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## May 2019 Monthly Meeting

**Date:** Tuesday, May 14, 2019

**Time:** 11:00 a.m. – 1:00 p.m.

### Meeting Location:

**Brown & Caldwell**  
201 North Civic Dr., Suite 300  
Walnut Creek, CA 94596  
925-937-9010

## Meeting Agenda Items

- 11:00 a.m.** Introductions
- 11:05 a.m.** March Meeting Recap
- 11:10 a.m.** General Group Discussion
  - **Announcements**
  - **Financial Update**
  - **Project Discussions**
  - **News or Questions**
- 11:30 a.m.** Lunch
- 12:00 p.m.** Presentation Begins
- 1:00 p.m.** Adjournment

# Sharing Technologies Together

## Presentation Topic

**Overcoming design and Construction challenges in a Former Military Base**, Jonathon Marshall, Carollo and Michael Wegley, Marina Coast Water District

Presentation will cover unique challenges in design of 7.5 mile pipeline through areas potentially containing unexploded ordinance, and poor soils, with existing utilities constructed without drawings.

## Meeting Questions

Contact: Dustin LaVallee, EBMUD

Phone: 510-287-1152

Email: [PUGnorcal@gmail.com](mailto:PUGnorcal@gmail.com)

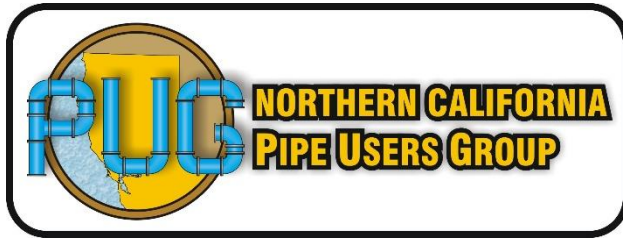
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[Click Here to RSVP](#)

## Upcoming PUG Events

**June 11: Centrifugal Pumping Basics and Applications**, Jacob Ferriera, Underground Solutions – 2 hour presentation – no business meeting.

**July 9: Lower Lateral Inspections, Is There a Better Way?**, Augustin Lopez, Sacramento Area Sewer District.



**MEETING MINUTES**  
**April 9, 2019**

**Attendees:**

<b>Name</b>	<b>Company</b>	<b>Email Address</b>
Alexander Cropp	alexander.cropp@stantec.com	Stantec
Alexandra Watson	awatson@hydroscience.com	HydroScience Engineers
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Brian Avon	Bavon@carollo.com	Carollo Engineers
Bryan Perkins	bperkins@ccwater.com	Contra Costa Water District
Casey Smith	csmith@sakon.com	SAK Construction, LLC
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Chase Temple	chase@griffinsoil.com	Griffin Soil Group
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Landon Lochrie	LANDON@CVSAN.ORG	Castro Valley Sanitary District
Lian Zhu	lian.zhu@weareharris.com	Harris & Associates
Lisa Zou	lzou@centralsan.org	CCCSD
Michael Flores	michael.flores@sanjoseca.gov	City of San Jose
Nancy McWilliams	nmcwilliams@cityofamericancanyon.org	City of American Canyon
Patrick Johnston	pjohnston@westyost.com	West Yost
Peter Stabb	pstabb@ccwater.com	Contra Costa Water District
Sarah Rahimi	sarah.rahimi-ardabil@ebmud.com	EBMUD
Sean Williams	seanw@deltadiablo.org	Delta Diablo

Minutes by: Nancy McWilliams, City of American Canyon  
 Secretary, Nor Cal PUG

\*\*\*The information disseminated on behalf of industry individuals/organizations via PUG is not necessarily the opinion of PUG, nor has PUG verified comprehensiveness or validity of the information.\*\*\*

Tara Sweet	tara.sweet@ebmud.com	EBMUD
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**Presentation:** “Standard of Care for Pipeline Geotechnical investigation,” Shawn Leyva and Eric Nichols, Crawford & Associates.

***Highlights from the presentation include:***

The presentation included an overview of geotechnical investigations as they relate to pipeline design and installation:

- Historical research
  - Review historical maps, look for previous reports, and web soil surveys
  - Used to obtain existing boring data and look for red flags including peat, fault lines and shallow rock
- Historical borings may be used provided
  - They are less than 20 years old (parameters were previously measured differently)
  - Borings should be within 100 feet of work
  - Historical borings may be more reliable if automated equipment used by professionals
- Frequency and depth of Boring’s for
  - open cut: 1 boring every 500 ft, 10 ft below pipe
  - Microtunnel, Bore & Jack: 1 at each pit plus 1 every 50 to 100 ft, 10 ft below pipe or support
  - HDD: 1 every 500 to 700 , 15 ft below bottom– offset borings from drill path and backfill with grout to limit inadvertent returns
- Seismic Lines
  - Used only in rock areas to provide excavatability
- Important information on boring logs
  - Material types
  - Blow counts
  - Groundwater elevations
  - Sample method
  - Lab test results
  - Drill method
  - Log data can be plotted on profile to help map soil levels
- Important considerations
  - Potential for soil movement
  - Weight of soil vs weight of backfill
  - Loading
  - Slope stability
  - Seismic
  - Corrosivity
  - Constructability
  - Backfill requirements

Minutes by: Nancy McWilliams, City of American Canyon  
Secretary, Nor Cal PUG

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- Geotechnical Data Report should be made available to contractors but not included or attached to contract documents. Data report includes the following
  - Boring logs and SPT data
  - Soil type
  - Soil classifications (A, B, or C)
  - Lab test results
  - Groundwater information
  - Boring logs
- Geotechnical Report is for design, not necessarily construction and includes:
  - Everything in the geotechnical data report
  - Recommendations for design including bearing pressures, trench design, foundation design, etc.
- Geotechnical baseline reports
  - To establish a baseline for construction and help address change orders
  - Consider as a risk management tool, and consider carefully before using
- Change/unforeseen conditions
  - Recommend having geotechnical engineer of record continue on the project through construction

Thank you Shawn & Eric for a great presentation and your contribution to PUG!

**General:**

***March 12, 2019 Meeting Minutes:*** Highlights from the March meeting were read.

**Announcements:**

***CWEA***– April 9-12, Palm Springs, CA

***CSRMA Webinar Sewer collection Employees: Online Library of Technical Skills Courses Now Available*** –April 10th.

***WEF Collection Systems conference*** – June 4-7, Indianapolis, Indiana.

***Alliance for PE Pipe, HDPE Roadshow*** – April 11 at San Jose Woman’s Club 57 South 11<sup>th</sup> Street, San Jose

***NASTT*** – Technical Papers are available on line for 2019 conference. Abstracts for 2020 Conference being accepted through June 30, 2019

***Financial Update:*** The current total in the organization account is \$48,022.54.

***Raffles:*** No raffle was held at this meeting. Remember, raffles can happen at any meeting but you have to be in attendance to win a prize.

### **Project Discussions:**

Brian Avon discussed SB 661 that went into effect July 2018. The law requires all excavation of existing pipelines with hand tools only within 24" horizontally of pipe zone regardless of anticipated elevation, or vertical separation from crossing pipeline. Pipeline owners can log comments prior to law's anticipated update in June 2020.

Damasio, Central San said the district has seen general decline in bid prices and 6 to 7 bidders per project. Current bid for 8,000 feet of 6- and 8-inch diameter sewer replacement by open cut and pipe bursting: EE \$3.65M, Low bid: \$2.73M.

Brian Avon said that they just finished construction on 6 year pipeline project, 36-inch diameter pipe including two micro tunnels.

Landon, Castro Valley San, bid opening for 3,000 feet of sewer replacement and upsize from 8" to 10" and 10" to 12" had three bidders; EE \$1.85M, Low bid: \$1.5M

Delta Diablo said that Bay Point 4 is currently out to bid. Project includes about 4,800 LF remove and replace, 2,100 LF of CIPP and several point repairs. EE: \$4.7M.

### **Next Meeting:**

The next general meeting is scheduled for Tuesday, May 14, 2019. The topic is "Overcoming Design and Construction Challenges in a Former Military Base." Please call Nancy McWilliams at 707-647-4579 or email [pugnorcal@gmail.com](mailto:pugnorcal@gmail.com) for additional information on this month's meeting minutes.