Ref: 25-8963

AGENDA

COMMUNITY AFFAIRS COMMITTEE MEETING
LEUCADIA WASTEWATER DISTRICT
December 16, 2024 – 3:00 p.m.
1960 La Costa Avenue, Carlsbad, CA 92009

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1. **Call to Order**

2. **Roll Call**

3. **Public Comment**

4. **Review of the Teacher Grant Applications.** (Pages 2-20)

5. **Information Items**
   A. Water Career Day Debrief. (Pages 21-23)

   B. Photo Contest Update. (Verbal)

6. **Directors' Comments**

7. **General Manager's Comments**

8. **Adjournment**

Ref: 25-8959

MEMORANDUM

DATE: December 12, 2024
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 six Teacher Grants totaling $8,900; or
2. Discuss and provide direction, as appropriate.

BACKGROUND:

Tactical Goal: Services/Teacher Grant Program Awards

LWD's Teacher Grant Program, established in 2008, aims to support water or wastewater educational initiatives within the District. Over the years, the program has progressed, including adjustments to the timeline and increasing the grant amount teachers can receive. In 2018, the program budget increased to $6,000, and the maximum grant per teacher was raised to $2,000. Staff has also enhanced outreach efforts to encourage more teachers to apply.

DISCUSSION:

In August 2024, staff distributed information about the Teacher Grant program to all schools within the District's service area, including nine elementary schools, one middle school, and one high school. Staff and Rising Tide Partners (RTP) reached out to schools and teachers via email and social media, to remind schools and teachers of the November 15, 2024 submission deadline. Additionally, information about the grants was made available on the LWD website, and RTP posted updates on Facebook.

As a result, six applications were received by the deadline and are attached for your review.

No.	Applicants	School	Amount Requested:	No. of Students Impacted	Project
1	Carrie Herndon	EUSD Farm Lab	$2,000	710	Water Wise: Experimenting with Groundwater Simulator
2	Nancy Jois	Capri Elementary	$2,000	90	We Can Help Ocean Animals
3	Jessica Caldararo	La Costa Heights Elementary	$2,000	22	Kinder-Garden for a Better Earth
4	Jacquie Street	La Costa Heights Elementary	$900	100	Young Water Protectors-Project on Ocean Water Pollution Prevention
5	Katie Oberman	El Camino Creek Elementary	$1,000	500	Native Plant Labyrinth
6	June Honsberger	La Costa Canyon HS	$2,000	100	Pollinators and Plant Species in the Fall and Spring
		TOTAL:	**$9,900**	**1,522**	

KEY CONSIDERATIONS:

Staff noted these three considerations when evaluating the applications:

1. The Encinitas Unified School District (EUSD) Farm Lab project is outside the District's boundary, but their project will benefit students from eight schools within the District. In the past, EUSD has received a grant due to their significant impact on District students. Staff recommends the Farm Lab grant request be accepted.

2. Two applications are from La Costa Heights Elementary. One of the applications (Ms. Caldararo's) includes a $600 request for bus transportation to LWD for a field trip. Staff recommends LWD offer a demonstration at La Costa Heights in lieu of the bus funding.

3. The La Costa Canyon High School application includes $400 for non-consumable items (shovels and gloves) that the District has funded in previous years. Staff recommends excluding the non-consumable items from the funding of this grant.

FISCAL IMPACT:

The FY25 budget for the Teacher Grant Program is $6,000, allowing for up to three grants of $2,000 each. Funding all six applications at the adjusted total of $8,900 would still exceed the authorized budget by $2,900.

RECOMMENDATION:

Staff recommends approving all six grants due to the high outreach value and impact on over 1,500 students in the District's service area. This number does not account for additional participants, such as teachers, volunteers, and parents, who contribute to or benefit from these projects. Staff believes that the benefits of the additional outreach achieved by awarding grants to all of the applicants as previously outlined, exceeds the relatively minor additional cost of funding these grants. In previous years, the District has exceeded the budget when funds were available to support outstanding applications, and the current year's budget can absorb the additional $2,900.

Staff recommends that the CAC review the applications and forward all applications to the Board of Directors for approval at the January 8, 2025 meeting.

th:PJB

Attachments

LEUCADIA WASTEWATER DISTRICT | LEADERS IN ENVIRONMENTAL PROTECTION

Grant Application Form

During the 2024-2025 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 DO NOT INCLUDE YOUR NAME, THE NAME OF YOUR SCHOOL, OR THE NAME OF YOUR DISTRICT. Completed applications MUST BE emailed to ntorresgarcia@lwwd.org or received by Friday, November 15, 2024.

IDENTIFYING INFORMATION

Carrie Herndon
Teacher's name

K-6
Grade

Farm Lab STEM Teacher
Subject

Farm Lab
School name

Encinitas Union School District
District

441 Quail Gardens Dr. Encinitas, CA, 92024
School address, including street, city and zip

Julie Burton
Principal's name

760-803-7233
School phone number

Encinitas Union School District
Name of parent organization (i.e. PTA or school foundation)

Water Wise: Experimenting with Groundwater Simulator
Project title

$2000
Grant amount requested

Teacher's signature

Please tell us how you heard about this program

☐ Poster/Flyer ☐ Web site ☒ Another Educator ☐ Newsletter ☐ Other

Fifth Grade Water Wise Unit

Each year all of our district's fifth grade students participate in a three day experiential Water Wise Unit. Our Water Wise Unit focuses on hydrogeology, namely the following concepts; water wise practices, bioswales, aquifers, water contamination, pollution prevention, water pumps, water scarcity, desalination, water reclamation, filtration and water wise farming techniques. At the culmination of the three day unit, each student walks away being able to articulate answers to the following guiding questions;

1) *Why do we need to conserve and reclaim water?*
2) *What can you do to help?*

To implement hands-on exploration and student collaboration, we are looking to add the Ward's Groundwater Simulator to our current lessons to provide an exemplary student experience. The following concepts will be added to our curriculum with the purchase of the Groundwater Simulator;

1) Surface leaching of contaminants that leads to pollution in the ocean
2) Rates of groundwater flow and well contamination
3) Permeability of rock layers
4) Connectivity between the water table and bodies of water
5) Management of the water table, water wells, and fresh water sources

As a nonconsumable model, the Groundwater Simulator can be reused hundreds of times once it is built. Water can flow through the acrylic model, with food dye being used to show the movement of contaminants and water through a watershed. At the end of each use, the Groundwater Simulator can be rinsed and then drained for storage. Reuse involves adding water and using different colored food dye.

This grant will provide the funds to allow every one of our 710 fifth grade students to use the Ward's Groundwater Simulator during two different rotations as a means to manipulate variables and observe how contaminants flow through a watershed. These annual hands-on activities will strengthen our students' understanding of Water Wise practices.

Each of our nine elementary schools attends the Water Wise Unit with their respective teachers at our district's Satellite Sustainability Campus. We have 710 students, 30 teachers, and over 20 instructional assistants that will be directly impacted with the use of the Ward's Groundwater Simulator *each school year*. Upon receiving the grant funds, we will order the Groundwater Simulator for use in our 5th grade Water Wise Unit. The outlined cost is $1889 for the Groundwater Simulator, including the sand, dye, soil, rock and pump tubing. It is estimated that shipping will be an extra $200. We are requesting a total of $2000 for implementation of this project to serve all grade 5 students for years to come.

Thank you for your consideration.

LEUCADIA WASTEWATER DISTRICT | LEADERS IN ENVIRONMENTAL PROTECTION

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IDENTIFYING INFORMATION

Nancy Jois
Teacher's name

Kindergarten
Grade

Subject

Capri Elementary
School name

Encinitas Union School District
District

941 Capri Road Leucadia CA 92024
School address, including street, city and zip

Chris Juarez
Principal's name

760 944 4360
School phone number

Capri PTA
Name of parent organization (i.e. PTA or school foundation)

We Can Help Ocean Animals
Project title

3,000
Grant amount requested

Nancy P Jois
Teacher's signature

Please tell us how you heard about this program

☐ Poster/Flyer ☐ Web site ☐ Another Educator ☐ Newsletter ☐ Other

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, sea animals, 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.

- By creating these models, students will see how water carries soil and debris to the ocean, and how debris from storm drains affects ocean animals. After creating these models, students will add native and drought resistant plants to a slope on campus to help mitigate debris / 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 several ocean animals.

This project consists of 90 students and 6-8 staff members. We would use $665 of the funds to make individual water cycle models (materials per model $7.00 x 95 = $665.) 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 help with our video for $300. 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 /ocean animals. An instructor paid for by the PTA 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 on the ocean and ocean animals
3. Understand their knowledge can be used to teach others

Budget: $2,000.00

$665.00 for Supplies for 90 water cycle models
$300.00 for Video props, filming, guidance
$1,035.00 for purchasing drought tolerant / native plants

Thank you for your time and consideration.

LEUCADIA WASTEWATER DISTRICT | LEADERS IN ENVIRONMENTAL PROTECTION

Grant Application Form

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IDENTIFYING INFORMATION

Jessica Caldararo
Teacher's name

kindergarten
Grade

Subject

La Costa Heights
School name

EUSD
District

3035 Levante St, Carlsbad, CA 92009
School address, including street, city and zip

Heidi Galassi
Principal's name

School phone number

PTA
Name of parent organization (i.e. PTA or school foundation)

Kinder-Garden for a Better Earth
Project title

$2000
Grant amount requested

Jessica Caldararo
Teacher's signature

Please tell us how you heard about this program

☐ Poster/Flyer ☐ Web site ☐ Another Educator ☐ Newsletter ☐ Other

Grant Application

A. Description of Project

Project Summary
Our project, titled *"Kinder-Garden for a Better Earth: Water Conservation and Pollution Prevention,"* aims to educate our kindergarten students on the importance of water resource management and ocean pollution prevention. This hands-on project will blend science, art, and environmental education to foster early understanding of how daily actions affect our local water systems and oceans. Students will also plant and care for drought-friendly plants in an outdoor mini-garden, learning how sustainable planting conserves water and benefits the environment.

Participants
This project will involve approximately 22 kindergarten students, 1 teaching aide, and one lead teacher, along with the potential involvement of parent volunteers. Also possible support from 5th and 6th grade students. We plan to share our findings with the broader school community through displays and presentations.

Project Description
The curriculum will consist of interactive activities that build awareness of water conservation and pollution prevention. These activities include:

1. **Water Exploration Stations**: Through various learning stations, students will explore the water cycle, water-saving tips, and the effects of pollution on water systems.
2. **Pollution Prevention Art Project**: Students will collect safe, reusable waste materials to create an art piece symbolizing ocean health, highlighting the impact of trash on marine life.
3. **Outdoor Mini-Garden**: Students will plant and care for drought-friendly plants in an outdoor mini-garden, learning how sustainable plant choices conserve water and support the environment.
4. **Field Trip or On-Campus Presentation**: We will arrange a field trip to the LWD facility, or invite LWD representatives to visit our campus, giving students a firsthand look at local water management and conservation practices. This experience will deepen their understanding of how communities work to protect and manage our water resources.
5. **Create an educational video:** to summarize our learning and teach other students at our school and in our community.

In-kind Resources or Matching Funds
Community donations of recyclable materials and possibly local nursery donations of drought-tolerant plants will contribute to project resources.

Location and Timeline
The project will take place on-site, with weekly lessons to culminate on Earth Day celebration in April.

B. Objectives

The primary objective of this project is to introduce kindergarten students to the importance of water conservation and ocean pollution prevention. Our goals align with EUSD's Global Citizen learning outcomes, aiming to cultivate students who are:

1. Environmentally Responsible: Students will develop an understanding of the water cycle, recognize the harmful effects of pollution, and learn ways to reduce waste. Additionally, they will plant and care for drought-friendly plants, understanding how sustainable plant choices conserve water and positively impact our environment.
2. Culturally Aware: By exploring global environmental issues, students will gain awareness of how people from diverse cultures approach water resource challenges, fostering an appreciation for different perspectives on environmental stewardship.
3. Inclusive and Equitable: The project encourages inclusive activities, inviting students from various backgrounds to engage in shared environmental goals. They will practice engaging in dialogue, teamwork, and empathy toward creating a sustainable community.
4. Committed to Sustainable Communities: By learning about water conservation, pollution prevention, and sustainable planting, students actively participate in building a more equitable, just, and sustainable world, starting with their immediate community.

Through this project, students will embody the principles of being culturally aware and environmentally responsible global citizens who make a positive impact on their community and the world.

C. Budget

Item	Cost	Notes
Water Exploration Station Supplies (tubs, water-safe materials)	$300	Reusable for future projects
Pollution Prevention Art Materials (paint, brushes, canvas)	$150	Mostly consumables
Drought-Tolerant Plants & Soil	$250	Long-term use, requires minimal upkeep

Educational Posters & Activity Guides	$100	Reusable educational resource
Student Water-Saving Kits (water-friendly coloring books, stickers)	$200	Consumables
Outdoor Garden Maintenance Supplies (watering cans, small shovels)	$200	Non-consumable, for reuse
Field Trip to Local Water Treatment Facility	$600	Covers transportation and fees
Miscellaneous Supplies (markers, pencils, eco-friendly bags)	$200	Consumables
Total	**$2,000**	

This budget includes items that can be reused, like exploration materials, posters, and garden tools, making it sustainable for future projects. Additionally, parent and community donations will cover some materials, helping to stretch grant funds.

Thank you for considering our grant application. With this support, we aim to provide a foundational understanding of water conservation and pollution prevention that students will carry with them throughout their lives.

LEUCADIA WASTEWATER DISTRICT | LEADERS IN ENVIRONMENTAL PROTECTION

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IDENTIFYING INFORMATION

Jacquie Street
Teacher's name

2nd Grade | Multiple Subject
Grade | Subject

La Costa Heights Elementary School | Encinitas Union
School name | District

3035 Levante Street, Carlsbad, CA 92009
School address, including street, city and zip

Heidi Galassi | 760-944-4375
Principal's name | School phone number

LCH PTA
Name of parent organization (i.e. PTA or school foundation)

Young Water Protectors
Second Grade Project on Ocean Water Pollution Prevention | $900
Project title | Grant amount requested

Jacquelyn Street
Teacher's signature

Please tell us how you heard about this program

☐ Poster/Flyer ☐ Web site ☒ Another Educator ☐ Newsletter ☐ Other

Young Water Protectors
Second Grade Project on Ocean Water Pollution Prevention

A. **Description of Project**

1. Inspired by the award-winning book "We Are Water Protectors" by Carole Lindstrom, this project aims to empower second-grade students (3 classes) to understand the importance of protecting water and learn how they can make a difference in their community. "We Are Water Protectors" tells the story of a young girl who, inspired by Indigenous wisdom, takes a stand against the "black snake" threatening her water, emphasizing respect for nature and the sacredness of water.

Project Overview

The "Young Water Protectors" project will guide students through a series of engaging language arts and science activities inspired by "We Are Water Protectors", encouraging them to take action against ocean pollution. Activities will include reading and discussing the book, interactive science lessons on water pollution, a community-focused art project, and litter removal. By combining literature, science, and art, this program will foster environmental stewardship and inspire students to be protectors of the Earth.

2. This grant proposal seeks funding to create a long-term, hands-on learning experience for 100 second-grade students (three 2nd grade classes) and 3 staff members (teachers) using this book as a foundation to explore ocean pollution, its effects, and ways to prevent it.

3. **Program Activities:**

- **Read-Aloud and Discussion of "We Are Water Protectors"**
  Teachers will read "We Are Water Protectors" to students, followed by a discussion about the themes of the book—respect for nature, the value of water, and the concept of protecting what we care about. Students will share their thoughts and explore why protecting water and oceans is essential.
- **Pollution Simulation Activity**
  Using jars of water, students will simulate ocean pollution by adding "pollutants" like dirt, food coloring (representing oil), and small pieces of plastic.
  The class will observe how pollutants affect the clarity and quality of water, leading to a discussion on the impacts of pollution on marine life.
- **"Water Protectors" Art Project**
  Students will create posters, inspired by "We Are Water Protectors", that depict ways they can protect water. These posters will feature messages on reducing plastic use, recycling, and keeping trash out of oceans.
  The posters will be displayed in the school library to raise awareness among other students and families.
- **Campus Clean-Up and Reflection**
  All 2nd grade students will participate in a mini clean-up day on the school grounds, picking up litter and learning to sort recyclables.
  This mini clean-up day will launch the 2nd grade leadership team and each 2nd grade class will continue clean up efforts weekly by picking up litter on designated days.
  Afterward, they'll reflect on how their efforts connect to the lessons from "We Are Water Protectors" and why protecting water sources matters.

B. Objectives

1. Educate students about the importance of water and the effects of ocean pollution on the environment.
2. Engage students in hands-on science activities to explore how pollution impacts marine life.
3. Empower students to share what they've learned and advocate for water protection within their school community.

C. Budget Request:

We are requesting approximately $600 to support materials and supplies.

Item	Cost	Total	Non-Consumable YES/NO
We are Water Protectors books	6 @ $11.00 each (two for each classroom)	$66	Yes
Pollution Simulation Materials	3 sets of Mason Jars (12 jars in set) @ $30/set	$90	YES
Art Supplies	Colorful Sharpies 6 sets (34 colors in a set & 2 sets per classroom) @ $20/set	$120	YES
Campus Clean Up Supplies	4 sets of Rubber Coated Garden Gloves (18 pairs) @ $45/set 5 Gallon Home Depot Buckets for trash collection - 20 buckets @ $4.00 each 5 Packs of Trash Grabbers (6 in a Pack) @ $50/pack	$180 $80 $250	YES YES YES
Misc. Curriculum lessons from Teachers Pay Teachers	Downloadable lessons from Teachers Pay Teachers	$50	YES
		Total Cost: $836 + $64.80 (7.75% tax) = $900.80	

Thank you for considering this proposal!

LEUCADIA WASTEWATER DISTRICT | LEADERS IN ENVIRONMENTAL PROTECTION

Grant Application Form

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IDENTIFYING INFORMATION

Katie Oberman
Teacher's name

K-6th — Grade
STEM — Subject

El Camino Creek Elementary — School name
Encinitas Union School District — District

7885 Paseo Aliso Carlsbad, CA 92009
School address, including street, city and zip

Jodi Greenberger — Principal's name
760-943-2051 — School phone number

ECC PTA
Name of parent organization (i.e. PTA or school foundation)

Native Plant Labyrinth — Project title
$1,000 — Grant amount requested

Teacher's signature

Please tell us how you heard about this program

☐ Poster/Flyer ☐ Web site ☒ Another Educator ☐ Newsletter ☐ Other

Garden Science and STEM class proposal - School gardening with water conservation and native plant education

Description of Project

Every student at our school attends STEM class once a week, in which they learn about a series of concepts including gardening and environmental protection. In addition, grades K-3 attend 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. We would like to add in a 20'x15' succulent and native plant labyrinth to our garden that will engage students while highlighting a series of drought-resistant and water-wise plants for them to learn about. 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, and learning about the biodiversity of plants that are native to this area. Students will connect what they learn in class about water conservation, native habitats, and even native communities' historic use of plants to the plants they see growing in our native garden and labyrinth. As part of the water unit and this project, students will also be introduced to the water systems (drinking, wastewater, stormwater) to gain a broader understanding of our water resources and what we can do to protect them (e.g. not flushing wipes, fog, and water conservation).

Participating students will include all of K-6th grade; K-3 participate in Garden Science lessons and K-6th participate in STEM. Roughly 500 students will be participating total, as well as around 20 Garden Science parent volunteers who run garden lessons for their classes.

In-kind resources include cuttings from community members' succulent plants to supplement the native plants requested and teach about resource conservation. Another in-kind resource that we plan to leverage is our school's partnership with BCK Programs, environmental education consultants. BCK facilitates water conservation, watershed protection, and wastewater education programs, and through their contract with the district, they are able to provide instructional and logistical assistance throughout the project.

This project will take place in the school garden towards the back of campus alongside the garden fence and outdoor classroom. The project will begin in the spring of 2025, and continue on year after year. Gardening will take place during STEM 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 be able to explain why native plants, including succulents, are better for conserving water as opposed to non-native 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.

Budget:

$250 - bricks to form the structure of the labyrinth

$50 - Weed Barrier 3ftx300ft

$100 - Focal point, such as a sundial, bird bath, or a tree

$500 - certified native plants

Total: $1,000

Thank you for your consideration.

LEUCADIA WASTEWATER DISTRICT | LEADERS IN ENVIRONMENTAL PROTECTION

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IDENTIFYING INFORMATION

June Honsberger and Alyson Thile

Teacher's name

Grades 9-12 | Biology and AP Enviornmental Science

Grade | Subject

La Costa Canyon High School | San Dieguito Union HS District

School name | District

1 Maverick Way Carlsbad, Ca 92009

School address, including street, city and zip

Justin Conn | 760-436-6136

Principal's name | School phone number

La Costa Canyon Foundation

Name of parent organization (i.e. PTA or school foundation)

Pollinators and Plant Species in the Fall and Spring | $2000.00

Project title | Grant amount requested

June Honsberger and Alyson Thile

Teacher's signature

Please tell us how you heard about this program

☐ Poster/Flyer ☒ Web site ☐ Another Educator ☐ Newsletter ☐ Other

Pollinators and Plant Species in the Fall and Spring

A. Description of the Project:

Over the past five years, the pollinator gardens on our campus have evolved into a vibrant, diverse ecosystem designed to attract a wide range of pollinator species. Pollinators play a critical role in the reproduction and establishment of a healthy, sustainable garden ecosystem. According to the Pollinator Project at the University of California Cooperative Extension (UCCE), San Diego County is home to over 700 species of native bees and a broad variety of other pollinator species. (Nabors et al., 2022).

This year, the focus of our project will be to engage AP Environmental Science and Biology students in documenting the existing pollinator plants and species in our gardens. Students will work in small groups, each responsible for monitoring a specific 3-square-meter area throughout the year. Using the iNaturalist app on their smartphones, students will identify and record the species of plants and animals they observe in their assigned garden area. Based on their observations, they will select new pollinator-friendly plants, determine the best way to cluster them for optimal pollinator foraging behavior, and plant them in their designated area. They will continue the maintenance of their plants throughout the year and monitor how these additions impact pollinator activity. The goal is to create a permanent, self-sustaining native plant pollinator garden that increases both the variety of pollinator species and the diversity of plants on our campus.

Throughout the school year, the students will maintain the gardens and track changes in species biodiversity. They will inventory the varieties of pollinators, noting any shifts in the ecosystem over time. This data will guide further plantings in the spring. In addition to enhancing the campus garden, the overarching mission of this project is to cultivate environmental stewardship among students and increase their awareness of the importance of biodiversity in their local community.

This project will be a collaborative effort involving two classroom teachers and 100 high school science students (grades 9-12), including those in the AP Environmental Science and Biology classes. The project will begin in the winter of 2024 and continue through the spring of 2025. These hands-on activities require a variety of supplies, including garden tools, soil, compost, plants, trees, and mulch. Grant funds will be used to purchase the necessary materials to ensure the success of this project. Additionally, the district's grounds team will assist with maintaining the existing sprinkler system.

Students collect data using iNaturalist.

B. Learning Objectives

Students will investigate the relationships between pollinators, native plants, and biodiversity within our drought-tolerant school gardens. They will research and select native plant species that are well-suited to thrive in Southern California's arid climate, while also providing vital pollen and habitat for the diverse pollinator species on our campus. Throughout the year, students will inventory the pollinator species present in the gardens and track any changes in biodiversity. The data they collect will inform future garden projects and scientific studies, helping to guide ongoing efforts to enhance and sustain our campus ecosystem.

C. Budget

Item	Quantity/vendor	Amount	Non-Consumables
Shovels	10 @ $20.00- Home Depot	$200	x
Garden gloves	20 @ $10.00- home depot	$200	x
Garden Soil	25 bags @ $12.00 – Home Depot	$300	
Mulch/compost	25 bags @ $12.00 – Home Depot	$300	
Plants & Trees	Anderson's La Costa Nursery	$1000	
	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.

Ref: 25-8977

MEMORANDUM

DATE: December 12, 2024

TO: Community Affairs Committee

FROM: Paul J. Bushee, General Manager

SUBJECT: **2024 Water Career Day Overview**

RECOMMENDATION:

This item is provided for information only.

DISCUSSION:

Tactical Goal: Services/Plan – Coordinate and Participate in the Water Career Day

After a year of planning, the District, in partnership with Olivenhain Municipal Water District and San Elijo Joint Powers Authority, successfully hosted the 2024 Water Career Day on Thursday, October 10, 2024. The event was held at the San Elijo Joint Powers Authority campus and featured hands-on demonstrations designed to promote careers in the wastewater and water industry.

The purpose of this item is to provide the Board with a summary of the event. A detailed report is attached. During the upcoming Board meeting, staff will provide an overview of the event highlights, outcomes, and lessons learned. Additionally, Neal Bloom from RTP will be present to address any questions from the CAC.

Attachment

th:PB

2024 Water Career Day Summary Report

Objective
To inspire high school, college, and early military veteran talent to explore careers in the wastewater and water industry by providing hands-on demonstrations that simulate everyday tasks and work environments.

Outreach Efforts, Participants, Attendees, and Event Activities Timeline
Outreach efforts targeting high schools and colleges began in October 2023, followed by approximately 12 months of detailed event planning. The event was hosted at the San Elijo Joint Powers Authority (SEJPA) campus on October 10, 2024.

Participants
Three agencies collaborated to provide staff, equipment, and funding:

- Leucadia Wastewater District (LWD)
- Olivenhain Municipal Water District (OMWD)
- San Elijo Joint Powers Authority (SEJPA)

Attendees
A total of **85 attendees**

- 30 High School Students
- 55 College Students (majority were community college students)
- Six Community Education Partners
  - San Diego County Department of Education
  - La Costa Canyon High School & Career Technical Counseling
  - Mission Hills High School
  - MiraCosta College
  - MiraCosta Career Technical Institute
  - Palomar College

Event Activities and Educational Opportunities
Students visited seven stations that allowed for a hands-on experience. Examples of hands-on demonstrations included:

  - Operate the CCTV robot
  - Use wastewater samples to view microbial under a microscope
  - Turning valves on equipment

Additional Activities:

- Lunch was provided to all attendees
- Agencies and partners provided promotion giveaways, career guidance and information on obtaining skills needed for wastewater/water careers

Fiscal Impact

- LWD's FY25 Budget included $7,500 for this event
- Costs were shared among LWD, OMWD, and SEJPA
- Total event cost: $22,380

Outcome of the Event and Post-Event Survey Results

The event received overwhelmingly positive feedback from attendees and participating organizations, both in-person and through post-event surveys.

Key Survey Findings:

- 17 survey responses expressed 100% interest in pursuing a career in water/wastewater
- The top three stations were:
  - SEJPA Laboratory
  - LWD's CCTV truck
  - LWD's Vactor truck

Post Event Resources:

- A video highlighting the event was produced
- A photo database documenting the event was created
- The event was shared on social media
- The event was featured in an article published by the Union-Tribune

Anecdotal Feedback from the Event

"I'm literally learning about reverse osmosis recycled water in class right now and today I got to see it and ask questions directly to the water workers who maintain it!"

"While the high school students were quiet, they really enjoyed meeting everyone and it really opened some eyes to the opportunities with local municipalities, as well as the courses offered at Palomar and MiraCosta!

Conclusion

The 2024 Water Career Day successfully achieved its objective of sparking interest in the water and wastewater industry among young talent. Valuable feedback was gathered to enhance future events, ensuring they remain impactful and educational. Staff plans on scheduling a future meeting with SEJPA and OMWD in January 2025 to discuss a possible event in the fall of 2025.