MSCP ANNUAL WORKSHOP

“Reconnecting with Nature”

July 16, 2013

Chula Vista MSCP Subarea Plan
Chula Vista MSCP Subarea Plan

- Subarea Plan Approved: February 2003
- Take Permit and IA: January 2005
- 86 Covered Species
- 99% “Hard-lined”
- Conservation Estimates: 9,243 acres
  - 4,993 within Subarea
  - 4,250 additional conservation outside Subarea
- 69% (6,365 acres) have been secured

Reconnecting with Nature: Urban Canyons

Importance
- Support threatened and/or endangered species
- Provide connectivity to Core Areas
- Less susceptible to large fires
- Green Infrastructure: connecting people to natural open space

Challenges
- Edge Effects: access control, domestic pets, invasives
- Funding
Central City Preserve Management Area (PMA)

- 1,600 acres
- Six predominant habitat types
  - Maritime Succulent Scrub
  - Coastal Sage Scrub
  - Native Grasslands
  - Southern Willow Scrub
  - Mule Fat Scrub
  - Freshwater Marsh
- Large Populations of Narrow Endemic Species
  - Otay Tarplant
  - Snake Cholla
  - San Diego Thorn-mint
- Connectivity to Sweetwater and Natl. Wildlife Refuge
Central City Habitat Restoration Grants

- **Location:** Central City Preserve
- **Size:** 9 acres
- **Project Objectives:**
  - Restore/enhance degraded habitat
  - Increase quality/quantity of existing cholla patches
  - Reduce weed and native shrub competition
  - Reduce uncontrolled access
- **Techniques:**
  - Dethatch and treat areas dominated by non-natives
  - Selective thinning, removal and/or treatment of native shrubs
  - Protect restoration areas by blocking unauthorized trails with native plant material
  - Collect and redistribute cholla cuttings
  - Intensive Weed Control

Costal Cactus Wren Habitat Restoration Grant

- **Location:** Central City Preserve
- **Size:** 9 acres
- **Project Objectives:**
  - Restore/enhance degraded habitat
  - Increase quality/quantity of existing cholla patches
  - Reduce weed and native shrub competition
  - Reduce uncontrolled access
- **Techniques:**
  - Dethatch and treat areas dominated by non-natives
  - Selective thinning, removal and/or treatment of native shrubs
  - Protect restoration areas by blocking unauthorized trails with native plant material
  - Collect and redistribute cholla cuttings
  - Intensive Weed Control
Costal Cactus Wren Habitat Restoration Grant

Results:
- Cholla cover, density and height is increasing
- Wren can re-occupy sites where shrub thinning and cholla planting have occurred

Regional Benefits:
- Implements regional conservation strategies
- Increases the amount of suitable habitat
- Facilitates the dispersal of wrens within the region

Otay Tarplant and San Diego Thornmint Restoration Grant

- **Location:** Central City Preserve
- **Size:** 15 acres
- **Project Goals/Objectives:**
  - Restore/enhance degraded habitat
  - Manage & increase grassland & clay lens habitat
  - Reduce weed competition
  - Reduce uncontrolled access
- **Techniques:**
  - Dethatching of non-native weeds using weed whips in the fall
  - Native seed collection and redistribution
  - Planting native plants to increase cover
  - **Intensive Weed Control**
Otay Tarplant and San Diego Thornmint Restoration Grant

Results:

- Increased population/density despite below average rainfall

Regional Benefits:

- Implements regional conservation strategies
- Protection/enhancement of a major population within the region

Thank You!
Multiple Species Conservation Program

15 year recap of the Multiple Species Conservation Program

County MSCP Plan Areas
County Parks & Preserves 1998

1998:
28,000 ac

County Parks & Preserves 1998 - 2001
**County Parks & Preserves 1998 - 2010**

1998: 28,000 ac

**County Parks & Preserves 1998 - 2012**

1998: 28,000 ac

2012: 46,000 ac
All Preserve Lands 2012

Federal, State, County and Partners: 1.3 mil ac

County Acquisitions

<table>
<thead>
<tr>
<th>Plan Area</th>
<th>Acres</th>
<th>County $</th>
<th>Partner $</th>
<th>Total $</th>
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<tr>
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<td>6,855</td>
<td>$32,317,922</td>
<td>$32,931,802</td>
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<td>North</td>
<td>4,951</td>
<td>$25,655,144</td>
<td>$46,608,101</td>
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<td>East</td>
<td>6,360</td>
<td>$5,369,573</td>
<td>$9,300,000</td>
<td>$14,639,574</td>
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<td>TOTAL</td>
<td>18,166</td>
<td>$63,342,639</td>
<td>$88,839,904</td>
<td>$152,317,544</td>
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</table>

- $8,400/ac
- 42% - County funding
- 58% - Partner funding
**South County MSCP**

Preserve Goal: 98,379 acres

Preserve Assembled: 72,635 acres

74% Assembled

**Lawrence & Barbara Daley Preserve**

2000  600 ac
Creating Wildlife Habitat for the Benefit of People and the Environment

Project Purpose:

• Post-fire removal of invasive, non-native weeds
• Development of a site specific, comprehensive restoration plan
• Permitting
• Complement downstream restoration efforts by California Department of Fish and Wildlife and San Diego Public Utilities Department (178 acres; 35,000 linear feet)

Photo Credit: K.C. Alfred/San Diego Union Tribune
http://interwork.sdsu.edu/fire/photo_gallery/2007_fires/harris-fire.html
Upper Project Area:

- Steep terrain and limited access
- Intact over-story
- Invasive understory

California Conservation Corps
Removed over an acre of:
• Arundo
• Castor bean
• Eucalyptus
• Tamarisk
• Tree tobacco
• Canary island date palm

2013-2014 Objectives:
• Restoration Funding
• Continued Weed Control
• Connectivity of a major wildlife movement corridor and downstream restoration efforts
Habitat Restoration in Tecolote Canyon Natural Park
Central Tecolote Mitigation Project

Keli Balo, Public Utilities Department

July 16, 2013
Project Scope

• Restoration of 3.05 acres of uplands
  – Diegan coastal sage scrub (Tier II)
  – native grassland (Tier I)

• Enhancement of 3.45 acres of riparian habitat
  – southern riparian forest

• 18+ acre weed management area

*Increase value and quality of habitats for native wildlife*

Project Components

• Removal of invasive non-native plants

• Temporary irrigation system

• Grow/Kill Cycles

• Planting (container plants and cuttings) and seeding with native species
**Project Components**

- 120-day Plant Establishment Period
- Wildlife Enhancement Features
- Active Maintenance and Monitoring Period
- Preservation and Long Term Management

**Pre-Implementation Conditions**

Riparian corridor degraded by Mexican fan palm, pepper trees, and pampas grass.

Uplands dominated by mustard, thistles, and non-native grasses.
Schedule

- 5/9/2011: Irrigation Installation
- 7/27/2011: Plant and Seed Installation
- 11/27/2011: 120-day PEP
- 2011-2016: 5 Year Maintenance and Monitoring

Non-Native Vegetation Removal

Removed weeds from 20+ acre project area
Removal of Palm Trees

Removed 170 large palm trees
(Mexican Fan Palm and Canary Island Date Palm)

Aerial Crane Operation Day #2
Hauling Away Debris

Temporary Irrigation
Planting and Seeding

Maintenance and Monitoring
Native Plants

- coast live oak
- Mexican elderberry
- San Diego sagewort
- arroyo willow
- mulefat
- laurel sumac
- black sage
- coastal cholla
- wild rye
- needlegrass

Native Grassland Habitat Establishment Year 2
Sage Scrub Habitat Establishment Year 2

Southern Riparian Forest Habitat Establishment Year 2
OCEAN AIR ELEMENTARY
MRS. LUBO’S
4TH GRADE CLASS
CARMEL MOUNTAIN PRESERVE

City of San Diego
Park & Recreation Department
Preserve Visits with the Park Ranger

Animal Studies
Plant Studies

We are students who studied the Carmel Mountain Preserve and the vernal pools this year. We went up to the pools once a week to check for water level, animal life, plant growth, and other changes. As students, we took all the pictures you see on the website, as well as made a video, gave a presentation of the Preserve to the community, and collected rain fall data and compared it to life in the Preserve.

We listened, observed, measured, watched microorganisms under a microscope, took a GPS land survey, met a biologist, worked with the park Ranger, and most of all, learned so much from our experience. We look forward to sharing what we know with others through the years to come.
Short-leaved Dudleya Monitoring

Rules and Regulations
You are responsible for knowing and complying with the following regulations:

• Stay only on designated trails.

• Dogs and other pets must be under control and on a maximum 8 foot leash at all times.

• No smoking

• All plants, animals, rocks, artifacts and structures are protected. Do not disturb, remove, damage or collect.

• Firearms, bows, sling shots and air rifles are prohibited.

• Fires and fireworks of any kind are prohibited.

• Glass containers are prohibited.

• Littering is prohibited.

• Loud noise and amplified music are prohibited.

• Overnight camping is prohibited.

• No motorized vehicles.

Additional rules and regulations may be posted throughout the Preserve.
2012 MSCP Annual Report Workshop:
U.S. Geological Survey –

Carlton J. Rochester and Robert N. Fisher

Trapdoor Spiders

The Barack Obama Trapdoor Spider
The Stephen Colbert Trapdoor Spider
The Angelina Jolie Trapdoor Spider
Fisher’s Red Rock Trapdoor Spider

### Trapdoor Spiders (*Aptostichus*)

<table>
<thead>
<tr>
<th>Site Name</th>
<th><em>A. atomarius</em></th>
<th><em>A. cabrillo</em></th>
<th><em>A. icenoglei</em></th>
<th><em>A. mikeradtkei</em></th>
<th><em>A. simus</em></th>
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<td>Tijuana Estuary</td>
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<td>UC Elliott Reserve</td>
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* - newly described species (Bond 2012)

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**Sycuan Peak Ecological Reserve**

Nonnatives removal

Detection of juvenile western pond turtles (*Emys marmorata*)

Preparing to release captive reared western pond turtles
North County San Diego Western Pond Turtle Assessment
Focused surveys for western pond turtles (*Emys marmorata*)
Six watersheds, over twenty-five sites

Arroyo Toad Habitat Occupancy

Arroyo toad probability of site colonization
Probability an unoccupied site becomes occupied from year to year vs. years since last fire

2012 arroyo toad survey sites distributed across the 2003 and 2007 wildfire perimeters
2012 Underpass Evaluation and Enhancement

- Small vertebrate use of wildlife tunnels
- 8 tunnels with cameras
  - SR-52 at Mission Trails
  - Sorento Valley Road
  - Carmel Country Road
    - North  South
  - Scripps-Poway Parkway
  - Valley Center Road
    - North  Middle  South

Stack Structure –
- 4 cinder block bricks
- 1.5 in X 2.5 ft PVC pipe
- 3 in X 2.5 ft PVC pipe

Stack Count –
- HFT = 19 stacks
- SVR = 9 stacks
- CCN = 13 stacks
- VCM = 12 stacks
2012 Underpass Evaluation and Enhancement

Very Preliminary Results –
- Southern Pacific Rattlesnake passed all the way under Hwy 52

No snakes detected yet in the 2012 photos from Hwy 52

Stephen’s Kangaroo Rat

Wildfire Workshop

- Hosted in collaboration with SDMMP
- March 13-14, 2013
- Presentations on:
  - Fire management practices of USFS, MCB Camp Pendleton, BLM, and CalFire
  - Impacts of 2003 and 2007 fires to at-risk biological resources

Wildfire Workshop

Presentations, summaries of presentations, and reference material:


Video recordings of all presentations and discussions:

http://www.youtube.com/channel/UC269WDmrkne76K5zvwbddDw?feature=watch
Thanks:

• Funding:
  – California Department of Fish and Wildlife – Local Assistance Grant
  – San Diego Association of Governments
  – U. S. Geological Survey

• Site access:
  – California Department of Fish and Wildlife
  – County of San Diego Parks & Recreation
  – U.S. Fish and Wildlife Service
  – And many others
Environmental Mitigation Program

MSCP 2013 Annual Report

July 16, 2013

Acquisitions

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<th>200</th>
<th>400</th>
<th>600</th>
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<td>Uplands</td>
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<td>405</td>
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</table>

Environmental Mitigation Program

2006  - 2013

Acquisition to Date

Remaining Mitigation
Regional monitoring and land management

Environmental Mitigation Program

REGIONAL MANAGEMENT and MONITORING

FY 2006-2013

$16,055,000

$7,340,000

$3,605,000

Management
Monitoring
Coordination
Milestone in FY 2013

Updated Vegetation Mapping

Adaptive Management Framework

Conserved Lands Database

Management Strategic Plan

Connectivity Monitoring Data
Species Monitoring Data
Vegetation/Habitat Data

Invasive Plant Strategic Plan

Species and Vegetation Community Goals and Objectives
• What
• Where
• Why
• Priority
What is Next?

- Management Strategic Plan (MSP) – September
- Call-for-Land Acquisition Projects – October
- Align Funding and Monitoring and Management Activities per MSP

- www.keepsandiegomoving.com
- www.sdmmp.com
California Department of Fish and Wildlife

Multiple Species Conservation Program
Annual Public Meeting
July 16, 2013
Blue Sky Ecological Reserve
Boden Canyon Ecological Reserve

Legend:
- Boden Canyon Ecological Reserve
- 4X4 Travel Encounters
Boden Canyon Ecological Reserve
Cañada de San Vicente

Cañada de San Vicente
Cañada de San Vicente
Hollenbeck Canyon Wildlife Area

Rancho Jamul Ecological Reserve
Rancho Jamul Ecological Reserve

Baseline Biodiversity Survey for the Rancho Jamul Ecological Reserve

California Department of Fish & Game

Los Angeles County Department of Public Health

Los Angeles County Department of Public Health

USGS

Rancho Jamul Ecological Reserve
Rancho Jamul Ecological Reserve
Otay Mountain Ecological Reserve