



WORKING WITH THE COMMUNITY

STAKEHOLDER COUNCIL

During 2004 and 2005 a series of Stakeholder Council meetings were held with interested community members to discuss goals towards the restoration and management of the Laguna de Santa Rosa. In tandem with these stakeholder meetings, a series of advisory committee meetings were sponsored to investigate selected topics in greater depth. Simultaneous with these two efforts, Laguna Foundation staff met individually with local landowners, ranchers, farmers, and non-governmental special interest groups to hear and learn about community hopes for the Laguna. Staff members also met with regulatory agency personnel, city and county government officials, public land managers, resource administrators, researchers, teachers, and professionals involved in ecological restoration. The organizations and individuals that contributed to this work are documented later in this report.

The Stakeholder Council's role became much more than a goals-setting body. By inviting community leaders from many different backgrounds, we intentionally sought a diversity of opinion. Over time this diversity became the project's greatest strength. Through the behind-the-scenes networking efforts of council members, word quickly spread regarding the project and its scope. This worked in our favor as we were soon able to engage a larger body of participants.

Diversity became project's
greatest strength

During one of the stakeholder council meetings, participants took time to work through a facilitated "visioning" session. A leading question was put to the council: "What would the Laguna look like, in 25 years—in the year 2030, if we had done our work right?" This sparked the imagination of everyone, with their hopes and ideas reflecting the broad range of values held by the participants. The outcome, *Laguna 2030*, was an inspiring group effort.

Laguna 2030

A second question was then asked: "What had happened in the intervening quarter-century to allow our vision for the Laguna to become

a reality?" This resulted in a long list of nuts and bolts suggestions, some straightforward and some bold, that awaits us. A sampling of these suggestions—all expressed from the perspective of the year 2030—are presented here:

LAGUNA 2030

"A million people find themselves within a five minute walk of open space."

"The headwaters of the Laguna is protected from development and enhanced with water retention ponds that eliminate flash flooding."

"Urban growth is retained within urban growth boundaries."

"Stewardship of the Laguna is a community effort with both funding and governance taken on by local citizens."

"Visitors can appreciate the vast open expanse of the Laguna from a high viewing spot."

"A large wildlife sanctuary is established on the stretch of the Laguna near Alpha and Brown Farms."

"Public knowledge and education is rich enough that everyone knows what watershed they live in."

"Stormwater runoff pollution has been minimized."

"The Laguna is a place that attracts visitors from all over the country to see what a success restoration has been."

"People learn about the Laguna through documentary films made about the watershed."

"There are working farms inside a Laguna Park."

"Water recycling is perfected to the point that there is no *waste* in discharged water."

"A new ethic and new behaviors arrive based on the recognition that we *drink* recycled water."

"Composting toilets are an accepted and widespread alternative to traditional waste disposal systems."

"Habitat health is such that invasive species have very little opportunity to take hold."

"Native salmonid species have returned to the Laguna."

"Urban rainwater collection systems are installed throughout the watershed."

“Once again we have safe and fun recreational fishing within the Laguna.”

“A stewardship ethic—influenced by Native Americans—and emphasizing a balance between nature and culture, is established in the Laguna.”

“There is an environmentally sensitive North-South bike path through the Laguna.”

“The Laguna consists of a large network of permanently protected, public and private lands.”

“A well-developed land ethic among property owners supports a healthy Laguna.”

“When people go to the Laguna they hear a chorus of birds.”

“Scattered along the Laguna are riparian forests that have rope swings that allow swimmers to drop into deep pools of water.”

“The community supports agriculture within the Laguna through community food programs.”

“Dairymen and the Water Board are working hand-in-hand to assure the health of the Laguna and dairy farms.”

“We are far along in the campaign towards a zero waste society.”

“A visitor to the Laguna, standing at a high-point, is able to see a large vista of native habitat, with an expanse of flowers and native plants, grazing animals, reeds and rushes for basket weaving, and ample habitat for the tiger salamander.”

The vision for “Laguna 2030” was artfully sketched on a large whiteboard hung on the wall. As participants shared their hopes and dreams, a picture emerged from the blank slate that beautifully captured the spirit of these emotions. This is reproduced, at the end of this chapter, in a double-page foldout.

ADVISORY COMMITTEES

Five advisory committees were formed with the intention that they would study special concerns in greater depth. These committees were: 1) agriculture, 2) hydrology, 3) water quality, 4) public access, and 5) biodiversity and wildlife. Each committee was composed of five to nine members who met during the winter and spring of 2004–2005. They worked without a fixed agenda and charted their own course of action. The findings of these committees varied widely: two committees went into great depth of detail; two other committees settled for a simple consensus of goals;


 <h2>Guiding Principles for Restoring and Managing the Laguna de Santa Rosa</h2>			
Restoration	Preserve the integrity of the Laguna's remaining intact high quality landscapes.	Restore the Laguna using passive techniques for working with the land whenever possible.	Restore the Laguna using active techniques when existing impairments warrant strong measures.
	Prioritize restoration efforts using multiple metrics: 1) urgency of endangered species protection, 2) urgency of invasive species control, 3) geographical spacing of projects throughout the watershed, and 4) timing of projects to achieve a continuum of seral communities.		
Management	Manage the Laguna's multi-jurisdictional conservation areas with a coordinated decision making team.		Apply our scientific knowledge of biology, hydrology, and soils science towards a balanced stewardship of the Laguna's resources.
	Adapt future management practices to a deeper understanding of the physical, chemical and biological processes of the Laguna obtained through an active program of research and monitoring.		
Biodiversity & Wildlife	Adhere to a conservation policy that ensures that no existing native species within the Laguna is extirpated during our watch.		Enhance and manage the habitat value of the Laguna's man-made features, e.g. water channels, structures, roadways and ponds.
	Maintain biodiversity by keeping common native species common.	Set quantitative goals for the restoration of riparian forests, perennial wetlands, oak savanna & native grassland, and seasonal wetlands & vernal pools.	
Hydrology	Establish a network of gauging stations in order to develop a hydrologic model for the Laguna.		Acquire agricultural lands within the annual floodplain and restore them to seasonal wetlands.
	Restore tributaries feeding the Laguna in order to reduce stream velocities and attenuate downstream flooding.		
Water Quality	Identify mechanisms that increase voluntary participation in water quality improvements.	Reduce water pollution within the Laguna de Santa Rosa to levels that support the healthy functioning of the watershed's human population, native plant communities and animal population.	Endorse and participate in an ongoing water quality sampling program within the Laguna watershed.
	Consider all of the Laguna's tributaries, seasonal swales, and land surfaces when designing pollution reduction programs for the watershed.	Focus near-term cleanup efforts on EPA-listed impairments of the Laguna; keep a watchful eye on the more troubling question of complex organic compounds used in human health and hygiene products.	
Agriculture	Pursue restoration of agricultural lands within the existing framework of agencies using the local RCDs and the NRCS.		Encourage the use of livestock as a land management tool on public lands.
	Develop methods to teach urban visitors to the Laguna about agriculture's role in conservation.	Streamline the permitting process to allow agricultural producers to more easily apply good stewardship practices.	
Public Access	Provide public access to selected portions of the Laguna for passive recreational uses.	Allow for multiple uses whenever possible.	Establish different guidelines for each reach of the Laguna with some areas being closed to the public.
	Minimize potential user conflicts by establishing clear rules of fair conduct.	Establish a Laguna-focused patrolling effort to coordinate the multiple agencies and departments which have jurisdiction over the Laguna's public lands.	

Figure 1: The *Guiding Principles for Restoring and Managing the Laguna de Santa Rosa* is an encapsulation of the goals established by the advisory committees and the stakeholder council.

the fifth and final committee dissolved, as a committee, after only two meetings, choosing to continue through one-on-one conversations.

The committee that met to discuss agriculture in the Laguna was the one that dissolved first. The two meetings that were held were attended by grape growers, dairymen, cattle ranchers, vegetable growers, and agricultural trade groups. Their principal concern was that new legal restrictions and regulations not be placed upon them. Many of the participants emphasized that over the years they have established a good working relationship with the area's two RCDs (Sotoyome and Goldridge), as well as the NRCS, and that they preferred to continue working with them on Farm Bill-related opportunity programs. Several individuals also expressed an interest in a dairy quality assurance program modeled after the one set up in Marin County. There was also general interest in expanding elementary school programs that involve school children in farm-related activities.

Agriculture committee

The committee that discussed hydrology defined several major problems that face the Laguna: fast water conveyance channels that eliminate flooding in one area but which exacerbate flooding downstream; impervious surfaces and urban stormwater systems that reduce groundwater recharge while increasing creek discharge; erosion, sediment transport and downstream sediment deposition that is filling in the Laguna's low spots; and loss of wetlands due to agricultural encroachment. Because there was insufficient data to adequately understand the Laguna's hydrological regime, this committee felt that it would be imprudent to make specific recommendations about local problems. Instead, the committee set goals for hydrology that reflect the need for better data. For example, a larger network of rain gauges and creek gauges is needed in order to model water movement through the watershed; a LIDAR-based digital elevation model (DEM) is needed in order to better predict flood inundation levels at the 5-year, 10-year, and 25-year recurrence levels; a sediment transport model is needed in order to understand which areas are losing soil, which areas are filling in, and which areas are merely picking up, suspending and locally resettling sediments; cross sectional surveys are needed in order to model floodplain capacity and hydraulics; and *thalweg* surveys—a survey that defines the lowest points along the length of a creek—are needed in order to understand fluvial geomorphology on a reach-by-reach basis.

Hydrology committee

Goals reflect the need for better data

The committee that discussed water quality allowed their conversations to range from stormwater regulations to agricultural runoff to reclaimed water discharge to septic system failures. Because water pollution in the Laguna does not come from a single, highly visible source,

Water quality committee

the targeted Superfund approach towards cleanup—where single “point source” polluters receive special attention—was never suggested: the committee instead discussed the need for a “non-point source” approach to identifying and removing pollutants. Many of the conversations ended on a note that stressed the need for community outreach and education: this reflected the committee’s findings that individuals have the greatest duty towards keeping the environment clean. Existing programs for collecting water samples are in place throughout the watershed; some of these are mandatory, others are voluntary. The committee recommended that the data collected through these programs be organized through a data clearinghouse and analyzed for changes over time.

Individual duty towards keeping the environment clean

The public access committee was composed of a variety of special interest groups: bicyclists, equestrians, hunters, birders, etc. Also present at the committee meetings were local land managers responsible for taking care of the public lands under consideration. Although the committee only considered public lands in its recommendations, it nevertheless also considered the needs and desires of adjacent private landowners; these needs were often discussed and the committee’s recommendations reflect their concerns. Much time was also spent on attempting to balance community hopes for greater public access into the Laguna with the unspoken need for wildlife sanctuary and refuge. The committee’s recommendations reflect this concern over the potential for “loving the Laguna to death.”

Public access committee

Balancing public access with the need for wildlife sanctuary

The committee on biodiversity and wildlife was the one that delved deepest into details; this committee produced several important lists including: a list of special status plants, a list of invasive plants, a list of special status animals, and a list of the Laguna’s birds. These are included in appendix A and B of this plan. The committee briefly flirted with the idea of developing a conceptual model—of habitats, species, impairments, restoration and management—but found it to be a larger undertaking than they had originally imagined, and deferred this work to later. The committee also wrestled with the question of whether to focus their discussions on habitats or on species: it finally agreed that a habitat approach to understanding the Laguna would provide a better set of questions and a richer set of working hypotheses. This resulted in the first multi-page description of the Laguna’s four basic ecosystems: perennial wetlands, seasonal wetlands, riparian forest, and oak savannah. The committee also made the important observation that focusing solely on species of special concern was unwise and that “keeping common species common” was ultimately an important part of the work ahead.

Biodiversity and wildlife committee

Habitat approach to understanding the Laguna

The goals and recommendations of the five advisory committees were brought to the Stakeholder Council in mid-2005. The Council in turn commented on the presentations, providing validation and emphasis to the committees’ work. An encapsulation of these goals is shown in figure 1 (page 20): this is the summation of the committees’ work—it is discussed in much greater detail throughout this report.

The stakeholder process proved to be useful in strengthening the Laguna’s community. There is an ever-present need to communicate our hopes and desires, to have our voices heard, to comment on plans, and to publicly laud the good works of our fellow citizens. An ongoing stakeholder council will be formed with this need in mind.

COMMUNITY INVOLVEMENT

During the course of our work to develop this restoration and management plan for the Laguna, we had the pleasure to meet with hundreds of people. Many of these individuals distinguished themselves by serving, in voluntary and professional capacities, as consultants and advisors to our work. The breadth of expertise that we were able to tap, is proof of the community’s appreciation for the Laguna de Santa Rosa. We acknowledge these varied contributions, large and small, with heartfelt gratitude.

Breadth of expertise is proof of community’s appreciation for the Laguna

Some community members served in two or more capacities during the course of the RMP’s development—we’ve listed their name only under their most notable or the most distinct role.

- ☆ This symbol indicates that the person attended stakeholder council or advisory committee work sessions.
- ★ This symbol indicates that the person served on the *Ludwigia* Task Force.

For helping us to understand the science and engineering of the Laguna’s hydrology	☆	Kevin Booker
	☆	Kim Cordell
		Chris Delaney
		John Mann
		Laurel Marcus
		Jen Melman
		Liza Prunuske

For their professional work related to measuring the rate of sedimentation in the Laguna	Betty Andrews Setenayi Bozkurt Jenny Curtis Janice Lera-Chan Terry Marks Karen Mason Cordel Stillman
For their professional and volunteer help in understanding the science of the Laguna's geomorphology	Lorrie Flint Lauren Hammack
For helping us to establish goals and objectives related to water pollution in the Laguna	Brenda Adelman Clayton Craeger ☆ Colleen Ferguson Miles Ferris Rangit Gill ★ Andrew Jensen Bill Keene Catherine Kuhlman David Leland Peter Otis ☆ Mike Sandler ★☆☆ John Short David Smith Matthew St. John ★ Joel Trumbo ☆ Lori Urbanek
For energetically advocating for a data-based approach to groundwater management in the Laguna	Stephen Fuller-Rowell Stephen Norwick
For helping us to understand how wetland mitigation works	Jane Hicks
For helping us to understand how flood control channels can be maintained in a habitat-sensitive way	★ Ron Benkert Mike Thompson
For sharing their passion for the protection and enhancement of the Laguna's native plant communities	Patricia Canfield M.L. Carle Marcia Johnson Russ Lyon Phil Van Soelen

For their work in studying the biology of the Laguna's rarest and most endangered plant species	★ Peter Baye ★ Gene Cooley ★ Keenan Foster John Herrick Christina Sloop
For helping us to understand the biology of the Laguna's invasive plants	★ Lars Anderson Dan Gluesenkamp Ingrid Hogle Tom McNabb Kate Symonds
For professional work in creating a weed mapping and weed management information system	Deanne DiPietro
For professional and academic research on the biology of <i>Ludwigia</i>	★ Mike Blankenship ★ Ray Carruthers Jeff Church ★ Brenda Grewell Christina Hernandez Fred Hrusa Robert Leavitt Sarah Swope ★ Lily Verdone
For serving on the <i>Ludwigia</i> Task Force	★ David Cuneo ★ Erik Hawk ★ Chris Kjeldsen ★ J.J. Krug ★ Bruce MacArthur ★ Jake MacKenzie ★ Bob Rawson ★ Mike Reilly
For helping us to understand issues related to grassland management	Kathleen Kraft
For sharing their passion for the value of hedgerows on our agricultural lands	Sam Earnshaw Glenn Tyralla

For helping us to formulate goals and objectives related to the biological diversity of the Laguna	☆ Kathy Biggs ★ Caroline Christian Caitlin Cornwall ☆ Katie Fehring Vincent Griego Michael Lennox
For extraordinary leadership towards the formulation of biodiversity goals	☆ Tom Gardali
For preparing our first written description of the Laguna's habitat types	☆ Phil Northen
For developing a complete list of the birds of the Laguna and for helping us to establish sensible biodiversity goals	☆ Betty Burrridge
For helping us to understand fish and wildlife management in the Laguna	★☆ Allan Buckmann Eric Larson Terry Palmisano
For help in researching the Laguna's rare and threatened wildlife, and for sharing his passion for bats	☆ Greg Tatarian
For sharing his research on the biology of California Tiger Salamanders	Dave Cook
For helping us to appreciate the role of invertebrates in the Laguna	Mace Vaughan
For their professional work towards understanding the biology of mosquitoes and workable methods of mosquito control	Martin Castro ★ Leigh Hall ★ Ron Keith ★ Piper Kimball ★ Chuck Krause ★ Walter Kruse Sharon Lawler ★ Jim Wandersheid
For teaching us ecological restoration practices and techniques	Harold Appleton Sean McNeil

For providing extraordinary leadership and inspiration in the fields of ecology, biodiversity and restoration planning	Karen Gaffney
For helping us to find our role in resource conservation in the Laguna	Susan Haydon Patricia Hickey Jennifer Jenkins Ron Roller Dennis Salisbury ☆ Kerry Williams
For their volunteer and professional services in protecting the Laguna's local and neighboring watersheds	Richard Baril Jeannette Baumgardner Bob Burke Sierra Cantor Rob Dickerson Brock Dolman Bob Evans Deborah Grace David Lewis David Shatkin Zeno Swijtink
For their professional work towards the enhancement and management of Santa Rosa's creeks	☆ Alistair Bleifuss ☆ Sheri Emerson
For continually reminding us about the significance of the Laguna in the greater Russian River watershed	Don McEnhill
For teaching us about the biology and protection of salmon and steelhead	★ Steve Brady ★ Dick Butler ★ Bill Cox David Hines ★ ☆ Dan Logan
For advocating for agriculture's strong and viable long term role in the Laguna	Lynda Carinalli Lisa Correia Lex McCorvey Randy Piazza ☆ Kathy Reese Mike Strunk

For teaching us about dairy farming and its place in the Laguna		Bob Beretta
		Doug Beretta
		Val Aggio
	☆	Leslie Dapo
		Jim Dei
	☆	Mike Griffin
	☆	Albert Mello
		Larry Morrison
		Bob Muelrath
	☆	Kristy Rocha
For teaching us about the grape-growing industry and its place in the Laguna		John Balletto
	☆	Chuck Conner
	☆	Dan Dehlinger
	☆	Dennis Devitt
	☆	Nick Frey
		Jim McGarry
		Larry Morias
For sharing their passion for family-based, community supported agriculture in the Laguna		Keith Abeles
		Kevin McEnnis
	☆	Stuart Schroeder
For helping us to understand the practice of rangeland management.		Kristan Flynn
For being close neighbors to the Laguna and being strong advocates for wildlife		Barnee Alexander
		Gary Alexander
For being an extraordinary neighbor to the Laguna and being a champion of its restoration		Guy Smith
For helping us to craft a workable plan for a north-south community bicycle corridors	☆	Christine Culver
	☆	Steven Schmitz
	☆	Warren Watkins
For helping us to see the potential for horseback riding in the Laguna's back country		Karl Bastian
	☆	Michael Murphy
For being close neighbors to the Laguna and helping us to understand the impacts of hunting		Suzanne Nelson
		Gary Nelson

For advocating for the rights of hunters in the Laguna	☆ Mark Hennelly Mike Malone
For being liaisons between the university community and the science of the Laguna	★ J. Hall Cushman Dorothy Freidel Nathan Rank David Stokes
For teaching us about the role of environmental education in our local schools	☆ Craig Anderson Rick Kaye ☆ Nettie Lane Stephanie Lennox Rebecca Thomsen
For helping us to appreciate the role of education and lifelong learning in the ongoing care of the Laguna	Mary Abbot
For helping us to really see the Laguna for the first time	Raini Sugg Carolyn Johnson
For sharing their passion for geography, geographic tools and geographic data that helped us to see the many layers of the Laguna	Georgiana Hale Tracy Love Tom Robinson Rich Walker
For sharing his fine collection of historic Sonoma County maps and survey records	Robert Curtis
For helping us to locate and use the historic aerial photographs of Sonoma County	Paul Scheffer
For introducing us to the Bancroft Library and its unparalleled collection of manuscripts	Elise Brewster
For inspiring us to pursue historical ecology as a tool for restoration	Arthur Dawson
For helping us to learn how to use the historical resources of Sonoma County	Tony Hoskins Harry Lapham Evelyn McClure

For consulting with us on history and for reviewing our first writings on the subject	Daniel Markwyn
For helping to promote the protection and acquisition of open spaces in the Laguna	Ralph Benson Kathleen Brennan Hunter B.C. Capps Maria Cipriani Wendy Millet Marta Puente
For being our liaison to the Sonoma County Regional Parks Department	☆ Ken Tam
For helping us to understand the importance of greenbelts and urban growth boundaries	Kelly Brown
For sharing their time and energy on questions related to the Laguna and city planning	☆ Dennis Dorch ☆ Kenyon Webster Dave Woltering
For being a passionate advocate for a zero waste approach to reducing, reusing and recycling	Mary Munat
For teaching us about air quality regulation and compliance	David Grounds
For helping us to understand how cultural studies, anthropology, and archeology fit into restoration projects	Richard Stradford
For being extraordinary community movers and shakers while adopting a local reach of the Laguna	☆ Wade Belew ☆ Jenny Blaker
For volunteering, in the field, in so many useful capacities	John Condon Jason Eberhard Don Jackson Patrick Woodworth
For giving us an aerial view of the Laguna in flood	Ray Peterson

For voluntarily helping us with our GIS-related work	Mitsuko Terry
For always being available when we needed to explore new ideas related to restoration	Tom Lambert David Bannister
For providing the initial encouragement to get involved with the RMP	Susan Churchill
For helping us to find gaps in our analysis	Ed Smith
For competently steering the Laguna Foundation, as members of the board of directors, during the course the RMP	Bill Bettinelli Jim Beyers Dick Carlile Brad DeMeo Miles Ferris Jim Gilliam Pat Kilkenny Glenn Minervini-Zick Jim Shelton Dan Smith Virginia Strom-Martin George Tuttle
For always being available, as coworkers, to consult on a day-to-day basis regarding the RMP	★ Mark Green Amber Manfree Julian Meisler Dan Schurman
For coaching us with communication skills and for facilitating our Stakeholder Council meetings	Joseph McIntyre
For providing assistance with authoring, publishing, printing, layout, graphics, copyediting and proofreading.	Elmarie Hutchinson Patrick Reagh Toby Cowan Molly Matheson Christina Sloop

For providing the funds—through the California Coastal Conservancy, the City of Santa Rosa, the Sonoma County Water Agency, and the Community Foundation Sonoma County—to make the RMP possible

Maxene Spellman
Dean Paige
Renee Webber
Robert Judd

For extraordinary devotion to the Laguna's natural resources, beauty, and preservation

★ ★ Denise Cadman



STAKEHOLDER GROUPS

The various stakeholder groups that were consulted in the development of this plan are logically presented here under one of several categories:

Public regulatory and enforcement agencies
Public resource land managers
Local ranches and farms
Public planning and public policy
Conservation acquisitions and easements
Non-governmental groups
Public research services
Land management outreach
Conservation research
Conservation education
Watershed organizations

In the listings below two symbols are used to indicate the level of participation in the stakeholder/consultation process.

- ☆ This symbol indicates that one or more representatives participated in stakeholder council or advisory committee work sessions.
- ✓ This symbol indicates that the Laguna Foundation has consulted with representatives of the organization via email, telephone or in person.

PUBLIC REGULATORY AND ENFORCEMENT AGENCIES

The state, federal and international laws which govern pollution, endangered species and migratory birds are enforced by a handful of regulatory agencies. These agencies are responsible for establishing policies

for administering the Clean Water Act, the Endangered Species Act, the International Migratory Bird Treaty, and other such laws. Individuals and groups, whether public or private, who intend to modify the use of the landscape, are advised to consult with these agencies to determine if their plans might potentially be detrimental to the environment. Applicants can apply to these agencies for permission to proceed with their plans and the agencies are responsible for approving, rejecting, or modifying those plans.

Public regulatory and enforcement agencies

Bay Area Air Quality Management District: A regional district of the California Air Resources Board; it issues and monitors permits to businesses, such as dry cleaners, gasoline service stations, auto body shops, coating operations and printers, related to the release of toxins into the air.

- ☆ **California Dept. of Fish and Game:** The state agency that administers and enforces permits for hunting and fishing in the State; CDFG is also responsible conserving, protecting, and managing California's fish, wildlife, and native plant resources; CDFG is the agency responsible for issuing permits for river, stream, and lake alterations.

California Dept. of Forestry and Fire Protection: The state agency responsible for the management and protection of California's natural resources through ongoing assessment and study of the State's natural resources; CDF also oversees enforcement of California's forest practice regulations and is the agency which issues Timber Harvest Plans.

- ☆ **National Oceanic and Atmospheric Agency (NOAA)—National Marine Fisheries Service (NMFS):** Responsible for the stewardship of living marine resources through science-based conservation and management; NMFS also issues incidental take and scientific research/enhancement permits for Pacific salmonids.
- ☆ **North Coast Regional Water Quality Control Board:** The local district of the State Water Resources Control Board, which administers the water pollution regulations of the state and federal EPA; it is also responsible for the creation of basin plans and Total Daily Maximum Load (TMDL) pollution budgets. NCRWQCB defines "beneficial uses" for all water bodies in their Basin Plan; these become the basis for determining impairments to the water and inclusion on the 303(d) list.

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- ✓ **Sonoma County Agricultural Commissioner:** Mandated to promote and protect the agricultural industry, and the environment of the county, through enforcement of local, State and Federal laws and regulations; the commissioner's office is responsible for pesticide applicator oversight. They act under the regulations provided by the California Dept. of Food and Agriculture (CDFA) and the California Dept. of Pesticide Regulation (DPR). Public regulatory and enforcement agencies
 - Sonoma County Environmental and Consumer Law:** A branch of the district attorney's office which, among other things, is responsible for investigating alleged acts of environmental crime.
 - ✓ **US Army Corps of Engineers:** This branch of the army is responsible for planning, designing, building and operating navigation, flood control, and environmental protection waterways; they also administer Section 404 of the Clean Water Act and issue permits related to its enforcement. The US Army Corps of Engineers presently has two projects under study within the Laguna watershed: the Laguna-Mark West Creek Sedimentation Study and the Santa Rosa Creek Restoration Study.
 - US Environmental Protection Agency (EPA):** This agency is responsible for protecting human health and the environment; it administers, at the national level, the National Pollutant Discharge Elimination System (NPDES). Among other things, its Urban Watershed Management Branch is responsible for the "Wet-Weather Flow" program. The EPA maintains a list of water bodies that have been impaired in their water quality. This 303(d) list identifies the Laguna as impaired for high nitrogen, high phosphorus, high temperature, low dissolved oxygen, excessive sediments.
 - ✓ **US Fish & Wildlife Service:** This agency administers the regulatory and enforcement provisions of the Endangered Species Act; it issues permits in three ways: 1) enhancement of survival permits, associated with Safe Harbor agreements and Candidate Conservation Agreements with Assurances, 2) recovery and interstate commerce permits, associated with activities such as captive breeding and research to further the recovery of a species, and 3) incidental take permits, associated with Habitat Conservation plans.

PUBLIC RESOURCE LAND MANAGERS

Land managers are responsible for the day-to-day stewardship of open space and parks. They monitor the land, making on-the-ground maintenance decisions, while keeping a watchful eye on the overall vitality of the land under their jurisdiction. Since many of the local public resource agencies have facilities on lands which double as open space, these agencies also employ environmental specialists and biologists to assist with the wise care of their lands.

Local public resource agencies are responsible for operating facilities and managing the day-to-day logistics of our public infrastructure of water delivery, flood protection, parks and trails, transportation services and emergency services. Many of these have direct relevance to our planning efforts in the Laguna.

☆ **California Dept. of Fish and Game:** This department is responsible for the management of the biological resources and public access to wildlife areas and preserves within the Laguna. These include:

- Timber Hill Preserve where Guerneville Road crosses the Laguna.
- Laguna Channel between River Road and Highway 12 given to the Department by SCWA.
- Laguna Wildlife Area along the main channel and consisting of three separated land areas, one just northwest of the Occidental Road / Sanford Road intersection, a second just south of the Joe Rodota Trail, and a third small area just south of Morse Road.
- Hall Road Preserve, in joint ownership with SCAPOSD, stretching from Hall Road south to Highway 12 near Fulton Road.
- Laguna Ecological Reserve running along the north and south sides of Todd Road just west of Llano Road.
- FEMA Property located at the end of Hearn Avenue near the old Santa Rosa Air Center.

The California Dept. of Fish and Game is also responsible for conservation easements on private properties within the Laguna including:

- Alton Lane Preserve northwest of the Piner Road and Fulton Road intersection.

- Piner Road Vernal Pools, two small areas one at the end of Paradise Lane, the other near Abramson Creek.
- Southwest Santa Rosa Vernal Pool Mitigation Bank along Todd Road near Melcon Lane.
- Cunningham Marsh located south of Lone Pine Road and north of McFarlane Road in the Blucher Creek watershed.

Public resource land
managers

California Dept. of Parks and Recreation: This state department operates Annadel State Park, the only state park within the Laguna watershed.

- ✓ **California Dept. of Transportation (CalTrans):** This department owns the right-of-way for highways 12, 116, and 101 which cross the Laguna's watershed. CalTrans has planning authority over any proposed trails that might cross over or under these highways; it also has authority over all signs that may be placed along these highways. Notably, a wide setback along Highway 12 between Fulton Road and Sebastopol, designated for a future four-lane highway, may be a candidate for some type of habitat restoration.

Federal Emergency Management Agency (FEMA): This agency provides logistical support during and after natural disasters; they maintain flood insurance maps and their designation of the "100-year" floodplain is an important development tool for the Laguna's extensive floodplain. FEMA also holds a large parcel of land in the City of Santa Rosa, at the old airfield, for use in the event of a natural disaster—in between times this area is an important vernal pool habitat area.

- ✓ **Marin-Sonoma Mosquito and Vector Control District:** This special district is responsible for the elimination or control of mosquitoes and other pests that carry infectious diseases that are a threat to human health. The District has assisted the Laguna Foundation in its efforts to remove *Ludwigia*, an invasive aquatic plant, from areas where mosquito control using traditional techniques were ineffective.

NOAA—National Weather Service: This well known service has flood prediction capabilities in the Russian River basin and successfully alerted river communities of the impending December 31, 2005 flood several days prior to its cresting.

- ☆ **Santa Rosa Subregional Water Reclamation System:** This system operates four large farms, totaling 1425 acres, for the purpose

of discharging reclaimed water. They are managed with special emphasis placed on the environmental benefits they provide. Located adjacent to the main water bodies of the Laguna, these open spaces have been carefully stewarded to promote a vital and diverse mixture of plant species; they provide an unparalleled example of how land management practices can meet human needs and wildlife needs simultaneously.

Public resource land
managers

- Alpha Farm is a 429-acre working farm used largely as an irrigated pasture. The area between Roseland Creek and the Laguna de Santa Rosa is managed as a nature preserve and is not farmed. The pocket corner of the property south of Roseland Creek, which contains seven constructed ponds, is also part of the nature preserve.
- Brown Farm is a 487-acre farm located south of Highway 12 and directly adjacent to two otherwise discontinuous parts of the California Dept. of Fish and Game's Laguna Wildlife Area. The majority of this acreage is in active hay production. Recent restoration along Gravenstein Creek, which cuts across the farmland, will eventually result in a high quality nature area.
- Kelly Farm is a 397-acre farm most of which is actively farmed for hay or silage. One part of the property, the Kelly Wetlands, which is about 9 acres in size, has been reserved as a wildlife area. The principal visitors to the wetlands have been third and fourth grade students participating in the Learning Laguna program, a Laguna Foundation docent-led education program.
- Stone Farm is a 112-acre farm which lies north of Occidental Road and is bisected by Sanford Road; it is in active agricultural use for both pasture and hay production. The western half of the farm is subject to regular inundation throughout the wet season and is an excellent habitat for egrets and herons. Situated in the eastern half is the historic Stone Farm house, the site of the Laguna Foundation's new *Laguna Learning Center*.

☆ **Sonoma County Regional Parks Department:** This county department is responsible for patrolling and maintaining the county's regional park and trail system which includes these watershed facilities:

- Colgan Creek Trail

- Joe Rodota Trail
- West County Trail
- Foothill Regional Park
- Hood Mountain Regional Park
- Shiloh Ranch Regional Park
- Spring Lake Park

Public resource land
managers

Sonoma County Transportation Authority: Among other things, this authority administers Measure M funds, part of which is targeted for bicycle lanes within the Laguna watershed.

- ☆ **Sonoma County Water Agency:** The agency that is responsible for supplying clean water to the county's citizens and for maintaining flood control mechanisms throughout the county. Many miles of tributary creeks to the Laguna have been channelized since the 1960's. These creeks are important habitat corridors: restoration efforts could increase their biological diversity while simultaneously providing recreational trails on the existing maintenance roads. Areas of interest include:

- Santa Rosa Creek from Willowside Road to the Laguna confluence
- Abramson Creek from Guerneville Road to Santa Rosa Creek
- Peterson Creek from the Youth Community Park to Santa Rosa Creek
- Piner and Paulin Creeks from Marlow Road to Santa Rosa Creek
- Roseland Creek from Stony Point Road to Llano Road
- Colgan Creek from Bellevue Avenue to Llano Road
- Wilfred-Bellevue Creek, Todd Channel, and Hunter Channel from Petaluma Hill Road to the Laguna confluence
- Labath and Hinebaugh Creeks from State Farm Drive to the Laguna confluence
- Gossage Creek from Stony Point Road to the Laguna confluence
- Washoe Creek from Gravenstein Highway to the Laguna confluence
- Laguna de Santa Rosa Flood control channel in Cotati beginning at Redwood Highway

LOCAL RANCHES AND FARMS

The operators of the Laguna's dairies, ranches, vineyards, orchards and specialty farms are among its most important stakeholders. These agricultural businesses continue to demonstrate a desire to find better methods of sustainable, ecologically balanced, and wildlife-friendly land stewardship.

Restoration and management of the Laguna's public and private lands will benefit from the knowledge these experienced farmers have accumulated about the Laguna.

- ✓ Aggio Dairy
- ☆ Gallo of Sonoma
- ✓ Balletto Ranch
- ☆ Beretta Dairy
- ✓ Carinalli Dairy and Vineyards
- ☆ Clover Stornetta
- ✓ Dehlinger Winery
- ✓ Dei Dairy
- ☆ Denner Ranch
- ✓ Dotti Dairy
- ✓ Fisher Farms
- ✓ Kendall-Jackson
- ✓ Laguna Farms
- ✓ Lynmar Winery
- ☆ Mello Dairy
- ✓ Morrison Dairy
- ✓ Park Avenue Turf
- ☆ Quetzel Farms
- ✓ Rutz Cellars
- ✓ Saralee Kunde Vineyards
- ☆ Stone Horse Farms

PUBLIC PLANNING AND PUBLIC POLICY

Wise and equitable use of our natural resources is governed by our cities and counties which are empowered to enact land use plans. These plans help guide local administrators to make fair decisions regarding the orderly development of our lands. Commissions, typically composed of five or more commissioners, are established to hear and decide on specific policies to be followed by the local administrators.

Some natural resources are governed by state agencies rather than cities or counties; these have corresponding commissions to enact state policies.

Public planning
and public policy

California Dept. of Water Resources: This state department provides dam safety and flood control services, assists local water districts in water management and conservation activities, promotes water-related recreational opportunities, and plans for future statewide water needs.

California Fish & Game Commission: A state commission that has general regulatory powers to define hunting and fishing seasons, bag limits and methods of take for game animals and sport fish.

California Resources Agency: This state agency administers several programs of interest to the Laguna: the California Biodiversity Council, the California Environmental Resources Evaluation System, the North Coast Watershed Assessment Program, and the California Wetlands Information System.

- ✓ **California State Coastal Conservancy:** A state agency that uses entrepreneurial techniques to purchase, protect, restore, and enhance coastal resources, and to provide access to the California's shore. The State Coastal Conservancy provided most of the funding for the development of this restoration and management plan.

California State Recreation and Parks Commission: A state commission which establishes general policies for the administration, protection and development of the state's recreational facilities and parks. The Laguna watershed encompasses most of Annadel State Park.

- ✓ **California Wildlife Conservation Board:** Administers several programs of relevance to the Laguna watershed: the California Riparian Habitat Conservation Program, the Habitat Conservation and Restoration Program, the Inland Wetland Conservation Program, the Land Acquisition Program, the Oak Woodlands Conservation Program, the Public Access Program, and the Rangeland, Grazing Land and Grassland Protection Program.
- ✓ **City of Cotati:** This city is at the far southern end of the watershed. An active restoration program of the city's creeks is underway through the Cotati Creek Critters. The city's Community &

Environment Commission is notable in promoting ecologically smart outreach and education.

Public planning
and public policy

- ✓ **City of Rohnert Park:** This city is located entirely within the boundaries of the Laguna watershed; the major creeks entering the city from the Taylor and Sonoma Mountain region cross the city from east to west, picking up urban stormwater before joining the Laguna; opportunities exist to enhance the wildlife habitat of these waterways.
- ☆ **City of Santa Rosa:** This is the largest city in Sonoma County; its boundaries falling entirely within the Laguna Watershed. There are several important ties between the city and the watershed: 1) The Prince Memorial Greenway is Santa Rosa Creek's premier ongoing restoration project; 2) the city is developing a Creek Master Plan with the assistance of the National Park Service and others; 3) the city has an ongoing Creek Stewards program run in tandem with the Sonoma County Water Agency.
- ☆ **City of Sebastopol:** Sebastopol authored the Laguna de Santa Rosa Park Master Plan which over the years has guided the restoration of city property into the Laguna de Santa Rosa Preserve, the first Laguna public park with trails, and one of the more significant places for the public to experience the Laguna. Sebastopol's Railroad Forest, just north of the Laguna Uplands, is part of this master plan. The city's Meadowlark Field, just east of the Laguna and north of Highway 12, is part of an ambitious restoration project; it will also serve as an important connector to the area's forthcoming trail system.

Fish Net 4C: This group is composed of county supervisors and department managers from planning, public works, parks, open space districts and water agencies; it focuses on implementing restoration projects, employing best management practices during maintenance activities, and incorporating aquatic habitat protections into land use regulations and policies.

National Park Service: This service sponsors the "Rivers, Trails & Conservation Assistance Program", which was used by the City of Santa Rosa for both the Prince Memorial Greenway plan, and the city's forthcoming Creek Master Plan. RTCA staff provides technical assistance to community groups and local, state, and federal government agencies so they can conserve rivers, preserve open space, and develop trails and greenways.

North Bay Watershed Association: A group of 15 regional and local public agencies located throughout Marin, Sonoma, and Napa counties created to help regulated agencies work cooperatively on water resources issues in order to promote stewardship of the North Bay watershed.

- ✓ **Pacific States Marine Fisheries Commission:** Among other things, this multi-state commission coordinates research and management projects related to interstate fisheries: of interest to the Laguna are the data on anadromous fish.
- ✓ **Russian River Watershed Association:** An association of cities, counties and special districts in the Russian River watershed that coordinate regional programs for clean water, fisheries restoration and watershed enhancement; it is helping to prepare an Integrated Regional Water Management Plan (IRWMP), which is a prerequisite for applying for Proposition 50 grants for clean water and watershed protection projects.

San Francisco Bay Joint Venture: One of fourteen Joint Ventures established under the Migratory Bird Treaty Act; it brings together public and private agencies, conservation groups, development interests, and others to restore wetlands and wildlife habitat in San Francisco Bay watersheds to protect, restore, increase and enhance all types of wetlands, riparian habitat and associated uplands.

- ☆ **Sonoma County Bicycle and Pedestrian Advisory Committee:** A committee of Sonoma County Transit, which coordinates the planning and implementation of bicycle and pedestrian related transportation concerns. This committee has provided a detailed proposal for a community corridor linking the Santa Rosa Creek Trail with the Joe Rodota Trail along the Laguna corridor south to Cotati.

Sonoma County Fish and Wildlife Commission: A county commission responsible for assisting the Sonoma County Board of Supervisors in the proper and orderly propagation and conservation of fish and game; they administer a grant program which is funded through environmental enforcement actions of the California Dept. of Fish and Game.

Sonoma County Landmarks Commission: This county commission designates historic landmarks, reviews development proposals involving historic properties, and administers a historic resources preservation program.

- ✓ **Sonoma County Permit and Resource Management Department (PRMD):** Mandated to administer the orderly development of real property, balanced with resource stewardship under the general policy direction of the Board of Supervisors; PRMD issues permits for many development related activities including grading and construction permits, as well as natural resource related permits. PRMD is responsible for renewing the county's General Plan every twenty years; the most recent iteration of this process will be complete in 2006.

Public planning
and public policy

Sonoma County Planning Commission: A county commission that holds public hearings and makes recommendations to the Board of Supervisors concerning updates and amendments to the County's General Plan and Zoning regulations.

CONSERVATION ACQUISITIONS AND EASEMENTS

In recognition of the value that open space contributes to our daily lives, many nonprofit organizations have been successful in using private donations to acquire and permanently protect wild spaces. Some of these organizations purchase land outright (conservation acquisitions), while others employ a land conservation technique of purchasing only the natural resources of the land (conservation easements), thereby allowing the original owners to remain on their property. This technique is accompanied by enforceable conservation restrictions that the owners must adhere to. In Sonoma County, we also have a public district dedicated solely to land acquisitions and conservation and agriculture easements.

California Dept. of Food & Agriculture (CDFA): This state department administers the 2002 Farm Bill which contains voluntary conservation opportunities for farmers including: Environmental Quality Incentives Program (EQIP), Wetland Reserve Program (WRP), Farm and Ranch Land Protection Program (FPP), Conservation Reserve Program (CRP), CRP Enhancement Program (CREP), and Wildlife Habitat Incentive Program (WHIP).

- ☆ **Sonoma County Agricultural Preservation & Open Space District:** The District conserves farmland, greenbelts between cities, wildlife habitat, and land for public recreation in Sonoma County; it is funded through a county sales tax. The District holds fee title to a couple of small properties in the Laguna watershed:

- Haroutunian South, 21 acres of vernal pools and wetlands formerly used as a prune orchard.
- San Francisco Archdiocese, 28 acres of wetlands along the Wilfred-Bellevue Creek near Wilfred and Whistler Roads.
- Hall Road Preserve.

Conservation acquisitions
and easements

The District holds conservation easements on several large and significant properties along the Laguna's channel:

- Alpha, Brown, Kelly, and Stone Farms, 1440 acres owned by the City of Santa Rosa and currently under a trail location study, collectively these farms are the Laguna's largest nearly-contiguous publicly owned properties.
- Balletto Ranch, east of the Laguna's main stem between Occidental Road and Sebastopol's city limit.
- Carinalli, 245 acres between Alpha and Brown Farms, along the Laguna's main stem.
- Sebastopol Railroad Forest, adjacent to the Joe Rodota Trail in Sebastopol, 10 acres of dense riparian vegetation.
- Laguna Uplands, between the Laguna's main stem to the east and the city of Sebastopol to the west, near Palm Drive Hospital, this property is owned by the Laguna Foundation.
- Morrison Brothers Dairy, 135 acres in active dairy use, west of Stony Point Road and north of the Laguna's main channel, with protected wetlands, vernal swales, riparian vegetation and valley oaks.
- Santa Rosa Creek Greenway running along Santa Rosa Creek, the Laguna's largest sub-watershed, provides trail access to the riparian corridor along the creek from downtown Santa Rosa to Delta Pond.
- Brown, 14 acres of greenbelt lands separating Santa Rosa and Rohnert Park, along Bellevue-Wilfred Creek near Horn Avenue.

- ✓ **Sonoma Land Trust (SLT):** A nonprofit land trust that works to provide permanent land and natural resource protection within Sonoma County. In 2003, SLT and the Laguna Foundation together produced the Laguna de Santa Rosa Resource Atlas and Protection Plan with funds provided by the California State Coastal Conservancy and the City of Santa Rosa. Within the

Laguna watershed, SLT holds conservation easements on four parcels:

Conservation acquisitions and easements

- Summerfield Waldorf School and Farm is a private K-12 school and a working farm adjacent to Santa Rosa Creek at Willowside Road with a portion of their 32-acre land held in a forever wild easement.
- Blucher Creek is a 7-acre conservation easement in the Cunningham Marsh, near Azalea Lane and McFarlane Rd, home to the endangered Marsh Meadowfoam (*Limnanthes vinculans*) an endemic California native plant.
- Santa Rosa Creek Headwaters is a 162-acre open space parcel adjacent to Hood Mountain Regional Park.
- Nefertierra is an 80-acre oak woodland, mixed conifer and chaparral conservation easement off St. Helena Road.

SLT was also instrumental in securing 287 acres of land in the Laguna on behalf of the California Dept. of Fish & Game.

- ✓ **The Nature Conservancy:** This national nonprofit organization works to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. The Conservancy's local focus, organizational values and collaborative, results-oriented approach, makes it—according to a Harris Interactive poll—one of “the most trusted nonprofit organizations” in the U.S.

The Tides Foundation: A donor-advised fund that, among other things, sponsors the California Wildlands Grassroots Fund a program for small nonprofit conservation organizations seeking to permanently protect wilderness and native biological diversity.

The Trust for Public Land: A national, nonprofit, land conservation organization that conserves land for people to enjoy as parks, community gardens, historic sites, rural lands, and other natural places, by helping to negotiate and complete land conservation transactions.

NON-GOVERNMENTAL GROUPS

There are many non-governmental groups (NGOs) which have organized themselves around topics that are relevant to the Laguna. Some of these are ad hoc groups that advocate for a particular cause, some are grassroots organizations that over time have grown to regional or national stature,

many are trade groups which provide outreach to the community regarding the issues and concerns of their constituencies.

Non-governmental
groups

This list of NGOs includes many of the self-selected Laguna stakeholders who approached the Laguna Foundation with information about their special interests. Also included are the local and regional groups organized around environmental concerns, plants, wildlife, water pollution, open space, farming and ranching, hunting, and recreation.

- ✓ **Audubon Canyon Ranch:** A nonprofit organization that, among other things, tracks the reproductive performance of heron and egret colonies throughout the northern San Francisco Bay Area through their Cypress Grove Research Center.
- ✓ **Audubon Society—Madrone Chapter:** A local chapter of a national birding group which promotes backyard habitat enhancement, endangered bird species habitat protection, and migratory bird species habitat restoration.
- ✓ **Bay Area Open Space Council:** A collaborative of member organizations from the nine-county San Francisco Bay Area that works to protect and steward parks, trails and agricultural lands.
- ✓ **Bay Area Ridge Trail Council:** A regional group that is planning, promoting and constructing the 500-mile Bay Area Ridge Trail. A section of this trail traverses Sonoma Mountain, in the watershed's southeast corner.
- ✓ **Bay Institute:** This nonprofit organization works to protect and restore the ecosystems of San Francisco Bay, the Sacramento-San Joaquin Delta, and the rivers, streams, and watersheds tributary to the Estuary. In Sonoma County it has been instrumental in helping to preserve the 1760-acre Tolay Lake Ranch.

California Association of Winegrape Growers: An advocate for farmers, providing leadership on public policies, research and education programs, sustainable farming practices and trade policy.

California Dairy Research Foundation: An organization which sponsors, among other things, the California Dairy Quality Assurance program, which assists producers in meeting state water quality standards.

California FarmLink: A nonprofit organization working to retain California's family farming heritage by linking aspiring and retiring farmers.

- California Healthy Foods Coalition:** Statewide coalition of organizations promoting the use of biotechnology to produce more food on less land while caring for the environment.
- ✓ **California Native Plant Society—Milo Baker Chapter:** A local chapter of the statewide group that conducts research on native plant ecology and native plant distribution.
- California Water Environment Association:** A nonprofit association of wastewater industry professionals that provides certification and technical information about wastewater while promoting policies for the protection and enhancement of water resources.
- ☆ **California Waterfowl Association:** A nonprofit organization that works to conserve and enhance California's waterfowl habitat while also promoting waterfowl hunting.
- California Women for Agriculture:** A statewide advocacy group with an educational program to develop the interest of women in California agriculture.
- ✓ **California Invasive Plant Council (CalIPC):** A nonprofit organization that acts as a nexus for land managers, researchers, policy makers and concerned citizens for work of the research, restoration, and education towards protecting California's Wildlands from invasive plants.
- ✓ **Climate Protection Campaign:** A nonprofit organization that is working to advance practical, science-based solutions for greenhouse gas reductions; it has established a Sonoma County target for the year 2015 to reduce emissions to a level that is 25% below 1990 levels.
- Community Alliance for Responsible Environmental Stewardship (CARES):** An industry group which works to ensure the long-term economic and environmental viability of the California dairy industry.
- ✓ **Community Alliance with Family Farmers:** A collective of family operated agricultural operations that promote care for the land, sustainable local economies and social justice.
- ☆ **Community Clean Water Institute:** A nonprofit organization which sponsors a long term volunteer-based water quality monitoring program, part of which includes the Laguna de Santa Rosa.
- ✓ **Ducks Unlimited:** A national organization that works to conserve, restore, and manage waterfowl and their associated wetland habitats.

Non-governmental
groups

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- Family Farmers Alliance:** A group whose members endorse the use of genetically modified organisms (GMOs) to increase productivity and reduce pesticide, fossil fuel, herbicide and water use.
- ✓ **Forest Unlimited:** A nonprofit organization working to protect, enhance, and restore the forests and watersheds of Sonoma County through education, logging plan review, and forestry law.
- ✓ **Friends of the Federated Indians of Graton Rancheria:** A group of local citizens who support the restoration of tribal status for authenticated ancestors of the Pomo and Miwok who formerly occupied areas of southern Sonoma and northern Marin including much of the Laguna watershed.
- ✓ **Graton Alliance to Stop Pollution:** A neighborhood group which monitors land use activities in the Graton area, part of which is adjacent to the Laguna watershed's westernmost boundary.
- ✓ **Greenbelt Alliance:** A San Francisco Bay Area organization that works to protect open space and to promote livable communities through public policy development, advocacy and education.
- ✓ **Laguna Lovers:** An ad hoc group of Sebastopol citizens voluntarily supporting the removal of invasive weeds in the Sebastopol Preserve without the use of pesticides.
- ✓ **Laguna Preservation Council:** An ad hoc citizens committee formed to stop a housing project called "Laguna Vista" in Sebastopol.
- ✓ **Leadership Institute for Ecology and the Economy:** A nonprofit organization which trains future community leaders to be effective while being socially just and ecologically and economically sustainable.
- North Bay Agriculture Alliance:** A regional group of ranchers and farmers organized to protect agricultural values.
- North Bay Wool Growers Association:** Local group of ranchers that promote the wool growing industry.
- ✓ **North Coast Water Network:** A network of grassroots environmental and social justice groups in the north coast region of California focused on issues related to fresh water.
- ✓ **Northern California Earth Institute:** A local chapter of the Northwest Earth Institute which sponsors discussion forums for individuals and communities to examine and transform personal values and habits towards the goal of acting responsibly for the Earth

Non-governmental
groups

- ✓ **O.W.L. Foundation:** Open Space Water Resource Protection and Land Use advocacy organization of the Penngrove-Cotati-Rohnert Park area.
- ✓ **Redwood Region Ornithological Society:** A local birding group which encourages the study and conservation of birds, other wildlife, and their natural habitat.
- Regenerative Design Institute & Permaculture Institute of Northern California:** A multi-disciplinary ecological training program for designers, farmers, trades-people, educators, facilitators and community leaders providing instruction in development models that address both human and environmental needs.
- ✓ **River Watch:** River Watch protects local waterways through education, pollution prevention, enforcement, and preservation—through cooperation with property owners, regulatory agencies and businesses—by negotiating with stakeholders to stop and clean up the pollution of water. If cooperation and negotiations fail, River Watch brings suit to prevent further harm.
- Russian River Low Flow Committee:** A committee of the Forestville Planning Association that advocates against the designation of a “dry year” under Decision 1610 (An SCWA policy on Russian River flow rates and diversions at the Wohler and Mirabel pumping facilities).
- ✓ **Russian River Protection Council:** A forum for stakeholders representing diverse economic, environmental and public interests that facilitates stakeholder involvement in watershed enhancement efforts and works to promote stewardship, sustain a healthy economy, and provide critical habitat for native fisheries within the Russian River watershed.
- Russian River Valley Winegrowers:** The official American Viticultural Area (AVA) association, whose members nourish the region’s agricultural diversity while preserving its environmental resources and maintaining an authentic farming heritage.
- ✓ **Russian Riverkeeper:** A local chapter of the Waterkeeper Alliance, advocating the preservation, restoration and enhancement of Russian River through citizen action, scientific research and expert advocacy (formerly known as Friends of the Russian River).

Non-governmental
groups

Salmonid Restoration Federation: A nonprofit organization dedicated to the protection and restoration of California's salmon, steelhead, and trout populations and their habitat. SRF sponsors field schools and an annual technical conference.

Non-governmental
groups

Sebastopol Grange: Local chapter of the California State Grange, an agricultural fraternity.

- ✓ **Sebastopol Water Information Group:** A local citizen's group monitoring well depths in the greater Sebastopol area and advocating for better well data collection efforts by the county.
- ✓ **Sierra Club:** An organization that works to support pro-environmental candidates for elected office. The Club is America's oldest, largest and most influential grassroots environmental organization.
- ☆ **Sonoma County Bicycle Coalition:** A nonprofit group which encourages cycling for transportation and recreation while working towards safer bicycling through designated bike lanes on public roads.
- ✓ **Sonoma County Conservation Action:** A grassroots organization working toward improved "quality of life" in Sonoma County via public engagement in local environmental issues and policies.
- ☆ **Sonoma County Farm Bureau:** Local chapter of a national organization of farm and ranch families that works to achieve educational improvement, economic opportunity, and social advancement of its members. The Farm Bureau is active in legislation dealing with pesticides, wetlands, clean air and endangered species laws, advocating common sense regulations and sound science.
- Sonoma County Farm Trails:** A local organization that supports sustainable agricultural diversity in Sonoma County through the promotion of its members' products.
- ☆ **Sonoma County Grape Growers Association:** A county-wide group that represents 35% of the counties 1100 grape growers. It focuses on issues important to sustaining profitable grape production for its members including, among other things, pesticide safety, crop diseases, preventing water pollution, and protecting wildlife habitat.
- ☆ **Sonoma County Horse Council:** A local group of horse owners promoting the interests of the county's second largest agricultural industry.

- Sonoma County Purebred Sheep Breeders Association:** Local group of ranchers that promotes the sheep industry.
- ✓ **Sonoma County Water Coalition:** A coalition of groups that collectively advocate for changes to county regulations covering ground water usage and aquifer recharge.
- Sonoma County Woolgrowers Association:** Local group of ranchers that promote the wool industry.
- Sonoma Earth Action:** A Sonoma State University club of students which has historically sponsored Earth Day events.
- ✓ **Sonoma Mountain Preservation:** A citizen's group working to preserve the scenic and natural resources of Sonoma Mountain, to expand recreational opportunities on the Mountain, and to provide a forum for constructive discussion of issues relating to Sonoma Mountain.
- Sonoma-Marin Cattlemen's Association:** A local chapter of a non-profit trade association representing California's ranchers and beef producers in legislative and regulatory affairs.
- South County Resource Preservation Committee:** A citizen action group that differs sharply with the City of Rohnert Park's groundwater pumping activities.
- The Land Institute:** A national non-profit organization, working mostly in the prairie states, developing an ecologically stable "Natural Systems Agriculture"—new paradigm for food production, where nature is mimicked rather than subdued.
- The Wildlife Society—North Coast Chapter:** Local chapter of an international nonprofit scientific and educational association working toward excellence in wildlife stewardship through science and education.
- ✓ **Town Hall Coalition:** A nonprofit organization working, in part, to "educate and advocate for permanent conservation and protection of critical wildlife habitat, fish spawning streams, native forests, oak woodlands and other native wild ecosystem in parks and 'forever wild' conservation easements."
- ✓ **Trout Unlimited:** A trout and salmon conservation organization, dedicated to conserving, protecting, and restoring wild migratory fish habitat.
- Water Environment Federation:** A nonprofit technical and educational organization that works towards the preservation and enhancement of the global water environment by commissioning research studies about the sources and causes of pollution,

Non-governmental
groups

examining water treatment procedures, and educating water quality professionals on new techniques and solutions.

- ☆ **Western United Dairymen:** A membership organization that provides labor law, environmental regulation and pricing support to its members. District 3 is the local chapter which represents the interests of the Laguna's dairies.
- ✓ **Xerces Society:** A national nonprofit organization that focuses on invertebrate biology and conservation, and which, locally, promotes the creation of hedgerows.

PUBLIC RESEARCH SERVICES

State and federal research agencies are working to better understand our natural environment. They are also leaders in the development of practical methods related to environmentally sound agriculture and ranching.

- ✓ **California Geological Survey:** This state department provides information and advice to protect life and property from natural hazards. Of special note to the Laguna watershed are areas with a high potential for landslides, liquefaction, and fault ruptures.
- ✓ **NASA Ames Research Center:** The Center of Excellence of Information Technology—located at the NASA Ames Research Center—has developed watershed and invasive species modeling technology, which may be of value to the Laguna towards mapping *Ludwigia*'s extent.
- ✓ **US Dept. of Agriculture (USDA)—Agricultural Research Service (ARS):** This federal service conducts agricultural research through 22 national programs, including: Water Resource Management; Soil Resource Management; Rangeland, Pasture and Forage; and Plant Genetic Resources. Of special interest to the Laguna is ARS's interest in *Ludwigia*.
- ✓ **US Dept. of Agriculture (USDA)—National Resources Conservation Service (NRCS):** This federal service received the legacy of the Dust Bowl era Soil Conservation Service. NRCS is now the repository for the nation's soils data (the soils of Sonoma County were mapped and classified in fine detail in the 1950s and 1960s and this data is now available in GIS format). Also of note is the Wetlands Reserve Enhancement Program and the Farm and Ranch Lands Protection Program, both of which are administered by NRCS.

- ✓ **US Geological Survey (USGS):** A multi-disciplinary science organization that focuses on biology, geography, geology, geospatial information, and water, dedicated to the impartial study of the landscape, natural resources, and the natural hazards of the county. Public research services

LAND MANAGEMENT OUTREACH

Individuals who want help with stewardship and husbandry can turn to cooperative extensions and resource conservation districts. These are set up around the country with the express purpose of bringing the latest research and applied management techniques out of the universities and onto our farms and ranches and into our parks and backyards. Conservation related grant programs, through both the state and federal government, are frequently made available to applicants who approach these extensions and districts.

- Farm Service Agency:** This agency, among other things, helps farmers conserve land and water resources through its Conservation Reserve Program, its Farmable Wetlands Program, and its Grassland Reserve Program.
- ✓ **Goldridge Resource Conservation District:** This RCD works on rangeland and forestry restoration projects in Western Sonoma County up to the Laguna's main channel. This area encompasses the Forestville, Goldridge, Blucher, and Gossage regions of the watershed.
- ☆ **Sotoyome Resource Conservation District:** This RCD works on dairy, range and wildland restoration projects east of the Laguna's main channel. It encompasses the 80% of the Laguna's watershed that is not covered by Goldridge RCD. Of special note is Sotoyome's historical work with dairy's in the Laguna.
- ✓ **Southern Sonoma County Resource Conservation District:** This RCD does not work on restoration projects within the Laguna watershed, but it has staff with experience managing the type of fragile open rangeland that is very similar to that found in the Gossage-Washoe-Cotati area of the watershed. The offices of the RCD are the county's repository of 1940s and 1950s aerial photographs.
- ✓ **University of California—Berkeley Cooperative Extension:** Develops and extends the use of research-based knowledge to improve specific practices and technologies. Part of a statewide system, the Sonoma County Watershed Management program is notable for its involvement in TMDL development.

 CONSERVATION RESEARCH

Nearby universities and institutes conduct research on a variety of natural resource questions of local interest to the Laguna. Collaboration with these research programs can help leverage these efforts into a deeper understanding of our own watershed issues.

- ☆ **PRBO Conservation Science:** A nonprofit conservation research organization that uses birds as ecosystem health indicators, and bird research as a means to measure the effectiveness of land stewardship practices.
- ✓ **San Francisco Estuary Institute:** Conducts studies, collects data, and collaborates with scientific specialists working on environmental science, environmental management and policy for San Francisco Estuary and its watershed. SFEI's work in the field of historical ecology is a model for this new environmental studies discipline.
- ✓ **Santa Rosa Junior College Shone Farm:** A 365-acre working farm that serves primarily as an outdoor laboratory site for agriculture and natural resource classes.
- ✓ **Sonoma State University:** The university has several departments whose faculty and student body have contributed towards Laguna-related research: Environmental Studies and Planning Department, Biology Department, and Geography and Global Studies Department.
- ✓ **University of California Davis—Center for Integrated Watershed Science and Management:** A program of interdisciplinary study of the critical issues in watershed science, with a focus on the sustainable and cost-effective restoration and management of estuarine ecosystems.
- University of California Integrated Hardwood Range Management Program:** Researches and develops management practices for Sudden Oak Death Syndrome, oak regeneration, fire management, and rangeland practices that ensure sustainability.
- ✓ **University of California Agriculture & Natural Resources—Hopland Research & Extension Center:** One of the UC's off-campus field research centers, it is the principal facility for agriculture and natural resources field work for the North Coast.

CONSERVATION EDUCATION

Reaching out to both children and adults with information about our natural world is a special emphasis of several notable organizations. Many of the organizations in the NGO list and the Land management outreach list (above) also sponsor education-related programs

- ☆ **LandPaths:** A nonprofit organization which fosters a love of the land by creating ways for people to experience the beauty, understand the value, and assist in healing the land in their local communities. LandPath's "In Our Own Backyard" program involves schoolchildren, many of them from the Laguna watershed, in discovering watersheds and wildlife habitats through stewardship.
- ✓ **Occidental Arts and Ecology Center:** OAEC offers adult courses in biodiversity, permaculture and watersheds. Of special note are the Basin of Relations course and the Stormwater Management Workshop
- Sonoma County Regional Parks Foundation:** The Foundation runs a docent-led school program for elementary school children at the Environmental Discovery Center.
- Students and Teachers Restoring A Watershed (STRAW):** A program of the Bay Institute, the STRAW project coordinates teachers, students, ranchers and restoration specialists mobilizing them towards planning and implementing watershed studies and restoration projects. These projects use scientific, educational and technical resources directed towards the ecological restoration of riparian corridors.

WATERSHED ORGANIZATIONS

Watersheds have become a convenient organizing vehicle for cutting across the multi-jurisdictional boundaries of public resource agencies, land managers, and regulatory agencies. Many *ad hoc* local watershed groups have formed as the basis for caring neighbors to come together in support of a cleaner, healthier local environment. Some large watershed groups have established themselves as nonprofit organizations specializing in restoration or education.

- ✓ **AmeriCorps*USA Watershed Stewards Project:** This AmeriCorps program uses program participants to help conserve, restore, and enhance anadromous watersheds by linking education with high quality scientific practices.

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- ✓ **Atascadero Green Valley Watershed Council:** A membership organization, working on watershed issues of concern to the Atascadero and Green Valley Creeks. Watershed organizations
- ✓ **Blucher Creek Watershed Council:** A membership organization, working on education and restoration in the Blucher Creek watershed.
- ✓ **California Watershed Network:** A statewide nonprofit organization that is working to develop a coordinated network of community-based watershed groups in California.
- ✓ **Colgan Creek Watershed Group:** An ad hoc group of citizens caring for the Colgan Creek watershed in Santa Rosa.
- ☆ **Cotati Creek Critters:** An ad hoc group of citizens caring for the Laguna de Santa Rosa and its tributaries in the city of Cotati. The Creek Critters have recently undertaken an ambitious project of outreach, education, and restoration of a two-mile reach of the Laguna de Santa Rosa.
- ✓ **Friends of Copeland Creek:** An ad hoc group of students caring for the Copeland Creek watershed in Rohnert Park and Sonoma State University.
- ✓ **Friends of Mark West Creek:** An ad hoc group of citizens caring for the Upper Mark West Creek watershed upstream from of Windsor.
- Friends of the Petaluma River:** A non-profit organization working to conserve the Petaluma River, its wetlands and its wildlife.
- ✓ **Rohnert Park and Cotati Creeks Council:** An ad hoc group of local citizens caring for the Crane, Hinebaugh, and Copeland Creek areas of Rohnert Park.
- Roseland Creek Watershed Group:** An ad hoc group of citizens caring for the Roseland Creek watershed in Santa Rosa.
- ✓ **Russian River Watershed Council:** A watershed council working to protect, restore, and enhance the biological health of the Russian River and its watershed through a community-based process.
- ☆ **Sonoma Ecology Center:** A nonprofit organization that works toward sustainable ecological health in Sonoma Valley through research, education, restoration, and preservation.
- ✓ **Stewards of the Coast & Redwoods:** A nonprofit organization, formerly known as Stewards of Slavianska, that promotes education, preservation and restoration of the natural and cultural

resources of Russian River area state parks in partnership with the California Dept. of Parks and Recreation. Watershed organizations

- ✓ **West County Watershed Network:** An information sharing network of watershed groups in western and central Sonoma County.



PUBLIC AND PROFESSIONAL SERVICES

A number of other public and professional service groups have provided valuable assistance in the research and development of this plan. They are included in one of these categories:

- Public information services
- Professional restoration services
- Native plant nurseries
- Historical research

PUBLIC INFORMATION SERVICES

Sonoma County is heavily invested in information technology. Of special note is the county's excellent Geographic Information System (GIS) which helps simplify the multi-layered wealth of land use and natural resource data.

- ✓ **Sonoma County Assessor:** This county department retains records related to property ownership which is a valuable source of planning and public outreach data for the Laguna. There are about 93,000 parcels in the Laguna watershed.
- ✓ **Sonoma County Information Systems Department (ISD):** This county department develops and disseminates GIS data layers related to the county. One or more of these products appear in nearly every map created by the Laguna Foundation.

PROFESSIONAL RESTORATION SERVICES

Some restoration projects require more than weeding, planting, and watering. A variety of professional services, from cultural resource compliance to civil engineering may be needed in more complex projects. No endorsement is implied in this listing of professional service organizations: these are starting points for evaluating services that might be needed. Restora-

tion project managers should evaluate their needs and match professional expertise accordingly.

Professional restoration
services

Brelje & Race: A professional firm of civil and environmental engineers, surveyors, and land planners.

- ✓ **Circuit Rider Productions—Center for Ecological Restoration and Stewardship:** The Center provides professional services focused on enhancing and restoring self-sustaining ecosystems, including training, applied research, technical consulting, restoration design and planning, and large scale project implementation.

- ✓ **Garcia & Associates:** Garcia and Associates is a natural and cultural resources consulting firm specializing in cultural resources compliance, aquatic and terrestrial ecology, and natural resources policy and planning.

Golden Bear Biostudies: A professional consulting firm specializing in vernal pools and their endangered species, wetland delineation, wetland permitting, and biological assessments.

- ✓ **Laurel Marcus & Associates:** An environmental consulting firm specializing in natural resource management plans and ecosystem restoration.

Pacific OpenSpace: A professional services organization that designs native plant communities for restoration and mitigation projects including riparian areas, wetlands, native perennial grasslands and oak woodlands.

- ✓ **Philip Williams & Associates:** A professional services organization specializing in hydrology, hydraulics and sediment transport, geomorphology and engineering design of rural and urban watersheds.

- ✓ **Prunuske Chatham:** A professional services organization that provides ecological restoration services.

Vernal Pool Technologies: A limited liability corporation offering wetland mitigation bank credits.

- ☆ **Wildlife Research Associates:** A professional services firm offering ecological consulting services, specializing in bats.

NATIVE PLANT NURSERIES

Many restoration projects in the Laguna will involve revegetation using locally adapted site-specific native plants. This list of native plant nurseries is a starting point in the search for container stock.

- ✓ **Appleton Forestry Nursery:** A local grower of native trees and shrubs. Native plant nurseries
- California Dept. of Forestry and Fire Protection:** The Lewis A. Moran Reforestation Center (LAMRC) specializes in native conifer and hardwood trees and shrubs for both public and private landowner projects.
- ✓ **California Flora Nursery:** A nursery specializing in native plants with both retail and wholesale sales.
- ✓ **Circuit Rider Productions—California Native Plants:** A nursery that grows site specific, genetically appropriate native plants for ecological restoration projects.
- ✓ **Golden Gate National Park Conservancy:** Operates, among other things, a large native plant nursery, used to grow plants for restoration projects within the Golden Gate Parks.
- ✓ **Mostly Natives Nursery:** Grower of native perennials, grasses, shrubs, and trees.
- Native Here Nursery:** A volunteer-run nursery specializing in East Bay native plants; operated by CNPS.
- North Coast Native Nursery:** A nursery that provides site-specific seed collection and contract growing of California native plants for revegetation projects
- ✓ **Sonoma Horticultural Nursery:** A local grower with some native plants.
- The Watershed Nursery:** An East Bay nursery specializing in less common California natives for restoration diversity.

HISTORICAL RESEARCH

The history of the Laguna and nearby areas is recorded in manuscripts, maps, photographs, county ledgers, land records, anthropological artifacts, and archeological collections. Many of these source documents have been published in book form and are available in regional libraries. Many of the artifacts are stored in museum archives and private collections. Listed here are starting points for researchers interested in finding out what the historical landscape of the Laguna was like.

- ✓ **Bancroft Library:** The primary special collections library of the University of California, Berkeley. It is one of the largest and most heavily used libraries of manuscripts, rare books, and unique materials in the United States, housing over 60 million manuscript items.

California State Library: The California History Room in Sacramento houses historical documents and artifacts of the state. The Sutro Library, in San Francisco, contains valuable pre-statehood documents.

- ✓ **Curtis & Associates:** Robert Curtis, a professional surveyor, has an outstanding collection of historical Sonoma County maps and land title abstracts.

National Agricultural Statistics Service (NASS): A service of the USDA that provides statistics about agriculture.

National Archives: The nation's repository of government documents has a Pacific Region office in San Bruno.

- ✓ **Santa Rosa Junior College Library:** The JC's Frank P. Doyle Library houses a small collection of books of historical interest to the region.

Society of California Pioneers Library: Alice Phelan Sullivan Library, in San Francisco, contains more than fifty original pioneer diaries.

- ✓ **Sonoma County Archives:** The county's repository of official documents containing, among other things, land use and planning documents, maps, and other documents related to the development of the county. Not open to the public.
- ✓ **Sonoma County Clerk and Recorder and Assessor:** The county's administrative paperwork hub keeps a document trail of all land transactions since California was admitted to the U.S. on September 9, 1850.

- ☆ **Sonoma County Library Local History Annex:** This facility houses the non-circulating collection of historical books, photographs, newspapers, census figures, and official records related to Sonoma County.

Sonoma State University—Anthropological Studies Center: ASC specializes in assisting clients in complying with the requirements of the California Environmental Quality Act and National Historic Preservation Act.

- ✓ **Sonoma State University Library:** The Schultz Information Center has a collection of regional books and maps, some of which are not found in other local libraries.
- ✓ **Southern Sonoma County RCD / NRCS:** This office houses the aerial photographs of the 1940s and 1950s that were taken for World War II civil defense and which were subsequently used to map the county's official soils survey data.

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- ✓ **Western Sonoma County Historical Society:** A non-profit organization that helps to preserve West County's heritage; their archives contains some Laguna-specific photographs. Historical research

