

ecesis \i-'se-sus, i-'ke-sus\ noun [from Greek *oikesis* meaning inhabitation]: the establishment of an animal or plant in a new habitat.

The Quarterly Newsletter of the California Society for Ecological Restoration
Winter Solstice 2006 Volume 16, Issue 4

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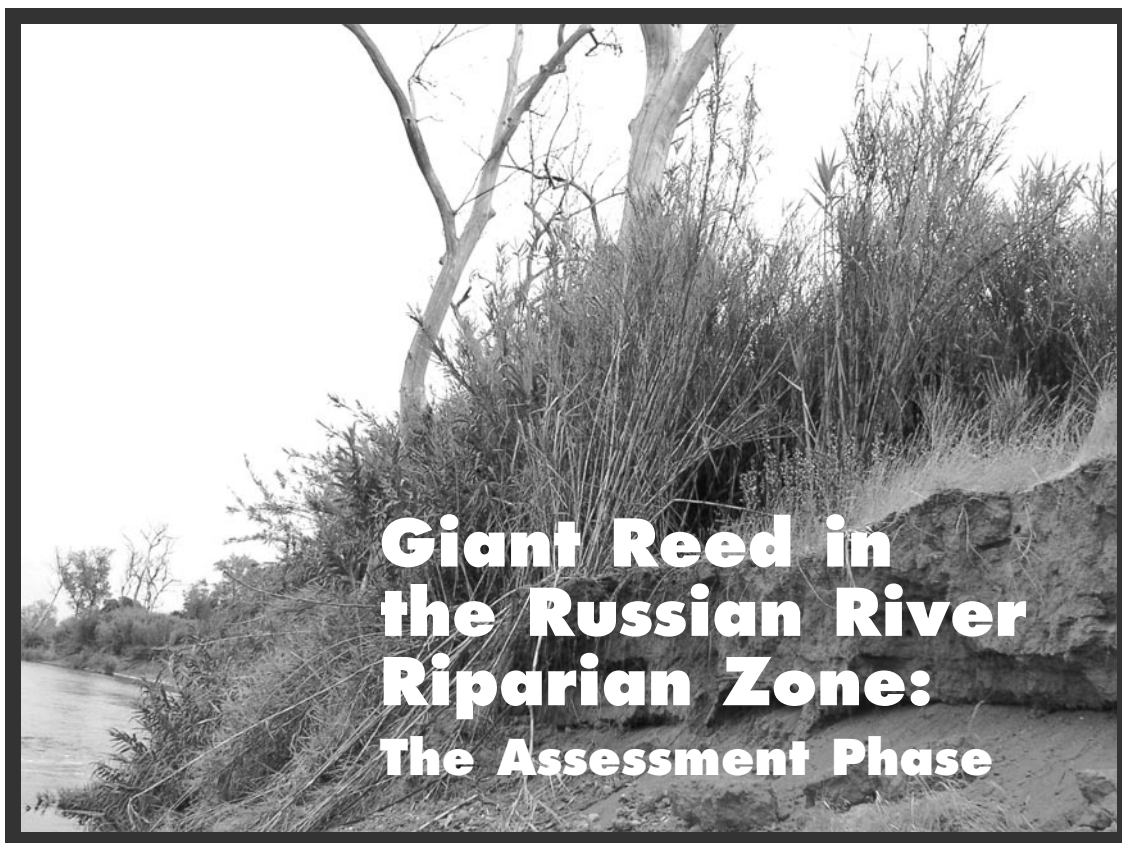


Ecesis is published quarterly by the California Society for Ecological Restoration, a nonprofit corporation, as a service to its members. Newsletter contributions of all types are welcome and may be submitted to any of the regional directors (see p. 2). Articles should be sent as a word processing document; and accompanying images sent as jpg or tif files.

ABOVE Fieldtrippers explore Cañada del Puerto in Santa Cruz Island's Central Valley. *Courtesy Pat Slater.*

RIGHT Giant reed infestation caused a fire killing the native over story vegetation, leaving the riparian zone susceptible to further invasion and bank failure.

We had an impressive array of posters competing for awards at our conference in Santa Barbara this past October, and so for this issue, Region 9 Director Paul Kielhold has collected articles based on some of the winning posters.



by Sean McNeil, Noelle Johnson, Greg Fisher, and Elizabeth Lotz. Photos courtesy the authors.

Giant reed (*Arundo donax*), an invasive grass native to Asia, is widespread in the Russian River watershed. Giant reed has a profound impact on native riparian plant communities primarily through alterations of riparian ecosystem functions. This would include increased fires in riparian areas, decreased native plant species, and suppressed seedling recruitment. Giant reed may affect the species that rely upon these communities, including three federally listed salmonids. The Russian River Riparian Enhancement Project Team, consisting of Circuit Rider Productions, Inc. (CRP), Mendocino County Resource Conservation District, and Sotoyome Resource Conservation District, is working in collaboration with regulatory agencies, landowners, and community members to identify invaded sites, remove giant reed, and restore native habitat in the Russian River Watershed.

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In Memory of John Coy



John Coy, founding member of SERCAL, Past President, Regional Director and Secretary for many years, passed away December 11, 2006. He has been an integral part of SERCAL since its inception and one of its most ardent supporters.

John earned a Bachelor's degree in Economics and a Master's degree in Ecology, both from the University of California at Davis. He worked in the environmental field for nearly three decades primarily as a consultant for firms of all sizes and capabilities. In the early days of the environmental movement, John worked on restoration projects primarily on mined sites. As time went on, and restoration projects became more sophisticated and the regulations more demanding, John, among others, saw the need for an organization like SERCAL — one that would promote restoration through education and outreach.

John loved working in the field, restoring the parts of our planet that had been injured. He always had a practical point of view, recognizing both the opportunities that existed and the limitations of the projects with which we work. John was straightforward and enthusiastic, always willing to pitch in and get the job at hand accomplished. And he had a lot of fun doing it.

John's remains have been interred in the wildlands outside Eureka, Montana, where his spirit is free to wander. He is survived by his wife, Susan Clark, to whom we send our best wishes. John would not want mourning over his passing but would want us to "get going" and keep going. Let us continue our work of restoration in fond memories of John and his life's work.



Giant Reed in the Russian River Riparian Zone *continued*

The Russian River Watershed extends over 388,000 hectares in Northern California and is home to anadromous fish populations such as steelhead trout, coho salmon, and chinook salmon that are in heavy decline and listed as threatened under the federal Endangered Species Act. Urban and suburban development, roads, and agriculture have impacted the Russian River riparian habitat. Ninety-eight percent of the property in this region is privately owned, necessitating a massive outreach program to these landowners before removal of the invasive plant from the watershed.

In the first phase of the removal project, a basin-wide mapping and GIS program was created to enable site prioritization, track giant reed populations and monitor project success. Results from our mapping and research program are incorporated into an ongoing Russian River watershed education and outreach program focused on reed removal and floodplain habitat recovery.

Assessment and Watershed Scale Mapping

In 1999, we mapped the extent of the giant reed invasion occurring within the riparian zone along the entire reach of the main stem of the Russian River. The area of infestation was estimated by digitally drawing polygons around the canopies of giant reed clumps that were identified in

aerial photography. In addition, in January and February of 1999, when riparian canopy trees and other deciduous plant species were dormant and the view of giant reed stands was clearest, aerial flights were conducted to photograph both banks of the 115-mile long Russian River main stem from an approximate altitude of 500 feet. These photographs were used to clearly identify stand locations and improve photo interpretation of the giant reed infestations. In 2001 and 2002, we expanded the mapping project to include alluvial sections of major salmonid bearing tributaries. These additional areas were photographed from low elevation aerial flights in January and February of 2001.

The Project Team flew the Russian River mainstem and blue-line tributaries again in winter 2006 in an effort to re-assess the infestation in the watershed over the last eight years. This expanded our survey of tributaries and yielded more properties infested with giant reed to an estimated 690 parcels with over 400 separate landowners. The aerial imagery was collected this time with a digital video camera, shooting each infested area after it was identified from the airplane. With this data, a point layer was created in the GIS database to identify properties towards which future outreach could be directed. The video of the tributaries and mainstem continues to be a valuable tool in

determining a variety of field conditions without having to leave the office.

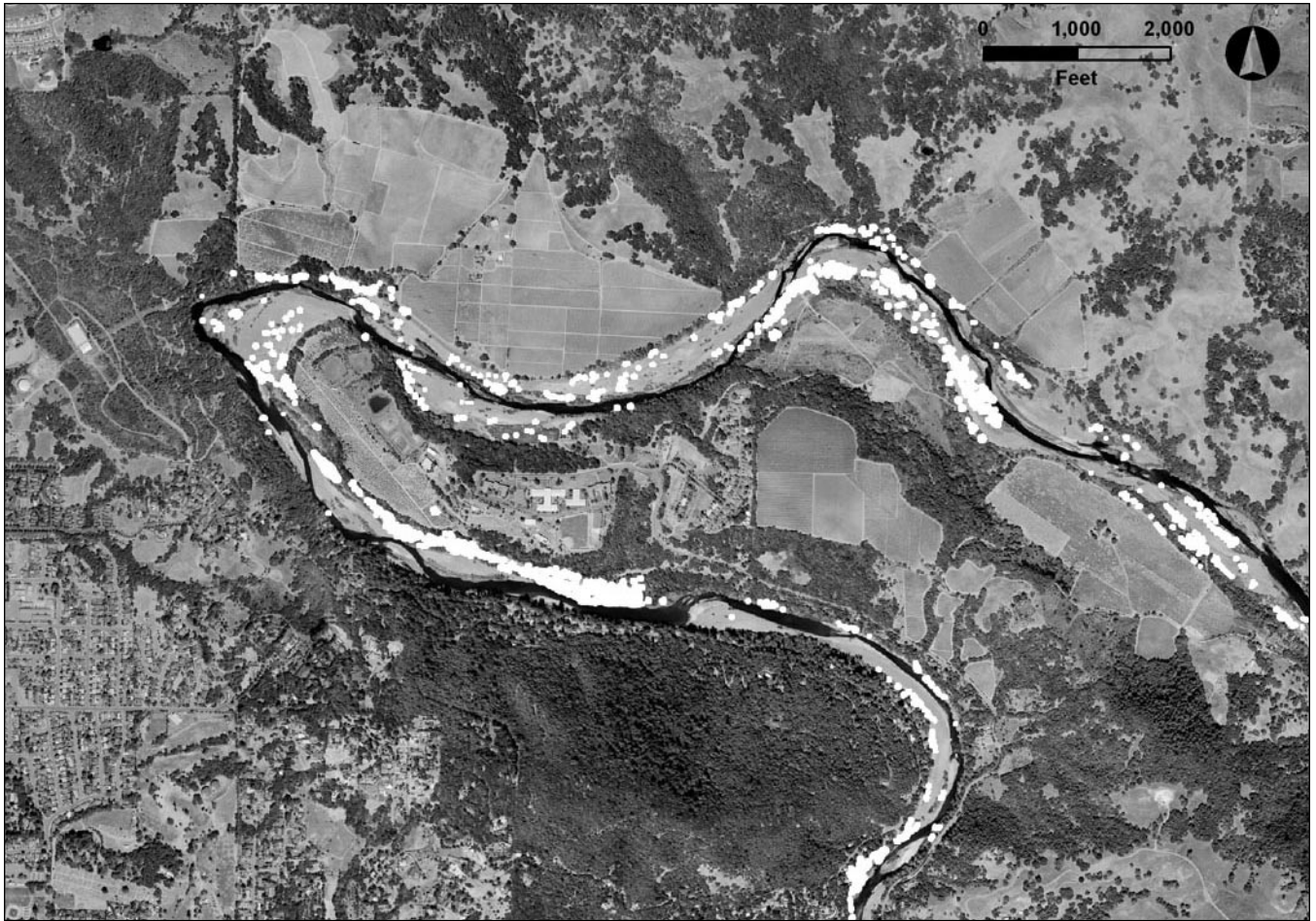
Outreach

The giant reed GIS database is the first step in implementing the eradication process. Giant reed occurs primarily on private property throughout the Russian River watershed and its eradication will be successful only with the investment and commitment of the watershed community, including streamside landowners, environmental groups, local agencies, and the general public. The project team has therefore placed a strong emphasis on community outreach, including workshops, literature, and one-on-one consultations with landowners.

The giant reed GIS assessment data are used to identify parcel numbers and landowner contact information. Landowners are then contacted

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ABOVE On the left, an aerial photograph of a site on the Russian River that is easily referenced in our GIS database. The giant reed is difficult to see, because the resolution is grainy and the non-dormant summer vegetation masked the vegetation. On the right, the giant reed clump is clearly visible from aerial video still taken in winter months from 500' elevation.



Giant Reed in the Russian River Riparian Zone *continued*

individually or through group outreach efforts in order to introduce the project and discuss the benefits of participation, such as the revegetation of infestation areas for improved erosion control and enhancement of riparian habitat. Once a landowner agrees to participate in the project by signing an access agreement, a trained restoration ecologist develops a restoration plan and the implementation phase is initiated.

This watershed project aims not only to remove giant reed and replace it with

native riparian habitat, but also to educate the local community about the important services that riparian habitat provides the entire area. This project is currently working with a variety of landowners, including the mining industry, large multinational corporations, family farmers, Native American tribes, suburban and urban homeowners, the State of California, and the counties of Mendocino and Sonoma. This diverse community has come together through this project to increase the habitat value of the Russian River Watershed. ❖

ABOVE Overview of the Russian River just upstream of Healdsburg with giant reed clumps highlighted in white.

Acknowledgements

Project partners are: Circuit Rider Productions, Inc., Sotoyome Resource Conservation District, and Mendocino County Resource Conservation District.

This project is funded by: Sonoma County Water Agency, The California Department of Fish and Game, the Wildlife Conservation Board, the California State Coastal Conservancy, and the Community Foundation Sonoma County.

A RECIPE for Success:

Addressing public concerns regarding habitat restoration of the White Point Nature Preserve

by Eric Hong, Amanda Peterson & Andrea Vona
Palos Verdes Peninsula Land Conservancy, 916 Silver Spur Road #207, Rolling Hills Estates, CA 90274.



Introduction

The Palos Verdes Peninsula Land Conservancy manages several preserves dispersed among neighborhoods, roads, parks, and the shoreline throughout the Palos Verdes Peninsula. Successful restoration and maintenance of these preserves is dependent upon our technical capabilities and, just as important, strong public support. To mate these two concerns, the Conservancy took an innovative step by developing a science program that would encompass research on the preserves and be conducted by staff, local schools and universities, and researchers. Using a grant from Alcoa Foundation, the program called Research Education and Community Involvement Program for the Environment, RECIPE, was launched in June 2006. Our first project began with a tree survey at the White Point Nature Preserve in San Pedro:

Species	Number Measured	Mean height (m)	Percent Yellowing	Percent with Herbivory
Toyon	46	1.58	26%	10.7%
Oak	37	1.46	68%	18.8%
Lemonade berry	25	1.33	32%	2.7%
Willow	25	2.78	40%	14.1%
Elderberry	16	1.63	50%	6%

The survey site is a 102-acre parcel that was ranched and farmed prior to World War II, then turned into an air defense bunker during World War II by the U.S. Air Force, who subsequently installed Nike missiles on the property during the Cold War. In 1978, the United States Secretary of Interior granted the White Point property to the City of Los Angeles for a public park and recreational purposes. The City formally named it the White Point Nature Preserve on May 6, 2000 and officially declared the land to be used for habitat restoration. The relatively undisturbed topography meant that ninety percent of the area was suitable for native habitat.

The Palos Verdes Peninsula Land Conservancy and the City of Los Angeles agreed in 2003 to a twenty-five year contract to manage the restoration of riparian woodlands, coastal sage scrub, and grasslands at the site. To begin the restoration process, the Conservancy planted over 300 native trees, a small number compared to the total vegetation brought to the preserve. The removal of the non-native trees created some tension between the

residents of San Pedro and the Conservancy. Along with restoring the land, it has become quite important for the Conservancy to create and maintain a positive relationship, as well as to gain support from the public for their restoration efforts.

Aware of the local concerns, the Conservancy aggressively planted trees at strategic locations throughout the preserve in order to achieve aesthetically appealing qualities that would gain public acceptance within the legitimate restoration project. Each of the three habitats was filled with the appropriate mix of five native species: arroyo willow (*Salix lasiolepis*), coastal live oak (*Quercus agrifolia*), elderberry (*Sambucus mexicana*), lemonade berry (*Rhus integrifolia*), and toyon (*Heteromeles arbutifolia*). Although lemonade berry is a shrub, the Conservancy treated it as a tree because of the large stature that the mature plant can achieve.

We needed to bridge two questions: the more public “When will these trees look like trees?” and “Does the Conservancy have any adaptive management issues?” With this in mind, we selected the White Point Nature Preserve as one of our first RECIPE projects using two summer interns, Eric Hong and Amanda Peterson. They were charged with assessing all of the trees planted to date in the Preserve and then assessing the data to develop answers to these questions.

Methods

To accurately assess and conduct the 2006 summer White Point tree survey, we developed set categories of data to record. The specific location of each tree was recorded by GPS for future reference and eventual incorporation into a GIS map. Health and condition criteria were taken that included height, width,

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ABOVE The White Point Nature Preserve features acres of coastal habitat on a scenic site overlooking the ocean and Catalina Island. Photo courtesy www.pvplc.org/



March 7-10, 2007

25th Annual Salmonid Restoration Conference

at the Wells Fargo Arts Center
in Santa Rosa

www.calsalmon.org

or email: srf@northcoast.com

The Salmonid Restoration

Federation Conference includes full-day workshops on dam removal and FERC relicensing, fish passage barrier removal tools, estuary restoration, and an urban creek restoration workshop and tour.

Field tours include visits to sustainable grazing sites in southern Sonoma and western Marin counties, Sonoma vineyards with salmon friendly agricultural practices, restoration and ecologically-sustainable water projects in Dutchbill Creek watershed, steelhead habitat restoration projects on Upper Sonoma Creek, bioengineering and in-stream restoration projects, and roads and up-slope restoration sites in western Sonoma.

Concurrent sessions focus on environmental, biological, and policy issues that affect Salmonid habitat restoration and recovery of native fish populations.

The plenary session will feature prominent keynote speakers including UC Davis Fisheries Professor Peter Moyle who will address the San Joaquin recovery efforts, Restoration pioneer Liza Prunuske who will provide a 20-year retrospective on restoration efforts in Sonoma County, and Nat Scholtz from NOAA Fisheries who will present on Coho Salmon recovery issues.

Congressman Mike Thompson and Kat Anderson, author of *Tending the Wild*, are invited speakers. Other highlights of the conference include the Wild and Scenic Environmental Film Festival, SRF's annual meeting, a poster session and reception, and a cabaret, banquet, and dance.

For more information, please see www.calsalmon.org or contact Salmonid Restoration Federation at 707.923.7501.

A RECIPE for Success *continued*

herbivory, ill effects such as yellowing, plus flowering and fruiting status.

Results

We found 149 trees although over 300 were planted. We suspect that some trees died and some we could not locate. A total of two dead trees were found and, of the 149 trees surveyed, most trees were healthy.

The plants are, for the most part, relatively young with an average height of 1.76 m. Several of the specimens planted in 2000 have reached heights of three to four meters. Out of the five plants surveyed, the lemonade berry held the lowest percentage of yellowing. Data on the oaks, on the other hand, suggest that it had the highest percentage of yellowing. There was no relationship between amount of yellowing and growth, as measured by height. The greatest amount occurred in the riparian woodland, indicating possible stress from insufficient water. Knowing that this aesthetic feature is not deleterious to the trees is an important fact to transmit to the local community.

We found herbivory by an exotic milk snail (*Otala lactea*) a problem, particularly in the riparian woodland. In addition to being unsightly, some trees harbored snail infestations that were sufficiently large to impact the amount of foliage. Most susceptible is oak, although all species sustained some level of infestation. There was no relationship between degree of infestation and tree height. Usually the snails were found attached to the main trunk, where there is sufficient perching space, but some were found near the upper branches.

Conclusion

We are encouraged by the tree restoration efforts and believe that it will lead to an aesthetically pleasing, native landscape. Although we were able to locate only half of the trees installed, we believe the restoration is successful at

this highly degraded site due to the generally vigorous growth of the surviving trees. Through the work of our interns, we gained valuable information for both our neighboring community and our restoration staff. Our interns benefited from the field and office working experience.

We are now poised to address the questions posed by our public and staff. The first is to develop a report for the neighboring community to inform them of the good news that trees placed in the ground in December 2004 are now averaging two meters in height. For time to maturity, we can direct attention to the trees planted in 2000, as they are highly visible having been placed near the roadside and entrance to the Preserve. The second provides feedback to our staff, identified as two outstanding problems, herbivory from an exotic snail and lack of water, both occurring primarily in the riparian woodland. The exotic snail infestation is a concern that, left untreated, can imperil the aesthetic appearances and health of the young trees. Also, irrigation watering schedules must be maintained in the woodland to insure success of the plants.

Our RECIPE products will be varied, utilizing the appropriate medium for each study. In this community-focused example, we will include results in both the Conservancy's quarterly newsletter and also the White Point neighborhood publication. We plan to develop GIS capabilities that can be placed on the Conservancy's webpage so that monitoring maps can be displayed. It will be important to note that the next phase of the project includes the introduction of 131 trees of various species including the oak, toyon and elderberry, as part of Los Angeles Mayor Villaraigosa's Million Tree Initiative. And, the staff may work toward day-lighting a storm drain above the riparian woodland, to provide a constant water source, at some point in the future. ❖

Sustainability & Land Use on the UCSB Campus:

Integrating Restoration with Conventional Land Use

Casey Peters and Lisa Stratton, PhD. Photos courtesy the authors.

Cheadle Center for Biodiversity and Ecological Restoration, UCSB, Santa Barbara, CA 93106.

UCSB is located in a biologically rich and diverse landscape, which includes sand dunes, estuarine salt marsh, coastal sage scrub, oak woodland, and vernal pools. Although demands on University lands are not compatible with protecting the full extent of this diversity, UCSB has recently made a commitment to becoming more sustainable in all aspects of its operations. Restoration provides a sustainable means for linking the opportunities provided by the diversity of the landscape with the needs of the University. Increasing sustainability means using fewer non-renewable resources and reducing long-term impacts to the environment. We compare the relative resource use of conventional versus restored landscapes, and offer suggestions about how to meet the needs of the University more sustainably.

University Landscape Demands

When considering the topic of sustainability and land use, it is important to understand what services the University requires the land to fulfill. Foremost, the University wishes to provide an aesthetically pleasant and safe environment for students, faculty, and staff. The land must also meet research and educational needs, provide living and recreational space of student, help attract faculty, students, parents, and donors, and provide space for outdoor social events such as graduation and fundraisers. Furthermore, all land management must meet the standards set forth by the Design Review Committee, provide mitigation for campus development projects, and comply with the Clean Water Act (1973) requirements which protect wetland quality.

What Services are Provided By Each Landscape Type?

Conventional:

- Classic aesthetics
- Recreation (e.g. field sports)
- Meeting the UC design standards
- Provides safe environment for outdoor activities
- Outdoor social events (e.g. graduation)
- Labor required for maintenance is comparable to restored areas

Restored:

- Low use of resources
- Natural aesthetics
- Recreation (e.g. bird watching, jogging)
- Mitigation & compliance with Clean Water Act
- Preservation of biodiversity and Santa Barbara's natural heritage
- Research and education opportunities
- Ecosystem services (e.g. water filtration)

What has already been done?

UCSB has been a leader in the quest to become more ecologically minded and more sustainable. There is still much that can be done, but UCSB has already made some significant strides in managing its landscapes more sustainably. Twenty percent of campus (151 acres) has been designated for restoration, and several large scale restoration projects have been completed or are underway. As a part of one of these restoration projects, a 1300-foot bioswale system was installed in 2002



(see inset next page). In order to reduce water use, drought tolerant plants are prioritized for landscaping, one large sports field has been converted to artificial turf, and 93% of campus lawns and fields are now watered with reclaimed water. There has been a drastic reduction in the quantity and toxicity of chemicals used for weed management. Only one chemical is currently used, reduced from a field of over thirty. The University's vehicle fleet has been partially converted to natural gas and electric vehicles when this is a viable option. More vehicles will be replaced with these alternatives as they are retired. In September of 2006, the University completed its Campus Sustainability Plan which sets further short- and long-term sustainability goals, and outlines how these goals might be achieved.

This Campus Sustainability Plan can help us define our sustainability goals. They formally define sustainability as

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ABOVE Dunes restoration in progress.

Sustainability & Land Use on the UCSB Campus *continued*

“meeting the needs of the present without compromising the ability of future generations to meet their own needs.”

They also list the criteria that they believe the University must meet in order to become sustainable. These criteria are:

- Energy sources should be 100% renewable
- Water budget should not exceed the water that falls on or flows through the site
- Quality of water leaving the site should have no damaging downstream effects
- No net degradation of the natural systems
- Air flowing out of site should be as pure or purer than air entering site (e.g. not a waste source for gases)

- Materials used are non-persistent and non-toxic and procured from reused, recycled, renewable, or abundant sources

Opportunities to Improve

There are several steps that can be immediately taken by the University to direct and aid the progress towards becoming more sustainable. A campus-wide survey and discussion about peoples' attitudes towards and uses of campus landscapes is a vital component of this process. The will to become more sustainable is based upon the values shared by the University community. Assessing these values will allow us to achieve our goals in a manner that satisfies the greatest number of people, and strengthens the bonds of the community to the landscape. Other steps that that can improve our sustainability include better integration of

storm water management between landscape types, and evaluation of the ecological costs and benefits of artificial turf, better integration of resource monitoring with resource management, and the continued expansion of current sustainable practices (e.g. more bioswales, xerophytic plant selection). Answering the following questions will also help guide our sustainable development:

How much land is needed to fulfill the perceived demands on a campus?

How separate do the restored and conventional landscapes need to be?

What are the potential benefits and drawbacks of integrating sustainable concepts within a university campus?

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Bioswales: Enhancing the Natural Filtration of Urban Runoff Water

A **bioswale** is a simple, vegetated earthen depression, which allows water to slowly soak into the soil. Bioswales serve people while including and utilizing nature. Water that flows through fertilized lawns, parking lots and other urban areas often contains a wide variety of contaminants including sediments, petroleum products, fertilizers, heavy metals and bacteria. Though not a total solution to the problems of urbanization and pollution, the implementation of bioswales can decrease the levels of these contaminants. Bioswales are a progressive way of treating urban runoff. By exposing runoff water to a combination of sunlight, soil, plant roots and microorganisms, bioswales break down or absorb many of the sediments, chemicals and bacteria, which contribute to water pollution.

Integrating Landscape Types for Sustainability: Manzanita Village Housing Project as a Model

By integrating bioswales into the conventional landscaping and buffering the lush lawns with low water, un-fertilized transitional lawns, this project models a sustainable way to blur the distinction between “conventional” and “restored” land management. Exposing students to sustainable values and aesthetics is an important role for the University and multiplies the benefits to the environment.



The Next Step: Becoming More Sustainable... Using Resource Monitoring to Set and Achieve Sustainability Goals

How Can Records be Used to Reduce Resource Use

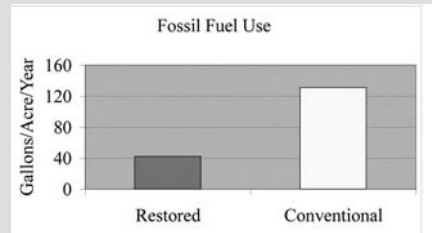
Baseline figures for resource uses can be used to set realistic goals for resource use reductions. Continued monitoring will allow us to chart the progress towards achieving the set goals and will allow us to make appropriate adjustments. Also, records can be used to create standards for best practices and to fine-tune maintenance methods. For example, if a certain lawn is being watered an unknown amount, but it is healthy and green, we cannot know by how much we could reduce the watering before the lawn became stressed without an accurate measure of water use. By trial and error, we could experiment with cutting back on water, but we cannot know exactly how much water that lawn needs to stay healthy. With accurate records, we could very easily pinpoint exactly how much water must be applied to the lawn, and we could therefore use only the bare minimum amount of resources.

Designing a Better Monitoring Regime:

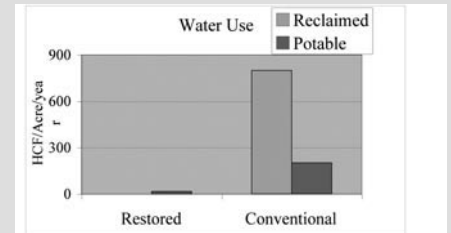
A resource monitoring regime must be easy, convenient, and routine. Fossil fuels and water uses can be monitored by meters as they are used. Fertilizers and herbicide uses can be monitored upon purchase or application. Records should be

Comparative Resource Use: Manzanita Village Housing and Restoration Project

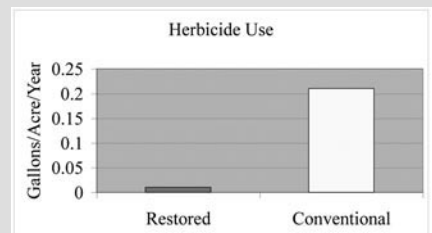
We compared resource use between established conventional and restored landscapes to quantify their relative sustainability. Specifically we sought to measure the key indicators of sustainability: water (potable and reclaimed), fossil fuels, fertilizers and herbicides.



Fossil fuel use based on purchase records. It includes estimates for mowing, personnel transport and waste removal. Excludes fossil fuel use for electric vehicle energy consumption.

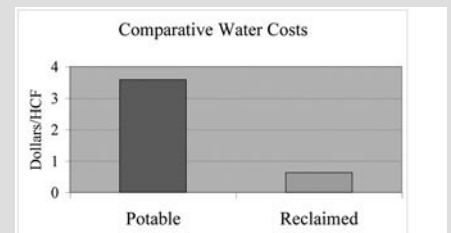


Water was measured with in-line meters. Use in the restored area is higher during the first year when seedlings are getting established, but then drops to near zero in ensuing years.



Herbicide usage is based on receipts rather than application records. Herbicide use in restored area is minimal because all weeds except Bermuda Grass and Kikuyu grass are hand pulled.

Fertilizer: Lawns receive 600 lbs/ac/yr; native seedlings only receive compost made from weeds and horse manure in the nursery.



Reclaimed water is significantly cheaper than potable water and more appropriate for watering plants. The costs associated with reclaimed water include installation of pipeline, signage, restrictions on use times and commitment to pay the Sanitary District for a designated amount per year, whether it is used or not.

Although records are kept on fuel and water use, it took an additional 130 hours of a research and interviews to gather and synthesize data to derive these figures. We feel that improved record keeping and integration of monitoring with management will lead to increased sustainability.

as specific as possible to area and land type (e.g. lawn, shrubbery, trees). The more general they are, the less power they have to inform management. Results should be organized into reports that are issued at regular intervals, and presented in a way that is most useful to managers.

Developing this monitoring regime relies on linking land uses to resource inputs. Involving Environmental Studies

students and graduate students enrolled in the Bren School of Environmental Science and Management in developing the monitoring regime, would be a useful and educational approach to meeting the above objectives. ❖

ABOVE Red-winged blackbird.



Welcome! to our New Members through 10 December 2006

Donna Ball, *H.T. Harvey & Associates, San Jose*
Catalina Island Conservancy, *Lauren Danner (NPO)*
Mike Ritenour, *EcoSystems Restoration Associates, Sacramento*
J-P Marie, *UC Davis*
Valerie Eviner, *UC Davis, Plant Sciences*
Kyla Dahlin, *Golden Gate Nat'l Parks Conservancy*
Todd Macauley, *Agri Chemical & Supply, Inc., Oceanside*
Denise Della Santina, *Yosemite National Park*
Don Schweitzer, *Yosemite National Park*
Eamon Schneider, *Yosemite National Park*
Greg Archer, *Yosemite National Park*
Lindsay Kircher, *Irvine Ranch Land Reserve Trust*
David Martin, *LADWP, Bishop*
Joy Polston-Barnes, *County of Orange, HBP, Costa Mesa*
Elaine Sahl, *Central Coast Regional Water Board, San Luis Obispo*
Kelly Hildner, *Storke Ranch, Goleta*
Tom Hesseldenz, *Tom Hesseldenz & Associates, Mt. Shasta*
Peter Meertens, *Central Coast Regional Water Board, San Luis Obispo*
Bart Topping, *Topping Ranch, O'Neals*
Michael Bower, *UC Davis*

Patrick Band, *Laguna de Santa Rosa Foundation, Santa Rosa*
Carlos Ruiz, *Victor Valley College*
Alija Mujic, *Central Coast Wilds, Santa Cruz*
Taya K. Cummins, *SWCA Environmental Consultants, Los Angeles*
Jim Carnathan, *Restoration Resources, Rocklin*
Michael Neumann, *Restoration Resources, Rocklin*
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Kimberly True, *Dept. Landscape Architecture, Cal Poly Pomona*
Elizabeth Swick, *Dept. Landscape Architecture, CSU Pomona*
Cristina Piraino, *FIRMA, San Luis Obispo*
Josh Koepke, *Rancho Santa Ana Botanic Garden, Claremont*
Meredith Manning, *Midpeninsula Regional Open Space District, Los Altos*
James Howard, *USDA-NRCS, Half Moon Bay*
Stefan Szalkowski, *Victor Valley College*
Mike Klinefelter, *M.J. Klinefelter Consulting, Temecula*
Ojai Valley Land Conservancy, *Derek Poultney (NPO)*
Ken Niessen, *Ojai*
Ken Knudsen, *KNK Aquatic Ecology, Helena, MT*
Steven Handel, *Green Shield Ecology, Inc., Bridgewater, NJ*
Johanna LaClaire, *URS Corporation, Santa Barbara*
Teresa Galvin, *Save the Bay, Oakland*
William Jones, *City of Los Angeles, DPW/BOE*
Kate Wilkin, *Cal Poly, San Luis Obispo*
George J. McMenamin, *Restoration Consultant, Boulder Creek*
Molly Ferrell, *UC Davis, Geography Graduate Group*
Heidi Krolick, *ECORP Consulting, Inc., Rocklin*
Weena Sangkatavat, *BonTerra Consulting, Costa Mesa*
Shawn Brumbaugh, *Santa Rosa*
Heather Brady, *Carmel*
Mike Blankinship, *Blankinship & Associates, Davis*
Garrison C. Rees, III, *Fairfield*

ABOVE View from Santa Cruz Island courtesy Pat Slator.

SERCAL 2007 Membership Application/Renewal Form

Complete form and payment to SERCAL and mail to: SERCAL Administrative Office, 2701 20th St., Bakersfield CA 93301

Annual Membership Dues

SERCAL's newsletter, Ecesis, is received with ALL rates.

INDIVIDUALS

- Student \$15
 Regular \$35
Joint Individual (Discounted)
 SERCAL + Cal-IPC[†] \$60
 SERCAL + CNGA[†] \$70
 All 3 organizations \$100
 Sustaining \$100 *

BUSINESS

- Nonprofit Organization \$45
 Contributing \$250 *
 Sustaining \$500 *
 Summit Circle \$1000 *

* Receive quarterly recognition in *Ecesis*

[†] **Cal-IPC** is the California Invasive Plant Council and **CNGA** is the California Native Grasslands Association

The following members receive additional benefits:

Category	Copies of each <i>Ecesis</i> issue **	No. of discounted rates at SERCAL events
Nonprofit Organization	2	1
Contributing Business	3	3
Sustaining Business	4	4
Summit Circle	6	6

**When completing this membership form, you may designate specific individuals to be included on the mailing list.

NAME _____ DATE _____

COMPANY/AFFILIATION _____

ADDRESS _____

CITY _____ ZIP _____ COUNTY _____

PHONE _____ EMAIL _____

Check enclosed (please make payable to **SERCAL**)

Please charge my credit card: Visa MasterCard

Exp: ___ / ___ / ___

Billing address (if different than address above): _____

Two Announcements from Victor Valley College:

Environmental Studies Position

This person will support the continued implementation of an environmental studies program at Victor Valley College; including coordination of environmental studies labs and student led scientific research projects. This program is supported by the Mojave Sustainability Project (MSP), a synergistic educational partnership between Victor Valley College Foundation, government agencies, and business. The program has a strong focus on hands-on education and community stewardship projects in Ecological Restoration, water and soils conservation, sustainable building, energy, agriculture and GIS.

This position is absolutely critical to the growth of this program and will suit someone with project implementation experience and a passion to build community collaborative that engage/educate all community stakeholders in sustainable solutions to our environmental issues. Ability to teach workshops and labs is a plus.

Applications and job description are on the VVC website — www.vvc.edu/offices/human_resources/joblisting — click on *Classified Positions*, then *Environmental Studies Position*.

Third Mojave Restoration Conference January 26 & 27, 2007

We have an excellent line-up of speakers including Vic Claassen from UC Davis who will speak on Soils and give an afternoon workshop; James Pompy and Leah Miller from CA Dept. of Conservation will present a work shop on mine reclamation planning; and SERCAL President Mark Tucker will speak on desert riparian restoration.

For the conference agenda and to register online, go to www.mojavesustainability.org then click on *Events* and then *Mojave Restoration Conference*.

If you would like to set up a vendor/display table, please contact Starla Underwood at underwoods@vvc.edu to reserve a spot and indicate any special requirements (electrical outlets are limited).

The California Society for
Ecological Restoration - SERCAL
2701 20th Street
Bakersfield CA 93301

Return Service Requested



Many, Many Thanks...

2007 Sustaining Members

INDIVIDUAL: \$100

Albert Knight, *Glendale*

BUSINESS: \$500

Tallac Applied Ecology & Design, Gerald A. Dion,
South Lake Tahoe

2006 Sustaining Members

INDIVIDUAL: \$100

Edith B. Allen, *Botany & Plant
Sciences, UC Riverside*

Bo Glover, *ENC, Newport Beach*

David B. Kelley, *K & AES, Inc., Davis*

Robert C. Kirkwood, *Palo Alto*

Martha Blane, *Martha Blane &
Associates, San Marcos*

Rick Storre, *Freshwater Farms, Eureka*

Virginia Mahacek, *Valley & Mountain
Consulting, Galt*

BUSINESS: \$500

Pacific Restoration Group, *Corona*

2006 Contributing Members

BUSINESS: \$250

Ecological Concerns, Inc.,
Santa Cruz

Restoration Resources,
Rocklin

Earthworks Restoration,
Inc., *Los Angeles*

Mitsubishi Cement
Corporation, *Lucerne Valley*

Tree of Life Nursery, *San
Juan Capistrano*

Pacific Coast Seed, Inc.,
Livermore

Dudek & Associates, *San Diego*

Ecosystems Restoration
Associates, *San Diego*

Full Circle Compost, Inc.,
Minden NV

Teichert Aggregates, *Sacramento*

EDAW, Inc., *Sacramento office*

Integrated Environmental
Restoration Services, Inc., *Tahoe
City*

Global Search, *Carlsbad*

Hedgerow Farms, *Winters*

ABOVE Getting a new perspective on Santa Cruz Island from Valley Peak Road courtesy Pat Slator.