

Meeting Minutes

September 8, 2026

In-Person Meeting

Attendees: See Attachment 1 for copy of attendee list

Announcements and General Business:

1. Attendee introductions
2. Announcements
 - a. Now accepting PUG membership applications. Applications have moved online.
 - b. Accepting monthly meeting topic ideas starting April 2027. Attendees are also encouraged to reach out with topic ideas they would like to hear about.
 - c. PUG Annual Seminar abstracts are due 9/18 at 5pm.
 - d. Upcoming events

Year	Date	Conf	Location
2026	9/26 to 9/30	WEFTEC	New Orleans LA
2026	10/20 to 10/21	WESTT Regional No-Dig	Albuquerque NM
2026	11/18	PUG Fall Training	Central San
2027	2/18	PUG Annual Seminar	Concord CA
2027	3/1 to 3/7	ASCE 2027	Philadelphia PA
2027	3/21 to 3/25	NASTT No-Dig	Raleigh NC
2027	4/19 to 4/22	AWWA CA/NW WFW	Sacramento CA
2027	6/13 to 6/16	AWWA ACF	San Diego CA

3. Secretary Report
 - a. Kingsley provided a recap of August monthly presentation (I&I studies, Kwin Peterson from RH Borden).
4. Financial Report
 - a. Financial summary report provided by Fidel.
 - i. Income: \$1,985.55
 - ii. Expenses: \$2,265.12
 - iii. Total Balance, End of July: \$81,317.91

Attendee Announcements/Discussions:

- EBMUD Wastewater is celebrating its 75th anniversary with an open house on 9/26, 10am – 2pm. There is an Eventbrite website to RSVP.

Minutes by: Kingsley Kuang, EBMUD
Secretary, Nor Cal PUG

Page 1 of 5

***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. ***

Presentation:**“The Pressure’s On! Using Hydraulic Modeling to Diagnose Recycled Water System Surges”**

Bobby Vera (West Yost)

Overview:

Presentation discussed field monitoring and a calibrated hydraulic model used to investigate recurring pipeline breaks in Central San’s recycled water system. The analysis identified hydraulic transients associated with rapid customer demand changes and evaluated practical surge mitigation measures to improve system reliability.

Highlights from the presentation include:

1. Presenter introduction
2. Hydraulic transients:
 - a. An increase or decrease in pressure associated with a rapid velocity change.
 - b. Caused by valve closing or opening, check valve operation, demand change, pipe failure, etc.
 - c. Can be mitigated by slowing down valve or pump operations, or installing surge mitigation devices at the right locations and confirm proper operation through maintenance.
3. CCCSD ADWF is 33 MGD. Total recycled water system capacity is 30 MGD.
 - a. Added Zone 1 commercial irrigation project that produced 1.55 MGD on average and contains 12.5 miles of branched distributions mains, 2 pumping units, 8-MG clearwell.
4. CCCSD Project Description:
 - a. Project drivers include recurring breaks/leaks near Maltby PS. Pressure surges were suspected of causing breaks. Unknown surge tank capacity. Needed to understand system performance and limitations.
 - b. Hydraulic model was last updated in 2009 and was out of date (i.e. lacking information, not calibrated, old RW demand data, approximated diurnal patterns).
 - c. Developed field monitoring program.
 - System is branched. Needed flow/demand monitoring
 - Small number of customers make up a large portion of demand
 - Pressure monitoring to confirm flow distribution in model. Pressure monitors were placed as close to the flow monitoring locations as possible.
 - d. Findings:
 - Maltby HPR surge event aligned with nearby customer demand on same day. Recommended installing bladder tank near this one customer. However, it was found that a 4-in ball valve at the service meter caused the surge.
 - CCCSD had not installed uniform service meters models, which presented challenges during flow recording.
5. Takeaways
 - a. Need good data to be able to investigate and find best solution
 - b. Surge analysis and mitigation measure can help protect a pressure pipe network, especially in system with demand spikes (i.e. recycled water system)

Next Meeting:

The next general meeting will be at the Brown & Caldwell office on Tuesday, October 13, 2026. The presentation is titled, “Close Tolerance Pipe Slurrification” and will be presented Steve Donovan (Underground Solutions).

Please email pugnorcal@gmail.com for additional information.

Minutes by: Kingsley Kuang, EBMUD
Secretary, Nor Cal PUG

Page 2 of 5

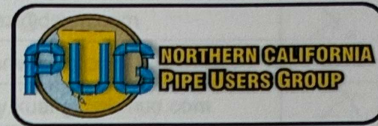
Attachment 1 – Attendee List

Nor Cal PUG

MEETING DATE: September 8, 2026

SIGN IN SHEET

MEETING DATE: Sep 8, 2026



Attendees:

No	Name	Agency/Company	Email Address	Present?
1	Aaliyah Silva	Solano Irrigation District	ASilva@sidwater.org	X
2	Aaron Bennett	EBMUD	aaron.bennett@ebmud.com	
3	Adam Brown	BKF	abrown@bkf.com	X
4	Ajmal Shams	HDR, Inc.	ajmalkhan.shams@hdrinc.com	✓
5	Alejandro Cabrera	West Yost	ACABRERA@WESTYOST.COM	X
6	Alexandra Watson	HydroScience Engineers	awatson@hydroscience.com	✓
7	Amelia Wall	Structural Technologies	awall@structuraltec.com	X
8	Amy Schroeder	West Yost	aschroeder@westyost.com	X
9	Ashruf Khan	West Yost	akhan@westyost.com	X
10	Bao Nguyen	Alameda County Water District	Bao.Nguyen@acwd.com	X
11	Bryan Perkins	Contra Costa Water District	bperkins@ccwater.com	X
12	Casey Smith	SAK Construction	Csmith@sakcon.com	
13	Celia Kitchell	EBMUD	celia.kitchell@ebmud.com	
14	Christina Ramirez	West Yost	cramirez@westyost.com	X
15	David Dong	Pakpour Consulting Group	ddong@pcgengr.com	X
16	Eric Yao	HDR	Yuan.Yao@hdrinc.com	✓
17	Feraydoon Farsi	Pakpour Consulting Group	ffarsi@pcgengr.com	
18	Fidel Salamanca	Harris & Associates	fidel.salamanca@weareharris.com	X
19	Hunter Kett	Solano Irrigation District	hkett@sidwater.org	X
20	James Kohne	Woodard & Curran	jkohne@woodardcurran.com	X
21	James Kong	Central San	jkong@centralsan.org	
22	Jason Fitch	CCCS	jfitch@centralsan.org	X
23	Joe Heavin	Shannon & Wilson	joseph.heavin@shanwil.com	
24	John Law	EBMUD	john.law@ebmud.com	X
25	Jomel Bautista	West Yost	jbautista@westyost.com	X
26	Jon Marshall	Carollo Engineers	jpmarshall@carollo.com	X

No	Name	Agency/Company	Email Address	Present?
27	Josh Sanchez	DSRSD	jsanchez@dsrsd.com	X
28	Kevin Kai	Brown & Caldwell	kkai@brwnncald.com	
29	Kingsley Kuang	EBMUD	kingsley.kuang@ebmud.com	X
30	Kinsey Kwan-Liu	Central San	kkwanliu@centralsan.org	✓
31	Liana Olsen	Central San	lolsen@centralsan.org	✗
32	Lindsay De Guzman	Central San	ldeguzman@centralsan.org	
33	Lucy Bocanegra	West Yost Associates	lbocanegra@westyost.com	X
34	Matt Escalante	EBMUD	matthew.escalante@ebmud.com	
35	Nancy Tran	City of Hayward	nancy.tran@hayward-ca.gov	
36	Oscar Sandoval	Solano Irrigation District	ORuiz@sidwater.org	X
37	Philip Tiewater	West Yost	ptiewater@westyost.com	✓
38	Richard Foss	Central San	rfoss@centralsan.org	X
39	Rose Fisher	Central San	rfisher@centralsan.org	
40	Rosie Delgado	Central San	rdelgado@centralsan.org	X
41	Sofie Tai	CCCWD	stai@centralsan.org	✓
42	Xavier Fernandez	Central San	xfernandez@centralsan.org	✓

No	Name	Agency/Company	Email Address	Present?
27	Josh Sanchez	DSRSD	jsanchez@dsrsd.com	X
28	Kevin Kai	Brown & Caldwell	kkai@brwncald.com	
29	Kingsley Kuang	EBMUD	kingsley.kuang@ebmud.com	X
30	Kinsey Kwan-Liu	Central San	kkwanliu@centralsan.org	✓
31	Liana Olsen	Central San	lolsen@centralsan.org	✗
32	Lindsay De Guzman	Central San	ldeguzman@centralsan.org	
33	Lucy Bocanegra	West Yost Associates	lbocanegra@westyost.com	X
34	Matt Escalante	EBMUD	matthew.escalante@ebmud.com	
35	Nancy Tran	City of Hayward	nancy.tran@hayward-ca.gov	
36	Oscar Sandoval	Solano Irrigation District	ORuiz@sidwater.org	X
37	Philip Tiewater	West Yost	ptiewater@westyost.com	✓
38	Richard Foss	Central San	rfoss@centralsan.org	X
39	Rose Fisher	Central San	rfisher@centralsan.org	
40	Rosie Delgado	Central San	rdelgado@centralsan.org	X
41	Sofie Tai	CCCWD	stai@centralsan.org	✓
42	Xavier Fernandez	Central San	xfernandez@centralsan.org	✓