

AGENDA

**COMMUNITY AFFAIRS COMMITTEE MEETING
LEUCADIA WASTEWATER DISTRICT**

December 12, 2023 – 1:30 p.m.
1960 La Costa Avenue, Carlsbad, CA 92009

1. **Call to Order**
2. **Roll Call**
3. **Public Comment**
4. **Review of the Teacher Grant Applications. (Pages 2-8)**
5. **Information Items**
None.
6. **Directors' Comments**
7. **General Manager's Comments**
8. **Adjournment**

MEMORANDUM

DATE: December 7, 2023
TO: Community Affairs Committee
FROM: Paul J. Bushee, General Manager
SUBJECT: Review of Teacher Grant Applications

RECOMMENDATION:

Staff requests that the Community Affairs Committee recommend that the Board of Directors:

1. Award three Teacher Grants totaling \$5,600; or
2. Discuss and provide direction, as appropriate.

BACKGROUND:

Tactical Goal: Services/Teacher Grant Program Awards

LWD’s Teacher Grant Program was established during 2008. Over the years, minor adjustments have been made to the program, such as updating the timeline of the program and increasing the dollar amount of the grant that teachers are eligible to receive. During 2018, total program budget increased to \$6,000 and the maximum grant per teacher increased to \$2,000. In addition, staff increased its outreach efforts to encourage teachers to apply for the grant.

DISCUSSION:

During August 2023, staff provided LWD teacher grant program information to all schools within the District’s service area which includes nine elementary schools, one middle school, and one high school. Staff and Rising Tide Partners (RTP) contacted schools and teachers via email initially and sent reminders until the deadline for submissions, November 17, 2023. Staff updated LWD’s website to include a Teacher Grant Program page and RTP posted several Facebook posts about the program.

As a result of these efforts the District received the following three applications:

Applicants	School	Amount Requested:	Project
Katie Oberman	El Camino Creek Elementary	\$1,600	STEAM Class – Water Conservation Gardening
June Honsberger	La Costa Canyon High School	\$2,000	The Pollinator Plant Garden
Nancy Jois	Capri Elementary	\$2,000	We Can Keep Water Clean
TOTAL:		\$5,600	

Staff reviewed the applications and each meet the program’s required criteria to qualify for a grant. The total cost for the three grant requests is under the FY 24 budget of \$6,000. Staff is recommending grants be awarded to all three applicants in the amounts requested. The applications are attached for your review.

Staff recommends that the Community Affairs Committee review the teacher grant applications and forward all applications to the Board of Director's for consideration at the January 10, 2024 meeting.

th:PJB

Attachments

Garden Science and STEAM class proposal - School gardening with water conservation education

Description of Project

Every student at our school attends STEAM class once a week, in which they learn about a series of concepts including gardening and environmental protection. In addition, grades K-3 attend additional Garden Science lessons once a month in which they learn more about where food comes from, how to care for a garden without wasting resources, and how our garden ecosystem works. I would like to upgrade our old, rotting wooden garden beds with new galvanized steel beds that retain water better and will last much longer for our school. Students will continue to learn about ways to save water while growing plants for both food and aesthetics by planting and caring for the plants in our school garden using drip irrigation to mitigate water waste.

Participating students will include all of K-6th grade; K-3 participate in Garden Science lessons and K-6th participate in STEAM. Roughly 550 students will be participating total, as well as around 20 Garden Science volunteers who run garden lessons for their classes.

In-kind resources include drip irrigation systems already constructed and in use, and ready to be transferred to our new beds once they arrive.

This project will take place in the school garden towards the back of campus alongside the garden shed and outdoor classroom. The project will begin at the start of the 2024-2025 school year, and continue on year after year. Gardening will take place during STEAM classes throughout each week as well as during Garden Science lessons, about one grade per week.

Objectives:

Students will be able to explain why plants need water to grow and how to save water while caring for plants. Students will continue to learn about the science of gardening, where their food comes from, and experience hands on lessons relating to Next Generation Science Standards. Students will be able to explain what food insecurity is and experience growing food and harvesting it to be donated to local food pantries.

Budget:

\$1,600 - 11 40-Gallon Galvanized Steel Stock Tanks from Lowes (\$129 each plus tax) (available for future use in subsequent years)

\$400 - soil, seedlings, and drip irrigation repair to be used with the new beds

Total: \$2,000

Our school is requesting \$1,600 from the LWD Teacher grant and has already secured partial funding from a district-wide grant to fund the remainder of the project.

LWD	\$1600
District Grant	\$400
Total	\$2000

Thank you for your consideration.

Discovering the Pollinators on our Campus

A. Description of Project:

Our project will focus on continuing to create and establish a permanent and self sustaining native plant pollinator garden that will increase pollinator species at our school site. Pollinators are a key component to the reproduction and establishment of a diverse garden ecosystem on our campus. According to the Pollinator Project at the University of California Cooperative Extension (UCCE), San Diego County has over 700 species of native bees. But bees aren't the only pollinators, wasps, flies, butterflies, moths, beetles, other insects, birds, bats, rodents, and even lizards are all important pollinators (Nabors et al, 2022).

Over the past year, students documented the existing pollinators using iNaturalist. iNaturalist is an app on their smartphones that helps them to identify and record the species that they observed. Using that data they designed the gardens to attract the missing pollinator species and created additional habitats for the existing pollinators. This year the students have begun a study of the current plants and the numbers and types of pollinators visiting them. The data will be used to generate scientific questions about pollinators and native plants that they can answer with further investigation. In addition the data will be used to redesign the garden by selecting the types of plants that need to be planted in order to provide food for the widest variety of pollinators.

The science students and the Biodiversity Club members will plant and maintain the gardens for the duration of the school year. Also, students will continue to inventory the varieties of pollinators, noting any changes in the species biodiversity throughout the year. The data collected will help guide the future biodiversity of the school gardens. The overarching mission of this project is to foster the students environmental stewardship and awareness of the importance of biodiversity in their community.

This project will be a joint endeavor between two classroom teachers, 100 high school science students (grades 10-12), the IB Biology class and the school's Biodiversity Club. The project will be ongoing, with planting and construction beginning in the Spring of 2024. These hands-on activities require garden tools, soil, compost, plants, trees, and mulch. The grant funds would be used to purchase the necessary supplies to make this project a success. Our parent foundation is helping with the project by providing a water source for the pollinators.

Students collecting data using iNaturalist.



B. Learning Objectives

Students will study the relationships between pollinators, native plants, and biodiversity in our drought tolerant school gardens. They will research and choose native plant varieties that will thrive in our arid Southern California climate and provide pollen and habitat for the many pollinators on our campus. Students will inventory the varieties of pollinators, noting any changes in the biodiversity throughout the year. This data will be used to guide our future garden projects and studies.

C. Budget

Item	Quantity/vendor	Amount	Non-Consumables
Shovels	10 @ \$20.00- Home Depot	\$200	x
Brooms	10 @ \$10.00- home depot	\$100	x
Garden Hoes	10 @ \$20.00 – Home Depot	\$200	x
Garden Vests	40 @ \$5.00 – amazon	\$200	x
Garden Gloves	20 @ \$5.00 – Home Depot	\$100	x
Garden Rakes	10 @ \$15.00- Home Depot	\$150	x
Garden Soil	15 bags @ \$10.00 – Home Depot	\$150	
Mulch/compost	25 bags @ \$5.00 – Home Depot	\$125	
Plants & Trees	Anderson's La Costa Nursery	\$775	
	Total	\$2000	

References

Nabors, A., Hung, K.J., Corkidi, L., & Bethke, J.A. (2022). California Native Perennials Attract Greater Native Pollinator Abundance and Diversity Than Nonnative, Commercially Available Ornamentals in Southern California. *Environmental Entomology*, 51, 836 - 847.

To Whom It May Concern:

I am applying for a grant in the amount of \$2,000.00 to teach 4 kindergarten classes about the water cycle and water resource management to meet the Next Generation Science Standards for kindergarten. With these funds, these 4 classes would participate in a project learning about the water cycle, water filtration, xeriscaping and would create a public service announcement for their families and the community about the importance of protecting the water system by keeping storm drains free from litter and soil by picking up litter around campus and planting drought tolerant / native plants on a slope near a storm drain on campus.

- Students will investigate the steps of the water cycle. They will describe each step of the water cycle and the state of matter that the water is in during each step. Students will demonstrate their understanding of the water cycle by designing and building their own water cycle model. They will take these models home to explain the water cycle to their families. They will also help make a water filter for each class and filter soil/litter from each class.
- By creating these models, students will see how water carries soil and debris to the ocean, and how filters clean water. After creating these models, students will add native and drought resistant plants to a slope on campus to help mitigate erosion near a storm drain.
- Students will synthesize what they've learned by creating a 5-minute videotaped PSA to reinforce for themselves and to teach their families the effects of litter/soil on storm drains. For the video several students will narrate what they have learned about the water cycle and the effects of litter/soil on storm drains.

This project consists of 80 students and 6-8 staff members. We would use \$595 of the funds to make individual water cycle models (materials per model \$7.00 x 85 = \$595.) Before we begin filming teachers will secure releases from students so the LWWD will be able to show this video on a public forum. A parent from our school is a professional photographer will edit our video for \$350. BCK Programs will be teaching 6 lessons on water pollution and the importance of keeping the campus litter free. The one class will in turn teach the other three classes about the effects litter has on water. An instructor paid for by the Sage Garden Grant will help all students plant drought tolerant plants near a storm drain.

As a result of this project students will be able to:

1. Create and explain a water cycle model
2. Explain the impact of erosion / litter on storm drains
3. Understand their knowledge can be used to teach others.

Budget: \$2,000.00

\$595.00 for Supplies for 90 water cycle models

\$350.00 for Video Editing

\$1,055.00 for purchasing drought tolerant / native plants

Thank you for your time and consideration.