



11769 Water Hill Rd.
Lakeside, CA 92040
Phone: (619) 562-0096 Fax: (619) 562-4799
E-mail: inquires@rcdsandiego.org
Website: www.rcdsandiego.org

May 4, 2009

Eileen Maher
Environmental Services Department
Port of San Diego
3165 Pacific Highway
San Diego, CA 92101

Dear Ms. Maher and Port Environmental Advisory Committee,

The Resource Conservation District of Greater San Diego County (RCD) would like to present the following funding proposal for consideration for the Port of San Diego's 2009 grant program, "Environmental Projects Benefitting San Diego Bay".

Project Title: Olivewood Gardens – Nurturing Tomorrow's Environmental Leaders

Project Description:

The RCD, in partnership with the International Community Foundation (Foundation), has embarked on the establishment and programmatic implementation of Olivewood Gardens, a school garden resource center on a 6.85 acre property owned by the International Community Foundation in National City, California.

Olivewood Gardens will initially serve as an educational facility for the students of Olivewood School and other neighboring schools in National City to learn about healthy eating and nutrition, ecosystems, educational standards, and gardening techniques. Olivewood Gardens will be a destination for field trips from local schools, where children can explore themed gardens that reflect state educational standards, reinforce nutritional competencies, and encourage appreciation for nature and awareness of natural processes.

This facility will also serve as a training location for teachers and community leaders in garden-based learning, and serve as inspiration for these individuals in building their own garden programs at schools, child care centers, and community centers throughout San Diego County. Such professional development and support is meant to result in greater sustainability of school garden programs county-wide, and in turn to sustain the benefits gained by children participating in such programs.

Grant Funding Request: From the Port of San Diego - \$49,000

Secured Funding: From The California Endowment - \$118,460

Total Cost of Project: For all first year programming - \$167,460

Timeline of Project:

- Summer 2009 – Hire Garden Program Manager. Commence construction of garden and parking lot.
- August 2009 – Develop curriculum for National School District (NSD) garden-based activities.
- October 2009 – Recruit NSD 4th grade teachers for pilot, Conduct 2 hour in-service for participating teachers
- October 2009 to May 2010 – Bus trips to Olivewood Gardens for participating classes.
- Spring 2010 – “Creating and Sustaining Your School Garden” workshop for NSD schools.

Benefit to San Diego Bay:

National City sits at a critical location just north of the mouth of the Sweetwater River, on the edge of the San Diego Bay. This urban center is home to approximately 59,000 people. Approximately 6,000 children attend school in National School District.

Experiences at Olivewood Gardens will directly address native plants, ecosystems, nutrition, and gardening basics. This will result in a myriad of positive effects to the overall environment. Children who have a greater awareness and appreciation of the natural environment are more likely to understand the consequences of their actions on the environment, thereby being less likely to litter or harm natural areas. They will relate to plants less as obstacles and more as living organisms that play an important role in their urban neighborhoods. Olivewood Gardens will practice only organic gardening methods, use Integrated Pest Management techniques, and promote composting and recycling as methods for waste reduction. Children often pass information learned in school to their along to parents. It is our hope that Olivewood Gardens will catalyze city-wide change in eating habits and environmental practices through the education of its next generation of citizens.

Source of Matching Funds:

Funds have been received by The California Endowment for some garden construction (Garden direct costs including: survey, site prep, irrigation, paths, raised beds, signage, fences), first year funding for a Garden Program Manager, and other programmatic expenses. The total received for 2009-2010 is \$118,460.00. The International Community Foundation is pursuing private funding to construct an outdoor kitchen, covered patio, and restrooms.

Project Manager: Diana Bergman, Education Coordinator
Resource Conservation District of Greater San Diego County
11769 Water Hill Rd. Lakeside, CA 92040
Phone: (619) 562-0096 x106, Fax: (619) 562-4799
diana@rcdsandiego.org

The Resource Conservation District of Greater San Diego County greatly appreciates your consideration of this worthy project for funding.

Sincerely, Diana Bergman

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I. Introduction

The RCD, in partnership with the International Community Foundation (Foundation), is in the process of developing Olivewood Gardens, a school garden resource center on a 6.85 acre property owned by the Foundation in National City, California. Olivewood Gardens will serve as an educational facility for the students of National School District to learn core educational standards in addition to healthy eating and nutrition, and sustainable gardening techniques. Olivewood Gardens will be a destination for field trips where children can explore themed gardens, be involved in the process of organic food production, and personally witness the bounty of nature and natural processes still evident in highly urbanized areas. This facility will also serve as a training location for teachers and community leaders in garden-based learning, and serve as inspiration for these individuals in building their own garden programs at schools, child care centers, and community centers throughout San Diego County.

Funds from the Port of San Diego will help bring children to this facility by providing bus transportation for classes from National School District, and securing supplies needed for the educational programs. It will provide professional development for teachers participating in the field trip program, and additional training for teacher teams from each school to strengthen or develop their own school garden at their sites. NSD does not have funding for teacher professional development in Science next year due to budget cuts. Finally, funding will support personnel time to manage the program at NSD and at the RCD to ensure quality deliverables.

The health of San Diego Bay is greatly dependent on the quality of water flowing into the Bay from its adjoining watersheds. Since National City is at the very end of the Sweetwater Watershed, the environmental habits of its residents may have a proportionally larger impact on the health of the Bay. Teaching young residents skills for sustainable living within our urban landscape will result in life-long positive behaviors that minimize the footprint of human activity on the Bay and its watershed. Furthermore, learning this information in their own neighborhood will allow it to be tailored to their community's unique demographics and needs.

School gardens are often urban children's first exposure to plants and their role in ecosystems and nutrition. Many children now live in apartments with little opportunity for home gardening experiences or exploration of natural areas, leading to what local writer Richard Louv

calls “Nature Deficit Disorder”. Creating a resource of this kind for children in National City will increase opportunities for urban children to interact positively with the natural environment. Garden-based learning has been shown through studies to enhance academic achievement, healthy nutrition choices, positive social development, and environmental appreciation.

The RCD is an independent special district office (EIN# 95-2586060) formed under Division 9 of the California Public Resources Code, serving San Diego County since 1941. The RCD receives funding from local parcel taxes and federal and state grants. The federal funds are primarily geared toward wildfire prevention. The RCD currently oversees several additional programs including the Fire Safe Council of San Diego County, the Tijuana River Valley Community Garden, the Port of San Diego Stormwater Pollution Prevention Program, and the San Diego Regional School Garden Resource Center.

The San Diego Regional School Garden Resource Center (RC), a partnership between the RCD and the California Department of Education. For the past 10 years, the RC has worked to support local educators who use school gardens as a teaching tool. By supporting teachers, the RC aims to enhance the educational experiences of local children by reconnecting children to the source of their food. The RC distributes information via email and printed newsletters, and organizes an annual garden-based learning conference, teacher workshops, and plant giveaways.

It has been a goal of the RC since its inception to develop a permanent model garden at which to conduct its educational programs. With the RCD’s new partnership with the International Community Foundation, land is now available in an ideal location to serve the urban residents of southern San Diego communities. In the initial stages of program development, the RC aims to develop strong ties with the neighboring community and its schools, and also pilot and refine K-12 educational programs that will be eventually offered to all schools throughout the county.

Partnerships have been in development for the last 6 months to ensure implementation of the proposed project. Initial funding has been secured to hire a Garden Program Manager and establish the foundational pieces of the garden (paths, irrigation, etc.) After the garden is planted and curriculum is developed, the next step is to procure additional funding so that local teachers and their classes have transportation to the garden. The major participants in this project – the RCD, International Community Foundation, and National School District are poised to commence the project upon acquisition of funding.

II. Project Narrative

Project Description

The Resource Conservation District of Greater San Diego County (RCD), in partnership with the International Community Foundation (Foundation), has embarked on the establishment and programmatic implementation of Olivewood Gardens, a school garden resource center on a 6.85 acre property owned by the International Community Foundation in National City, California. The school garden would complement the Foundation's existing ½ acre organic garden which is currently generating produce for the UCSD Cancer Center's Healing Foods Kitchen.

Olivewood Gardens would initially serve as an educational facility for the students of Olivewood School and other neighboring schools in National City to learn about healthy eating and nutrition, ecosystems, educational standards, and gardening techniques. Olivewood Gardens will be a destination for field trips from local schools, where children can explore themed gardens that reflect state content standards and reinforce nutritional competencies. School gardens are also a forum in which to address the principles in CalEPA's Environmental Education Initiative. Activities will facilitate "hands-on" explorations and information gathering, and help students see first-hand how humans interact with, depend on, and shape natural places.

This facility will also serve as a training location for teachers and community leaders in garden-based learning, and serve as inspiration for these individuals in building their own garden programs at schools, child care centers, and community centers throughout San Diego County. Such professional development and support is meant to result in greater sustainability of school garden programs county-wide, and in turn to sustain the benefits gained by children participating in such programs.

With funding from the Port of San Diego, the proposed grant would support an educational program for National School District student and teachers, including transportation costs, development of curriculum, support for teacher professional development, and staff time to implement the program. The requested grant would also provide partial funding for educational

supplies associated with children's activities in the garden within permissible guidelines and limitations.

Benefits to San Diego Bay

The proposed Olivewood Gardens project responds in many ways to the Port of San Diego's goal to protect the San Diego Bay. Furthermore, it supports the Green Port Program's environmental sustainability goals in at least 3 of the six key areas: water, waste management, and sustainable development. For example, responsible watering practices will be implemented and directly taught. Drought-tolerant native plants will be planted in the unchanging structural areas of the garden and will be incorporated into lessons on pollination, historical use of plants by Native Americans, plant adaptations, local habitats, and appropriate plant choices for San Diego landscaping.

Urban run-off from National City has a direct impact on the health of the San Diego Bay because of its critical position adjacent to the Bay on the edge of the Sweetwater River. Public outreach and education are important tools for the protection of downstream wildlife and habitat. The argument can be made that general appreciation for living things found in urban areas will translate into positive effects for key endangered and threatened species, through reduced pollutant stresses entering the Bay and abutting wetlands.

Experiences at Olivewood Gardens will directly address native plants, ecosystems, nutrition, and gardening basics. This will result in a myriad of positive effects to the overall environment. Children who have a greater awareness and appreciation of the natural environment are more likely to understand the consequences of their actions on the environment, thereby being less likely to litter or harm natural areas. They will relate to plants less as obstacles and more as living organisms that play an important role, even in their urban neighborhoods. Olivewood Gardens will practice only organic gardening methods, use Integrated Pest Management techniques, and promote composting and recycling as methods for waste reduction. This may reduce harmful or inappropriate application of fertilizers, pesticides, or herbicides that wash from urban areas into storm drains and eventually into the Bay.

Children often pass information learned in school to their along to parents. It is our hope that Olivewood Gardens will catalyze city-wide change in eating habits and environmental

practices through the education of National City's next generation of citizens. The RCD and International Community Foundation intend to expand the level of community based knowledge specific to school gardens to promote improved environmental awareness among the San Diego area's socio-economically disadvantaged school children and youth.

Impact measurement

To ensure that the Olivewood Gardens' curriculum and program implementation plan is able to benefit from the experiences of other successful garden programs throughout San Diego County, a peer review panel will be assembled by the International Community Foundation and Resource Conservation District to include representatives of key participating organizations, other organizations supporting nutrition education and nature education, and local school garden coordinators.

Beyond the proposed peer review evaluation, the International Community Foundation and RCD intend to collect survey data indicating behavioral and attitudinal changes among 4th graders and teachers participating in the Olivewood Gardens program. Content understanding will also be assessed through pre and post tests for participating classes.

In late 2010, a case study will be developed on the Olivewood Gardens program with a goal of making lessons learned available to other educators, school district staff, policy makers, and researchers interested in school garden programs. The case study will evaluate the effectiveness of the program and assess the value of expanding such programs to other schools throughout the region over time.

Specific Project Deliverables

1. Bus travel to Olivewood Gardens for 4th grade classes

On a first come, first served basis, 4th grade teachers will be invited to bring their classes to Olivewood Gardens for exploration and educational activities, centered around state content standards and nutritional competencies. The garden will be constructed during the summer and fall of 2009. Field trips will commence beginning in October. All participating teachers

will be required to attend a two hour in-service to take place after school in the fall, to receive orientation on lessons they will receive during their visit and how they can reinforce their experience with pre- and post-visit activities that will take place back at school.

2. “Creating and Sustaining Your School Garden” Professional Development

The RCD has presented the “Creating and Sustaining Your School Garden” one-day training workshop for 2 years, developed by the UC Davis Children’s Garden Program and UC Santa Cruz Life Lab Science Program. To stimulate the creation of school gardens at each elementary school and complement the program at Olivewood Gardens, the RCD will implement one CSYSG workshop specifically for teams of 3 from each NSD school. Team members can be teachers, administrators, or classified staff.

3. National School District Liaison

RCD will hire an independent subcontractor to serve as a liaison between the Olivewood Gardens program and the teachers/district staff of National School District. The NSD liaison would communicate regularly with Olivewood Gardens staff, publicize and manage teacher reservations for the professional development opportunities explained above, schedule visits from NSD schools to the garden including bus reservations, and help develop the activities and pre- and post-visit materials for the garden visits.

4. RCD Education Coordinator

In cooperation with the NSD Liaison and Garden Program Manager, the RCD Education Coordinator will be responsible for developing activities and pre- and post-visit materials for the garden visits. The Education Coordinator will manage grant funding, write reports and invoices, present large portions of the CSYSG workshop and 2 hour in-service, and spearhead the development of the case study detailing program value and lessons learned.

Project Timeline

Summer 2009 – Hire Garden Program Manager and commence construction of garden and parking lot.

August 2009 – Develop curriculum for NSD garden activities

October 2009 – Recruit NSD 4th grade teachers for pilot, Conduct 2 hour in-service for participating teachers

October 2009 to May 2010 – Bus trips to Olivewood Gardens for participating classes.

Spring 2010 – Creating and Sustaining Your School Garden Workshop for NSD school teams.

Fall 2010 – Write case study about lessons learned.

Importance

Schools in California are facing some of the most difficult economic circumstances ever experienced in the state's history. National School District has pinched back all “nonessential” spending. This means that field trips and science teacher professional development have been eliminated. That is, unless outside groups or grants can fund them. It is critical at this time that private companies and outside agencies step in to support what many would argue are essential pieces of the public education system.

The growing childhood obesity epidemic is well-documented and provides the primary reason why such a facility should be developed in National City, which is located within California's 79th Assembly District. According to a 2004 study released by the California Center for Public Health Advocacy, 33.4% of children in this district are overweight. The overall average for California is 26.5%. The District is among the top 10 out of 80 in the state for high numbers of overweight children. The correlation between the growing incidence of childhood obesity and other social, political, and environmental factors is supported by the fact that 99% of the student body is considered socio-economically disadvantaged, 62% are English learners and 80% are Latino or Hispanic. (http://nsd.us/uploadsxx/sarc/district_sarc.pdf) More opportunities must be created to increase access to and awareness of fresh and healthy food, presented in a manner that is culturally appropriate to the audience.

Several voices have also recently joined together through the Children and Nature Network to bring attention to the fact that children are spending more time indoors rather than outside in nature, leading to a decreased understanding and interest in natural places. Learning outside has been shown to reduce stress, facilitate physical activity, and increase focus. Furthermore, interactions with nature engage all five senses, promote observation, and encourage creative and critical thinking. Children who grow up in urban environments often have limited access to natural places. In these situations, gardens can bring nature to the children instead. School gardens take textbook lessons and connect them into real life, illustrating concepts in tangible form and hooking children's interest through their taste buds and stomachs. For more information and references, visit the website of the California School Garden Network (www.csgn.org) Research and Policy webpage.

Partnerships

Partnerships have been in development for the last 6 months to ensure implementation of the proposed project. Initial funding has been secured to hire a Garden Program Manager and establish the foundational pieces of the garden (paths, irrigation, etc.) After the garden is planted and curriculum is developed, the next step is to procure additional funding so that local teachers and their classes have transportation to the garden. The major participants in this project – the RCD, International Community Foundation, and National School District are poised to commence the project upon acquisition of funding.

III. Qualifying Experience

Since 1999, the RCD has served as the program administrator for the San Diego Regional School Garden Resource Center on behalf of the California Department of Education's Nutrition Services Division. Over the past decade, the RCD has worked with numerous school garden programs throughout San Diego County, and is part of a state-wide network of organizations committed to garden-based learning. The Resource Center annually organizes workshops and a conference for garden educators, and also provides information and material resources to

schools. The RC distributes information via email and printed newsletters, and organizes an annual garden-based learning conference, teacher workshops, and plant giveaways.

In 2000, with funding from the USDA Natural Resources Conservation Service and in partnership with the County of San Diego Department of Parks and Recreation, the RCD worked with contractors to construct the Tijuana River Valley Community Garden. In terms of gardens specifically complementing the needs of schools, the RCD has funded garden construction in the past and provided technical assistance on the design of others. RCD staff are excited about being directly involved in the actual development of a model school garden to serve educators throughout the county. A project of this sort is a new journey for the RCD but one in which its previous experiences will be directly applicable.

IV. Objectives of Grant Proposal

Objective #1: Design an Educational Program for Olivewood Gardens - starting with 4th grade academic standards and wellness objectives, design or collect and then sequence garden-based activities to best meet those objectives. Design assessment tools to measure the effectiveness of the program in achieving those goals. Design of the program will be completed by October of 2009. Data collection using the designed assessments will be completed by end of May 2010.

Expected Outcome – Students will better meet learning objectives in core subject areas as demonstrated by greater scores on assessments to be developed. Students will show more positive eating choices and environmental perceptions as reported back from teachers at the end of the program. Activities will be refined and ready to offer to county-wide audience for the next school year and beyond.

Objective #2: In early spring of 2010, train 30 NSD teachers using the Creating and Sustaining Your School Garden workshop model. Schools will be better equipped to develop or fully use their school gardens to meet their individual learning objectives.

Expected Outcome – By end of 2009-2010 school year, participating schools will report greater use of their gardens, or develop a garden program at their schools that will complement the goals of Olivewood Gardens.

Objective #3: Write case study documenting the lessons learned about program effectiveness and assess the value of expanding such programs to other schools throughout the region. The audience for this case study will be other educators, school district staff, policy makers, and researchers interested in school garden programs.

Expected outcome – Case study will be published in online locations to be determined. School district officials and school administrators in San Diego County will better understand the value of garden-based learning in the San Diego Region and examine ways to support garden programs in their own districts.

V. Cost Proposal

Budget Narrative:

Bus transportation to Olivewood Gardens from NSD's elementary schools will be provided on a first come, first served basis to 20 classes. The classes will attend once in the fall and once in the spring for a total of 40 bus trips. National School District charges \$85 per local bus trip.

Because the children's garden is in development, materials that can be used in perpetuity must be purchased, including garden tools (watering cans, shovels, wheelbarrows, etc.) a shed for tool storage, compost bins, and a greenhouse.

Teacher professional development will be funded at district pay rates of \$17/hr. This includes a two hour after school in-service for the twenty 4th grade teachers participating in the field trip program. The second training opportunity, for school teams attended the Creating and Sustaining Your School Garden workshop, will be open to teams of 3 people from each of the

ten schools in the district. Port grant funds will cover substitute teachers for 30 attendees, and consumable materials for the workshop (binders, lunch, etc.).

Employees compensated for work on this project include one RCD staff member and one consultant with specialized knowledge regarding science education in National School District. RCD Education Coordinator Diana Bergman will be responsible for developing activities and pre- and post-visit materials for the garden visits. The Education Coordinator will also manage grant funding, write reports and invoices, and present large portions of the CSYSG workshop and 2 hour in-service. Time dedicated to this project for the 2009-2010 fiscal year will amount to 300 hours at \$21.00 per hour (plus RCD benefit rate of 50%). An independent consultant will handle logistics for National School District personnel participating in the garden programs.

Itemized Budget:

Bus Transportation

Two trips each for twenty 4th grade classes at \$85 per trip \$3,400.00

Materials

Children's Activity/Gardening Materials (tools, seeds, gloves, greenhouse, etc.) \$9778.70

CSYSG Workshop Materials for Teacher Training \$1,000.00

Teacher Compensation

After School 2 Hour In-service for 20 teachers at \$17.00/hr \$680.00

CSYSG One Day Workshop for 30 teachers - substitute pay at \$110/day \$3,300.00

Personnel

Education Coordinator (300 hours at \$21.00/hr) \$6,300.00

Benefits @ 50% \$3,150.00

Consultant (300 hours at \$50.00/hr) \$15,000.00

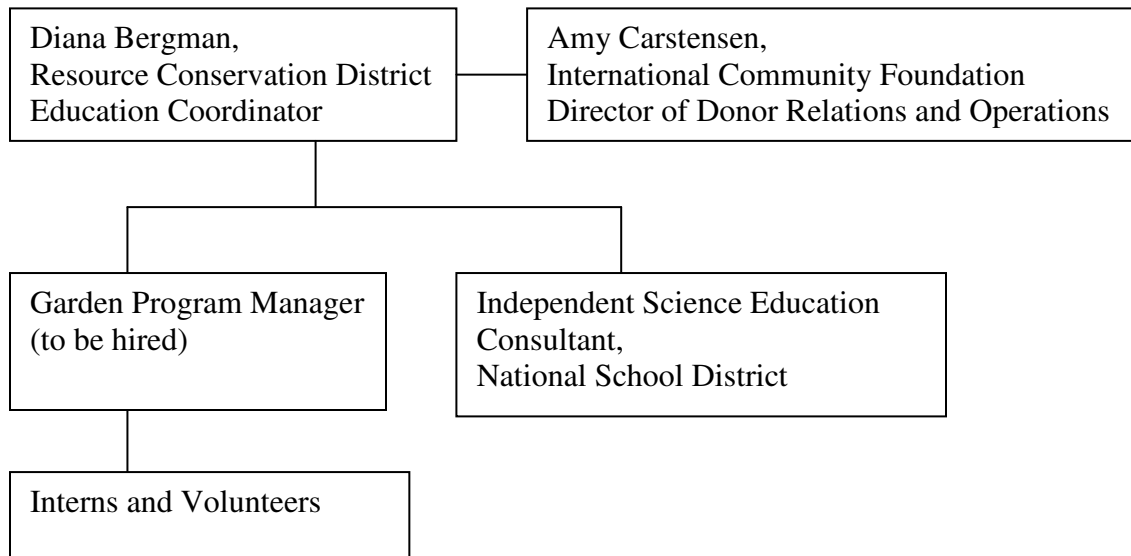
Total \$42,608.70

Indirect at 15% \$6,391.30

Grand Total \$49,000.00

VI. Personnel

Key personnel



Diana Bergman (formerly *Diana Hussey*)
Education Coordinator
Work (619)562-0096 x106 email: diana@rcdsandiego.org

EXPERIENCE:

Resource Conservation District of Greater San Diego County, San Diego CA
2007-present **Education Coordinator** - Implement a diverse array of education-related programs including the San Diego Regional School Garden Resource Center, which provides garden-related support for teachers via newsletters, an annual conference, and workshops.

San Diego Natural History Museum, San Diego CA
2006-2007 **Instructor** - Present educational programs at local schools and in the museum; develop curriculum with emphasis on hands-on learning and constructivist teaching theory.

San Diego Unified School District, San Diego CA
2003-2005 **Secondary Science Teacher** - Mission Bay High School
Courses taught: Honors Biology, General Chemistry, & Advanced Placement Environmental Science
1998-2003 **Secondary Science Teacher** - Ray Kroc Middle School
Courses taught: 7th and 8th grade general science courses, AVID College Prep program

EDUCATION:

1999 University of California San Diego, Professional Clear Single Subject Teaching Credential: Biology
1997 University of California San Diego, MS: Plant Molecular Biology
1996 University of California San Diego, BS: General Biology

PROFESSIONAL ASSOCIATIONS/ACCREDITATIONS:

Board member, San Diego Agriculture in the Classroom Foundation
Member, California School Garden Network
Competent Communicator Award, Toastmasters International
Professional Clear Single Subject Teaching Credential, Biology
CLAD – Cross-cultural Language and Academic Development
GATE – Gifted and Talented Education

VII. Subcontractors

An independent consultant will be hired to serve as a liaison between the Olivewood Gardens program and the teachers/district staff of National School District. The NSD liaison would communicate regularly with Olivewood Gardens staff, publicize and manage teacher reservations for the professional development opportunities explained above, schedule visits from NSD schools to the garden including bus reservations, and help develop the activities and pre- and post-visit materials for the garden visits. This person must have established relationships and historical knowledge specific to science education in NSD.

VIII. Non-profit Status

The RCD is an independent special district office (EIN# 95-2586060) formed under Division 9 of the California Public Resources Code, serving San Diego County since 1941.

IX. Applicant Disclosure

No citations for environmental violations have been filed against the Resource Conservation District of San Diego County or any party involved in this proposal from any regulatory agency within the last five years.

X. Agreement

The RCD accepts the insurance and indemnification clauses required under the terms of this RFP.

XI. Conflict of Interest

The RCD is not currently performing services of any kind, for any person or entity that would conflict with the services to be provided to the Port under this agreement. Furthermore, The RCD agrees that it will not perform services which would conflict with the services to be provided under this RFP.

XII. Additional Information

For the past 9 years, the Resource Conservation District of San Diego County has provided the Stormwater Pollution Prevention Classroom Program for elementary schools within the San Diego Bay Watershed, on behalf of the Port of San Diego. The aim of this program is to reduce the amount of pollutants in the San Diego Bay through preventive education. During this time the RCD has maintained a high quality of service to the Port of San Diego and the schools that are served by this program. We hope this previous record of performance and accountability speaks highly to the RCD's ability to fulfill the requirements of its grantors.

More information on next page.

Satellite view of property, International Community Foundation



View facing northeast of area
for children's garden