

March 2024



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.

Welcome to In-Person Training
Thursday, March 28, 2024 8:00 a.m. - 2:30 p.m.
Scout Hall Building, Anderson Riverpark
2800 Rupert Rd, Anderson, CA 96007
Brick building across grass from entrance to
Anderson Wastewater Treatment Plant

- 8:00 SIGN IN and NETWORK** with your peers over coffee and pastries
- 8:30 Mechanical Aeration and Mixing Technologies Review for Biological Treatment by Aeration Industries,**
Presenter: by David Alvarado, Regional Sales Manager – Industrial, Aeration Industries/Newterra
- 9:20 Wastewater, a Public Health Perspective**
Presenter: by Shauna Stratton, Shasta County Public Health
- 10:10 Break**
- 10:20 Navigating Power Outages with Bypass Preparedness**
Presenter: Fred Kesich, Pac Machine Corporation
- 11:10 Innovations in Remote Monitoring Technology**
Presenter: Sean Hennessy, Smart Cover
- 12:00 LUNCH \$15, cash or check payable to CWEA NSVS**
- 12:30 Drive separately to Coleman National Fish Hatchery**
24411 Coleman Fish Hatchery Road, Anderson, CA 96007
- 1:00-2:30 Tour of Coleman National Fish Hatchery, by Justin Erickson**

Questions?

Contact Kevin Garner, President (contact info on left side-bar)

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

NSVS Calendar of Events

- March 28, 2024, Thursday, Training in Anderson, CA
- April 17, 2024, Wednesday, 11:00am — 1:00pm Board Meeting
- May 15, 2024, Wednesday, Vendor Fair, Redding, CA
- June 12, 2024, Wednesday, Training in location TBD (possibly Chico)
- Summer 2024, Redding Colt 45 Baseball game, TBD
- July 10, 2024, Wednesday, 11:00am — 1:00pm Board Meeting
- 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 Neville Rd, Orland, CA 95963.

Members are always welcome to attend the board meetings.

Please contact twyhliko@cityofredding.org or 530-224-4319, or any of the NSVS Executive board members for information regarding board meetings.



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



CALIFORNIA WATER ENVIRONMENT ASSOCIATION
NORTHERN SACRAMENTO VALLEY SECTION

The Training Day Report from the October 17, 2023 training at the City of Redding

Michael Randall from Jacobs presented “Introduction to Collaborative Delivery on Water and Wastewater Projects”. He described various ways that problems get solved on contracts for design projects. A different style of bidding projects called Construction Management at Risk (CMAR) makes sure that the contractor is on board during the design process. CMAR is a qualifications based process, not low bid. The owner has a contract with the designer, advisor, and contractor from the beginning. Another process is called Progressive Design-Build. In this scenario, the engineer and contractor work together to create the design and the owner has an off-ramp clause at the 60% design process. This speeds up the process. Prior to SB991 in September 2022, water and sewer agencies could only have two projects over \$10M using the Progressive Design-Build bid process. Now, up to 15 projects over \$5M each are allowed per water/wastewater agency. There are other styles of bidding projects such as fixed price design build and collaborative delivery. Cities are no longer stuck hiring the “low bid” contractors on high stakes projects.



Mr. Lars Stenstedt, V&A Consulting Engineers, presented, “Data Science for Gravity Main Maintenance”. Considering the likelihood of failure of sewer lines and SSO’s, how do you optimize sewer replacement and cleaning projects? By using data science, cities can fine tune their sewer hot spot lists, clean sewers more frequently at known failure points, and back off from unnecessarily frequent cleaning of areas that do not have problems. Data analysis can determine whether a sewer system is under-cleaning or over-cleaning specific areas. Gathering data during the gravity main cleaning can lead to better data analysis to plan for the future. The data science and machine learning can recommend segment cleaning frequencies and remove old hot spots from the list if they have been repaired. A small investment in data analysis could pay off as a big savings in staff time and materials.

CALIFORNIA WATER ENVIRONMENT ASSOCIATION
NORTHERN SACRAMENTO VALLEY SECTION

The Training Day Report from the October 17, 2023 training at the City of Redding

Matthew Williams from Thermal Process Systems in Salt Lake City, Utah presented “Anaerobic, Aerobic & ATAD—Process Basis for Digestion Innovation”. Mr. Williams described that aerobic digestion is typically used in wastewater treatment plants without primary clarifiers and results in some organic material breakdown. Anaerobic digestion is typically used in wastewater treatment plants with primary clarifiers, and works very well. ATAD high temperature aerobic digestion is another option that process produces high quality biosolids. In an age that includes digestion of food waste, nutrient limitations, air quality limitations and PFAS contamination, wastewater treatment facilities are wondering whether their current solids handling strategy is going to work long-term. The ATAD process is a liquid form of composting, and stands for Autothermo Thermophilic Aerobic Digestion. Heat and aeration generate a Class A biosolids with enhanced odor control compared to the ATAD equipment installed in the 1990’s and early 2000’s. The process is a two-stage high temperature thermophilic phase and a mesophilic stage called “SNDR”. A biofilter is used to off-gas the odors.



John McClain from MCC Engineering presented “An overview of Programmable Logic Controllers (PLC)”. PLC’s are the devices that write the logic used by industrial computer control systems. A PLC is on a “rack” or a “bus” that includes modules for input/output

communications, power supplies, and controllers. You can see this information on a network and when something fails, you can easily go replace the failed part. The programming “ladder lock” language is easy to learn and program. The programs are easy to troubleshoot and manipulate in the field. This type of work is highly technical, but highly important for wastewater agencies. Having staff trained in PLC controls and programming keeps the processes flowing!



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

Wastewater Laboratory Supervisor, Salary \$65,556.00 - \$92,244.00
Annually
Closing Date 4/14/2024 11:59 PM Pacific

Wastewater Plant Operator - Grade III/IV/V, Salary Grade III: \$32.74 – 41.78/hr, Grade IV: \$33.55 – 42.82/hr, Grade V: \$34.39 – 43.89/hr.
Closing Date: 4/7/2024 11:59 PM Pacific

Associate Environmental Specialist, Salary: \$78,108.00 - \$109,908.00
Annually
Department Public Works, Engineering. Closing Date: 3/27/2024 11:59 PM Pacific

Electrical Technician, Salary: \$114,108—125-789 Annually. Closing Date 4/14/2024

Jobs posted on <https://www.governmentjobs.com/careers/davis?page=2>

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

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



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SENIOR ENGINEER

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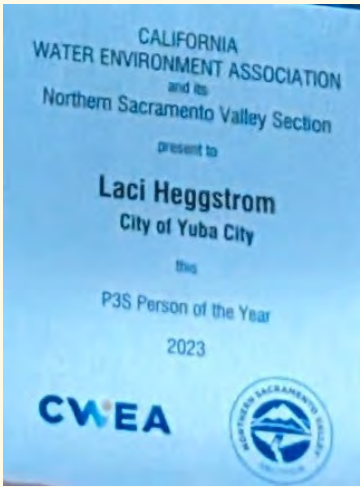
ANNUAL AWARDS BANQUET, JANUARY 27, 2024



The CWEA Northern Sacramento Valley Section Annual Awards banquet was hosted by CWEA State Past-President, Mr. Kevin Calderwood at the Rolling Hills Casino in Corning, CA. Thank you to all who traveled to make this award banquet a fun evening of conversation, awards, and door prizes. We appreciate the support and donations from so many of our local vendors!



ANNUAL AWARDS BANQUET, JANUARY 27, 2024



Pretreatment Pollution Prevention Person of the Year Laci Heggstrom, City of Yuba City

Mechanical Technician of the Year, Logan Robinson, City of Redding announced by Sheila Nilsen, CWEA NSVS Vice-President



Safety Plant of the Year, City of Davis accepted by Josie Tellers, City of Davis, announced by Tracy Wyhlidko, CWEA NSVS Newsletter editor.



Operator of the Year, Travis Elliott, City of Chico announced by Sheila Nilsen, CWEA NSVS Vice-President



Collection System of the Year, City of Redding, received by Mark Stratton, Kevin Garner, Anthony Green, Broc Putnam, Nic West, and Isaac Villa

ANNUAL AWARDS BANQUET, JANUARY 27, 2024



Engineering Achievement, Joe Riess, Water Works Engineers, announced by Kevin Garner, CWEA NSVS President, received by Sheila Nilsen, Waterworks Engineering



Administrative Professional, Scarlett Harris, City of Yuba City, announced by Kevin Garner, CWEA NSVS President

Laboratory Person of the Year, Wade Corley, City of Chico, announced by Kevin Garner



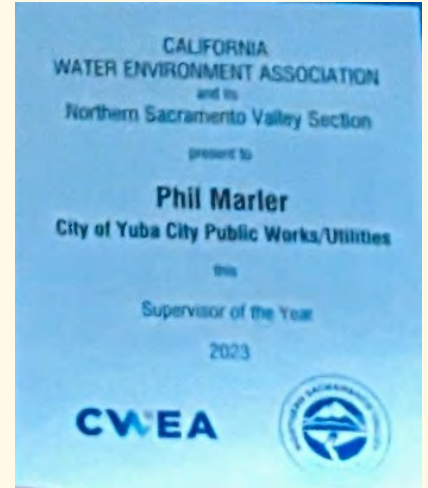
Inspirational Award, George Coughran, retired, City of Redding, announced by Kevin Garner



ANNUAL AWARDS BANQUET, JANUARY 27, 2024



Emerging Leader of the Year, Rianna Laughridge, City of Woodland , announced by Josh Vieira, Senior Operator, City of Woodland



Supervisor of the Year, Phil Marler, City of Yuba City,



Quarter Century Award, Troy Mitchell, retired, City of Redding



Past President's Award, Pratyusha Reddy Reddy, Jacobs announced by Tracy Wyhlidko, CWEA NSVS Newsletter Editor.



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):

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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

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