

June 2023

# BARSCREEN BEE

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



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

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

**In-Person Training**  
**Wednesday, June 28, 2023**  
**8:30 a.m. - 1:30 p.m.**

**City of Chico Corporation Yard & Fire Training Center**  
**901 Fir Street, Chico, CA**

**8:30 SIGN IN and NETWORK** with your peers over coffee and pastries

**9:00 Variable Frequency Drives in Wastewater Treatment**  
Dwight Summers, Regional Sales Director; Control Techniques

**9:50 Biofilm Reactors: An Overview of Technologies and Applications**  
Doug Barber, Process Engineer; Jacobs Engineering

**10:40 Break**

**10:50 Mitigating the Toxic Effects of QAC's, Surfactants and FOG with Nanobubble Pretreatment**  
Jas Pannu, Business Development Manager; Moleaer Inc.

**11:40 An Evaluation of Odor Control Technologies**  
Kingston Leung, Aftermarket Service Manager; Integrity Municipal Systems LLC

**12:30 LUNCH \$15, cash or check payable to CWEA NSVS**

**1:15 TOUR OF CITY OF CHICO WATER POLLUTION CONTROL PLANT, 4827 Chico River Road, Chico, CA 95928**

**Questions?**

**Contact Pratyusha Reddy Reddy, President (contact info on left side-bar)**

**Attendees of technical sessions will be issued Continuing Education contact hours toward CWEA Technical Certification**

CALIFORNIA WATER ENVIRONMENT ASSOCIATION  
NORTHERN SACRAMENTO VALLEY SECTION  
Training Day Report, City of Yuba City  
April 12, 2023, By Kevin Garner

We would like to thank the City of Yuba City and staff for hosting the CWEA NSVS training day on April 12<sup>th</sup>, 2023. The attendance was great with 35 members present. The tour was educational and lunch was delicious.

The morning began with a presentation on Pipe Rehabilitation with a Trenchless Technology using Spray Applied Geopolymer Mortar Lining, by Kurt Chirbas, Western Regional Manager, GeoTree Solutions (GeoSpray). This WRC approved product allows for trenchless rehabilitation of large diameter pipes having corrosive, structural, and infiltrating defects. GeoSpray is the first geopolymer mortar specifically designed as a structural and corrosion-resistant solution for large diameter storm and sanitary pipes, manholes, wet wells, and treatment plant structures. The centrifugal spray nozzle application applies the product at a uniformed specified thickness and uses the old pipe as the host. Mr. Chirbas did a great job outlining all the factors to take into consideration when considering this method of rehabilitation.



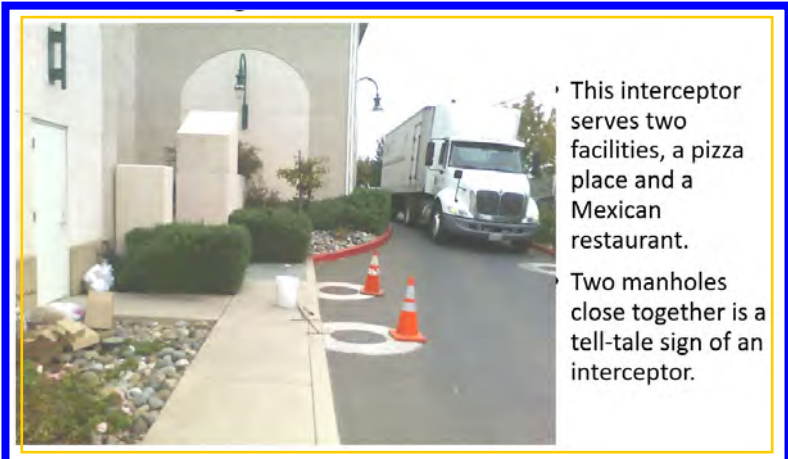
Second, Mr. Valentino Villa of BioForce Tech presented on SB 1383 Solids Diversion—What Do We Do Now? Mr. Villa presented remotely and discussed how their technologies are transforming organic streams into renewable energy and Biochar, delivering a sustainable solution to cities looking to comply with California Senate Bill 1383. The Bioforcetech process is divided into 2 steps: BioDrying and Pyrolysis. Both systems can be installed independently or combined. When treating sewage sludge (Municipal

Biosolids or industrial sludge) the combination of the 2 processes can achieve net-zero energy processing without additives or bulking agents. This process can achieve reductions in sludge volume of up to 90%. The final product from the BioForce Tech process is called BioChar which can be managed, sold, and transported at no cost to the municipality under a contract with BioForce Tech because Biochar is a renewable source of carbon for soil amendments, pigments (carbon-black), and as an additive in concrete.

CALIFORNIA WATER ENVIRONMENT ASSOCIATION  
NORTHERN SACRAMENTO VALLEY SECTION  
Training Day Report Continued

The third and final presentation was by Ms. Tracy Wyhlidko from the City of Redding Industrial Waste/Pretreatment Division titled “Sewer Pipe Blockage Control Program for Fats, Oils, and Grease”. The presentation focused on the key elements of a successful F.O.G. program. The key elements consisted of delegation of Legal Authority, Plan Review & Design Standards, Inspections, Permitting, Enforcement, Communication, Performance Measures, Public Education, and Information Management System. The City of Redding implemented its F.O.G. program in 2006 and it has drastically reduced SSO’s caused by F.O.G. related stoppages. Tracy also highlighted some of the tools required to carry out inspections of grease interceptors. Communicating and helping restaurant owners fosters good relationships and helps educate people on what they can do to help mitigate F.O.G from entering the sewer system.

The lunch of 5 different kinds of pizza was followed by a tour of the City of Yuba City’s Wastewater Treatment Plant.



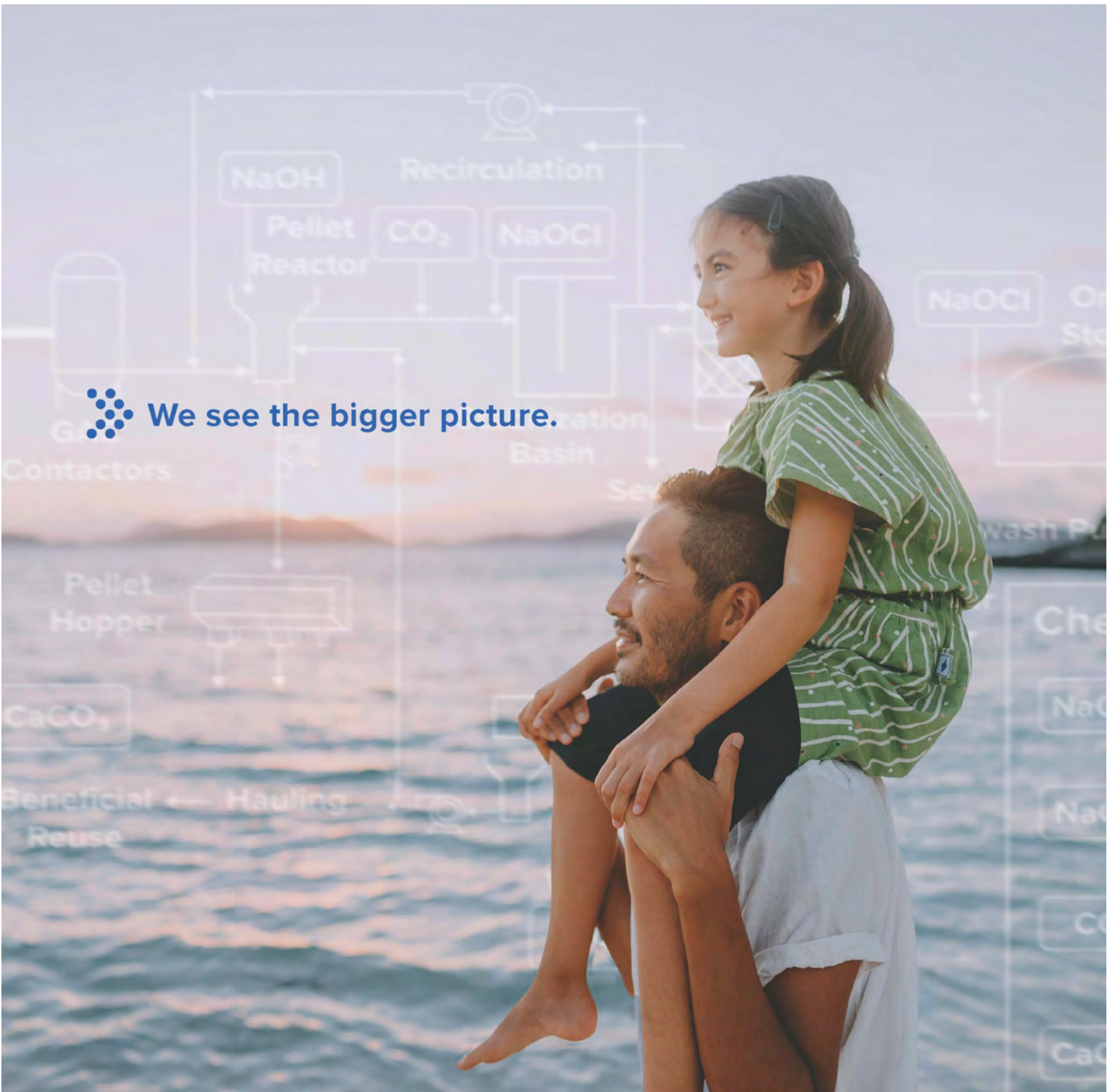
• This interceptor serves two facilities, a pizza place and a Mexican restaurant.  
Two manholes close together is a tell-tale sign of an interceptor.

**The newly Adopted Dec 6, 2022 Sanitary Sewer System WDR, Attachment D, Sanitary Sewer Management Plan, item 7 requires the evaluation to determine whether a sewer pipe blockage control program is needed to control fats, oils, grease, rags, and debris.**

- When a regulation requires an evaluation, the evaluation must be DOCUMENTED
- Write the evaluation, sign it and date it.
- If your evaluation concludes that a pipe blockage control program is NOT needed, you should state all the reasons why your agency came to that conclusion.
- AKA CYA

**This is not new, but may be new to you.**

- The FOG Program (Fats, Oils, and Grease Inspection Program) is only one part of the SSMP plan.
- All agencies have to determine whether a FOG program is needed or provide justification for why it is not needed.
- Similar requirements were been in place in the 2006 Sanitary Sewer Management Plan.



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 safeguard the quality of life for all communities, developing the most innovative solutions in the water industry. It just doesn't get any bigger than that.

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The logo for Carollo, featuring a stylized blue wave icon to the left of the word "carollo" in a bold, blue, sans-serif font.

## **NSVS Calendar of Events**

- Training, Wednesday, June 28, 2023, Chico, CA
- Board Meeting Monday July 10, 2023, 10-12, Blue Plate Special Restaurant, Orland
- Training, or Board Meeting Wednesday, August 16, 2023, location TBD
- Golf Tournament CWEA/APWA, Friday, September 15? Date and Location TBD
- Training Meeting, Tuesday, October 17, Redding
- Board Meeting Wednesday November 8, 2023, 10-12, Blue Plate Special Restaurant, Orland
- Training Meeting, Wednesday, December 6, 2023, location TBD
- Board Meeting January 2024, date TBD, 10-12, Blue Plate Special Restaurant, Orland

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

Members are always welcome to attend the board meetings.

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

# Pumps Ragging?

## Problem Solved

### Case Study: Half Moon Bay CA

#### Problem:

- Pumps clogging usually twice per week and took 1 hour to clean each pump.
- Risk to employees lifting pumps & exposed to waste, sharps etc.
- Excess energy consumption & high energy bills.

#### Solution:

- DeRagger+ and Keypad installed in control Panel.
- *Real Time Pump Protection* used to detect rags and run pump reversal via VFD.

#### Result:

- Energy Savings: 19% or \$500 per month in PG&E bills
- Near complete reduction in ragging.
- Big savings on manpower now effectively utilized rather than for cleaning pumps. Savings at \$735 per month.
- Reduced pump Run Time with clean pump

**Total cost savings as projected by sewer authority: \$14,820 per year.**

*"We found that the energy usage has decreased to approximately 20% which shows a \$500 savings on our PG&E bill. This is besides the fact that we have been able to save manpower and utilize them for other activities instead of the constant cleaning."*

- Kishen Prathivadi, P.E, PMP, Sewer Authority Mid-Coastside

## DERAGGER



### Easy, Fast, and Inexpensive

**Call for a free evaluation of your pump ragging problem.**



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# Job Postings

<https://www.governmentjobs.com/careers/reddingca>

City of Redding: Public Works Maintenance Worker, continuous recruitment

Regular Full-Time Positions \$26.85 - \$28.20 per hour

Temporary Full-Time /Part-Time Positions \$18.24 - \$20.68 per hour

The City of Redding is accepting applications for the position of Public Works Maintenance Worker for various Divisions including Streets, Parks, Storm Drains, Water and Wastewater. This position performs a wide variety of unskilled and semi-skilled work on City facilities.

<https://www.ci.anderson.ca.us/departments/personnel/index.php>

City of Anderson: MAINTENANCE WORKER, Salary Range: \$20.16 - \$27.01/Hour, Closing Date: June 21, 2023

<https://www.governmentjobs.com/careers/chico>

City of Chico, Construction Inspector, Public Works Engineering, Salary \$54,371 - \$74,984

City of Chico, Engineering Technician, Public Works Engineering, Salary \$45,552 - \$62,816

City of Chico, Assistant Engineer, Public Works Engineering, Salary \$62,795 - \$86,507 Annually

City of Chico, Associate Engineer, Public Works Engineering, Salary \$70,678 - \$97,385 Annually

City of Chico, Project Manager, Public Works Engineering, Salary \$78,665 - \$108,472 Annually

City of Chico, Senior Civil Engineer, Public Works Engineering, \$105,206.40 - \$145,017.60

City of Chico, Senior Development Engineer, , Public Works Engineering \$105,206 - \$145,017

City of Chico, Equipment Mechanic II, Public Works Operations & Maintenance, Salary \$45,989 - \$63,419

City of Chico, Maintenance Aide (Limited Term), Public Works Operations & Maintenance, \$15.00 - \$18.75 per hour.

City of Chico, Industrial Waste Inspector, Public Works Ops & Maintenance, Salary \$50,793 - \$69,888

City of Chico, Laboratory Technician or Analyst (Limited Term), \$23.00 - \$35.00 per hour.

City of Chico, Wastewater Treatment Plant Operator III, Salary: \$67,776 - \$93,267 Annually

<https://jobs.cwea.org/>

Olivehurst:

Wastewater Treatment Plant Operator, Olivehurst Public Utility District, Olivehurst, CA, Compensation: \$22.76 to \$38.91 Hourly

UC Davis, Davis, CA:

Civil Engineer, UC Davis, Salary Range: \$74,600/yr. - \$141,000/yr., Apply by Date: 6/23/23

DEPARTMENT DESCRIPTION: Utilities consists of wastewater treatment plant, solid waste, water and gas services, high voltage electricity and outdoor lighting, Instrumentation & Controls, and the Central Heating and Cooling Plant (CHCP).

Woodland:

Water Pollution Control Operator -in-Training, City of Woodland, Close Date: 6/12/2023 at 5pm

Salary: \$3,983.21-\$6,670.25 Monthly, Location: 42929 County Road 24 Woodland, 95776



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**2023**  
**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 \_\_\_\_\_

**DATE:** \_\_\_\_\_

**NAME** \_\_\_\_\_

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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**

Make checks payable to: **CWEA NSVS**

Enclose a business card or submit electronic advertisement (jpg, gif, or pdf) to the Newsletter Editor at: **Newsletter.Editor.CWEA.NSVS@outlook.com.**