



Meeting Minutes

August 11, 2026
In-Person Meeting

Attendees: See Attachment 1 for copy of attendee list

Board Members:

1. Adam Brown – Chair
2. James Kohne – Vice Chair
3. Fidel Salamanca – Treasurer
4. Kingsley Kuang – Secretary
5. Dorothy Bechler – Communications Officer
6. Dustin Rainey – At-Large Representative
7. Dustin LaVallee – Past Chair

Announcements and General Business:

1. Attendee introductions
2. Announcements
 - a. Membership season is open. Membership is \$400 per organization, payable by CC or check. Application is now through Google form. Provides discounts for events.
 - b. Upcoming PUG presentations – Looking for presenters for March 2027 and beyond.
 - c. Upcoming events:

Year	Date	Conf	Location
2026	8/4 to 8/6	CASA	Napa, CA
2026	8/24 to 8/26	Water Reuse	San Francisco, CA
2026	9/26 to 9/30	WEFTEC	New Orleans, LA
2026	10/20 to 10/21	WESTT Regional No-Dig	Albuquerque, NM
2026	11/12	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

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Secretary, Nor Cal PUG

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2027	4/19 to 4/22	AWWA CA NV WCW	Sacramento, CA
2027	6/13 to 6/16	AWWA ACE	San Diego, CA

d. Upcoming events:

- i. WESTT Regional No-Dig – one day of networking and one day of training
- ii. AWWA CA/NV WCW – Abstracts due 8/28
- iii. WESTT networking event in Walnut Creek, 8/12, 6-8pm

e. Now accepting PUG Annual Seminar abstracts.

3. Secretary Report

- a. Kingsley provided a recap of July monthly presentation (Cameron Brown, ISCO Industries - HDPE).

4. Financial Report

- a. Financial summary report provided by Fidel.
 - i. Income: \$1,542.20
 - ii. Expenses: \$683.67
 - iii. Total Balance, End of July: \$81,442.97

Attendee Announcements/Discussions:

- How do organizations confirm that membership payments have been received?
 - Organization will appear on the NorCal PUG website. Can also email pugnorcal@gmail to confirm.
- PUG Fall Training is in November and will be similar to last year's event: Practical Consideration for Pipeline Design and Construction.
- Fidel provided update on possible upcoming site visit to Ross Valley Sanitation District's micro-tunneling and HDD project. Will be in Fairfax (North Bay). A separate announcement will be sent.

Presentation:

"What We've Learned from 50+ I&I Studies", Kwin Peterson (RH Borden)

Overview:

Presentation summarized recent studies on I&I mitigation using sensor technologies and modeling.

Highlights from the presentation include:

1. Presenter introduction
2. I&I = Inflow & infiltration = water that enters the collection system that does not come from sewer.
3. Quick stats:
 - a. 35% - 50% of flow comes from I&I
 - b. 1 MGD of I&I treatment costs around \$500,000/yr to treat.
4. Level monitoring approach & BasinIQ methodology:
 - a. Radar level technology, fast installation, no confined space entry, multi-carrier cellular chip
 - b. With manhole virtual model (MVM) can calculate flow.
 - c. Level sensors are placed based on system's drainage basins. For long-duration monitoring, a

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- handful is distributed evenly across system. For short-term monitoring, sensors are concentrated in problem areas. Best suited for manholes with straight-through flow.
- d. Cost is calculated by system size. Roughly \$1.70-\$1.90 per foot of pipe, but does not include mobilization and traffic control.
 - e. Inflow is shown as sharp spike, where infiltration is shown as peak that slowly goes away.
 - f. MVM wall score can only be derived from 48-in manholes.
5. Case studies
- a. San Rafael Sanitation District – Found an open drain that was collecting 9,000 gpm during storms. Was able to reduce flows by 81% after mitigation, equating to 1.2 MG of flow.
 - b. Balch Springs, TX – Monitored 51 manholes starting at one location and moved upstream to pinpoint I&I. Took 4 months to complete study. Worst manholes had significant corrosion.
 - c. Half Moon Bay – Study and research found that a resident was opening manhole to drain flooded street during storms.
 - d. Great Neck New York (Long Island) – 423 sensors, largest study ever. Hydrograph showed that something happened in the system that caused infiltration. Found one manhole that was completely rooted. Significantly I&I across system, and was able to prioritize rehab work based on amount of I&I.
6. Peaking factors as high as 12x.
7. During stretches of dry weather with no rain, sensors can remain installed beyond 5 months. California is more favorable since rainy season is more predictable.
8. Contracts with agencies are usually set up as professional services contracts since it is an engineer product and service.

Next Meeting:

The next general meeting will be at the Brown & Caldwell office on Tuesday, September 8th, 2026. The presentation is titled, “Surge Analysis” and will be presented by Bobby Vera (West Yost).

Please email pugnorcal@gmail.com for additional information.

Attachment 1 – Attendee List

Nor Cal PUG		MEETING DATE: August 11, 2026		
SIGN IN SHEET				
MEETING DATE: Aug 11, 2026				
Attendees:				
No	Name	Agency/Company	Email Address	Present?
1	Aaliyah Silva	Solano Irrigation District	ASilva@sidwater.org	✓
2	Adam Brown	BKF	abrown@bkf.com	
3	Ajmal Shams	HDR, Inc.	ajmalkhan.shams@hdrinc.com	✓
4	Alexandra Watson	HydroScience Engineers	awatson@hydroscience.com	
5	Amelia Berumen	Central San	aberumen@centralsan.org	✓
6	Amelia Wall	Structural Technologies	awall@structuraltec.com	✓
7	Andrea Bautista	VFWD	abautista@vallejowastewater.org	
8	Ashruf Khan	West Yost	akhan@westyost.com	
9	Casey Smith	SAK Construction	csmith@sakcon.com	✓
10	Chang Sohn	Sacramento Area SD	sohnc@sacsewer.com	
11	Cindy Preuss	CDM Smith	preusscl@cdmsmith.com	✓
12	Daniel Wilkins	West Valley Construction	dwilkins@wvcc.com	
13	Darrin Mock	EBMUD	darrin.mock@ebmud.com	✓
14	Derek Pham	City of Hayward	derek.pham@hayward-ca.gov	✓
15	Dorothy Bechler	Central San	dbechler@centralsan.org	X
16	Dustin Rainey	Jacobs	dustin.rainey@jacobs.com	X
17	Edrienne Aguilar	CVSan	edrienne@cvsan.org	
18	Eric Yao	HDR	Yuan.Yao@hdrinc.com	✓
19	James kong	Central San	jkong@centralsan.org	
20	Jason Fitch	CCCSD	jfitch@centralsan.org	
21	John Lewis	Contech Engineered Solutions	john.lewis@conteches.com	
22	Jose Ramirez	SASD	ramirezj@sacsewer.com	
23	Joseph Sexson	West Valley Construction	jsexson@wvcc.com	X
24	Kassidy Joya	Central San	kajoya@centralsan.org	X
25	Kingsley Kuang	EBMUD	kingsley.kuang@ebmud.com	X
26	Kinsey Kwan-Liu	Central San	kkwanliu@centralsan.org	X

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1	Aaliyah Silva	Solano Irrigation District	ASilva@sidwater.org	✓
2	Adam Brown	BKF	abrown@bkf.com	
3	Ajmal Shams	HDR, Inc.	ajmalkhan.shams@hdrinc.com	✓
4	Alexandra Watson	HydroScience Engineers	awatson@hydroscience.com	
5	Amelia Berumen	Central San	aberumen@centralsan.org	✓
6	Amelia Wall	Structural Technologies	awall@structuraltec.com	✓
7	Andrea Bautista	VFWD	abautista@vallejowastewater.org	
8	Ashruf Khan	West Yost	akhan@westyost.com	
9	Casey Smith	SAK Construction	csmith@sakcon.com	✓
10	Chang Sohn	Sacramento Area SD	sohnc@sacsewer.com	
11	Cindy Preuss	CDM Smith	preusscl@cdmsmith.com	✓
12	Daniel Wilkins	West Valley Construction	dwilkins@wvcc.com	
13	Darrin Mock	EBMUD	darrin.mock@ebmud.com	✓
14	Derek Pham	City of Hayward	derek.pham@hayward-ca.gov	✓
15	Dorothy Bechler	Central San	dbechler@centralsan.org	X
16	Dustin Rainey	Jacobs	dustin.rainey@jacobs.com	X
17	Edrianne Aguilar	CVSan	edrianne@cvsan.org	
18	Eric Yao	HDR	Yuan.Yao@hdrinc.com	✓
19	James kong	Central San	jkong@centralsan.org	
20	Jason Fitch	CCCSD	jfitch@centralsan.org	
21	John Lewis	Contech Engineered Solutions	john.lewis@conteches.com	
22	Jose Ramirez	SASD	ramirezj@sacsewer.com	
23	Joseph Sexson	West Valley Construction	jsexson@wvcc.com	X
24	Kassidy Joya	Central San	kajoya@centralsan.org	X
25	Kingsley Kuang	EBMUD	kingsley.kuang@ebmud.com	X
26	Kinsey Kwan-Liu	Central San	kkwanliu@centralsan.org	X

No	Name	Agency/Company	Email Address
44	Dustin LaVelle	EBMUD	dustin.lavelle@ebmud.com
45	S. Mertets	CCCSD	smertets@cccso.ca.gov
46	Fidel Salamea	Harris	fidel.salamea@harris.com
47	Jerrel Bautista	West Yost	jbautista@westyost.com
48	Eli Hayes	Sewer AI	ehayes@sewerai.com
49	Chang Sohn	Sac Sewer	SohnC@Sacssewer.com
50	Luis Rodriguez Sainz	Sac Sewer	rodriguez.sainz@sa-sewer.com
51	Sean Kirby	Sewer AI	skirby@sewerai.com
52	Diego Rivera	USFPA	diego.rivera@usfpa.com
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