

MCCONNELL SANCTUARY, INC., DBA APPLE SOULS COLUMBIA FOUNDATION

Proposal Summary December 1, 2004

APPLICANT AGENCY: MCCONNELL SANCTUARY, INC., DBA APPLE SOULS

AMOUNT REQUESTED: \$90,000

PROJECT TITLE: Seed to Seedlings: Lake Community Propagation Center (S2S)

COLLABORATIVE AGENCIES: Lake Valley Land Trust, Lake County Watershed Information Center, and Lake

County Resource & Conservation District

TARGET REGION: Lake and Sonoma counties

PROJECT PERIOD: June 1, 2005 – May 31, 2007 (24 Months)

SUMMARY OF MAIN PROPOSAL

- 1. Grant Purpose and Funding Request: Apple Souls requests \$90,000 from the Columbia Foundation to underwrite costs to launch a native plant propagation center. The project, *Seed to Seedlings: Lake Community Propagation Center (S2S)*, will be developed at the Land Trust's Connelly Ranch in Lake, California. This is a collaborative effort between **Apple Souls**, **The Land Trust of Lake County**, the Watershed Information Center & Conservancy of Lake County, and the Lake County Resource & Conservation District. The *Seed to Seedlings* project is a self-sustained, earned income initiative that will utilize collaborative efforts to engage the community and youth from Lake and Sonoma counties while providing critical and needed native plant species for restoration projects countywide.
- 2. Need for the Project: In the Lake Valley, native species and ecosystems are increasingly at risk. Accelerating sprawl and invasive nonnative species have consumed native plant communities. Flooding, excessive clearing, and other activities have also besieged native plants. Relatively little is known about the propagation and growth of local plant species and few of Lake's native plants are commercially available. The California Conservation Corps has been the main producer of local, native plant species. Due to fiscal changes of the State of California, they are ending their propagation program permanently.

3. Plan of action, including the rationale for this approach:

The *Seed to Seedlings* project was initiated partly to respond to the challenges of conserving and restoring natural resources. Both urban and rural landowners are landscaping with native plants, and more and more neighboring farm regions are being transformed into naturalized ecosystems. This trend benefits the environment and educates landowners about the natural environment, bringing them closer to the historical ecosystems of their region. Apple Souls proposes to support restoration efforts in the region by: identifying native species appropriate for restoration, developing propagation techniques for those species, and educating the community.

4. Goals (Accomplish/Achieve): The broad intention of the *Seed to Seedlings* (S2S) project is to contribute significantly to: 1) the long-term conservation of natural resources and biodiversity within the Lake Valley region, and 2) the understanding and development of sustainable natural resources. The S2S project will support restoration efforts on private and public lands by implementing the following three goals and objectives:

GOAL (1): To develop a viable, self sustained propagation center

Objectives:

1. To build a greenhouse with a shade house, automated watering system, and an automated mist bench.

- 2. To develop a Propagation Facility Operational Plan in consultation with the Lake County Resource & Conservation District and the Lake County Flood Control District.
- 3. To conduct a plant survey to collect the baseline data needed to support restoration efforts.

GOAL (2): To provide native plants species for restoration projects in Lake County

Objectives:

- 4. To propagate 2,000 seedlings to increase native plant populations within the county. (All revenue derived from the sale of plants will be used to support management of the facility and education programs).
- 5. To work with the Watershed Information Center and the Lake County Resource & Conservation District to identify priority habitat regions and regionally coordinate distribution of plants.
- 6. To participate in on-the-ground restoration projects that utilize propagated plants.

GOAL(3): To conduct community and youth outreach and education regarding the importance of native plants and agricultural land restoration

Objectives:

- 7. To develop native plant propagation and preservation curriculum for school districts in Lake and Sonoma counties.
- 8. To involve students in plant propagation operations and restoration projects.
- 9. To develop the Lake Valley Plant Propagation & Restoration brochure guide.
- 10. To develop a native plant demonstration garden in conjunction with public education workshops.
- **5. Methods/strategies to achieve goals (how goals will be accomplished/achieved):** The three major goals of the *Seed to Seedlings* project will be accomplished through a collaborative Propagation Management Team which will be spearheaded by the senior management of Apple Souls and Connelly Ranch. The Lake County Resource & Conservation District will be a resource for project management expertise. Collaborative agencies will set up committees of board members, staff and volunteers to coordinate project components. Apple Souls will be responsible for youth education supervision, school district outreach, and curriculum development. The Land Trust of Lake County will supervise site development, and propagation facility structural enhancements and compliance. The Watershed Information Center will centralize community information, outreach to landowners, and coordinate plant distribution to sites.
- **6. Timeline:** The (24 month) *Seed to Seedlings* project will start on June 1, 2005 and will be completed on May 31, 2007. The propagation center will be ready for propagation of plants by September 2005. Native plants are expected to be available by March 2006.
- 7. Anticipated barriers/challenges: One of the anticipated challenges of the S2S project will be designing the annual work cycle needed to maintain the facility and plant production while relying primarily on students and class-driven restoration projects during the academic year. The solution will involve designing an annual work plan that uses primarily volunteers, interns, and students during the academic year, with paid staff utilized to carry the heavy workload during the summer. The project will also present unique selection and cultivation challenges which will be addressed through consultation with the Lake County Resource & Conservation District. There is such a high demand for native plant species in the region that it will be a challenge to decipher which projects should receive priority. Both the Watershed Information Center (WICC) and the Lake County Resource and Conservation District will advise on site coordination for distribution of plants.
- **8. Impact and significance:** The *Seed to Seedlings* project is a progressive and regional approach to promoting sustainable food systems in Lake Valley. It advances the protection of natural resources and biodiversity, and thereby supports a sustainable community of natural resources. The public interest benefit will be monitored through participation of farm owners and the number of requests for restoration assistance or independent restoration projects launched. The utilization of native plants on these projects is also a measurement of success.

- **9. Evaluation/assessment plan:** To evaluate the *Seed to Seedlings* project, the collaborative Propagation Management Team will supervise its progress. Apple Souls will involve its Board of Directors Program Committee in the supervision of this team and program compliance with objectives.
- **10. Qualifications of the organization:** Apple Souls, a 501(c)3 public benefit corporation was founded to answer environmental education program needs that utilize outdoor settings to teach responsible stewardship and to serve a multitude of age and interest groups. These include schools, youth organizations, special populations, and seniors and special-needs youth. Apple Souls has already integrated into 27 school district classrooms providing over 5,000 experiences to over 1000 students.

The Land Trust of Lake County is a non-profit organization and works to protect the natural diversity, scenic open space and agricultural vitality of Lake County by preserving lands with significant conservation values for present and future generations and by fostering an appreciation and understanding of the natural environment. The Land Trust works to permanently protect lands by: entering into conservation agreements, facilitating property transfers, accepting outright land donations, monitoring protected land, working with local, state, and federal agencies to acquire open space, parks, and wildlife refuges.

- 11. Relationship to Similar Programs or Organizations: Apple Souls is currently the Co-Chair organization of the Environmental Education Coalition of Lake County. Apple Souls works with over 27 schools in Lake and Sonoma counties, and manages restoration projects throughout both regions. Through restoration project management, the organization initiates multi-agency collaborations (private and public) on an ongoing basis.
- 12. Future Plans for the Program or Project, Including Dissemination of Results: The Seed to Seedlings project sets the stage for the collaboration's larger goals that will extend beyond the two-year initial proposal. The project is a long-range self-sustaining project that is expected to grow and develop indefinitely. It matches a great and continuous need in the Lake Valley to address issues of erosion and land habitat restoration. Eventually, the collaborative plans to develop a long-range plan for expansion and increased community participation as well as agency participation. The collaborative also hopes to eventually include a research component with the propagation facility in conjunction with a university. Long-range expansion plans include Acorns Soupe's agenda to provide resources to surrounding counties. In future years, the project will be able to provide native plants and student watershed expertise to other Lake Valley stream restoration projects.
- 13. Organizational Development/Capacity Building Needs and Plans: As a young organization, launched in 2000, collaboration with the Land Trust on the *Seed to Seedlings* project is a capacity building activity for Apple Souls. While the project was initiated by both directors of Apple Souls and Connolly Ranch to support restoration and education in the valley, it provides an expansion of sustainable program services for both agencies. Since both co-located agencies share target populations and similar missions, to prevent duplication of service, the *Seed to Seedlings* project coordinates and directs agency resources to support their individual and long-range goals.

COLLABORATIVE AGENCIES

AGENCY	CONTACT
The Land Trust of Lake County	707.224.1894
Director, Connolly Ranch	email:
Roberta Tugendreich, Director	ro_Lakelandtrust@sbcglobal.net
Watershed Information Center & Conservancy of Lake County, Lake Conservation Development & Planning	Jeff Sharp, Director 707-259-5936 email: jsharp@co.Lake.ca.us
Lake County Resource & Conservation District	Michael Champion 707-252-4188 email: michael@Lakercd.org
	chian. menaere Eukered.org



MCCONNELL SANCTUARY, INC., DBA ACORN SOUPE COLUMBIA FOUNDATION Proposal Narrative December 1, 2004

CATEGORY - SUSTAINABLE COMMUNITIES AND ECONOMIES

1. GRANT PURPOSE

Apple Souls, in collaboration with The Land Trust of Lake County, the Watershed Information Center & Conservancy of Lake County, and the Lake County Resource & Conservation District, requests \$90,000 from the Columbia Foundation to launch a community-wide propagation project – *Seed to Seedlings: Lake Community Propagation Center* (S2S). The propagation facility will be designed to provide native plant species for restoration, research, and education projects within the Lake and Sonoma valleys.

Directors of Apple Souls and The Land Trust of Lake County (Land Trust) initiated the *Seed to Seedlings* project to support native plant restoration in the Lake County agricultural region by supplying landowners with plants, information and assistance in restoration. The *Seed to Seedlings* project provides a sustainable solution for the collection of native plants while establishing a reliable income for operating costs. For collaborating agencies, this project sets the stage for larger restoration activities and community education goals that will extend beyond the two-year initial project.

Project outcomes will include a fully developed propagation facility for studying and growing native trees, shrubs, grasses, and other plant species; a native plant survey to identify species appropriate for Lake Valley restoration projects; and a brochure guide that will provide guidelines for naturalizing farm regions. In carrying out this project, partner agencies will mobilize a network of volunteers and establish a framework for collaboration among private, local, state, and federal groups involved in restoration projects. With these tools in place, Apple Souls can more effectively fulfill its role as a resource for farmers and others groups that are working to protect and preserve Lake Valley's delicate food resources.

2. NEEDS ASSESSMENT

Food Production in Lake Valley: Lake County is home to 1500 farms and encompasses more than 485,000 acres; 70,000 in cropland. While the region is famous for growing grapes (10% of acreage), the Lake Valley region is a rich and diverse source of food production. Major crops include apples (all); barley; cherries; kiwifruit; oats; olives; cling peaches; Asian pears; plums; prunes; raspberries; strawberries; English walnuts; and wheat. The valley also produces extensive livestock and poultry resources. Lake Valley's wine industry accounts for \$4 billion of California's annual \$33 billion economic impact from winemaking and related industries. Due to such valuable food and wine resources, Lake Valley has also become known as a culinary center of the United States, home to some of the country's best chefs.

Native Plants are Disappearing: Native plants are the most visible elements of California ecosystems. Native plants are habitats for wildlife and have evolved together with birds, salmon, and all native animals; dependents on native plants for food, shelter, and survival. Native plants, contributing to biodiversity and the reduced need for pesticides, are essential elements in healthy agricultural regions.

California plants are full participants in the extinction crisis that has sparked outcry from scientists. The World Conservation Union reports that 29% of plant species in the U.S. are at risk of extinction. Scientists have found that more than 1400 of California's native plant species (22% of the native flora) are at risk, while many California plants species have already been lost.

Unfortunately, in the Lake Valley, native species and ecosystems are increasingly at risk. Accelerating sprawl and invasive nonnative species have consumed native plant communities. Flooding, excessive clearing, and other activities have also besieged native plants.

Threats to Habitat, Threat to Farms: Lake County maintains a long list of Threatened & Endangered Species which include fish, mammals, plants, invertebrates, birds, amphibians, and reptiles – all integrated links in the delicate eco-system that supports a rich and bio-diverse farmland region. Landowners have a vested interest in protecting Lake Valley's resources - its soil, land, environment, vineyards and people. Local landowners have placed a total of 11,000 acres of agricultural land in The Land Trust of Lake County, ensuring their land will never be developed. Another 16,000 acres are protected under the Williamson Act, a program that provides incentives to keep land in agricultural production and open space. However, conservation is only one component of land preservation. Restoration and enhancement with native plants are crucial elements. In this northern region, however, relatively little is known about the propagation and growth of local plant species and few of Lake's native plants are commercially available. The California Conservation Corps has been the main producer of local, native plant species. Due to fiscal changes of the State of California, they are ending their propagation program permanently.

3. PLAN OF ACTION

The *Seed to Seedlings* project was initiated partly to respond to the challenges of conserving and restoring natural resources. Both urban and rural landowners are landscaping with native plants, and more and more neighboring farm regions are being transformed into naturalized ecosystems. This trend benefits the environment and educates landowners about the natural environment, bringing them closer to the historical ecosystems of their region. Apple Souls proposes to support restoration efforts in the region by: identifying native species appropriate for restoration, developing propagation techniques for those species, and educating the community.

The *Seed to Seedlings* collaborative agencies plan to address regional plant needs by developing an easily accessible propagation center, by assisting landowners in restoration projects, and educating youth and the community on the issues of agricultural land and natural resource preservation.

The propagation center will be centrally located in the City of Lake, conveniently placed on the Land Trust's Connolly Ranch. Connolly Ranch borders Westwood Hills Park, a 20-acre oak woodland owned by the City of Lake, and is in close proximity to the Di Rosa Preserve, a 217-acre setting with a 35-acre lake.

4. PROJECT GOALS

The broad intention of the *Seed to Seedlings* (S2S) project is to contribute significantly to: 1) the long-term conservation of natural resources and biodiversity within the Lake Valley region, and 2) the understanding and development of sustainable natural resources. The S2S project will address this by implementing the following three goals and objectives:

GOAL (1): To develop a viable, self sustained propagation center

Objectives:

- 11. To build a greenhouse with a shade house, automated watering system, and an automated mist bench.
- 12. To develop a Propagation Facility Operational Plan in consultation with the Lake County Resource & Conservation District and the Lake County Flood Control District.
- 13. To conduct a plant survey to collect the baseline data needed to support restoration efforts.

GOAL (2): To provide native plants species for restoration projects in Lake County

Objectives:

- 14. To propagate 2,000 seedlings to increase native plant populations within the county. (All revenue derived from the sale of plants will be used to support management of the facility and education programs).
- 15. To work with the Watershed Information Center and the Lake County Resource & Conservation District to identify priority habitat regions and regionally coordinate distribution of plants.
- 16. To participate in on-the-ground restoration projects that utilize propagated plants.

GOAL (3): To conduct community and youth outreach and education regarding the importance of native plants and agricultural land restoration

Objectives:

- 17. To develop native plant propagation and preservation curriculum for school districts in Lake and Sonoma counties.
- 18. To involve students in plant propagation operations and restoration projects.
- 19. To develop the Lake Valley Plant Propagation & Restoration brochure guide.
- 20. To develop a native plant demonstration garden in conjunction with public education workshops.

5. METHODS/ STRATEGIES

The three major goals of the *Seed to Seedlings* project will be accomplished through a collaborative Propagation Management Team which will be spearheaded by the senior management of Apple Souls and Connelly Ranch. The Lake County Resource & Conservation District is a resource for project management expertise. Collaborative agencies will set up committees of board members, staff and volunteers to coordinate project components. Apple Souls will be responsible for youth education supervision, school district outreach, and curriculum development. The Land Trust of Lake County will supervise site development, and propagation facility structural enhancements and compliance. The Watershed Information Center will centralize community information, outreach to landowners, and coordinate plant distribution to sites.

GOAL (1): To develop a viable, self sustained propagation center

Apple Souls and the Land Trust's Connolly Ranch offices are co-located on Connolly Ranch grounds, and serve as a central location for community programs. The propagation facility will be developed near the program center of the ranch adjacent to the barns, garden, public entrance/parking area, and office building.

Seed to Seedlings: Lake Community Propagation Center – Connolly Ranch is a 12-acre property, located within the city limits of Lake, and serves as the Land Trust's Agricultural and Environmental Education Center. The mission of Connolly Ranch is to provide unique, dynamic, hands-on educational programs in an outdoor setting, for children and the community, creating active environmental stewards for Lake County and the earth. The grounds include: a 2,500 square foot barn, a duck pond, an organic garden, animal pastures, and a nature trail system. In addition to three acres of cultivated land, there are nine acres of oak woodlands.

The 1000 square foot propagation facility will be constructed on Connolly Ranch in an area adjacent to barns/pastures in what is now an under-utilized garden space. A pre-fabricated greenhouse will be installed to allow for propagation activities as well as provide for a suitable environment for young plants and seedlings. A

36' x 72' shade house will be constructed using either PVC or wood framing draped with shade cloth to provide adequate protection to more established plants. Plant benches will be installed to prevent rooting, rot, and rodent issues from arising. A misting system will also be installed along with drip irrigation. Propagation mats will be added to encourage growth.

Staffing: Work will be accomplished throughout the year using a combination of individual student and class projects. A permanent Facility Manager will contribute technical advice for greenhouse operations and coordination for propagation efforts and ongoing field restoration projects. This will involve soliciting, designing, and assisting with restoration projects as well.

Seeds and Plants: Seed collections and donations of plant species from local sources will be used to start the foundation collection of native plants. However, additional plant materials must be collected and propagated over several years to build the substantial volume of materials needed to support large-scale restoration efforts. Seed collection, seed processing, storage, propagation, and planting activities will be conducted throughout the year. **Targeted Native Plants: 95 species (24 months)**

The center will support the conservation and restoration of several rare plant species and make both technical information and source plant materials available to regional nurseries and landowners. The first crop of plants will be produced (available March 2006) and one teaching demonstration gardens will be planted and designed for future planting.

Propagation Facility Operational Plan: This plan will be developed with consultation by the Lake County Resource & Conservation District and the Lake County Flood Control District to design operations with maximum efficiency. The continued involvement of these experts will be very valuable in the planning and execution of work. The plan will cover staffing, management, coordination, conflict-resolution, sales procedures, outreach and continuous development and expansion of programs. The "Outreach and Community Participation" section of the plan will involve public meetings to solicit community input and School District participation. Apple Souls and The Land Trust of Lake County will create a **Memorandum of Understanding** to co-operate the propagation facility and education programs. The Operational Plan will integrate the agency agreements into daily procedures.

Plant Survey: The objective of the plant survey is to collect the baseline data needed to support restoration efforts. The survey will fill in gaps in existing plant inventory information and the data will be used to develop a list of species appropriate for restoration within the Lake Valley. From this plant list, target species will be identified for propagation studies. The goals of this activity are: (1) to develop propagation techniques for common native species which are not currently produced commercially; (2) to expand agency knowledge of regeneration and growth requirements of Lake Valley species; and (3) to publish findings.

Goal (2): To provide native plants for restoration projects in Lake County

By providing native plants for sale, the *Seed to Seedlings* project will increase native plant populations within the county and provide an income. The project provides an earned income resource for the Land Trust to support continuous development of facility related programs – a sustainable method to collect native plants while establishing a reliable income for operating costs. All proceeds from the sale of plants will be used to maintain the facility and education programs. Within four years of operations, planning estimates target the *Seed to Seedlings* facility to be fully self-sustained (covering 100% of operating costs) from plant sales and services. **Targeted Production: 2000 plants (15 months)**

Donated Plants: Additionally, the revenue for the program will support the project's capacity to donate plants to vital projects that are under funded. Operating calculations factor in donating 8% of plants produced for qualified restoration projects. Donors will also be solicited to sponsor plant costs to support the donor plant program.

The Watershed Information Center and the Lake County Resource & Conservation District will assist in identifying priority habitat regions and regionally coordinating how plants should be distributed. The Watershed Information Center will utilize its complex community development website to centralize information regarding the inventory of plants, the background of species, and details of restoration sites in progress. Additionally, the site will be utilized for outreach to landowners and other major stakeholders.

On-the ground restoration activities will be conducted by Apple Souls within their existing youth restoration program. Activities will likely include protection and propagation of desirable plants currently on-site, chemical-free removal and eradication of weed species, and selection and planting of habitat and culturally-relevant plants according to a habitat restoration plan.

Goal (3): To conduct community and youth outreach and education regarding the importance of native plants and agricultural land restoration

Substantial numbers of visitors and schools are expected to come to the facility each year. Through demonstration plots, and other educational tools, this project will greatly advance efforts to increase public understanding and support for conserving biological diversity. The S2S project will target farmers in addition to student groups, teachers, community members, and local agencies. **Targeted Number of Participant Students: 3200 (24 months)**

Curriculum: The youth component focuses on the education of students about native plant propagation and preservation, the propagation of endangered plant species to enhance their survival, and research in conventional and biotechnological techniques to improve propagation. The new curriculum will cover topics such as conservation and cultivation of native plants, site preparation, elements of shade, transplanting, propagation of native plants, seed propagation, vegetative propagation, fern propagation, propagation of specific wild flowers, propagation of specific trees, shrubs, and woody vines. Students will learn valuable botanical concepts while studying techniques and processes. All Apple Souls curriculum utilizes the State of California, Department of Education Standards.

Service Learning: A goal of the S2S project is to not only educate youth about native plants, but to provide the valley with trained workers. Students will be involved in each step of the facility design and construction as well as the creation of the various restoration sites. As a service-learning component, the S2S project produces native plants as well as skilled watershed managers. Students will be assisted in identifying and gathering native plant seeds. Watershed management skills will also be taught to students in the classroom at schools.

Brochure Guide: The Seed to Seedlings project will produce the Lake Valley Plant Propagation & Restoration brochure guide. This guide will be written for landowners and the general public with three primary objectives: (1) to convey the importance of native plant species and generate interest in restoration, (2) to provide general guidelines for restoration efforts, and (3) to initiate a volunteer network coordinated at Connolly Ranch. It will be a user-friendly manual, to assist those who wish to learn plant propagation in their own communities. The brochure guide will be prepared and distributed to farmers and the general public through all outreach efforts of the Seed to Seedlings collaborative agencies (including direct mail, web site, and workshops).

Tours & Workshops: The S2S project will involve developing a native plant demonstration garden in conjunction with public education workshops and tours at the facility. Connolly Ranch has a partnership with the University of California's Master Gardener program as a resource for teaching. Farmers, members from local communities and schools will visit Connolly Ranch where they will be given first-hand knowledge on how to propagate plants by using plant cuttings. Attendees will receive a certificate at the completion of the workshop. The purpose of the workshop is to encourage active involvement and empowerment of the surrounding community, as well as the acquisition of cuttings. The workshops help make the propagation facility personal for the community - a living example of what they can achieve.

6. TIMELINE

The (24 month) *Seed to Seedlings* project will start on June 1, 2005 and will be completed on May 31, 2007. The propagation center will be ready for propagation of plants by September 2005. Native plants are expected to be available by March 2006.

QUARTERLY TIMELINE

	1	2	3	4	5	6	7	8	END
Activity	June '05	Sept '05	Dec '05	Mar '06	June 06	Sept '06	Dec '06	Mar '07	May '07
Site design completed	X								
Project Evaluation set up	X								
Collection of seeds and plants	X	X	X	X	X	X	X	X	X
Propagation facility site completed		X							
Facility Operational Plan completed			X						
Plant survey launch			X	X	X	X	X		
Public Education workshops			X	X	X	X	X	X	X
First plants available for distribution				X					
Watershed Info Center online completion				X					
On-the-ground restoration participation				X	X	X	X	X	X
New curriculum completed					X				
Brochure guide available to public					X				
Program Evaluation assessment Phase I					X				
School District tours begin						X			
Program Evaluation assessment Phase II								X	
Program Evaluation completion									X
Project End May 31, 2007									X

7. Barriers/Challenges

Staffing: One of the anticipated challenges of the S2S project will be designing the annual work cycle needed to maintain the facility and plant production while relying primarily on students and class-driven restoration projects during the academic year. The solution will involve designing an annual work plan that uses primarily volunteers, interns, and students during the academic year, with paid staff utilized to carry the heavy workload during the summer. As the number of formal restoration projects increases, the project will begin to generate additional financial support to meet the facility and labor expenses of the project.

Cultivation: The project will also present unique selection and cultivation challenges which will be addressed through consultation with the Lake County Resource & Conservation District. The collaborative will also seek support from the Native Plant Society for advice and guidance as well.

High Demand: There is such a high demand for native plant species in the region that it will be a challenge to decipher which projects should receive priority. Both the Watershed Information Center (WICC) and the Lake County Resource and Conservation District can advise on site coordination for distribution of plants. The WICC will utilize its complex web project management system to map out site locations and coordinate restoration groups.

8. IMPACT/SIGNIFICANCE

The *Seed to Seedlings* project is a progressive and regional approach to promoting sustainable food systems in Lake Valley. The public interest benefit will be monitored through participation of landowners and the number of requests for restoration assistance or independent restoration projects launched. The utilization of native plants on these projects is also a measurement of success.

By providing native plants, restoration assistance and education, the project encourages landowners to assess their land restoration and enhancement needs, and provides easy-access resources for implementation. Encouraging environmental habitat restoration with private landowners has been a difficult task for government and adult-based restoration groups. However, landowners are much more supportive of restoration teams when they involve children and education components.

The S2S project also enhances knowledge by expanding agency knowledge of regeneration and growth requirements of Lake Valley species. It sets an important foundation by which to support future research.

By focusing on youth education and curriculum, the program ensures future land stewards that valuable natural resources are preserved over the long term. This contributes to increased public awareness and support of the benefits of agricultural land use.

9. EVALUATION/ASSESSMENT

To evaluate the *Seed to Seedlings* project, the collaborative Propagation Management Team will supervise its progress. Apple Souls will involve its Board of Directors Program Committee in the supervision of this team and program compliance with objectives. This committee will report back to the general Board of Directors. Listed below are targeted measurements and reporting:

OBJECTIVE MET	MEASUREMENT/MONITORING
1. To build a greenhouse with a shade house, automated	Completion of facility and standards approval by Lake
watering system, an automated mist bench.	County Flood Control and the RCD. Reporting: Board of
	Directors of Apple Souls.
2. To develop a Propagation Facility Operational Plan in	Completion of plan and standards approval by consulting
consultation with the Lake Co. Resource Conservation	agencies. Reporting: Board of Directors of Apple Souls.
District and the Lake County Flood Control District.	
3. To conduct a plant survey to collect the baseline data	Completion of survey and standards approval by consulting
needed to support restoration efforts.	agencies. Reporting: Apple Souls Board of Directors
4. To propagate 2,000 seedlings to increase native plant	Facility Manager will produce monthly progress reports for
populations within the county.	Propagation Management Team.
5. To work with the WICC and the Lake Co. Resource	Facility Manager will produce quarterly progress reports for
Conservation District to identify priority habitat regions	Propagation Management Team.
and regionally coordinate distribution of plants.	
6. To participate in on-the-ground restoration projects	Apple Souls Program Manager and Lead Teacher will present
that utilize propagated plants.	monthly progress reports to Executive Director. WICC will
	track volume of plants, location placement, compile data for
	Propagation Management Team.
7. To develop native plant propagation and preservation	Apple Souls Program Manager and Lead Teacher will present
curriculum for school districts	monthly progress reports to Executive Director.
8. To involve students in plant propagation operations	Apple Souls Program Manager and Lead Teacher will present
and restoration projects.	monthly progress reports to Executive Director.
9. To develop the Lake Valley Plant Propagation &	Administrative staff will report to Propagation Management
Restoration brochure guide.	Team and Apple Souls Board Marketing Committee.
10. To develop a native plant demonstration garden in	Facility Manager will produce quarterly progress reports for
conjunction with public education workshops.	Propagation Management Team.

In addition to the above measurements of project success, community organizations that conduct restoration projects will be given incentives to offer feedback online or through surveys. Apple Souls will also work with the Watershed Information Center to post surveys for other stakeholders. Overall, the program will track the participation of landowners and the number of requests for restoration assistance or independent restoration projects launched. All final evaluation measurements will be integrated and assessed by the Board Program Committee.

Monitoring Curriculum Development: Many restoration projects are in critical need of monitoring. However, due to high costs, professional monitoring is rarely accessible. By developing youth monitoring curriculum, Apple Souls plans to empower local youth to contribute to the monitoring efforts in their areas and thereby track the success of restoration projects. This will also advance the organization's capacity to collaborate on matching funded projects. Apple Souls plans to collaborate with either of two universities to establish a rigorous monitoring curriculum for continuous data collection and review. Targeted universities are the University of California, Davis and California State University of Sonoma. This is a component of the agency's Strategic Plan and is targeted to launch in Fall 2005.

Work Products Developed: The Seed to Seedlings project will result in the following work products:

- a) A fully developed propagation facility
- b) A Native Plant Survey to identify (and publish) species appropriate for Lake Valley restoration projects
- c) A Lake Valley Plant Propagation & Restoration brochure guide that will provide guidelines for naturalizing farm regions
- d) A Propagation Facility Operational Plan
- e) 2,000 Lake Valley native plant seedlings
- f) Regionally-specific native plant propagation and preservation curriculum for school districts

For additional information on public interest benefits, please see Section (8) on Impact/Significance.

10. ORGANIZATION QUALIFICATIONS

Apple Souls, a 501(c)3 public benefit corporation was founded to answer environmental education program needs that utilize outdoor settings to teach responsible stewardship and to serve a multitude of age and interest groups. These include schools, youth organizations, special populations, and seniors and special-needs youth. Apple Souls has already integrated into 27 school district classrooms providing over 5,000 experiences to over 1000 students. Formed in March 2000, Apple Souls has conducted informal environmental education programs since 1997.

Mission Statement: Apple Souls's mission is to provide youth development and environmental education programs for K-12 students by partnering with the community to foster an appreciation of the nature in Lake and Sonoma counties. Apple Souls implements its mission by engaging students in stewardship while providing experiential, hands-on opportunities for learning and healing on the land.

Locations: To implement its mission, Apple Souls sponsors projects at schools, various public parks, and private lands. The organization's regionally relevant curriculum has thus far included restoration and education projects throughout Lake and Sonoma counties. Sites include Bothe Lake Valley, California Academy of Sciences – Pepperwood Ranch, McConnell Sanctuary at Sugarloaf State Park, McConnell Ranch, Robert Louis Stevenson State Park, Bale Grist Mill Park, and Skyline Wilderness Park. Other sites where students have been invited to participate in restoration activities include Sulphur Creek, Sutter Home, Connolly Ranch, Salvador Creek, Chase Creek, Carneros Creek, Heath Canyon Creek, and reaches of the Lake River.

Acting as Co-Chairman of the Environmental Education Coalition, Executive Director Angelina Phillips has been initiating collaboration to support expanded public-private partnerships for on-the-ground projects.

<u>The Land Trust of Lake County</u> is a non-profit organization and works to protect the natural diversity, scenic open space and agricultural vitality of Lake County by preserving lands with significant conservation values for present and future generations and by fostering an appreciation and understanding of the natural environment. The Land Trust works to permanently protect lands by: entering into conservation agreements, facilitating property transfers, accepting outright land donations, monitoring protected land, working with local, state, and federal agencies to acquire open space, parks, and wildlife refuges.

Connolly Ranch serves as the Land Trust's Agricultural and Environmental Education Center with a mission to provide unique, dynamic, hands-on educational programs in an outdoor setting, for children and the community, creating active environmental stewards for Lake County and the earth. The grounds include: a 2,500 square foot barn, a duck pond, an organic garden, animal pastures, and a nature trail system. In addition to three acres of cultivated land, there are nine acres of oak woodlands.

The Lake County Resource Conservation District (RCD) is charged with protecting and enhancing resources within district boundaries. Originally established to aid farmers and ranchers in their soil erosion control efforts, and to provide assistance in water conservation, the districts have expanded their services to communities, school districts, economic development programs, river basin and watershed projects, and to environmental improvement programs.

The RCD is managed through its Board of Directors; five local landowners who serve as unpaid volunteers. The District is a technical information source for landowners, land managers and residents. It provides information on soils, watershed, and resource conservation methods. Because education is of prime importance to the District, it provides a large array of school oriented materials.

The Watershed Information Center & Conservancy (WICC) Board was convened in 2002 by the Lake County Board of Supervisors, at the recommendation of the Lake River Watershed Task Force Oversight Committee. The WICC is governed by a 14-member Board of Directors representing a broad range of stakeholder interests. The mission of the WICC is to guide and support community efforts to maintain and improve the health of Lake County's watershed lands by: coordinating and facilitating partnerships among the individuals, agencies, and organizations involved in improving watershed health; supporting watershed research activities; and providing watershed information and education. It supports and promotes the activities of watershed restoration organizations and facilitates cooperation among them. The WICC considers itself a part of the solution to watershed issues and concerns and implements the following strategic goals: Enhance partnerships, cooperation, and consistency and avoid duplication among all those working to improve the health of Lake County's watersheds.

As a part of its mission, the WICC provides an interactive online community website that provides information about the watersheds of Lake County, the organizations participating in watershed protection activities and how one can get involved. The WICC website contains watershed data, reports and monitoring information, as well as interactive maps, calendar of events and more.

11. SIMILAR PROGRAMS/ORGANIZATIONS

Apple Souls is currently the Co-Chair organization of the Environmental Education Coalition of Lake County. Apple Souls works with over 27 schools in Lake and Sonoma counties, and manages restoration projects throughout both regions. Through restoration project management, the organization initiates multi-agency collaborations (private and public) on an ongoing basis.

Apple Souls partners with national, state and local agencies, as well as corporations and private landowners to provide resources and sites for restoration projects. Partners include several local farmers and landowners, California State Parks, U.S. Army Corps of Engineers, Trout Unlimited, Lake County Resource Conservation District, Natural Resource Conservation Services, Lake County Flood Control and Water Conservation District, California Department of Fish and Game, Environmental Education Coalition of Lake County, Lake County

Farm Bureau's Ag in the Classroom, Copia, The Land Trust of Lake County, Jane Goodall's Roots and Shoots Program, and the Di Rosa Preserve.

12. FUTURE PLANS

The *Seed to Seedlings* project sets the stage for the collaboration's larger goals that will extend beyond the two-year initial proposal. The project is a long-range self-sustaining project that is expected to grow and develop indefinitely. It matches a great and continuous need in the Lake Valley to address issues of erosion and land habitat restoration. Eventually, the collaborative plans to develop a long-range plan for expansion and increased community participation as well as agency participation. The results of the project will be profiled through newsletters, agency websites, a community forum, and centralized countywide online resources via the Watershed Information Center.

Research: The S2S collaborative hopes to eventually include a research component with the propagation facility in conjunction with a university. Sonoma State and U. C. Davis have extensive involvement in land research programs in the region.

Increased Service Area: Long-range expansion plans include Acorns Soupe's agenda to provide resources to surrounding counties. Apple Souls has been requested by the County of Marin, Lake, and Solano for services.

Increased Restoration Areas: In future years, the project will be able to provide native plants and student watershed expertise to other Lake Valley stream restoration projects.

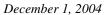
13. ORGANIZATIONAL DEVELOPMENT

As a young organization, launched in 2000, collaboration with the Land Trust on the *Seed to Seedlings* project is a capacity building activity for Apple Souls. While the project was initiated by both directors of Apple Souls and Connolly Ranch to support restoration and education in the valley, it provides an expansion of sustainable program services for both agencies. Since both co-located agencies share target populations and similar missions, to prevent duplication of service, the *Seed to Seedlings* project coordinates and directs agency resources to support their individual and long-range goals.

Capacity building needs for Apple Souls include the need to increase its public profile, to develop outdoor activities for its growing program of youth, to develop regional curriculum, increase outreach to landowners and farmers, and develop resources and opportunities for on-the-ground activities. Because the program facilitates Apple Souls to advance its program services and curriculum content, its supports the agency in building capacity to nationally disseminate its regionally specific environmental education model. Additionally, Apple Souls will potentially receive revenue to implement on-the-ground restoration projects.

ACRONYMS	
McConnell Sanctuary; dba Apple Souls	Apple Souls
Seed to Seedlings: Lake Community Propagation Center	S2S
The Land Trust of Lake County	Land Trust
The Lake County Resource & Conservation District	RCD
The Watershed Information Center & Conservancy of Lake County	WICC

THE COLUMBIA FOUNDATION





ATTACHMENTS D. E. F. & G.

APPLE SOULS SEED TO SEEDLINGS: LAKE COMMUNITY PROPAGATION CENTER (S2S)

D. List of funders and grants secured for the project [Time period: June 1, 2004 – May 30, 2005]

Total	\$54,400.00
Mary A. Crocker Trust	\$10,000.00
Coastal Conservancy	\$1,000.00
Gamble Foundation	\$8,000.00
Lake County Fish & Game, Wildlife Commission	\$2,400.00
5 Star	\$8,000.00
Institute for Fish Resources	\$10,000.00
Fish America	\$15,000.00

E. List of funders approached and grant requests pending for the project [Time period: FY 05/06]

Nature Restoration Trust	\$30,000.00
Sato Foundation	\$15,000.00
Community Foundation of Lake Valley	\$30,000.00
Jack L. Davies Fund	\$5,000.00
Educational Foundation of America	\$40,000.00
Whale Tale	\$50,000.00
Sonoma Community Foundation	\$20,000.00

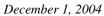
F. List of funders and grants secured for the organization [Time period: FY 04/05 & 05/06]

National Oceanographic & Atmospheric Total	\$5,000.00 \$82,400.00
Bank of the West	\$2,000.00
Community Projects	\$15,000.00
Mary A. Crocker Trust	\$10,000.00
Gamble Foundation	\$15,000.00
Fish & Wildlife Conservation Commission	\$2,400.00
5 Star	\$8,000.00
Institute for Fish Resources	\$10,000.00
Fish America	\$15,000.00

G. List of funders approached and grant requests pending [Time period: FY 04/05]

Outdoor Writer's Association	\$1,000.00
Braitmayer Foundation	\$10,000.00
City of Yountville	\$5,000.00
Lake Valley Wine Auction	\$70,000.00
Surdna Foundation	\$50,000.00
Target Foundation	\$5,000.00







ATTACHMENT B. ITEMIZED PROJECT BUDGET



APPLE SOULS SEED TO SEEDLINGS: LAKE COMMUNITY PROPAGATION CENTER (S2S)

Project Period: June 1, 2005 to May 31, 2007 (24 Months)

Personnel		
Executive Director (10%)	\$13,000	
Facility Manager (50%)	\$40,000	
Program Manager (20%)	\$16,000	
Lead Teacher (15%)	\$10,500	
Fringe (11%)	\$8,745	
		\$88,2
Administration/Outreach (24 months)	Φ1. 7 .000	
Printing (educational and promotional)	\$15,000	
Postage	\$2,400	
Mail House distribution	\$3,100	
Evaluation (Includes survey & web)	\$2,500	
Graphics Design	\$2,000	
Administrative Operations	\$18,500	
Motorials/Supplies (1x assts)		\$43,
Materials/Supplies (1x costs) Greenhouse	\$3,500	
Fencing materials	\$1,800	
Irrigation upgrade, (including tubing,	\$2,500	
valves, controller)	\$2,300	
PVC or Wood Framing	\$700	
Plant Work Benches	\$1,500	
Shadecloth & Weedcloth	\$700	
Work Tables	\$1,000	
Garden Carts	\$1,500	
	\$600	
Propagation Mats/Thermostats	\$000	\$13,8
Materials/Supplies (24 months)		Ψ15,0
Tools (trowels, gloves, shears,	\$4,800	
watering cans, labels/tags, etc.)	Ψ1,000	
On-the-ground supplies (i.e. shovels,	\$5,000	
seeds)	•	
Educational materials, supplies	\$5,200	
Potting and soil supplies	\$7,300	
		\$22,3
Contract		
Web Development/management and	\$20,000	
landowner outreach - WICC		
Construction	\$7,000	
		\$27,0
TOTAL PROJECT COST		\$194,8