

Storke Ranch East Vernal Pool Restoration

Lessons Learned in Project Planning and Implementation

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Restoration Coordinator



Overview

- Storke Ranch Background
- Project Development
- Planning
- Funding
- Permitting
- Volunteer Recruitment
- Science
- Staffing
- Scheduling
- Project Documentation
- Educational Value
- Monitoring and Maintenance
- Capacity building



Storke Ranch Background

- Housing development
- Sensitive habitats protected by easement
- Heavily impacted
- Managed by HOA
- Community involvement



Goleta, California





Project Development

- Recognition of need
- Worked with independent biologist to determine opportunities for habitat improvement and restoration
- Involved the community thru volunteer events
- Wrote restoration and monitoring plan for specific project



Planning

- Identify existing conditions
 - Resources, threats, etc.
- Define project goals: clear and achievable
- Locate photo points and take 'before' photos
- Identify low impact site access
- Determine planting palette and plan



Planning

- Identify space/support for growing plants
- Cultivate partnerships
- Plan site preparation/grading
 - Weed removal
 - Grading contractor
- Plan for contingencies



Funding

- Identify time required to research and write grant proposals and reports
- Funding for our project:
 - Coastal Fund, UCSB
 - Kiwanis Club
 - WRP Small Grants Program
 - US Fish and Wildlife Service Partners for Fish and Wildlife



Funding

- Importance of matching funds
- Volunteers
 - University/College groups
 - Community members
 - High School community service programs

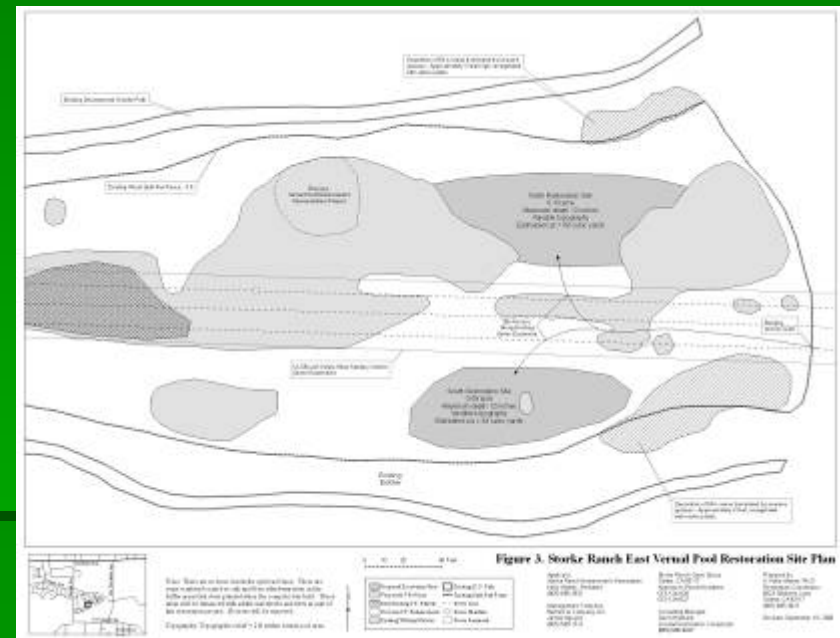


Permitting

- Permit process for restoration does not differ from permit process for development/mitigation
- Start permitting process as early as possible!
- Determine permit requirements and costs
- Guide to Watershed Project Permitting for the State of California – California Association of Resource Conservation Districts
- Realize that permit conditions are negotiable

Permitting

- Permits required for our project:
 - Coastal Commission
 - City of Goleta
- Agencies consulted:
 - US Army Corps of Engineers: Section 404
 - CA Dept. of Fish and Game: no listed species
 - CA Regional Water Quality Control Board



Volunteer Recruitment

- Coastal Service Program, UCSB
 - Alpha Lambda Delta Honors Society
 - Film Studies
 - Global Medical Brigades
 - Lambda Phi Epsilon
 - Phi Alpha Delta
 - Theta Pledge Class of Gamma Zeta Alpha
 - Tiny Stars
 - WETT
- Storke Ranch Community Members
- Local High Schools



Science

- Utilized expertise of local vernal pool restoration specialist
- Studied the impact of inoculum collection on vernal pools
- Student study on disturbance in vernal pool basin, edge, and upland.
- Conflict between good science and desire for maximizing project success



Staffing

- Important to have dedicated staff
- Can't always count on volunteer availability and motivation
- Staffing for our project:
 - On-site restoration coordinator (biologist)
 - Restoration specialist (biologist)
 - Team of 4 paid interns



Scheduling

- Project timetable
- Difficult part is getting the permits to complete the project within the funding timeframe
- Also, for volunteer groups, need to plan ahead; can't always choose times based on conditions on the ground



Project Documentation

- Restoration and monitoring plan
- Interim and final reports
- Photo documentation from fixed points
- Vegetation surveys before and after
- Set up tripod and shoot pictures during the entire process





Video

Educational Value

- Educating community members about the special habitats in their area
- Instilling a sense of ownership and stewardship for the site
- Educating Isla Vista Elementary school kids about vernal pools
- Interpretive signs to educate people into the future



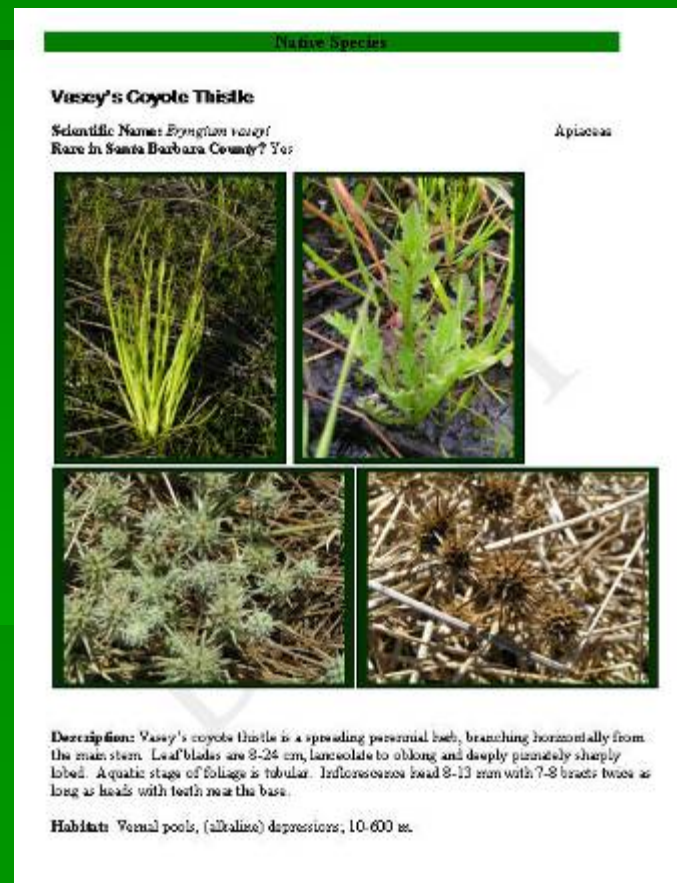
Monitoring and Maintenance

- Ongoing maintenance by HOA
- Annual monitoring of hydrology and bird use for 5 years
- Annual vernal pool vegetation monitoring for 5 years



Capacity Building

- Knowledge – costs and factors involved
- Tools and equipment
- Demonstrated success leads to additional funding
- Plant guide



Summary

- Utilize specialists in the type of habitat being restored
- Write or use an existing restoration and management plan
- Identify existing conditions and achievable, measurable goals
- Define good photo points and get baseline photos
- Plan for contingencies
- Start permitting early
- Cultivate partnerships and volunteer support

Acknowledgements

- Southern California Wetlands Recovery Project
- Coastal Fund of UCSB
- US Fish and Wildlife Service
- Community Environmental Council
- Storke Ranch Homeowner's Association
- Growing Solutions Restoration Education Institute
- Kitson Landscape Management
- David Hubbard
- Interns: Sarah Finstad, Frankie Burton, Kristen Gravelle, Sara Motheral, Meredith Baker, Amy Lee, Audrey Loy, Dean Levy, Ryan Sarkaria, Haylie Barlow, Tess Mayall, Polly Uttayaya, Shawn Guan, Alli Condra, Corey Vermillion, and Jesse Vasquez
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