Ref: 22-7805

AGENDA

COMMUNITY AFFAIRS COMMITTEE MEETING LEUCADIA WASTEWATER DISTRICT

Tuesday, December 14, 2021 – 11:00 a.m. Via Teleconference

Pursuant to the State of California Executive Order N-29-20, and in the interest of public health, the District is temporarily taking actions to mitigate the COVID-19 pandemic by holding meetings by teleconference. The general public may not attend this meeting at the District's office due to social distancing requirements.

Members of the public attending via teleconference will be provided with an opportunity to comment on each agenda item prior to Committee discussion.

To join this meeting via Teleconference please dial: (669) 900-6833Meeting ID:843 0983 5289Password:786840

- 1. Call to Order
- 2. Roll Call
- 3. Public Comment
- A. New BusinessA. Review of the Teacher Grant Applications. (Pages 2-16)
- 5. Information Items None.
- 6. Directors' Comments
- 7. General Manager's Comments
- 8. Adjournment

MEMORANDUM

DATE: December 9, 2021

TO: Community Affairs Committee (CAC)

FROM: Paul J. Bushee, General Manager

SUBJECT: Review of Teacher Grant Applications

RECOMMENDATION:

Staff requests that the CAC recommend that the Board of Directors:

- 1. Award five Teacher Grants totaling \$7,480; 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, the Teacher Grant amount was increased to maximum amount of \$2,000 per grant and the budget was increased to \$6,000. In addition, staff increased its outreach efforts to encourage teachers to apply for the grant.

DISCUSSION:

During September 2021, staff provided the teacher grant information to nine elementary schools, one middle school, and one high school indicating that the submission deadline was November 19, 2021. Staff and RTP contacted all schools and teachers via email to inform and send reminders about the deadline. Staff also updated the LWD website that included a Teacher Grant Program page with a quick link to its home page. RTP posted several Facebook posts about the program.

As a result of these efforts, the District received the following five applications by the deadline:

Received Teacher Grant Applications:

Applicants	School	Amount Requested:	Project
Kelly Cole	Flora Vista Elementary	\$1,352	Garden Signs
Jennifer Smith	El Camino Creek Elementary	\$1,998	Water Conservation Strategy
Julie Anguiano	Park Dale Lane Elementary	\$1,500	Water Management Internship
June Honsberger	La Costa Canyon High School	\$2,000	Native Tree Garden / Outdoor Classroom
Nancy Jois	Capri Elementary	\$630	No Wipes Down the Pipes
	TOTAL:	\$7,480	

Staff has reviewed all applications and each qualifies for a grant based on the program's criteria. Attached please find the applications for your review.

FISCAL IMPACT:

Please note that the total cost for the five grants, if awarded, is \$7,480, which is \$1,480 over the FY 22 budget amount of \$6,000. Based on the quality of the applications, staff is recommending that the grants be awarded to all five applicants. Staff believes the additional \$1,480 is well worth the outreach value of the award and this amount can be absorbed by the FY 22 budget relatively easily. As an alternative, the CAC could also choose to short-list the number of awards in order to stay within budget.

Staff recommends that the CAC review the teacher grant applications and forward all applications to the Board of Director's for consideration at the January 12, 2022 meeting.

th:PJB

Attachments



12:21 pm VIAEmail



LEADERS IN ENVIRONMENTAL PROTECTION

Grant Application Form

During the 2021-2022 school year Leucadia Wastewater District will award grants to teachers in local elementary, middle, and/or high schools in LWD's service area. The District anticipates awarding up to three grants up to \$2,000 each.

Use this cover sheet as page one of your application. Identifying information is to be included on the cover sheet only. IN YOUR PROJECT NARRATIVE <u>DO NOT</u> INCLUDE YOUR NAME, THE NAME OF YOUR SCHOOL, OR THE NAME OF YOUR DISTRICT. Completed applications MUST BE emailed to mbrechbiel@lwwd.org or received by Friday, November 19, 2021.

IDENTIFYING INFORMATION Kelly Cole Teacher's name All 3rd Subject Grade Flora Vista Elementary **Encinitas Union** School name District 1690 Wandering Road, Encinitas, CA 92024 School address, including street, city and zip 760-944-4329 Chris Juarez Principal's name School phone number Flora Vista PTA Name of parent organization (i.e. PTA or school foundation) Garden Signs \$1352.00 Project title Grant amount requested Kelly Cole Teacher's signature Please tell us how you heard about this program email from the school district Poster/Flyer Web site Another Educator Newsletter Other Click here: Email to LWD

Leucadia Wastewater District Grant Application

A. Description of Project

- 1. We would like to have the children make metal signs for our garden, detailing facts about its drought resistant, native plants, as well as their use by the local Native American tribe, the Kumeyaay. We would also create signs that detail the ways our garden saves water (drip irrigation, drought resistant plants, planting on a hill/decline, etc.). Being in a drought, the children will detail how important water conservation is, not just in our garden, but in all aspects of life. The subject areas are many: science (climate change and the need for water conservation), social studies (history of the Kumeyaay), and language arts (research and writing).
- 2. There will be approximately 70 third grade students working on this project with 3 teachers. We would like to involve the parent community with helping drill the metal signs into posts and dig the stakes into the ground.
- 3. See #1 above.
- 4. Parent volunteers in the community could help with placing the signs firmly in the ground.
- 5. The location is our school garden. The timeline would be this 2021-2022 school year, with completion being before June of 2022.

B. Objectives

Students will learn about the importance of water conservation in California, especially considering we are in one of the driest years on record. Children will also benefit from the leadership role as ambassadors of our garden and school. They will understand that certain plants have adapted for their survival in this climate. Through their research, children will be able to identify native plants and how they survive in a dry climate. Children will also learn to identify resources through their research that are reliable, credible, and accurate.

Science standards:

3-LS3-2 Heredity: Inheritance and Variation of Traits

3-ESS2-2 Earth's Systems

c. Budget

- 20 metal panels (Walgreens--\$59.99 each, 11 x 14 inches)
- 7 wooden stakes (Home Depot--approximately \$6 each)
- Sheet metal screws to affix the signs (Home Depot--approximately \$10 for 100)
- Tax



Grant Application Form

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ADIA

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Jennifer Smith		
Teacher's name		
4	Multiple	
Grade	Subject	
El Camino Creek	Encinitas	
School name	District	
7885 Paseo Aliso Carlsbac	92078	
School address, including street, city and zip		
Jodi Greenberger	760-943-2051	
Principal's name	School phone number	
PTA		
Name of parent organization (i.e. PTA or school foundation)		
ECC Water Conservation Strategies	1,998.00	
Project title	Grant amount requested	
Jennifer Smith		
Teacher's signature		
Please tell us how you heard about this program		
Poster/Flyer Web site Another Educator	sletter Other	
	Click here:	Email to LWD

I am seeking a LWWD grant to continue and grow the Water Conservation Strategies program I teach my 4th grade students. Our school community would like to be able to extend the hydroponics program to other classes at our school as well. The program objective is to instill a sense of awareness, empathy and conservation towards our water sources, environment, and community and to grow crops of food as an authentic learning and philanthropic experience. To begin, students will conduct a personal water use audit to calculate their "water footprint". We will discuss the journey water takes from the Delta and Colorado Rivers to San Diego County and the environmental ripple effects of taking water from those environments. They will learn about drought, the importance of conserving water, the projected effects climate change are likely to have on our water sources, and of course, what students can do everyday to conserve water. Students will calculate their school's rain harvest potential and use captured rainwater from the school's cisterns for composting and to irrigate the ornamental plants around campus.

We would also like to be able to continue our successful hydroponic Class Crop program. Through the hydroponic program, students learn how Ph affects nutrient absorption, how individual elements and minerals contribute to plant structure and how conductivity is measured in a solution. The crops we grow will be shared with food insecure people in our community through the St. Andrew's Food Pantry. We would like to be able to extend this portion of the program to other classes at our school by purchasing a greenhouse and more efficient hydroponic system in order to grow with several classes at a time.

In kind resources include the use of the school garden and supplies as well as the rain cisterns, Facilities will assemble the greenhouse and the Principal will fund part of the hydroponic consultant. The project will occur in my classroom, in the school's garden and kitchen lab, in our hydroponic lab area, as well as around campus. Several aspects of the program are ongoing in my class such as the captured rainwater use and growing in our small hydroponic system. The timeline for the extended hydroponics program will begin when the funds are released in March 2022 and will continue with as many crop cycles and classes as possible to end March 2023. The greenhouse and system will be a valuable and useful resource for the school community for years to come.

ECC Water Conservation Strategies	
Item	Price
Greenhouse Tent	160
Tower Garden	850
20 gal reservoir and lid	128
Eco 1056 Water Pump 1083GPH	75
Seeds and seedlings	100
Nutrients	150
Root Riot	20
pH down 32	35
maxi tray (6)	120
irrigation for nursery	100
timer	30
soil	100
Hydroponic consulting	130
Total	\$1998

Thank you for your consideration.



Grant Application Form

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Julie Anguiano		
Teacher's name	(b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	
5th grade	General Ed.	
Grade	Subject	
Park Dale Lane Elementary	EUSD	
School name	District	
2050 Park Dale Lane, Encir	nitas, CA 92024	<u> </u>
School address, including street, city and zip		
Erin Terry	(760) 944-434	4
Principal's name	School phone number	
Park Dale Lane PTA (Tax I	D #33-011945	5)
Name of parent organization (i.e. PTA or school foundation)	1	
Water Management Internship	\$1,500	
Project title	Grant amount requested	
nere Anomana	2	
Teacher's signature		
Please tell us how you heard about this program		
Poster/Flyer Web site Another Educator	sletter Other	
	Click he	ere: Email to LWD

LWD Grant/Water Management Internship

Program Summary and Curriculum Description

I am a 5th grade teacher and this year my class will be participating in the Water Management Internship (WMI) program. This program, created and administered by BCK Programs, provides a framework for students to investigate the complexities of the water industry including both water suppliers and wastewater treatment providers. My students will gain an appreciation of the work involved in providing safe and reliable water services, and how water conservation (especially in California) is an important strategy to mitigate climate impacts. Students will connect with water professionals and the district's facilities team to identify ways to improve water efficiency at school, carry out investigations of water usage on their campus to obtain baseline data to further support their recommendations, examine wastewater system issues that have a broad community impact, and launch campaigns to address improper disposal of wipes and oils & grease, a significant issue jeopardizing the function of our local wastewater systems.

Program Reach

My students will study the water efficiency of our school and make best practice recommendations that will impact the campus and possibly the eight other schools within our district. Additionally, my students will learn about the harms of FOG and wipes disposal and create a campaign to educate their school community (approximately 5,000+ families) and beyond.

Matching Funds

The School District is providing the funding for the WMI curriculum and for an instructor from BCK programs to make weekly visits to my class to assist with teaching this program. LWD grant funding will provide additional materials needed to assist with water conservation efforts on campus and materials needed to complete a successful outreach campaign in the community.

Program Specifics and Timeline

The program will take place at a local school over the course of the 2021-2022 school year. Meetings will start in November and our work will be completed in June.

Program Goals/Budget:

- Students will gain an understanding of how water travels to their home and is cleaned for reuse.
- Students will learn the value of clean water & water infrastructure.
- Students will learn the importance of water conservation and the harms to water infrastructure from FOG and wipes disposal.
- Students will make informed water efficiency recommendations to the school stakeholders.
- Students will promote infrastructure best practices to the school and community.

Budget/Estimated Expenses	Amount
New, more efficient irrigation for garden beds.	\$500.00
Drought tolerant plants for school.	\$200.00
Materials for community outreach projects (students will design FOG collectors as part of their project and stickers, magnets and/or posters to promote Wipes Clog Pipes campaign).	\$300.00
Sturdy, durable signage calling out water efficiency measures (to educate the school community).	\$200.00
Electronic pumps and hoses for multiple water catchment cisterns on campus to ensure water collected is being used.	\$300.00
TOTAL	\$1,500.00

Water Management Internship



Action 1: Water in California

Students learn about California's water systems and water sources, how water is stored, distributed, and managed throughout the state.

Action: Students Identify the source of their drinking water.



Action 2: Your water agency

Provide students with an introduction to local water agencies including water supplies, treatment, and distribution.

Action: Look at the school water bill and calculate the cost of a gallon of water and ask students to

do the same with parents. Help them realize the value of water.



Action 3: Water in your home

Focus specifically on how water gets to students' homes and school and how it is used. Look closely at the water meter and pipes.

Action: Audit water meter/s and sprinklers. Make sure families know how to find and shut off the water meter and irrigate responsibly.



Action 4: Conserving California's water

Explain California's drought conditions and the impacts associated with climate change. Explain the need for conserving water.



Action: Students evaluate a checklist of water conserving actions and identify the ones they already do and ones they will consider and share with their families.



Action 5: Wastewater from your home Students learn the important distinction between potable water and wastewater. They follow wastewater's trip from the home, beneath the streets, and to the treatment plant. Students then identify major problems facing the wastewater industry such as wipes disposal (flushing) and grease clogs.

Action: Students create a checklist of wastewater dos and don'ts and make plans to create a community outreach campaign.



Action 6: Implement Student Campaigns

Students use the remainder of program time to implement their campaigns to protect valuable water infrastructure and to conserve water.

Action: Rollout Wipes Clog Pipes Campaign. Can the Grease Campaign and Water Conservation Campaigns in the community. Schedule student presentations to community stakeholders.





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June Honsberger		
Teacher's name		
10th -12th	Science	
Grade	Subject	
La Costa Canyon High School	San Dieguito Union High School	
School name	District	
1 Maverick Way Carlsbad, C	Ca 92009	
School address, including street, city and zip		
Reno Medina	760-436-6136	
Principal's name	School phone number	
La Costa Canyon HS Found	lation	
Name of parent organization (i.e. PTA or school foundation)		
Monarch Butterfly and Native Plant Garden	\$2000	
Project title	Grant amount requested	
June Honsberger		
Teacher's signature		
Please tell us how you heard about this program	email	
Poster/Flyer Web site Another Educator New	sletter 🖌 Other	
	Click here: Email to LWD	

Monarch Butterfly and Native Plant Garden

A. Description of Project:

According to the January 2021 report by the Xerces Society, the western monarch butterfly population in California has declined 99.9% from three decades ago and this water use project will focus on helping the population recover its numbers. Experts blame this decline on climate change, habitat destruction, and the lack of food due to drought. In order to combat this decline, students will design, plant and maintain four large butterfly and native plant gardens on the school campus. The gardens will create a new habitat for the monarch butterflies and serve as outdoor laboratories where the students will study the life cycle and population of the monarch caterpillars and butterflies. The project will be a joint endeavor between science classes and the school's native plant club.

Starting in the late fall and early winter the science students will team up with members of the native plant club to remove the invasive species and amend the soil in the four garden areas. Next, the students will research native nectar plants and trees to discover which varieties will provide the best food sources and habitat for the butterflies. The students will continue to work on the design of the gardens and start germinating milkweed plants during the winter. In order to have enough native milkweed for the four garden areas, the students will need to germinate 100+ milkweed seedlings. This large number of milkweed plants are needed because each monarch caterpillar consumes an entire milkweed plant before it forms a chrysalis. Planting will begin in the spring once the designs are finalized, the supplies are ordered, and the milkweed plants are large enough to be transplanted to the garden locations.

After the gardens are installed the science students and club members will be responsible for maintaining the gardens for the duration of the school year. Additionally, science students will investigate the benefits of providing a habitat for monarch butterflies through a variety of garden activities and experiments. They will keep detailed records of caterpillars and butterfly numbers and use the data to track the population at each garden.

This project will involve two classroom teachers, 100 high school science students, and the native plant club members, grades 10-12. The project will be ongoing, with planting beginning in the Spring of 2022. These hands-on activities require garden tools, soil, compost, plants, trees, seeds, and mulch. Funds are needed to make this garden project a success. The grant would be used to purchase necessary supplies. Our parent foundation will provide an outdoor shed for tool storage.



B. Learning Objectives

Students will study the relationship between monarch butterfly population, local climate, native plants and water use. Students will research and choose water wise plant varieties that will thrive in our arid Southern California climate and provide nectar and habitat for monarch butterflies. Students will monitor and record the monarch butterfly population and growth patterns of the different varieties of native milkweed plants.

Item	Quantity/vendor	Amount	Non-Consumables
Shovels	20 @ \$10.00- Home Depot	\$200	x
hand trowels	10 @ \$10.00- home depot	\$100	x
100' garden hose	5 @ \$20.00 – Home Depot	\$100	x
Watering cans	10 @ \$15.00 – Home Depot	\$150	x
Garden Gloves	20 @ \$5.00 – Home Depot	\$100	x
small pots	100 @ \$0.50 – Home Depot	\$50	×
Garden Soil	50 bags @ \$10.00 – Home Depot	\$500	
Mulch/compost	60 bags @ \$5.00 – Home Depot	\$300	References and
Plants, Trees & Seeds	Anderson's La Costa Nursery	\$500	
	Total	\$2000	

C. Budget



Grant Application Form

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Nancy Jois
Teacher's name
Grade Subject
Capri Elementary Enginitas Union School Districe
941 Capri Road Encinitas CA 92024 School address, including street, city and zip
Stacy Crum (760) 944-4360 Principal's name School phone number
Name of parent organization (i.e. PTA or school foundation)
"No Wipes Down The Pipes" \$630.00 Project title Grant amount requested
Teacher's signature
reacher's signature
Please tell us how you heard about this program
Poster/Flyer Web site Another Educator Newsletter Other
Click here: Email to LWD

To Whom It May Concern:

I am applying for a grant in the amount of \$630.00 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 and would create a public service announcement, in both English and Spanish, for their families and the community about the importance of protecting the water system by not flushing disposable wipes down the pipes. Specifically, students will create models of individual water cycles.

On March 17, 2020 the California Water Board sent out this notice to the public, "Wipes are among the leading causes of sewer system backups, impacting sewer system and treatment plant pumps and treatment systems," the notice reads. "Many spills go to our lakes, rivers, and oceans, where they have broad-ranging impacts on public health and the environment. Preventing sewer spills is important, especially during this COVID-19 emergency, for the protection of public health and the environment."

- 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.
- Students will go on a virtual field trip via Zoom to the Leucadia Wastewater District facility to observe firsthand how the facility processes waste water from our community and to hear from experts what happens when "wipes go in the pipes."
- Students will synthesize what they've learned by creating a videotaped PSA to reinforce for themselves and to teach their families the effect of putting wipes down drains has on the sewage system. For the video all students will participate in a song/dance by the Banana Slug Band titled the "Water Cycle Boogie." several students will narrate in English and Spanish what they have learned about the water cycle and the effects of wipes in the septic systems.

This project consists of 90 students and 6-8 staff members. We would use \$630 of the funds to make individual water cycle models (materials per model $$7.00 \times 90 = 630 .) Before we begin filming teachers will secure releases from students so the LLWD will be able to show this video on a public forum. A parent from our school does video production and has offered to put the video together for free.

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

- 1. Create and explain a water cycle model;
- 2. Explain the impact of "wipes in the pipes"
- 3. Understand their knowledge can be used to teach others.

Budget: \$630.00

\$630.00 for Supplies for 90 water cycle models

Thank you for your time and consideration.