October 2021



http://nsvs.cwea.org/

BARSCREEN BEE

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



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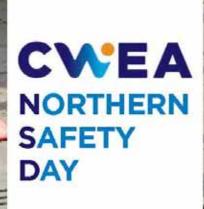
The Barscreen Bee is a publication of the Northern Sacramento Valley Section of the California Water Environment Association.

NSVS Calendar of Events

- Register now for Northern Safety Day (see page 2-5)
- Go to Northern Safety Day, Wednesday, Oct 20, 2021 at the Yolo County Fairgrounds, Woodland, CA
- Nominate your co-workers for CWEA and Local Section Awards, now through Nov 1, 2021. (see page 11-12)
- Board Meeting Tues Nov 9, 2021 Online
- Online Training Wednesday Nov 17, 2021, 9-11 am
- Board Meeting Tuesday Dec 14, 2021, location T.B.D.

Since March 13, 2020, Board Meetings have been held online. Prior to Coronavirus, most board meetings were held at 10 am at the Berry Patch Restaurant at 900 Newville Rd, Orland, CA 95963

Members are always welcome to attend the board meetings. Contact twyhlidko@cityofredding.org or 530-224-4319, or any of the NSVS Executive board members For location or login information to board meetings.







NORTHERN SAFETY DAY

EVENT INFO

DATE

WEDNESDAY, OCT. 20, 2021

TIME

8:00 a.m. to 4:00 p.m.

REGISTER BY OCT. 7 TO SAVE \$25

YOLO COUNTY FAIRGROUNDS
Woodland, CA

Weather at the Yolo County Fairgrounds can be unpredictable. Please dress in layers in case of warm, cold or inclement weather. Lunch will be served outside.

REGISTER ONLINE

events.cwea.org

CWEA is excited to return to in-person training events, starting with our ever-popular Northern Safety Day.

With hundreds of wastewater professionals participating, you'll have a chance to reconnect with friends, participate in important safety training sessions, and enjoy a delicious BBQ lunch from Buckhorn Grill.

We'll host three tracks of training with an emphasis on preventing serious injuries and fatalities in water and wastewater. The educational tracks include: collection systems, operations, and maintenance. For your health and safety, remember to bring your mask and keep socially distanced.

WHO SHOULD ATTEND

(subject to change)

- O&M Leaders
- Mechanics
- Electricians
- Instrumentation Technicians
- Inventory Managers
- Maintenance Schedulers
- Wastewater Operators
- · Collection Systems Crews





NORTHERN SAFETY DAY SCHEDULE AT-A-GLANCE

TIME	EVENT				
7:15 - 8:00	Registration, Continental Breakfast in Home Arts Hall				
8:00 - 9:00	GENERAL SESSION in Waite Hall Occupational Safety and Health Standards Board Rulemaking Process, Current and Prospective Rulemaking Workload Christina Shupe, Occupational Safety & Health Standards Board				
	COLLECTIONS TRACK Waite Hall	MAINTENANCE TRACK John Rodgers Hall	OPERATIONS TRACK Mararviov Hall		
9:10 - 10:10	Line Jetting Safety Bruce Newell, Municipal Maintenance Equipment	New ANSI regulations with Lifts Andy Bull, CH Bull & Co.	Hazard Communications John Paine, Univar Solutions		
10:10 - 10:45	Expo & Networking in Home Arts Hall & Outside				
10:45 - 11:45	Vacuum Technology and Water Delivery of a Combination Cleaner Si Norris, Owen Equipment	Electrical Safety in Water and Wastewater Raiph Stevens, E&I Testing SME	Accidental Mixing of Chemicals John Paine, Univar Solutions		
11:45 - 1:15	BBQ Lunch & Expo, Rotary Park and Home Arts Building & Outside				
1:15 - 2:15	Traffic Control Ed Yarbrough, Caltrans	Respiratory Safety Kaila Krichmar, ehs International	Safe Handling Sodium Hypochlorite - Hydro-Chloric Acid John Paine, Univar Solutions		
2:15 - 2:45	Last Chance to Visit Expo in Home Arts Hall & Outside				
2:45 - 3:45	GENERAL SESSION in Waite Hall Best Practices and Safeguards During High Risk and Ever-Changing Conditions Michael C. Alvarez, California Division of Occupational Safety & Health				
3:45 - 4:00	Door Prizes/Adjournment in Home Arts Hall (must be present to win)				

FEATURED KEYNOTE SPEAKERS



Christina Shupe Occupational Safety & Health Standards Board

Occupational Safety and Health Standards Board Rulemaking Process, Current and Prospective Rulemaking Workload

Northern Safety Day will kick off with a presentation on the Board rulemaking process and current regulatory proposals in development.



Michael C. Alvarez California Division of Occupational Safety & Health

Best Practices and Safeguards During High Risk and Ever-Changing Conditions

Learn about safeguarding yourself against heat illness, wildfire smoke, COVID-19, night work, and other high-risk elements. What are acceptable best practices—both by Industry and Cal/OSHA? Where can you obtain more information and resources in safeguarding yourself during these ever-changing conditions?







NORTHERN SAFETY DAY

HEALTH & SAFETY NOTES

The health and safety of members and fairground staff are paramount. Based on guidelines from Yolo County Public Health, California Department of Public Health, and CWEA's requirements here's what to expect:

- Attendees must wear masks indoors. Anyone without a mask will be given one to wear.
- Each attendee's temperature will be taken upon arrival at registration, and hand sanitizer must also be used.
- Hand sanitizer will be available in all meeting rooms, the expo, and outdoors in the lunch area.
- Wearing masks outdoors will be optional but encouraged, except for when partaking in meals.
- Unvaccinated attendees should practice social distancing (stand six-feet apart).
- Masks must be worn while waiting in line for meals. Food and coffee will be served to attendees. Bottled water and canned beverages will be available.
- High touch areas will be sanitized with disinfectant wipes throughout the day.



CWEA DISCLAIMER

CWEA and its Board, members, and volunteers are not responsible for the actions of speakers or the contents of their papers, and no endorsement is implied or given of any persons or their philosophies, ideas, or statements, nor of any products or processes, nor of any organizations or companies who volunteer to serve as speakers at the conference or exhibitors who purchase display space in the exhibit hall. CWEA is not responsible for theft of or damage to personal or agency/company property, whether intended to be used for CWEA purposes or not.

NORTHERN SAFETY DAY

Register online: events.cwea.org

REGISTRATION FORM

(PLEASE PRINT OR TYPE)

First Name:	Last Name:	Last Name:			
Agency/Company:	Title:	Title:			
Address:					
City:	State:	Zip:			
Phone Number:	E-Mail:				
Emergency Contact:		Emergency Phone:			
□ CWEA MEMBER □ WEF MEMBER (Must have current membership for memb		IEMBER#		-	
Special Services: □ Check here if you re Attach a written description of your nee		03/013/04/14/20 J. FV			
Dietary Restrictions: Indicate any dietar	y restrictions				
Tell us a bit about you. Please select on	e response for each qu	estion.			
1. WHAT IS YOUR CAREER STAGE?	2. WI	HAT IS YOUR PRIN	MARY PRACTICE AREAS		
☐ Student ☐ Job Seeker ☐ Entry-level ☐ Journey-level ☐ Supervisor ☐ Management ☐ Executive ☐ Retiree ☐ Other	☐ Collection Systems ☐ Engineering ☐ Plant Operations ☐ Safety YPE OF ORGANIZATION	☐ Laboratory ☐ Pretreatment ☐ Stormwater	☐ Plant Maintenance ☐ Public Outreach ☐ Utility Executive ☐	Other	
☐ Municipal - Large (400K+ customers) ☐ Municipal - Small (< 50K customers) ☐ Non-municipal - Manufacturer or sales repre	□ Municipal - Medium □ Non-municipal - Co esentative □ Non-municipal	onsulting Firm			
REGISTRATION		For		MBER SERVICES 800 option 4 or vices@cwea.org	
			Member	Non-Member	
☐ EARLY BIRD RATE (Before OCT. 7)				\$200	
□ REGULAR RATE			\$175	\$225	
□ STUDENT Provide proof of college attendance w/minimum of 9 units.			\$0	\$0	
Fee Total \$					

PAYMENT INFORMATION

For payments by check or money order, make payable to: CWEA NSD21.

For payments by credit card, please print clearly.

Credit card: □ VISA □ MASTERCARD □ DISCOVER □ AMEX Signature: ____

Credit card number: _____ Expiration date: ____ Name of account holder: _______ Billing zip code: ______

Full payment or purchase order is required to process registrations. If you have to cancel, written cancellation notice is required and must be received at least 15 days prior to the workshop date. A 25% service fee shall be retained on all cancellations. No refunds shall be given for cancellations made less than 15 days prior to the event. A written special service request is required 30 days in advance.

1. Register online at events cwea.org

2. Send registration form and payments to:

CWEA Workshops

7677 Oakport Street, Suite 1030 Oakland, CA 94621-1935

Training Review from August 11, 2021 by Josh Vandiver, City of Redding

Margaret Laub from Anaergia gave a presentation encompassing their approach to optimising solids handling, digester capacity, gas conditioning/ CHP/ pipeline injection as well as their pyrolysis project in southern California. Anaergia provides full scale **solutions** to each process throughout the treatment process.



OREX + Organics Polishing System (OPS) Generates Clean, Digestible Slurry





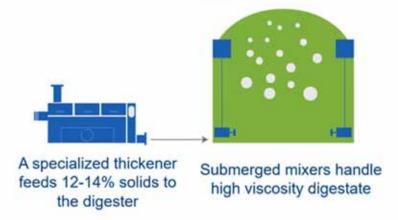
Training Review from August 11, 2021 (continued)

Anaergia's Omnivore Triples Capacity in Existing Digesters at Wastewater Plants with a Simple Retrofit



Omnivore® is similar to conventional digestion with 2 changes:

- 1. The addition of thickening
- 2. An advanced mixing system













THOMAS W. WARNOCK, P.E. PRINCIPAL ENGINEER

1730 SOUTH STREET (530) 244-0202 REDDING, CA 96001 Cell (530) 355-9612 e-mail: twarnock@paceengineering.us



2218 Railroad Avenue Redding, California 96001

voice 530.243.7234 fax 530.243.7494

info@basiclab.com

G3 Engineering, Inc. Water and Wastewater Equipment

G.J. (Jim) Billings III, PE

PO Box 2148 Granite Bay, CA 95746 jim@g3engineering.com Phone 916-797-1880 Fax 916-797-1881

916-838-3913

Cell

www.g3engineering.com

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

DERAGGER

Authority Mid-Coastside



Easy, Fast, and Inexpensive

Call for a free evaluation of your pump ragging problem.



Ponton Industries Inc. 714 998 9073 www.PontonInd.com info@PontonInd.com

Energy and cost saving calculations are as reported by Sewer Authority Mid-Coastside, using PG&E bills, known times for pump cleaning and appropriate hourly rates.

Training Review from August 2021 by Josh Vandiver, City of Redding

Jeff Shapiro from Jacobs gave a safety talk regarding heat injuries and wildfire smoke exposure. The talk covered individual risk factors, signs and symptoms and prevention techniques for heat exposure. The wildfire smoke discussion covered acute and chronic health effects, explained how to interpret Air Quality Index (AQI) and also covered increased risks regarding COVID-19 while sheltering from wildfire smoke exposure.

Risk Factors - Environment

Heat Index

- Measures how hot conditions feel to the human body
- Measured in the shade, accounts for temperature and humidity

	WBGT	Heat Index
Measured in the sun	1	×
Measured in the shade	X	1
Uses Temperature	1	1
Uses RH	1	1
Uses Wind	1	X
Uses Cloud Cover	1	X
Uses Sun Angle	1	X

Wet Bulb Globe Temperature (WBGT)

- Similar to Heat Index in that it indicates heat stress on the human body
- Measured in the sun, accounts for humidity, wind, cloud cover, and sun angle
- · Most biologically relevant

Temp F	Dwpt F	RH %	Sky %	Wind mph	Heatldx F	WBGTF
90	66	42	05	03	92	89
90	65	42	05	13	92	83
90	65	42	65	13	92	81
90	70	52	10	06	96	88
90	70	52	60	- 06	96	86
90	70	52	60	13	96	85
100	70	39	10	13	108	90
100	70	39	10	5	108	- 94
100	70	39	65	05	108	91

https://www.dtn.com/forget-heet-index-wet-bulb-globe-temperature-iswhere-its-at/





AFTERMARKET

OEM Parts & Service

OEM Rebuild Services and Scheduled Replacements

Maintenance Agreements

On-site Inspections and Troubleshooting

Energy Saving Upgrades



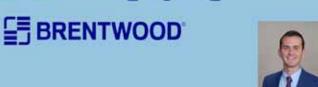












(a) Casey Rebmann
 Aftermarket Sales Assoc.

 (a) Casey@chcwater.com
 (b) (760) 525-6139



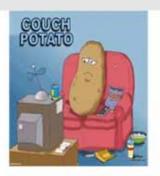
- Jeff Rabas, CWP
 Aftermarket/Service Manager
- s jeff@chcwater.com
- (303) 710-9426

Aftermarket Hotfine (800) 964-9733 | www.chewater.com

Training Review from August 2021 (continued) Excessive Heat and Wildfire Smoke, Protecting Outdoor Workers

Risk Factors - Personal

- Age, weight, fitness
- Underlying conditions
 - Heart disease
 - Diabetes
 - Asthma
- Medications
- Diet
 - Caffeine
 - Alcohol (hangovers)
 - Sugary beverages
 - Heavy meals
- Smoking
- Acclimatization









What's in Wildfire Smoke?

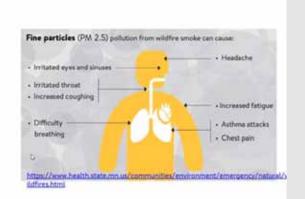
- Combustion Sources:
 - Forest/biomass
 - Residences and vehicles
 - Commercial/industrial properties and supplies
- Particle types:
 - Organic carbons (mostly < 2.5µm)
 - Soot (mostly < 2.5µm)
 - Ash (mostly > 2.5μm)
 - Gases
 - PM25 (fine PM) deposits in deep lungs, remains more elevated in atmosphere
 - PM₁₀ (coarse PM) deposits in nose/throat, more rapidly settles from plume



Health Effects

- Wildfire smoke can make anyone sick even healthy individuals.
- · Wildfire smoke inhalation can cause both acute and chronic health effects including:
 - · Coughing
- Headaches
- · Trouble breathing normally
- · An asthma attack

- Stinging eyes
- · Tiredness
- · A scratchy throat
- · Fast heartbeat
- · Runny nose
- · Wheezing and shortness of breath
- · Irritated sinuses
- · Chest pain



NOMINATE YOUR CO-WORKERS FOR CWEA AWARDS! Due Nov 1, 2021.

- 1) Visit the website https://www.cwea.org/awards/award-listings/
- 2) Find Category information
- 3) Click APPLY button on category page
- 4) Log in using the same credentials as MyCWEA.org (typically you log in with your email address and your CWEA membership number as the password)
- 5) Fill Out Application
- 6) Click Save and Finalize to submit

Photo Contest

Each year the CWEA Annual Conference Photography Committee holds a photo contest that aligns with the conference theme.

• Gimmicks and Gadgets (O&M)

Recognizes innovation and creativity in developing solutions to performing routine tasks or functions in maintenance, operations or construction of wastewater collection systems.

Golden Manhole

This committee-specific society recognizes and honors individually, both the inductees and their employers for their combined contributions which promote increased professionalism in the collection systems field.

Collection System of the Year

Given in recognition of outstanding maintenance programs, regulatory compliance and safety & training procedures. Awards are given in three categories: Small, Medium and Large.

• Collection System Person of the Year Recognizes an individual for their innovation and excellence in collection systems maintenance.

• Community Engagement & Outreach Best Use of Social Media

Recognizes achievements in promoting awareness and understanding of water quality issues through the use of social media.

Electrical Instrumentation Person of the Year

Recognizes significant contributions to the field and an individual's contribution to CWEA.

Engineering Achievement

Recognizes outstanding projects by an individual, group or agency.

• Laboratory Person of the Year

Recognizes involvement in projects that advance the science of laboratory technology and an individual's contributions to CWEA.

Mechanical Technician of the Year

Recognizes outstanding performance, dedication to the job, and for sharing knowledge of maintenance procedures.

Operator of the Year

Recognizes outstanding contributions to the operations of wastewater treatment facilities and the application of knowledge to improve plant processes.

Outstanding Young Professional of the Year

Recognizes professionals who demonstrate excellence in the profession and are under the age of 35.

P3S Person of the Year

Recognizes P3S professionals for exceptional achievement and contribution to the profession while being an active member of the CWEA.

• Plant of the Year (Small, Medium, Large)

Recognizes acomplishments in compliance, innovative practices, cost effectiveness, and superior plant performance in small, medium and large categories.

Research Achievement

Recognizes outstanding engineering research by an individual, group, or agency.

Safety Plant of the Year

Awarded in three categories: small, medium and large. Criteria include number of injuries, lost-time accidents, record keeping, in-house training, emergency response and program implementation.

• Supervisor of the Year

Recognizes successful mentoring of team members, professional development, and effective communication.

Quarterly Century

CWEA Quarter Century Recognition Program honorees have dedicated their careers in a challenging and most vital profession, the water environment field.

IT'S AWARD NOMINATION TIME AGAIN! Nominate your co-workers.

Local Section Award Nominations Due Nov 1, 2021.

Apply through the online "Survey Monkey" links, below.

CWEA NSVS - 2021 Outstanding Service Award Nomination Form:

https://www.surveymonkey.com/r/Q6FLTTK

CWEA NSVS - 2021 Inspirational Award Nomination Form:

https://www.surveymonkey.com/r/QZCVZCQ

CWEA NSVS – 2021 Lifetime Achievement Award Nomination Form:

https://www.surveymonkey.com/r/QZFHMX3

CWEA NSVS - 2021 Administrative Professional of the Year

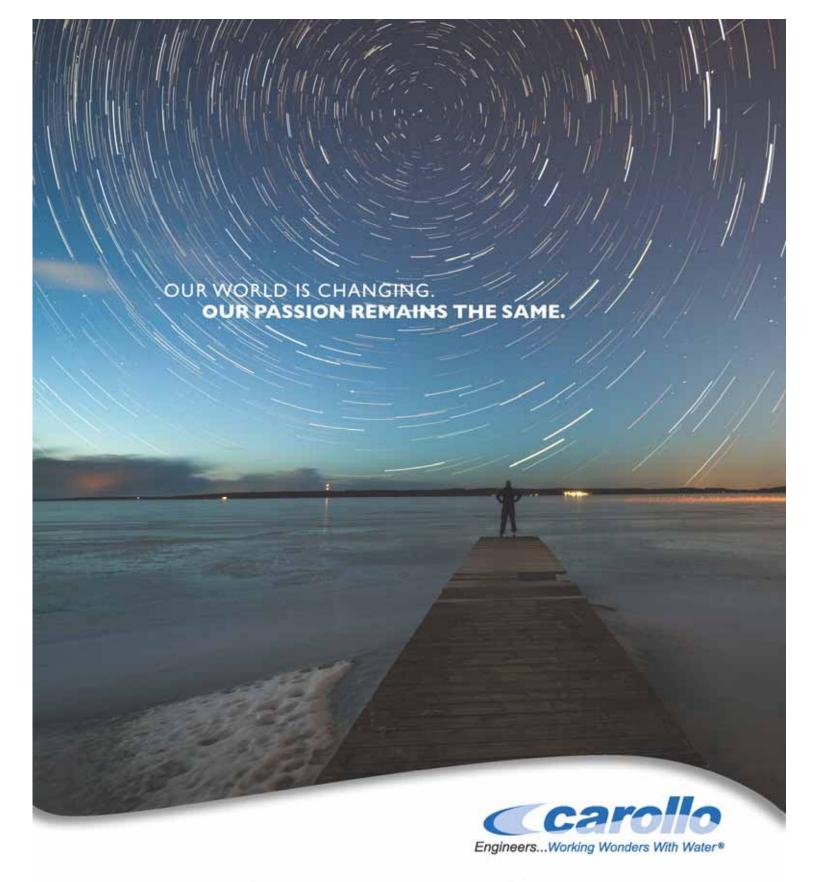
Nomination Form: https://www.surveymonkey.com/r/Q65L7ZN



Alex Ambrosi

(P) 415-460-6393 (F) 415-460-6395 alex@aquadyneassociates.com www.aquadyneassociates.com

710 C Street, Suite 200 San Rafael, CA 94901



WATER OUR FOCUS OUR BUSINESS OUR PASSION Change is happening at a pace we've never seen before. Climate change, sea level rise, cyber threats, aging infrastructure... and now an unprecedented health crisis from a global pandemic. Anticipating change and managing our most precious resources through these conditions has become a daunting task. For more than 85 years Carollo has delivered innovative solutions to meet today's challenges while being adaptive to an unknown future. By never wavering from our singular, passionate focus on water, we can meet the challenge of change head on, and help build a better world for generations to come.

1.800.523.5826 | carollo.com

JOB POSTINGS on CAWaterJobs.com:

Posted August 11, 2021, The City of Chico, California, is currently recruiting for Wastewater II or III Operators. Chico, CA. \$45,968 to \$80,745 Chico offers a very generous benefits package, including CalPERS retirement. Positions will be filled at the Operator II or III level, depending on candidate qualifications. The City is now offering a signing bonus of up to \$10,000 level III Operators!

Posted Sept 28, 2021, Wastewater Treatment Facility Operator II/III, City of Yuba City Yuba City, CA Compensation: \$31.40 to \$43.89 Annually

Posted Sept 28, 2021, Water Distribution Operator I/II/III, City of Yuba City Yuba City, CA, Compensation: \$25.06 to \$40.28 Hourly

City of Dunsmuir Lead Wastewater Treatment Plant Operator, no salary or deadline information listed. http://www.ci.dunsmuir.ca.us/employment For more information visit the city's website: www.ci.dunsmuir.ca.us Our mailing address is City of Dunsmuir, ATTN: City Manager 5915 Dunsmuir Ave. Dunsmuir, CA 96025 no applications will be accepted via email.

PUBLIC WORKS DIRECTOR The City of Dunsmuir CA has an opening for a Public Works Director. Under the direct supervision of the City Manager, the incumbent will plan, organize, control, and direct Public Works operations and activities including the maintenance and repair of streets, sidewalks, buildings, and water, sewer, and wastewater systems, and equipment. This position is also responsible for Public Work's communications, projects, personnel, and information to meet City needs and ensures department efficiency. Performance evaluations of assigned personnel, and performs related duties as assigned.

Minimum qualifications for the position includes at least five years of progressively responsible experience, a Bachelor's Degree, and a Waste Water III Certificate The application deadline is open until filled (first review of applications will be October 22nd, 2021). Starting pay is \$90,000 per year.

PUBLIC WORKS SUPERVISOR The City of Dunsmuir CA has an opening for a Public Works Supervisor Position. Under the direct supervision of the Public Works Director and City Manager, oversees the work of maintenance personnel in activities such as street maintenance, infrastructure, and equipment maintenance. The incumbent will also be responsible for the supervision of landscape area maintenance, the operation of heavy construction equipment such as a road grader, backhoe, bulldozer, road roller, snow plow, and maintenance equipment such as a street sweeper. The position also requires the maintenance of records, labor, and equipment used on projects; sees that the equipment is properly operated and maintained, and participates in the work of the crew. The deadline for application is: open until filled (first review of applications will be October 15, 2021). Starting pay is: \$26.55 per hour. ATTN: City Manager 5915 Dunsmuir Ave. Dunsmuir, CA 96025 no applications will be accepted via email.



2021 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
DATE:		
NAME		
AGENCY		
TITLE		
MAILING ADDRESS		
CITY	_ STATE ZIP	
PHONE		
E-MAIL ADDRESS		
Submit application and payment to the N Brianna Barton, P.E. Carollo Engineers, Inc. 2880 Gateway Oaks Drive, Suite 30	ISVS Secretary/Treasurer:	
D: 916-576-4718, C: 530-391-5805		
Email: BLBarton@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.