Marine Corps Base Camp Pendleton

Least Bell's Vireo Efficiencies & Mission Flexibilities Under the Riparian Biological Opinion

Presented by

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Environmental Security, Wildlife Management Branch

Camp Pendleton

- **Founded in 1942**
- **125,000 acres – largest West coast expeditionary training facility, including amphibious training**
- **Mission: "promote combat readiness"**

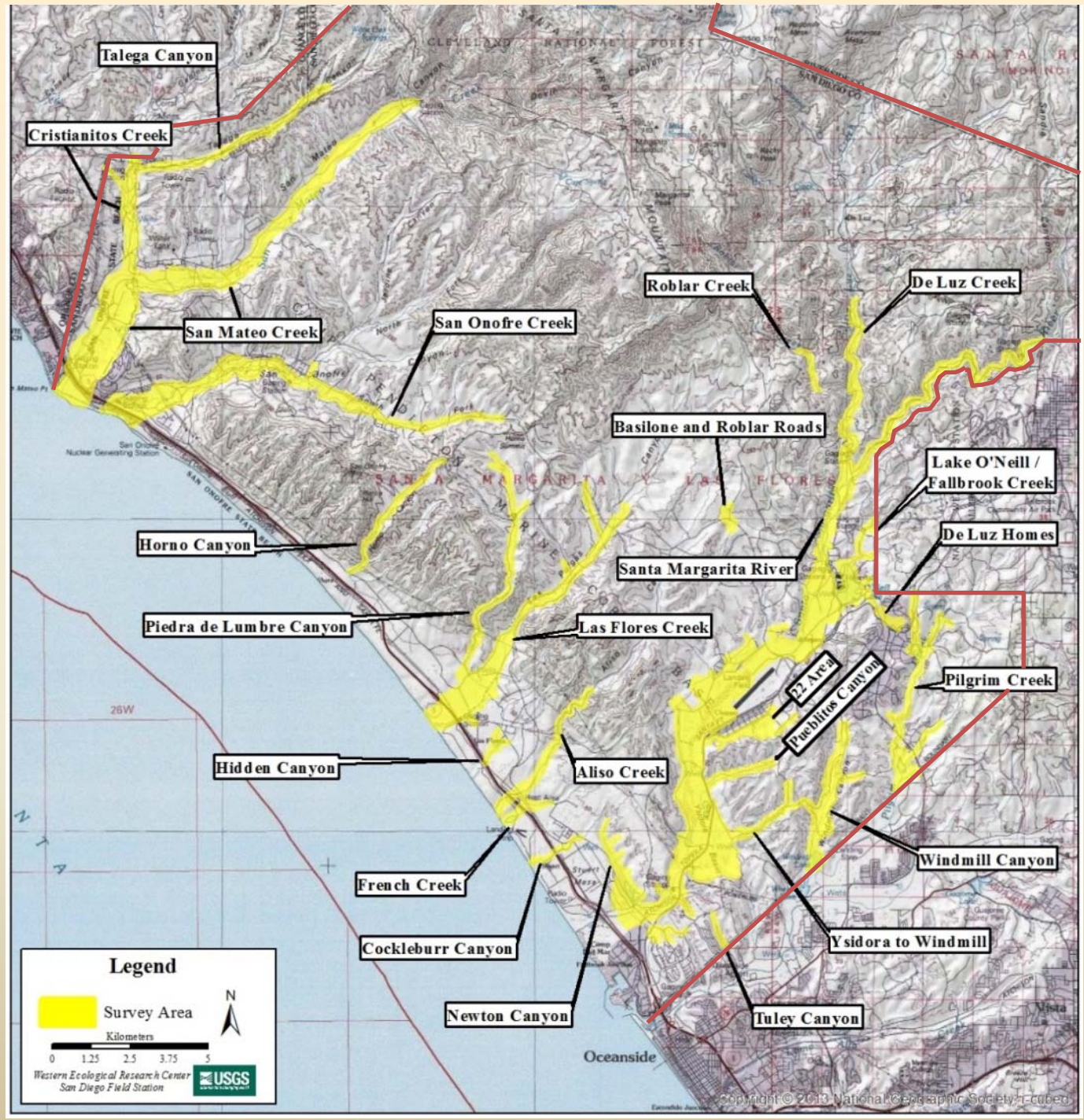
Finding a Balance

Endangered Species Act Sec. 7(a)1, 7(a)2
Responsibility to consult with USFWS

Sikes Act (1960)
Cooperative conservation activities are promoted while allowing military lands to continue to meet the needs of military operations.

Integrated Natural Resources Management Plan

- Marines need quality land to train on
- Self-regulation builds trust and maintains flexibility
- The Base is not an island; Regional biological diversity concerns


Talega Canyon
Cristianitos Creek
San Mateo Creek
San Onofre Creek
Roblar Creek
De Luz Creek
Basilone and Roblar Roads
Lake O'Neill / Fallbrook Creek
De Luz Homes
Horno Canyon
Santa Margarita River
Piedra de Lumbre Canyon
Las Flores Creek
22 Area
Pueblitos Canyon
Pilgrim Creek
Hidden Canyon
Aliso Creek
Windmill Canyon
French Creek
Cockleburr Canyon
Ysidora to Windmill
Newton Canyon
Tuley Canyon
Oceanside
Vista
Legend
Survey Area
Kilometers
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Western Ecological Research Center
San Diego Field Station
USGS
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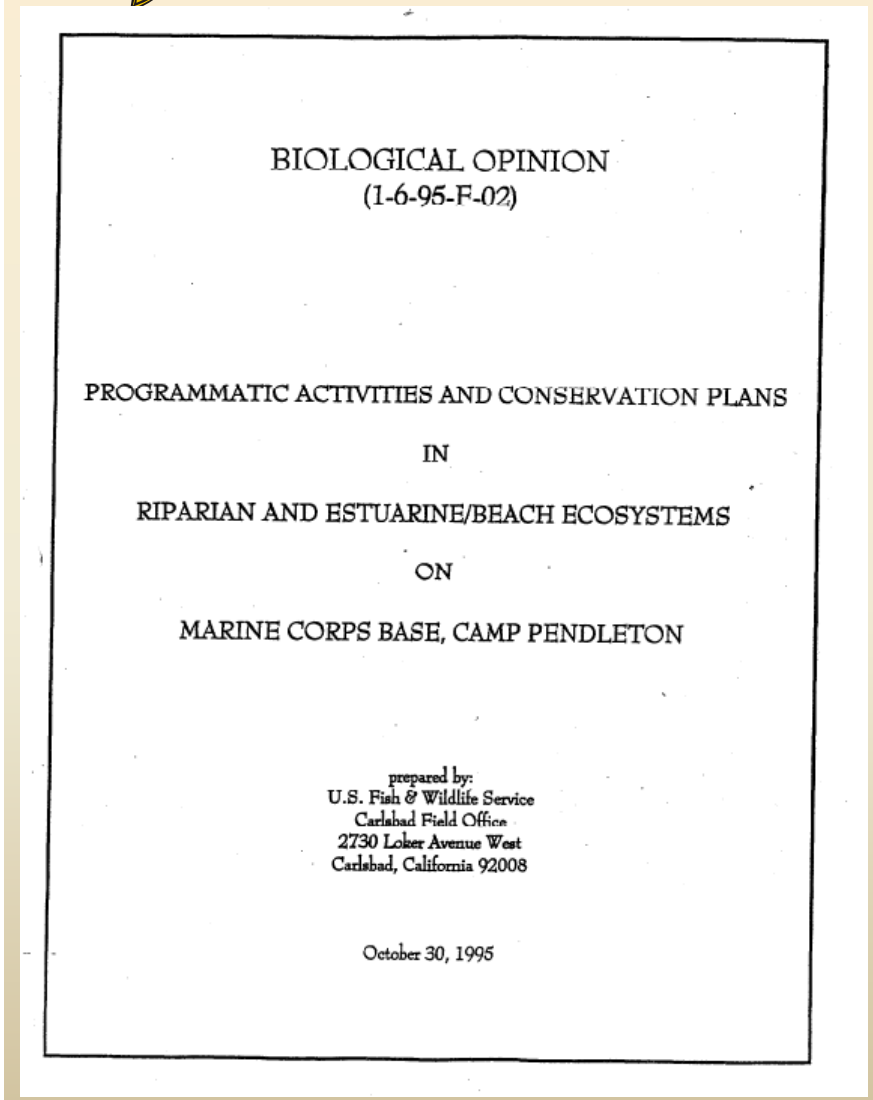
Riparian BO



BIOLOGICAL OPINION
(1-6-95-F-02)

PROGRAMMATIC ACTIVITIES AND CONSERVATION PLANS

IN

RIPARIAN AND ESTUARINE/BEACH ECOSYSTEMS

ON

MARINE CORPS BASE, CAMP PENDLETON

prepared by:
U.S. Fish & Wildlife Service
Carlsbad Field Office
2730 Loker Avenue West
Carlsbad, California 92008

October 30, 1995

Covers:

- Ongoing training
- Infrastructure maintenance activities
- Recreation

- Planned Future Training
- Planned construction projects

- Implementation of a Riparian & Estuarine Conservation Program

T&E Species

Goals

1. Increase mission flexibility on the beaches and across all Base waterways
2. Increase efficiency of doing operations
3. Meet our T&E obligations

Strategies

A. Programmatic instructions to avoid unlawful take
   - Example: schedule activities during non-breeding season

B. Mitigating actions where impacts cannot be avoided
   - Offset the loss through improvements to species/habitat values and functions

Riparian Conservation Plan

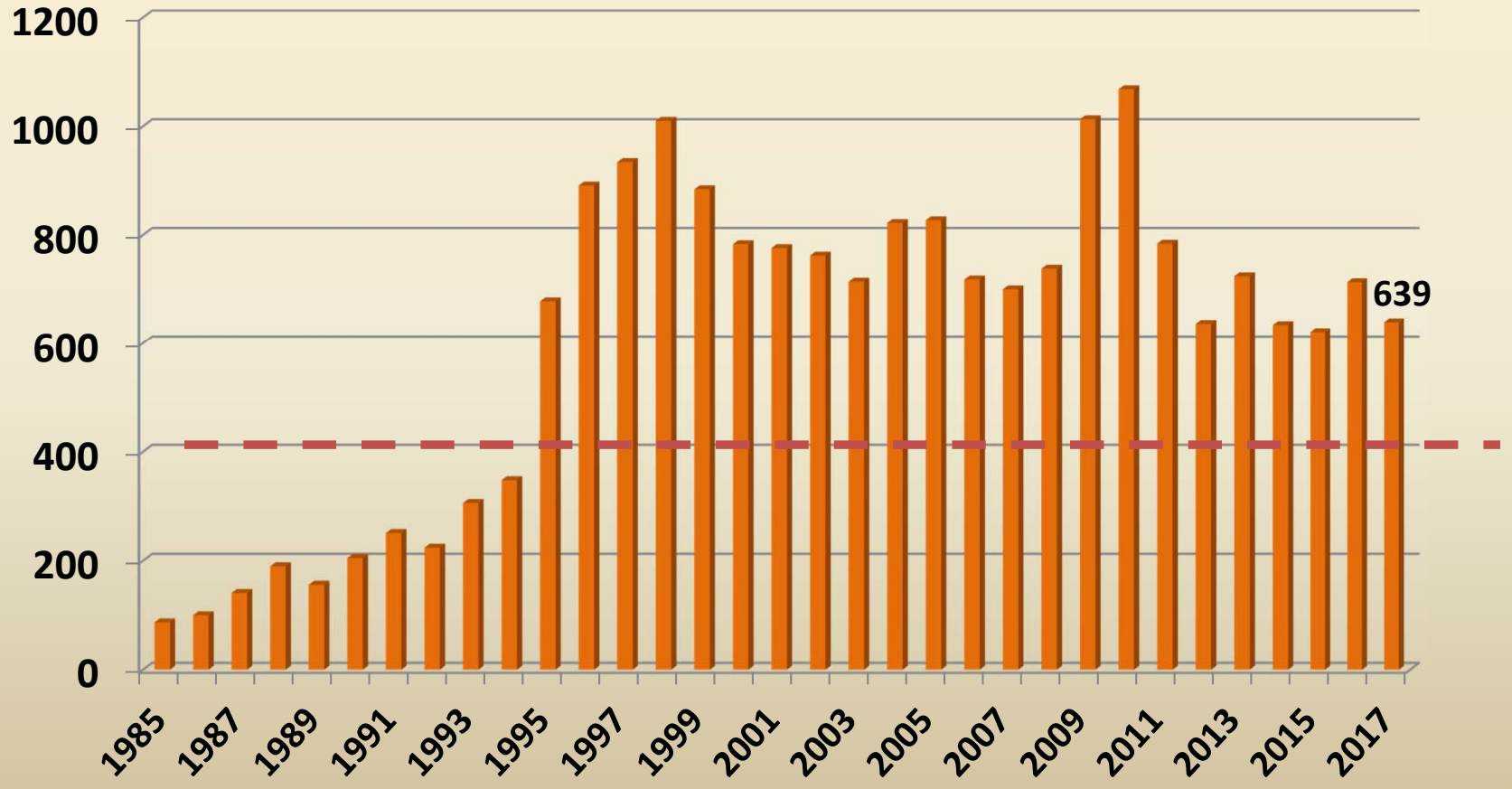
Ecosystem management approach

- “Training and maintaining fighting forces while improving ecosystem integrity and conserving sensitive species.”
- Recovery of endangered species to non-endangered status
- Restoration of riparian functions and values for all riparian species

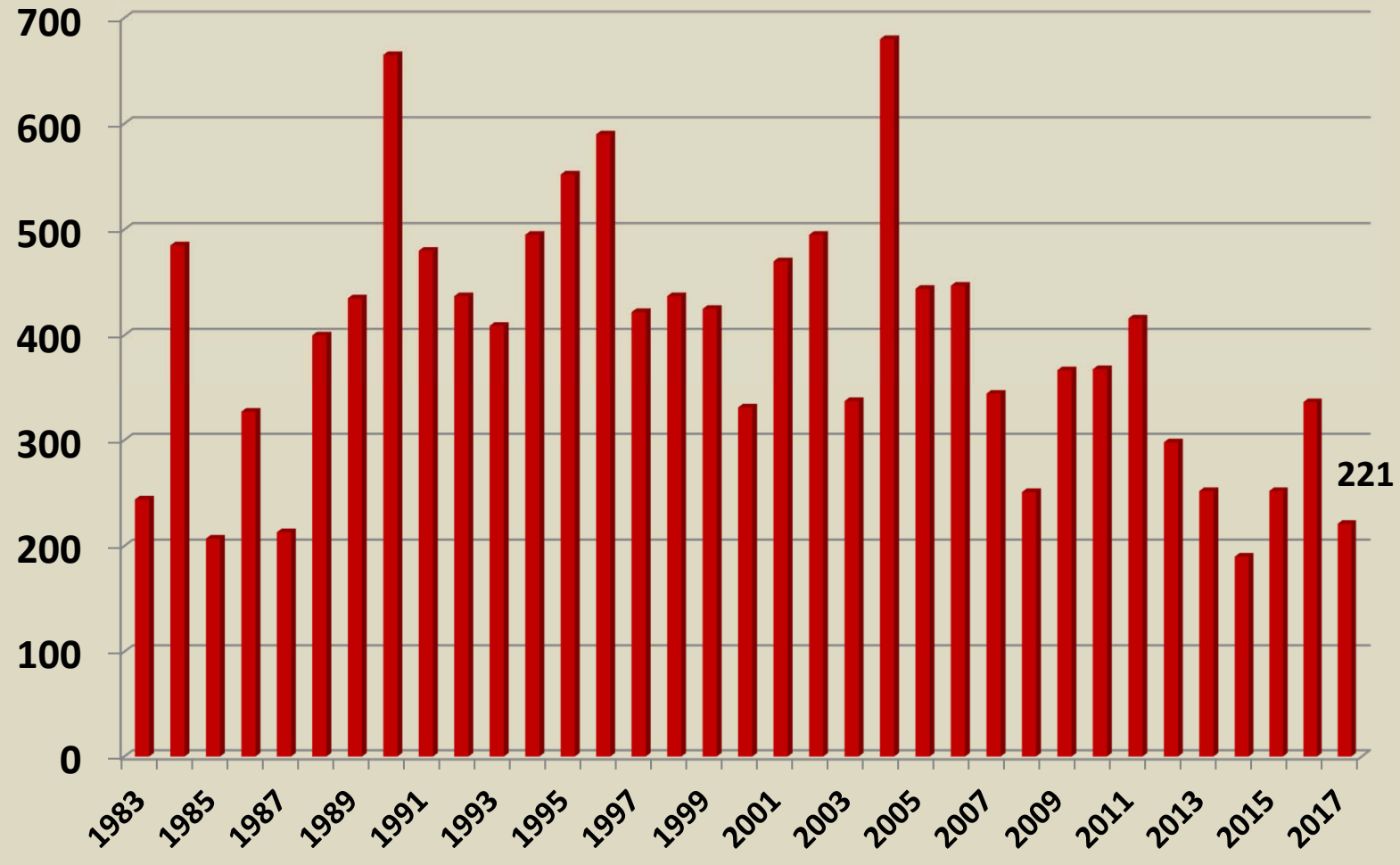
Includes cowbird trapping, aquatic exotic species management, and research studies

Objectives

Number of Territorial Male Vireos
(Population Target = 400)



Brown-headed Cowbird Trap Results



Arundo Removal

1997-2012

- **1,300 ac.** Arundo Treated
- + Follow-Up Treatment

Mission Flexibility

1986 MOU

+

Riparian BO

+

Integrated Natural Resources Management Plan

=

No Critical Habitat Designation

Efficiencies

Projects with no project-specific mitigation required

Year	Class II	Class III	Class IV
2010	1	13	
2011		17	1
2012	2	2	
2013	1		
2014		9	
2015		7	
2016		6	

Actions in Addition to BO

Least Bell's Vireo

- Post-Fire Effects Study (2014-2018)
- Arundo Removal Effects Study
- Cost-savings & partnership with USGS

Southwestern Willow Flycatcher

- Conspecific Song Playback Experiment (2018)
- Informal Consultation

Arroyo Toad

- Emergency Salvage (2017)
- Riparian BO Class II consultation

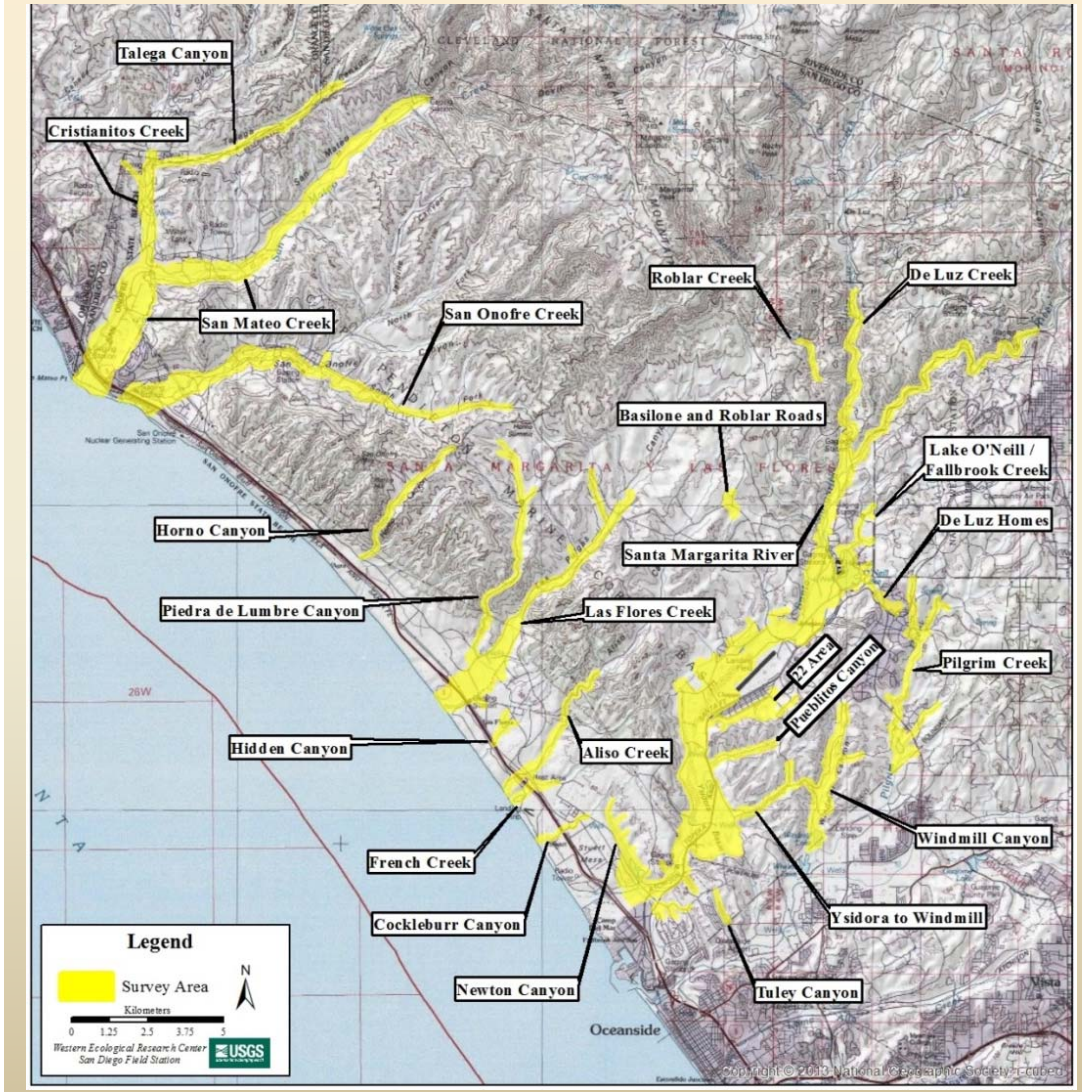
Tidewater Goby

- Emergency Salvage (2015)
- Action under USFWS Authority

Summary

1. Implement measures to avoid impacts where possible
2. Recognition that take is going to happen
3. Work together to ensure the benefits outweigh costs

Create a framework to more easily do beneficial actions, like 7(a)1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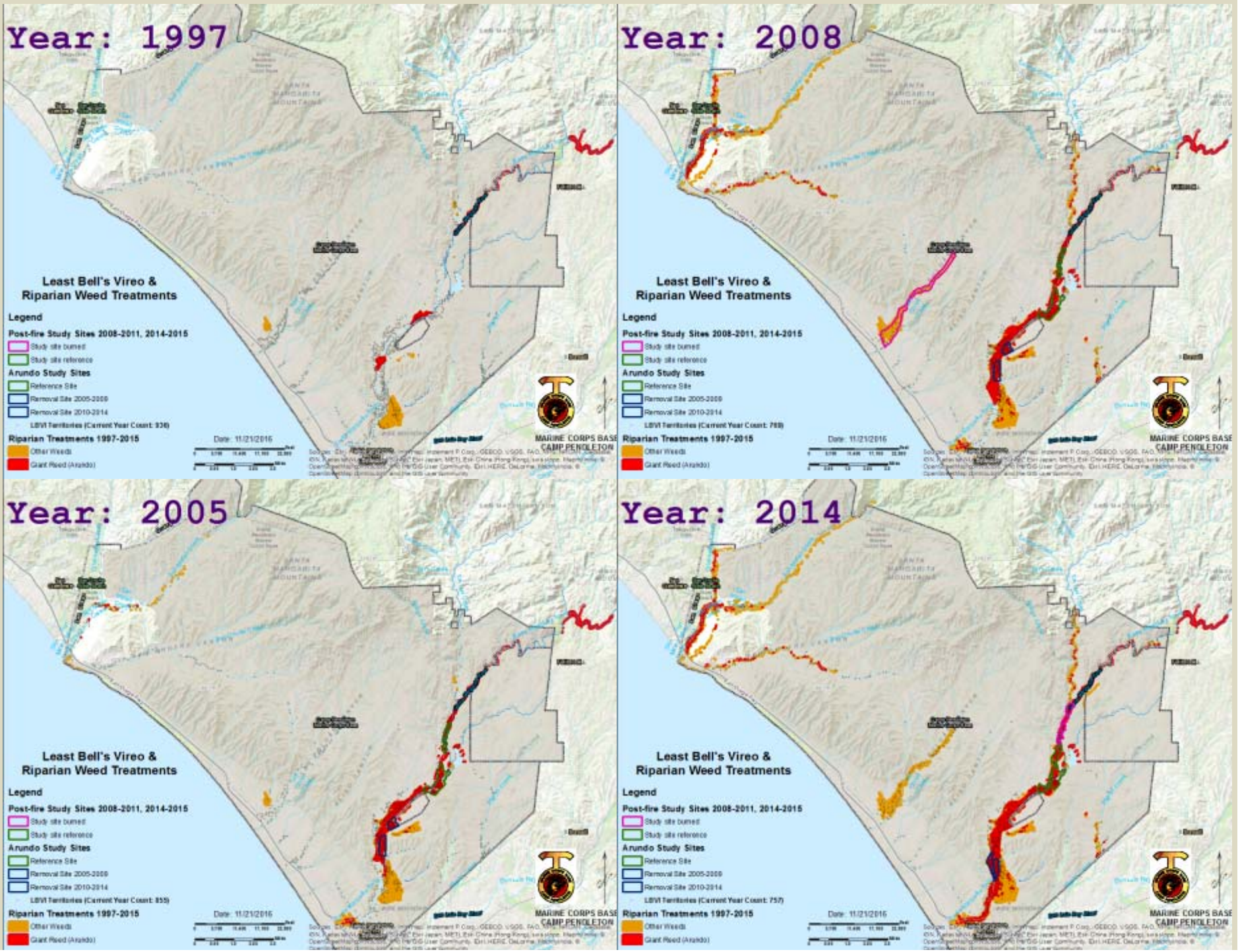
Year: 1997
Least Bell's Vireo &
Riparian Weed Treatments
Legend
Post-fire Study Sites 2008-2011, 2014-2015
Study site burned
Study site reference
Arundo Study Sites
Reference Site
Removal Site 2005-2009
Removal Site 2010-2014
LBVI Territories (Current Year Count: 936)
Riparian Treatments 1997-2015
Other Weeds
Giant Reed (Arundo)
Date: 11/21/2016
MARINE CORPS BASE
CAMP PENDLETON
Year: 2008
Least Bell's Vireo &
Riparian Weed Treatments
Legend
Post-fire Study Sites 2008-2011, 2014-2015
Study site burned
Study site reference
Arundo Study Sites
Reference Site
Removal Site 2005-2009
Removal Site 2010-2014
LBVI Territories (Current Year Count: 788)
Riparian Treatments 1997-2015
Other Weeds
Giant Reed (Arundo)
Date: 11/21/2016
MARINE CORPS BASE
CAMP PENDLETON
Year: 2005
Least Bell's Vireo &
Riparian Weed Treatments
Legend
Post-fire Study Sites 2008-2011, 2014-2015
Study site burned
Study site reference
Arundo Study Sites
Reference Site
Removal Site 2005-2009
Removal Site 2010-2014
LBVI Territories (Current Year Count: 855)
Riparian Treatments 1997-2015
Other Weeds
Giant Reed (Arundo)
Date: 11/21/2016
MARINE CORPS BASE
CAMP PENDLETON
Year: 2014
Least Bell's Vireo &
Riparian Weed Treatments
Legend
Post-fire Study Sites 2008-2011, 2014-2015
Study site burned
Study site reference
Arundo Study Sites
Reference Site
Removal Site 2005-2009
Removal Site 2010-2014
LBVI Territories (Current Year Count: 757)
Riparian Treatments 1997-2015
Other Weeds
Giant Reed (Arundo)
Date: 11/21/2016
MARINE CORPS BASE
CAMP PENDLETON

Wildfire & LBVI Study