thomas F. Riley Wilderness Park provides an opportunity for linking gnatcatcher populations protected in the Upper Chiquita Conservation Area with the portion of the major population found on Chiquadora Ridge.
- The protection of the large block of habitat consisting of the NAS Starr Ranch Sanctuary and Caspers Wilderness Park creates an opportunity for linking the Gobernadora Creek area to habitat supporting gnatcatchers in the Chiquita sub-basin and to expansive blocks of habitat along San Juan Creek.
- The creation of GERA provides nesting for several listed and unlisted species, opportunities for further riparian habitat restoration within the Gobernadora Creek area and the need for managing water flows affecting existing and future wetlands/riparian habitat resources.
- The protection of sources of coarse sediment in Bell Canyon and Lucas Canyon, combined with protection provided by the Cleveland National Forest, is complemented by protection of important sources of coarse sediment in Verdugo Canyon so that arroyo toad habitat can be maintained.
- With the protection of the key location of the vast majority of the important and major population of arroyo toads in Bell Canyon, previous County efforts at giant reed

eradication in areas upstream of RMV properties create an opportunity for continuing with a comprehensive giant reed eradication program in downstream areas in order to maintain and help restore habitat for arroyo toads, least Bell's vireo and other aquatic species within San Juan Creek.

- The creation of the Donna O'Neill Land Conservancy assured contiguous habitat linkage for dispersing gnatcatchers with the important population in a key location of gnatcatchers in upper Cristianitos Canyon and for extending watershed protection further into the headwaters of Cristianitos Creek.
- The protection of gnatcatcher "stepping stone" functions within the San Clemente Hydrologic Unit in existing conservation easements and open space designations by the cities of San Juan Capistrano and San Clemente provides important supplemental connectivity serving the proposed Habitat Reserve.
- Long-term habitat funding requirements established through Talega and Coto de Caza 4(d) permits help create a funding base for the implementation of the Habitat Reserve Management Program (HRMP) for the Habitat Reserve.

### **3.4 Non-NCCP Federal Actions Contributing to Conservation Planning Options**

In addition to those actions taken by participating landowners and local jurisdictions, actions involving the creation of the Cleveland National Forest (CNF) by the U.S. Department of Agriculture and the San Mateo Wilderness Area also contribute to conservation planning options and considerations. The CNF was created via several federal actions that culminated in 1908. Within the Southern Subregion, the CNF covers approximately 40,000 acres within the subregion, including the upper portions of the San Juan Creek Watershed. Significant sources of coarse sediments important to the functioning of the San Juan Creek habitat system (*e.g.*, important to arroyo toad habitat) are found within the CNF. Although elevations in the CNF are too high for gnatcatcher populations, ranging from 1,500 feet to more than 5,000 feet, the northern portion of the CNF provides important connectivity functions linking the Southern Subregion with the Central and Coastal NCCP Subregion and the Western Riverside County MSHCP for a variety of wildlife such as the mountain lion. Overall, the CNF provides a large block of contiguous habitat extending from central Orange County through Southern Subregion into Camp Pendleton.

Outside the subregion this habitat block extends to Interstate 15 in north San Diego County and connects with the San Mateo Wilderness (*Figure 119 – Relation of Southern Subregion to the CNF and San Mateo Wilderness Area*). The San Mateo Wilderness covers about 39,700 acres and extends eastward into Riverside County and encompasses portions of the upper San Mateo

Creek watershed including Devil Canyon, a documented spawning location of the southern steelhead. Federal Wilderness designations are extremely restrictive and allow only passive recreation and day use.