

May 2024

# BARSCREEN BEE

The Official Newsletter of the  
Northern Sacramento Valley Section of the  
California Water Environment Association



**CWEA**

<http://nsvs.cwea.org/>

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<http://nsvs.cwea.org/>

The Barscreen Bee is a  
publication of the Northern  
Sacramento Valley Section  
of the California Water  
Environment Association.

## Welcome to the CWEA Northern Sacramento Valley Section Vendor Fair Tuesday, May 21, 2024 9:00 a.m.—1:00 p.m. Rain or Shine



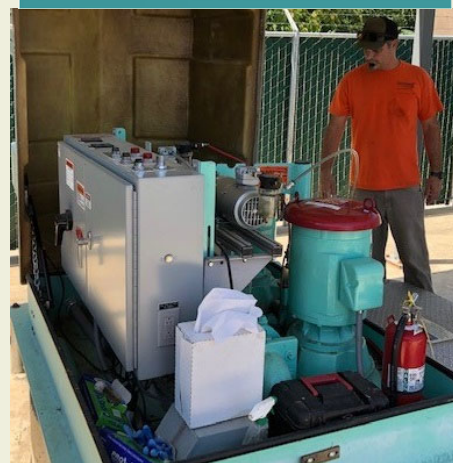
**At the REDDING CIVIC CENTER, 700 Auditorium Dr,  
Redding, CA**

**Interact with 20-30 vendors and your fellow wastewater  
professionals in Northern CA!**

**Lunch by Odell Craft BBQ  
11:30—12:30 p.m. for \$20.00,  
RSVP for lunch is required by  
scanning the QR Code and filling out  
the form. QR code for the attendee form is attached and can  
also be accessed with this link: <https://forms.office.com/r/tnkfvJs465>**

**Questions? Contact Kevin Garner, President**

**(contact  
info on  
left side-  
bar)**



## NSVS Calendar of Events

- May 15, 2024, Wednesday, Vendor Fair, Redding, CA 9am-1pm
- June 12, 2024, Wednesday, Training in location TBD (possibly Chico)
- July 10, 2024, Wednesday, 11:00am — 1:00pm Board Meeting
- July 20, 2024, Saturday, Sacramento Rivercats Baseball game



- August 14, 2024, Wednesday, Training location TBD
- September 2024, Friday, Golf Tournament, location and date TBD
- October 16, 2024, Wednesday, 11:00am — 1:00pm Board Meeting
- November 13, 2024, Wednesday, Training location TBD
- December 11, 2024 Wednesday, 11:00am — 1:00pm Board Meeting
- Annual Awards Banquet January 2025. 5-8:30 pm Location TBD

Board meetings are held either online or at the Blue Plate Special Restaurant, 900 Newville Rd, Orland, CA 95963.

Members are always welcome to attend the board meetings.

Please contact [twyhldko@cityofredding.org](mailto:twyhldko@cityofredding.org) or 530-224-4319, or any of the NSVS Executive board members for information regarding board meetings.

### **G3 Engineering, Inc.**

Water and Wastewater Equipment

**G.J. (Jim) Billings III, PE**  
President

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[www.g3engineering.com](http://www.g3engineering.com)



A butterfly with brown, white, and blue wings is perched on a stone ledge in the foreground. In the background, a dense city skyline with various skyscrapers is visible under a clear blue sky.

**We see the bigger picture.**

We see more in water—more than the science, more than the planning, and more than the design. We see the families and communities we serve, and the increasingly fragile ecosystems we must protect. For 90 years, we've been inspired to develop the most innovative solutions in the water industry, designed to improve our lives and the lives of all living things. It just doesn't get any bigger than that.

**800.523.5826 / [carollo.com](http://carollo.com)**



**CALIFORNIA WATER ENVIRONMENT ASSOCIATION  
NORTHERN SACRAMENTO VALLEY SECTION**  
The Training Day Report from the March 28, 2024 in Anderson  
By Sheila Nilsen

Speaker 1: David Alvarado with Newterra.

Topic: Mechanical aeration and mixing

Mr. Alvarado presented an overview of aeration and mixing design and equipment selection criteria for nutrient removal and treatment in aerated basins. Alpha and Beta factors were defined and discussed. These factors relate to mixing and aeration efficiency and therefore equipment selection. The Alpha factor is a comparison of the oxygen transfer in process water compared to clean water, and the Beta factor is a comparison of oxygen transfer in saline water compared to clean water. The presentation concluded with a look at the Triton 2.0, a hybrid floating aerator and mixer with independently controlled mixing and aeration components. This equipment design presents a solution for quick-deployed aeration and mixing, whether this is for facility maintenance, or for a permanent installation in a remote lagoon.



Speaker 2: Shauna Stratton, Harm Reduction Supervisor, Shasta County Public Health

Topic: Wastewater expose and Wastewater Professionals

Mrs. Stratton explained the resources available to the public via the <https://www.shastacounty.gov/health-human-services/page/public-health> website that present up-to-date trends of infectious disease concentrations in wastewater. She admitted to the limited focus from research professionals on wastewater professionals and the exposures they face working in wastewater, and urged caution for WW professionals to be aware of the trends of certain diseases and to take extra precautions when these diseases are on the rise (like Norovirus). She recommended prevention measures, such as wearing appropriate PPE, washing that PPE after use, getting vaccinated, and reviewing infectious disease statistics in safety briefings. She finished her presentation with a discussion on Fentanyl and the danger it poses to wastewater professionals, especially those who are called into help with homeless encampment cleanups. She described how easily someone can overdose from accidentally touching the drug's residue, and described what an overdose may look like. She recommended wastewater professionals carry Narcan, which is a nasal spray that can be used as an antidote to a Fentanyl overdose. Narcan may need to be administered multiple times to a victim, and emergency authorities should be contacted immediately if there is an overdose event.





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**Speaker 3: Fred Kesich, Pac Machine Corp. Topic: Navigating Power Outages with Bypass Preparedness**

Mr. Kesich discussed the options for emergency or planned bypass pumping scenarios, and the design hurdles many municipalities may face when implementing such strategies.

California Air Board requirements are strict and have driven the market to electrically powered bypass pumping arrangements over diesel generators. He discussed the pitfalls in selecting bypass pumping arrangements, whether that be

oversizing or under sizing the pump or discharge lines. He noted some of the developments in bypass pumping engineering, including sound attenuation, SCADA connection, and cyber security. He discussed various types of pumps that can be included in the bypass pumping design depending on site specific design requirements (electric pumps with diesel backups, dry-prime pumps, and submersible pumps to name a few). He recommended agencies design a bypass pumping plan ahead of time and keep certain parts on hand to be available for emergency situations.



**Speaker 4: Sean Hennessy, Smart Cover. Topic: Innovations in Remote Monitoring Tech**

Mr. Hennessy discussed the limitations of current remote monitoring technology, including line of sight requirements, repeaters, and cellular service reliability. He presented on the options available for remote monitoring, specifically for sewer manhole and pump station monitoring, like level, flow, and gas sensors, to detect emergency instances. He presented multiple real-life scenarios where remote monitoring equipment allowed an agency time for a quick response to avoid a spill disaster. He discussed how remote monitoring can be useful for collecting data for sewer maintenance planning (like infiltration and inflow projects) and sewer modeling projects. He discussed the cost saving potential related to maintenance activities and field personnel deployment,

as well as the increase of employee safety by taking those employees out of compromised situations, like assessing a manhole located in a roadway. The Smart Cover devices can send monitoring information to an employee's cell phone, making remote monitoring more accessible for those off-hour times. The devices communicate via satellite, and not radio or cellular, avoiding the typical pitfalls of existing remote monitoring hardware.



# Job Postings around the Northern Sacramento Valley

City of Redding: <https://www.governmentjobs.com/careers/reddingca>

Public Works Maintenance Worker, continuous recruitment

Regular Full-Time Positions \$28.20 - \$29.61 per hour

Temporary Full-Time /Part-Time Positions \$19.15 - \$21.71 per hour

City of Chico: <https://www.governmentjobs.com/careers/chico>

Industrial Mechanic, Salary \$63,440.00 - \$85,030.40 Annually

Public Works - Operations & Maintenance, Wastewater Treatment Plant

Closing Date 6/15/2024 11:59 PM Pacific

Senior Civil Engineer, Salary \$108,368.00 - \$149,364.80 Annually,  
Department Public Works Engineering

City of Davis: <https://www.governmentjobs.com/careers/davis>

Public Works Maintenance Worker I/II (Fats. Oils & Grease (FOG)  
Inspector), \$21.30—28.48/hour, temporary part-time

Public Works Maintenance Worker I/II - Temporary Part-Time (TPT),  
Salary: \$43,430—58,073 Annually

City of Woodland <https://www.calopps.org/city-of-woodland>

Utilities Maintenance Worker I / II (20497935), Sanitary Sewer / Storm  
Drainage Systems

Full-Time, Close Date Until filled, Salary \$3,846.76-\$5,554.69 Monthly

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See back page for  
details



Jessica L Chandler, CE  
SENIOR ENGINEER

530.244.0202  
jchandler@PaceEngineering.us

5155 Venture Pkwy.  
Redding, CA  
96002



## 2024 Northern Sacramento Valley Section Advertising

Advertisements in the bi-monthly Northern Sacramento Valley Section (NSVS) "Barscreen Bee" newsletter may be purchased for:

\$75 per year for a business-card size advertisement,

\$150 per year for a half page advertisement (8.5 x 5.5 inches), or

\$300 per year for a full page advertisement (8.5 by 11 inches).

**APPLICATION (check one):**

NSVS Advertisement for \$75/year \_\_\_\_\_ or \$150/year \_\_\_\_\_ or \$300/year \_\_\_\_\_

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Submit application and payment to the NSVS Secretary/Treasurer:

Nikki Ong  
Carollo Engineers, Inc.  
2880 Gateway Oaks Drive, Suite 300, Sacramento, CA 95833  
D: 916-576-4726  
Email: [NOng@carollo.com](mailto:NOng@carollo.com)

Make checks payable to: CWEA NSVS

Enclose a business card or submit electronic advertisement (jpg, gif, or pdf) to the Newsletter Editor at:  
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