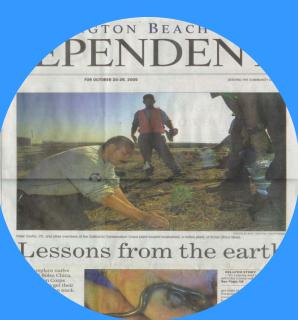
The Southern California Wetlands Recovery Project's

Community Wetland Restoration Grant Program

Fifteen years of community restoration projects: The lessons of conducting restoration at a small scale









small projects with big returns

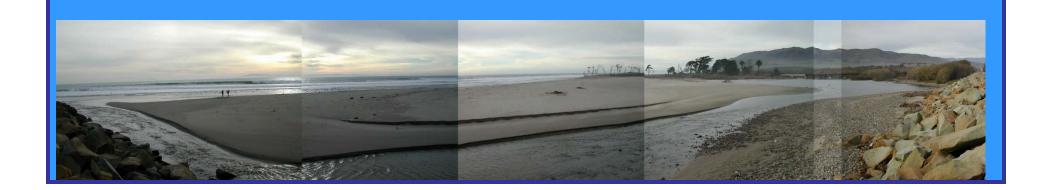


"...small implies not just small levels of funding, but clearly defined, ready to implement projects that are implemented in a short time span without the permitting, planning and funding complexities of large restoration projects carried out by contractors...these projects are defined by the community and funding partners, and then successfully implemented by the community... there is a real sense of achievement and forward momentum..."



How is the Program funded?

- The funds to support the Program come from a settlement of the matter of <u>Earth Island Institute</u>, <u>Donald May and David Jeffries v</u>.
 <u>Southern California Edison Company</u> regarding the impacts of Edison's San Onofre Generating Station.
- Wildlife Conservation Board and the State Coastal Conservancy have also contributed funding
- Funding is not indefinite; funding available for the next 3 years and beyond that time is uncertain



the CWRGP – by the numbers

Projects

- 154 projects have been accepted to the Program over 15 years
- 146 projects have been completed (>97%)

Funds

- \$3.5M obligated
- → Average of just over 10 projects per year and \$22k per project





the CWRGP in action:

Eastern Devereux Slough Restoration



the CWRGP in action:

Eastern Devereux Slough Restoration



Large vs Small Restoration Project?

Wetlands update MUTED TIDAL: 223 Nesting FULL TIDAL: 367 **FUTURE TIDAL: 248** islands acres, mostly acres, controlled acres: oil wells need cordgrass; fully waterflow through pipes; to be removed O Oil wells submerged at high tide pickleweed dominant before flow restored Newest Muted tidal area This 223-acre area was Mesa restoration The Bolsa projects Chica Land Trust is working designed not to get the full tidal fluctuation. on a 118-acre project for the The tidal flow is controlled by gates that are WATER FLOWS working as designed after some initial Bolsa Chica Mesa. HUNTINGTON issues. Early concerns over oil well leaks have been resolved. HUNTINGTON BEACH Chica wetlands **Garfield Ave** Cord and eel grass These important salt marsh species provide habitat for birds and underwater shelter for fish. After an initial slow start, the grasses are doing well. Nest sites All three nesting islands for wetland birds have proven to be very successful in supporting populations. The snowy CURRENT ployer and the least terns have done particularly well in the last year. **FUTURE** FULL TIDAL Inlet Sand is piling up on the sea floor inside and outside the inlet roughly as expected by engineers, who developed Nest cam Expected to launch mathematical models to help them design jetties in March, the camera will allow and other structures along the inlet. A small environmental enthusiasts to beach, the domain of birds, has formed on one side look in on the least tern and of the inlet within the new tidal basin. Outside the snowy plover. inlet, sand is flowing as designed, and beaches to the Sources: Kelly O'Reilly, California Dept. of Fish and Game; south are not being harmed. Sand accumulating inside Jim Trout, State Lands Commission; Bolsa Chica Land Trust the inlet will have to be dredged about every two years. The Register



Bolsa Chica Anecdote

3 Program years / 26 projects

Native plants planted: 18,326 + 600 seed balls + 5 lbs. of

seed

Native trees planted: 4,786 + 1,000's of acorns

Volunteers utilized: 11,064 + 1,222 students on field trips

with some planting

Cu yards of invasive plants removed: 60,566 ¹

Volunteer hours: 45,018

Value of volunteer hours: \$1,209,634 (\$26.87² x 45,018)

¹ Not all grantees measured their removal efforts in this format or engaged in strict removal, but rather utilized herbicide treatment of invasive plants. In addition to this total, accomplishments reported include "20,000 square feet of cape ivy removed" and "4.6 acres of invasive plants treated" and "arundo removed from 8 acres with average density of 12% cover; estimated 3.8 tons dry weight"

3 Program years / 26 projects

- These projects over three Program years represent a total of \$664,648 in CWRGP funding
- Beyond habitat improvement metrics that were summarized, this investment leveraged over 1.2 million dollars' worth of volunteer efforts - highly compelling
- Beyond the CWRGP funds: significant in-kind contributions from the grantees and funding from other funding partners.



- Sonya grew up in City Heights in central San Diego
- Sonya joined Ocean Discovery Institute's programs when in high school
- Helped to plan an event in Swan Canyon which engaged over 950 community members in invasive plant removal and plantings
- CWRGP investment kicked off years of restoration and community engagement in the canyon in which Sonya continued to stay involved.

Swan Canyon Entrance, December 2007





Swan Canyon Entrance, April 2011





- After working in the canyon habitat, Sonya was hooked on ecology
- Attended UCSB, graduated with a BS in zoology, and accepted a position with the Bureau of Land Management as an intern
- Hired by RECON Environmental, Inc. and is currently a Restoration Biologist on their team
- Continues to volunteer in the canyon restoration efforts in City Heights, acting as a role model and mentor for younger students who might be interested in a career like hers



← As a volunteer in her neighborhood canyon as a high school student

As an environmental professional working for RECON Environmental, speaking to students back in her old neighborhood ->



- "Large projects versus small projects" is not as simple as one versus the other-- they *both* have value.
- The perspective that large projects accomplish large things is a "given"
- Probably less obvious to many people (many times proponents and practitioners of large projects), is the value of small projects



- Benefits realized when you sum the small projects' achievements across many projects, ideally in the context of a Program
- Funding small-scale restoration projects typically leverages a great deal of in-kind contributions and volunteer labor that immensely increases the overall value
- The nuanced work that dozens of volunteers and technical experts can accomplish with hand tools contrasted with what engineers and backhoes accomplish is distinctly different



- Critical to recognize and acknowledge that restoration does not, and should not, happen via large-scale projects only.
- More than a 150 small-scale projects across our region have had a significant positive impact and do not represent a frivolous accomplishment.
- The sum of these types of projects represents significant improvements in our habitats, and, importantly, nuanced improvements that large projects often don't do well.



Not insignificantly, these projects ---

- Invest in the human side of restoration
- Deal with the causes not just the symptoms
- Offer experiences whereby project volunteers will
 - become stewards of these habitats
 - vote on future State funding initiatives to acquire and restore these resources
 - be our future environmental leaders and technical experts

Tanzanian proverb: "Little by little, a little becomes a lot"



Thanks!

About that work, Sonya said:

- "I remember feeling overwhelmed by how poor the conditions in the canyon were from years of degradation. There was so much to be done and I didn't know how we'd be able to do it all. Thanks to the community's dedication and constant participation in restoration events, Swan Canyon looks fantastic."
- "... inspiring to see Swan Canyon restored back to its natural beauty, but the best part about it is that through restoring these natural areas, we are able to simultaneously restore our communities. These restoration events don't just improve the quality of our canyons and wildlife, they improve the quality of our lives by bringing us closer to nature, they teach us to respect and protect our canyons – and they motivate us to be stewards of the environment in our everyday lives."