



November 2019

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.

CWEA Northern Sacramento Valley Section 2020 Annual Awards Banquet

Saturday, January 18, 2020

Granzella's Banquet Hall

457 7th Street

Williams, CA 95987

5:00 –8:30 pm

\$35.00 Per Person

No-Host bar and Dinner

5:00 No-Host Cocktails

5:30 Opening Program

6:00 Dinner

6:30 Award Presentations

7:00 Installation of Officers

7:30 Door Prizes - Of Course, Additional Prizes Always Welcome



Please RSVP by Wednesday, January 8th, 2020

Email or Call Ryan Bailey, City of Redding

rbailey@cityofredding.org or (530) 224-6030

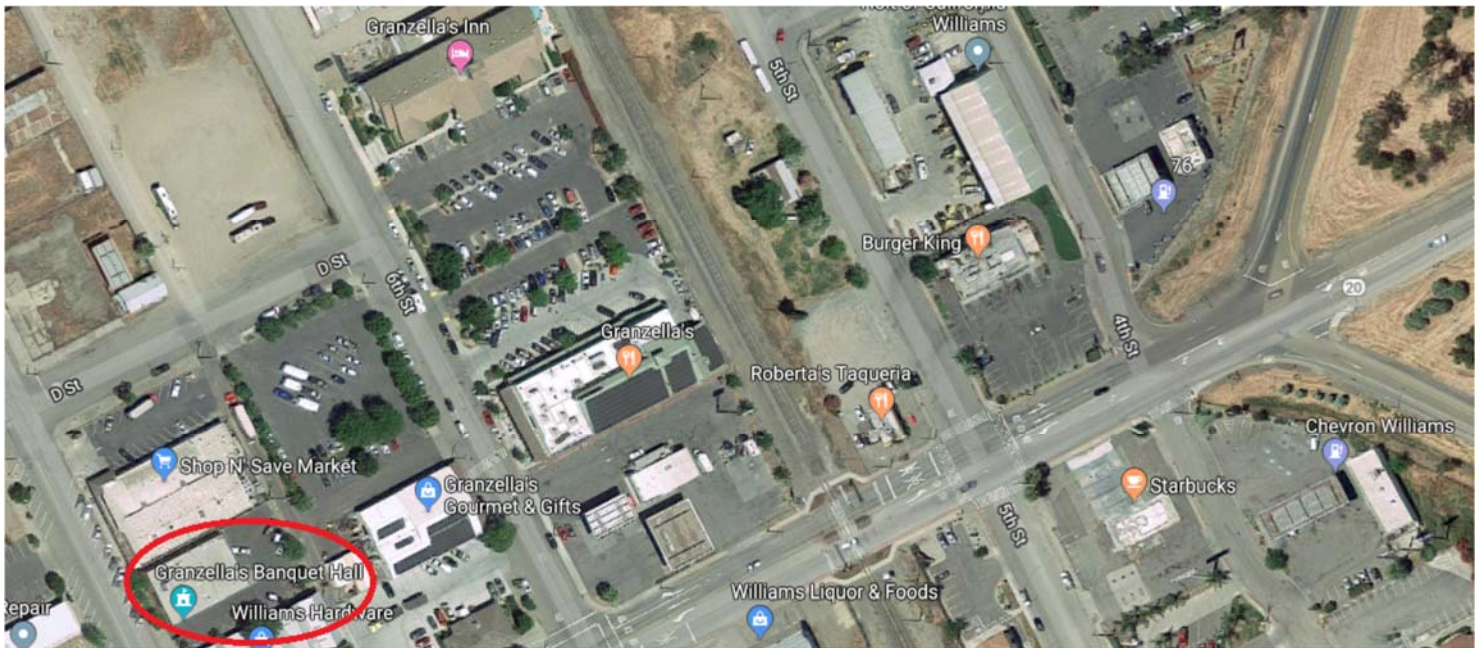
Note: We are obligated to pay for every dinner reservation submitted.
Please inform us immediately if you need to change your reservations.

Directions to Granzella's Banquet Hall, 457 7th St, Williams.

I-5 to Exit toward Williams. Turn west on E Street.

Turn Right onto either 6th or 7th St.

Granzella's Banquet Hall is across 6th the street from the Granzella's restaurant, on the same block as the Gift Shop.



NSVS CWEA new bylaws:

After 24 years, it is time to update the Northern Sacramento Valley Section constitution and bylaws. The state CWEA issued a new template local sections to follow. Our section president, assisted by the board of directors, has completed a draft of new section constitution and bylaws.

Comments are needed from the membership on the draft document before we can offer the new constitution and bylaws document for a vote.

Please review the draft and submit comments through our section webpage link:

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

NSVS Calendar of Events

- Wed Dec 11, 10 a.m. Board Meeting
- Sat January 18, 2020 Annual Awards and Dinner Banquet 6-9 p.m.
Granzella's Banquet Hall, 457 7th Street, Williams, CA 95987



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Board meetings are typically held at the Berry Patch Restaurant in Orland, CA. Contact twyhliko@cityoffreeding.com or call 530-224-4319 for location information.

Training Day Report, Redding, Sept 17, 2019
By Tracy Wyhlidko

We would like to thank the McConnell Foundation in Redding for providing a first-class venue for our September training day. The snacks from Costco and lunch catered by From the Hearth kept everyone well fed during the day.



Kevin Garner, Collection System Supervisor with City of Redding started the morning presentations with, “Emergency Repair – What to do when a 30-inch sewer interceptor line fails.” Three days after an unusually large snow storm caused wide-spread damage in Redding, the sewer crew received a weekend call out for a broken sewer line. A sink hole was discovered in a remote location in Redding, caused by the massive structural failure of a 30-inch vitrified clay pipe sewer interceptor line. The pipe had been installed in 2001 and was supposed to last 100 years. The only good part of this pipe failure was that the sewage was contained within the sink hole and did not create a sanitary sewer overflow. The repair work was complicated by:

- Exhausted crews after spending the previous 3 days doing snow storm cleanup and enduring power outages at their own homes.
- An illegal fence built across the city easement access to the sewer line.
- Chain saw work needed to cut wood, limbs, and vegetation to access the sewer line
- The pipe failure occurred at the bottom of a muddy cliff.
- Emergency “Rite of Entry Agreement” (paperwork) had to be quickly negotiated between the City and the adjacent neighbor, with photos to document before and after property conditions, and protection for the home’s septic system leach field from damage by heavy truck traffic.
- Construction of a temporary road 500 feet long, 10 feet wide and 4 inches thick (using 75 yards of rock) was needed through the adjacent neighbor’s property to bring in heavy equipment for repair work.
- The sewer department had to borrow a backhoe from the streets department, rock from the storm drain utility, and build a custom aluminum shoring box to access the sewer line.



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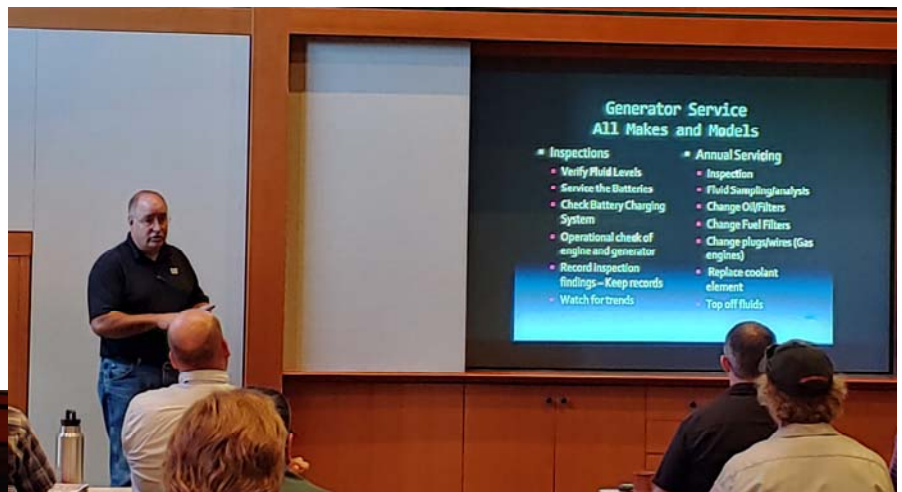
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Training Day Report, Redding, Sept 17, 2019, continued

- 750 feet of bypass sewer pumping lines were needed during the project.
- The sewer interceptor line was flowing at 2000 gallons per minute during the project.

After several attempts to try various strategies to repair to the broken section of pipe, the final repair was made by removing at least 20 yards of earth and rock material from the pipe and installing a cap over the broken section of clay pipe using a corrugated steel half-pipe. The repair cap was sealed in place with a cement grout. The sink hole area was backfilled with 2 feet of crushed rock, then native soil compacted at 2-foot intervals. Gravel was also removed from a sewer lift station 3 miles away and the lift stations grinder pump was ruined. The total cost of the repair was \$30,000.

The second presentation of the day was by Dennis Gordon from Peterson Power Systems (Peterson Caterpillar) discussing “Generator Programs – Are you ready if the power goes out?” Due to the wildfires and snow storms causing wide-spread power outages in the North State in the last 12 months, several utilities are installing back up generator systems at



key water and wastewater locations. Peterson Power provides rentals, equipment purchase, and service of generators.

All back up generators need service. Service includes typical engine needs such as topping off or replacing batteries, checking fluid levels, checking oil, etc. Annual load testing is required on generators to ensure that the machine will function under its maximum load. Load testing helps plan for repairs rather than reacting to a generator break down. Generators also need to be inside of a weather protective enclosure. All generators require a fuel tanks and air district permitting is also necessary. Your generator vendor will assist your agency with navigating all of the installation and generator service needs, keeping your facilities safe and operational during power shut downs.

Training Day Report from Spetember 17, 2019, continued

The third presentation was by Nick Visconti, Assistant Public Works Engineer with City of Redding, discussing, "The ins and outs of sewer pipe lining." Many underground pipes can be lined as a repair strategy instead of traditional excavation and replacement. By lining a pipe, approximately 4 ½ mm of internal diameter is lost due to the thickness of the lining material. An advantage to pipe lining is the reduction in excavation work and the increase in safety. The disadvantage is that the flow must be bypassed during the project and the liners must be made to order. Cure time for the liner is typically between 1 hour and 30 hours, during which the flow is bypassed and heat is applied within the curing pipe liner. If curing is conducted improperly, the liners can crack or shrink. The host (original) pipe must be cleaned ahead of time.



A common misconception is that the cured in place pipe (CIPP) is glued to the original pipe. This is not true; there is no adhesion between the pipe liner and the host pipe. The liner simply takes the shape of the host pipe, creating a new, rigid pipe liner inside the original pipe. The expected lifespan of the CIPP liners is approximately 50 years. A complicating factor in these projects is that each and every sewer lateral needs to be re-cut once the liner is cured, and a "top-hat" shaped lateral connection needs to be inserted into each lateral line. The use of CIPP can save a utility a lot of money in repair costs and speed up repair projects in areas where an open cut excavation would be difficult.



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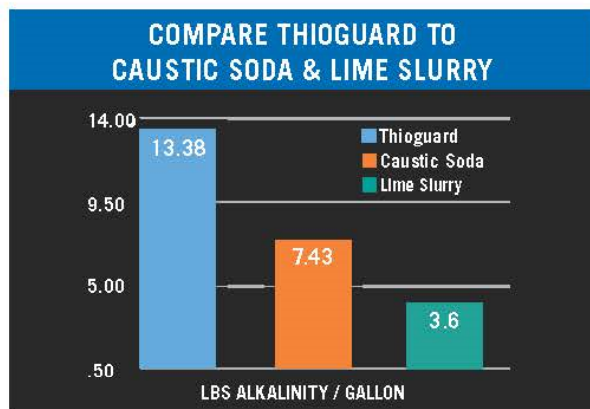
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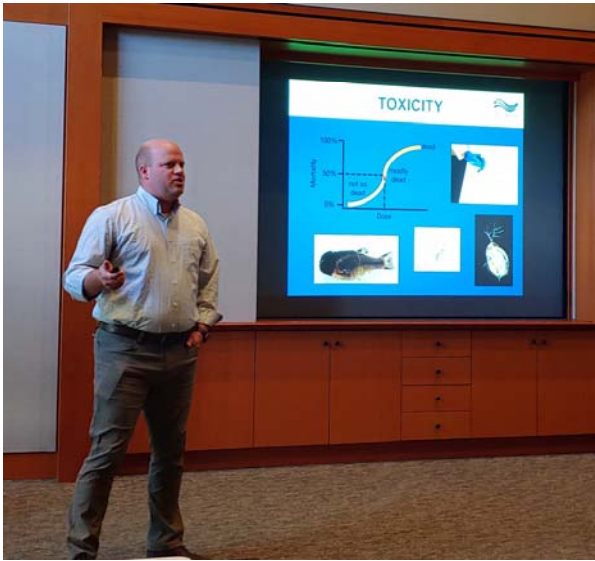
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Training Day Report from September 17, 2019, continued



The last presentation of the day was by Mr. Jeremy Pagan from the Redding office of the Central Valley Regional Water Quality Control Board. Jeremy addressed six “hot topics” in wastewater regulations.

1) Whole effluent toxicity testing will be moving away from the dose/response testing and toward a screening test called a TST, test for significant toxicity. Determining when to conduct a reasonable potential analysis is an issue, especially since the *Ceriodaphnia dubia* reproduction is super sensitive to any change in water toxicity.

2) New monitoring requirements for pyrethroid pesticides are being implemented in basin plans. The Central Valley is currently in an investigative stage, requiring monitoring

plans to be developed and testing to begin within the next two years. Analytical testing methods are under development for determining pyrethroids in wastewater influent and effluent.

3) Sanitary Sewer waste discharge requirements (WDR) have been renewed to help reduce sanitary sewer overflows.

4) SSM, Sufficiently Sensitive Method, rule will require that NPDES holders submit a report of analytical methods 60 days after a new NPDES permit adoption. The purpose of the SSM rule is to ensure that the analytical laboratories are providing good quality data with the proper detection and reporting limits.

5) CV-Salts, Central Valley salts program affects facilities in the middle and southern part of the Central Valley which may have excessive salts in their wastewater.

6) PFAS, Perfluoroalkyl substances and polyfluoroalkyl substances are an emerging contaminant of concern for drinking water and wastewater facilities. There are thousands of PFAS compounds including products such as Teflon, carpeting, clothing, non-stick pans, paints, polishes, waxes, cleaning products, food packaging, and fire fighting foam. PFAS compounds are a problem because they are persistent in the environment and can migrate from soils into groundwater. Some parts of the country have already limited the disposal of biosolids to land application sites because of PFAS contamination. If you haven't already heard of PFAS compounds, brace yourself. New regulations will be coming.

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raysprague@jbiwater.com

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Northern Division Operations and
Sales Manager

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mprotine@source-mme.com

4750 Caterpillar Rd., #D
Redding, CA 96003

Office: 530-243-4856
CSLB #980409

TWO dates and locations, see both pages

PUMP SCHOOL HYDRAULIC SEMINAR



DECEMBER 17TH
8:30AM – 3:30PM
Lunch Provided Onsite.

GIERLICH-MITCHELL
Union Sanitary District
5072 Benson Rd
Union City, CA 94587

\$25 REGISTRATION FEE
RSVP Online:
bit.ly/2B6IEKF

For More Information Contact:
Angie McDaniel
amcdaniel@gierlich-mitchell.com
(916) 996-1739

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(SELF REPORTED) AVAILABLE

LEARN PUMP HYDRAULICS AND INSTALLATIONS, MAINTENANCE AND TROUBLESHOOTING!

Cornell Pump has presented our highly regarded Pump School for 70 years in Portland, Oregon. In conjunction with Gierlich-Mitchell, we're proud to offer this innovative training in the Union City area.

Attend this informative one-day class to learn about new advances in pumps, how to maximize energy efficiency, methods for dealing with pump clogs and ragging, and ways to increase your operations efficiency.

TOPICS TO BE COVERED:

- Basic Hydraulics/NPSHR/A
- Pump Selection & Application
- Installation & Care
- Cutters for Waste Water
- Pump Troubleshooting
- Energy Efficiency (Cost/Savings)
- Plus, great networking and hands-on experience!

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TWO dates and locations, see both pages

PUMP SCHOOL HYDRAULIC SEMINAR



DECEMBER 18TH
7:00AM – 3:30PM
Lunch Provided Onsite.

GIERLICH-MITCHELL
Sacramento County Regional
Sanitation District
10060 Goethe Rd
Sacramento, CA 95827
In the Valley Oak Room

\$25 TO ATTEND
RSVP Online:

bit.ly/2OCRW9y

For More Information Contact:
Angie McDaniel
amcdaniel@gierlich-mitchell.com
(916) 996-1739

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- Basic Hydraulics/NPSHR/A
- Pump Selection & Application
- Installation & Care
- Cutters for Waste Water
- Pump Troubleshooting
- Energy Efficiency (Cost/Savings)
- NSF Requirements
- Plus, great networking and hands-on experience!



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Training Day Report from September 17, 2019, continued



The afternoon tour of Iron Mountain Mine treatment plant was a rare opportunity for many of us to step foot on an active EPA Superfund Site. The acid mine drainage is treated with slaked lime (Calcium Hydroxide, $\text{Ca}(\text{OH})_2$) to neutralize the acid. The slurry is settled in a giant thickener tank (shown above). The red-colored sludge is dried in sludge drying beds before the sludge is transported to a disposal pit on site in one of the former mine's excavation areas.



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

Job Title ^	Job Type	Salary	Closing
Public Works Maintenance Worker	Full-time, Temporary, and Seasonal	See Position Description	Continuous
Systems Analyst - Programmer I	Full-Time	\$49,524.00 - \$69,684.00 Annually	
Water Plant Operator-in-Training	Full-Time	\$46,696.00 - \$51,480.00 Annually	11/25/19



2855 Mitchell Drive, Suite 215
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Email: brad@chcwater.com

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

Job Title ^	Job Type	Salary	Closing	Posted	Category	Department	Location	Job Number
Assistant/Associate Engineer	Full Time	\$58,884.80 - \$91,353.59 Annually		09/20/19	Engineering / Public Works / Professional / Project Management	Public Works - Engineering	Chico, CA	19-00136
Engineering Technician II	Full Time	\$42,744.00 - \$58,926.40 Annually		09/20/19	Engineering / Public Works / Professional / Paraprofessional	Public Works - Engineering	Chico, CA	19-00137
Equipment Mechanic II (Signing Bonus!)	Full Time	\$42,120.00 - \$58,073.60 Annually		06/05/19	Fleet Services / Public Works	Public Works - Operations & Maintenance	Chico, CA	19-00115
Maintenance Aide (Hourly)	Hourly Part Time	\$28,288.00 - \$39,000.00 Annually		08/27/19	Building Maintenance / Facility Management / Public Works / Miscellaneous / Parks / Urban Forestry /	Public Works - Operations & Maintenance	Chico, CA	19-00134
Senior Civil Engineer	Full Time	\$84,947.20 - \$117,124.80 Annually		08/15/19	Engineering / Public Works / Management / Project Management	Public Works - Engineering	Chico, CA	19-00131
Wastewater Treatment Plant Operator II or III	Full Time	\$45,926.40 - \$73,403.20 Annually		09/26/19	Public Works / Waste Management / Miscellaneous / Wastewater / Maintenance	Public Works - Operations & Maintenance	Chico, CA	19-00139

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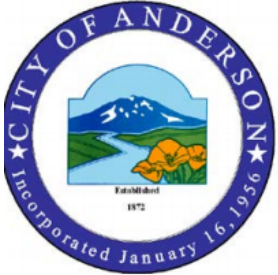
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jim@g3engineering.com

Phone 916-797-1880
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Jobs listed for City of Anderson

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



EMPLOYMENT OPPORTUNITY

WASTEWATER TREATMENT PLANT OPERATOR

Salary Range: \$20.60- \$27.59/Hour

Closing Date: January 5, 2020, 5:00 p.m.

Postmarks and faxed applications not accepted

WASTEWATER TREATMENT PLANT OPERATOR III

Salary Range: \$22.67- \$30.41/Hour

Closing Date: January 5, 2020, 5:00 p.m.

Jobs listed on www.cawaterjobs.org

Posted October 23, 2019

Grade III Wastewater Operator

Sewerage Commission Oroville Region

Oroville, California, USA Full Time

Compensation: \$4,881 to \$6,344 Monthly

Posted November 19, 2019



Water Distribution Operator I/II

City of Yuba City

Yuba City, California, USA Full Time

Compensation: \$19.90 to \$27.80 Hourly

+ Excellent Benefits



Laboratory Assistant

City of Yuba City

Yuba City, California, USA Full Time

Compensation: \$19.62 to \$23.84 Hourly

+ Excellent Benefits

Posted October 01, 2019

Industrial Waste Specialist

City of Roseville

Roseville, CA, USA Full Time

Compensation: \$4,875.10 to \$6,859.75 Monthly





2019
NSVS-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:

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Carollo Engineers, Inc.

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D: 916-576-4718, C: 530-391-5805

Email: BLBarton@carollo.com

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