

CalDesal Executive Committee Meeting Agenda Monday, September 16, 2024 11:00 a.m.- 12:00 p.m.

Zoom Meeting: https://zoom.us/j/2629510972

Agenda

- Call to Order by Chair Mark Donovan
- Executive Director Glenn Farrel reports:

Updates and Discussion

- Events Update
 - o CalDesal Board of Directors Meeting
 - Wednesday, December 4 7:00 AM (Hybrid)
 - JW Marriott Palm Desert
 - CalDesal Fall Mixer
 - Wednesday, December 4 6:00 PM
 - JW Marriott Palm Desert
 - Sponsorship opportunities
 - o 2025 CalDesal Annual Conference
 - Pechanga Resort Temecula
 - Wednesday, February 5 Thursday, February 6
 - Consideration of conference theme options (Attachment)
 - Sponsorship prospectus (Attachment)
 - Events Planning Committee work under way (Attachment)
 - Preview of early programming concepts
 - Keynote speaker ideas

Governance

- Financial
 - CalDesal financials August 2024 (Attachment)
 - CalDesal budget performance report (Attachment)
- Executive Committee membership and vacancies (Attachment)

CalDesal Policy Issues

- Crowfoot meeting agenda (Attachment)
- OPA 2.0 planning efforts (Attachment)

Desalination Project Updates

- Update on Monterey Peninsula Water Supply Project
- Update on Doheny Desalination Project
- Update on Carlsbad Desalination Facility Intake Project
- MWD desalination siting and technical studies
- Other project updates?

Other?

Next Executive Committee meeting: October 21, 2024 – 11:00 AM

Conference Theme Options

- (1) Improving California's Resiliency Through Desalination
- (2) Desalination Innovation: Advancing Seawater and Brackish Water for a Sustainable Supply
- (3) Charting a Course for California's Desalination Future
- (5) Desal: The Long Game for California's Resiliency



2025 ANNUAL CONFERENCE

February 5-6, 2025 • Temecula, CA

CalDesal 2025 Annual Conference - Sponsorship Opportunities

Diamond Sponsor: \$5000 (1 Available)

- One 6' table exhibit booth with priority booth placement
- Three full complimentary program registrations for the conference
- · Logo recognition on signage at the Conference
- Logo/ad on a running PPT slide during the Conference lunch
- · Logo recognition in the event program
- Logo recognition on the CalDesal website during the month of the conference
- Logo recognition in conference marketing communications
- Logo recognition on the cover of the event program
- Logo recognition in post-conference newsletter
- Free full-page ad in the event program
- Special mention in opening session and throughout event
- Signage recognizing level of sponsorship throughout event

Platinum Exhibitor: \$4000 (2 Available)

- · One 6' table exhibit booth
- Two full complimentary program registrations for the conference
- Logo/ad on a running PPT slide during the Conference lunch
- Logo recognition in conference marketing communications
- Logo recognition in the event program
- Logo recognition on the CalDesal website during the month of the conference
- · Logo recognition in post-conference newsletter
- Logo recognition on signage at the Conference
- Special mention in opening session and throughout event
- Signage recognizing level of sponsorship throughout event
- · Half-page ad in event program

Gold Exhibitor: \$3000 (5 Gold)

- One 6' table exhibit booth
- One full complimentary program registration for the conference
- Logo/ad on a running PPT slide during the Conference lunch
- · Logo recognition on signage at the Conference
- Name recognition in conference marketing communications
- · Name recognition in the event program
- Name recognition on the CalDesal website during the month of the conference
- Name recognition in post-conference newsletter
- Signage recognizing level of sponsorship throughout event
- · Half-page ad in event program

Tote Bag Sponsor: \$2,500 (1 Available)

- Logo branding and recognition as Tote Bag Sponsor
- One full complimentary program registration for the conference
- Logo/ad on a running PPT slide during the Conference lunch
- Logo recognition on signage at the Conference
- · Name recognition in the event program
- Name recognition in post-conference newsletter
- Signage recognizing level of sponsorship throughout event

Lanyard Sponsor: \$2,500 (1 Available)

- Logo branding and recognition as Lanyard Sponsor
- One full complimentary program registration for the conference
- Logo/ad on a running PPT slide during the Conference lunch
- Logo recognition on signage at the Conference
- Name recognition in the event program
- Name recognition in post-conference newsletter
- Signage recognizing level of sponsorship throughout event

CalDesal 2025 Annual Conference - Sponsorship Opportunities

Reception Sponsor: \$1250 (2 Available)

- Logo recognition on reception drink tickets
- Logo/ad on a running PPT slide during the Conference lunch
- · Name recognition in the event program
- Name recognition on signage at the Conference
- Name recognition in post-conference newsletter
- Signage recognizing level of sponsorship throughout event

Keynote Lunch Sponsor: \$1,000 (1 Available)

- Logo/ad recognition on the Keynote welcome slide
- Logo/ad on a running PPT slide during the Conference lunch
- Name recognition in the event program
- · Name recognition in post-conference newsletter
- Name recognition on signage at the Conference

General Sponsor: \$750

- Logo/ad on a running PPT slide during the keynote conference lunch
- · Name recognition in the event program
- Name recognition in post-conference newsletter
- Name recognition on signage at the Conference

Conference Bag Swag Item Sponsor: \$500

- Add an item with your organization logo into the bags that will be provided to all attendees at registration (or sponsor the bags themselves

 logo bags distributed to all attendees, with various swag items included)
- Sponsor is responsible for providing the swag to CalDesal by **January 10, 2025**, in order to be included.
- No refunds will be given if your swag arrives too late to be added to the bags.

DIY Sponsorships:

 DIY or "do it yourself" sponsorships are for all the creative desal professionals out there. Showcase your organization in a way that we haven't thought of! Email: glennf@caldesal.org with your proposed sponsorship and budget and we will work with you to customize a package for your organization!

All Sponsors Will Receive:

- · List of attendees
- Acknowledgement in handout materials

 100-word organization/company/agency description

Sponsor Registration Form

Click Here

CalDesal.org



CalDesal 2025 Annual Conference Session/Panel Concepts

Salinity/Concentrate Management Session

- (So Cal) Jeff Mosher SAWPA Inland Empire Brine Line
- Adam Zacheis Brown/Caldwell FRRO for High Recovery City of Santa Monica (MSSC – Feb 2024)
- Mike Mickley Brine Mining Mickley & Assoc/BlueTech Research)
- (So Cal) Linnea Eastern Municipal Water District
- (So Cal) Rancho California (?)
- (Central Cal) Calleguas MWD new brine line how to grow use
- (Central Cal) Other inland brackish desal
 - o Camarillo desalter
 - Moorpark desalter
- (Northern Cal) Valley Water brine discharge issues

Arizona/Nevada Desal Activities

- Chuck Podolak Water Infrastructure Finance Authority of Arizona
- Rick Spilsbury Ely Shoshone Tribe Member of Great Basin Water Network
- Wally Wilson Metro Water District Arizona
- Jim Watrus Southern Nevada Water Authority
- Phillip Richards Arizona Public Service
- Scott Muller Arizona Public Service
- Rezaur Rahman Scottsdale Water Arizona
- Joe Olson Metro Domestic Water Arizona
- Orestes Morfin Central Arizona Project
- Chad Lapora Tuscon Water
- Peter Fox Professor Environmental Engineering School of Sustainable Engineering Arizona State University
- Charles Ester Salt River Project Arizona
- Reed Blochberger Salt River Project Arizona
- Andrew Burns Southern Nevada Water Authority

Energy Session (Steve Wait)

- Global Water Farms CEO Jon Becker (partnership with Primeval Energy) Geothermal desal in Salton Sea area
- Capture6 Project Monarch with Palmdale Water District CEO Ethan Cohen-Cole
- CarbonCapture, Inc.
- Energy Recovery, Inc. Rodney Clemente Sr. Vice President of Water
- Equatic COO Edward Sanders Seawater electrolysis for production of green H2
- Hydrogen issues/linkage

PFAS Session (Glenn)

- Mitigating PFAS impacts to Eastern Municipal Water District's brackish desal operations
- Restoring a PFAS-impacted groundwater supply for potable use (Orange County WD)
- Chris Berch GM, Jurupa Community Services District
- Carlos Quintero GM, Sweetwater Authority

Labor Session (Glenn)

- Pete Wohlgezogen UA Local 250 Pipefitters
- Ernesto Medrano Executive Secretary LA/OC Building Trades
- Joseph Cruz CA Council of Laborers
- Michael Quigly CA Alliance for Jobs

Miller Marine Science Report Session

- Eric Miller
- SDCWA/Channelside Resources

Desal Critics Session (Glenn)

- Environmental Justice group
- Tribal interests (?)
- Enviro groups CA Coastkeeper
- Pacific Institute

Public-Private Partnerships Session – Financing

- Consolidated Water
- Seven Seas Water Group
- SDCWA/Channelside Resources

Cost of Water Session (Steve Wait)

- Cost comparison models
 - Desalination
 - Seawater
 - Brackish
 - Water recycling (purple pipe)
 - o IPR
 - o DPR
 - o Stormwater
 - o Other
- Possibly Family Feud-style (or similar)

Public Perceptions of Desalination Session

Others for Consideration

- Martin Ludlow Groundswell for Water and Housing Justice
- Hayley Smith LA Times environment reporter
- USBR Funding Opportunities for Water Reuse and desalination Construction and Water Treatment Research
 - o Maribeth Menendez USBR Water Resources and Planning Office
 - o Andrew Tiffenbach USBR Research and Development Office
- Jeopardy/Family Feud game

Keynote Speaker Options

- Congressmember Mike Levin San Diego
- Peter Fiske NAWI

CALDESAL Statement of Financial Position

As of August 31, 2024

	Aug 31, 24	Aug 31, 23	\$ Change	% Change
ASSETS				
Current Assets				
Checking/Savings				
1000.00 · BMO	287,397.97	267,822.96	19,575.01	7.31%
Total Checking/Savings	287,397.97	267,822.96	19,575.01	7.31%
Accounts Receivable				
1200.00 · Accounts Receivable	0.00	1,000.00	-1,000.00	-100.0%
Total Accounts Receivable	0.00	1,000.00	-1,000.00	-100.0%
Other Current Assets				
1300.00 · PrePaid Expenses	5,000.00	4,000.00	1,000.00	25.0%
Total Other Current Assets	5,000.00	4,000.00	1,000.00	25.0%
Total Current Assets	292,397.97	272,822.96	19,575.01	7.18%
TOTAL ASSETS	292,397.97	272,822.96	19,575.01	7.18%
LIABILITIES & EQUITY				
Liabilities				
Current Liabilities				
Accounts Payable				
2000.00 · Accounts Payable	9,185.13	9,285.91	-100.78	-1.09%
Total Accounts Payable	9,185.13	9,285.91	-100.78	-1.09%
Total Current Liabilities	9,185.13	9,285.91	-100.78	-1.09%
Total Liabilities	9,185.13	9,285.91	-100.78	-1.09%
Equity				
3150.00 · Operating Reserve	89,000.00	89,000.00	0.00	0.0%
3300.00 · Unrestricted Net Assets	89,353.92	68,736.36	20,617.56	30.0%
Net Income	104,858.92	105,800.69	-941.77	-0.89%
Total Equity	283,212.84	263,537.05	19,675.79	7.47%
TOTAL LIABILITIES & EQUITY	292,397.97	272,822.96	19,575.01	7.18%

CALDESAL Statement of Financial Income and Expense July through August 2024

	Jul - Aug 24	Jul - Aug 23	\$ Change	% Change
Ordinary Income/Expense			-	-
Income				
4100.00 · Program Income				
4110.00 · Membership Dues				
4110.02 · Regular Dues	110,000.00	115,000.00	-5,000.00	-4.35%
4110.04 · Associate Dues	21,500.00	18,000.00	3,500.00	19.44%
Total 4110.00 · Membership Dues	131,500.00	133,000.00	-1,500.00	-1.13%
4200.00 · Annual Conference Income				
4200.02 · Annual Conference Registration	1,250.00	0.00	1,250.00	100.0%
Total 4200.00 · Annual Conference Income	1,250.00	0.00	1,250.00	100.0%
Total 4100.00 · Program Income	132,750.00	133,000.00	-250.00	-0.19%
4600.00 · Other Types of Income				
4605.00 · Interest Income	4.00	0.00	4.00	100.0%
Total 4600.00 · Other Types of Income	4.00	0.00	4.00	100.0%
Total Income	132,754.00	133,000.00	-246.00	-0.19%
Gross Profit	132,754.00	133,000.00	-246.00	-0.19%
Expense				
6500.00 · Operating Expenses				
6510.00 · Bank/Credit Card Fees	890.15	93.60	796.55	851.02%
6533.00 · Administrative- Management Fees				
6533.10 · Management Contracted Fees	8,652.80	8,652.80	0.00	0.0%
Total 6533.00 · Administrative- Management Fees	8,652.80	8,652.80	0.00	0.0%
6537.00 · Executive Director				
6537.10 · ED Fees	18,334.00	18,334.00	0.00	0.0%
Total 6537.00 · Executive Director	18,334.00	18,334.00	0.00	0.0%
6550.00 · Office Expenses				
6550.45 · Telephone Expense	0.00	88.47	-88.47	-100.0%
6550.60 Printing/Copy- Admin	0.00	1.16	-1.16	-100.0%
6550.90 · Storage	18.13	29.28	-11.15	-38.08%
Total 6550.00 · Office Expenses	18.13	118.91	-100.78	-84.75%
Total 6500.00 · Operating Expenses	27,895.08	27,199.31	695.77	2.56%
Total Expense	27,895.08	27,199.31	695.77	2.56%
Net Ordinary Income	104,858.92	105,800.69	-941.77	-0.89%
Income	104,858.92	105,800.69	-941.77	-0.89%

CALDESAL Profit & Loss Budget vs. Actual July through August 2024

	Jul - Aug 24	Budget	\$ Over Budget	% of Budget
Ordinary Income/Expense	ou. /tag = :	zaagot	TOTO: Budgot	70 01 Badgot
Income				
4100.00 · Program Income				
4110.00 · Membership Dues				
4110.02 · Regular Dues	110,000.00	120,000.00	-10,000.00	91.67%
4110.04 · Associate Dues	21,500.00	21,000.00	500.00	102.38%
Total 4110.00 · Membership Dues	131,500.00	141,000.00	-9,500.00	93.26%
4200.00 · Annual Conference Income				
4200.02 · Annual Conference Registration	1,250.00	0.00	1,250.00	100.0%
4200.05 · Annual Conference Sponsorship	0.00	0.00	0.00	0.0%
Total 4200.00 · Annual Conference Income	1,250.00	0.00	1,250.00	100.0%
4300.00 · Event Income				
4310.00 · Virtual Program				
4310.05 · Virtual Program Registration	0.00	0.00	0.00	0.0%
Total 4310.00 · Virtual Program	0.00	0.00	0.00	0.0%
Total 4300.00 · Event Income	0.00	0.00	0.00	0.0%
4360.00 · Spring Mixer				
4360.02 · Spring Mixer Sponsorship	0.00	0.00	0.00	0.0%
4360.00 · Spring Mixer - Other	0.00	0.00	0.00	0.0%
Total 4360.00 · Spring Mixer	0.00	0.00	0.00	0.0%
4380.00 · Fall Mixer				
4380.02 · Fall Mixer Sponsorship	0.00	0.00	0.00	0.0%
Total 4380.00 · Fall Mixer	0.00	0.00	0.00	0.0%
Total 4100.00 · Program Income	132,750.00	141,000.00	-8,250.00	94.15%
4600.00 · Other Types of Income				
4605.00 · Interest Income	4.00	0.00	4.00	100.0%
Total 4600.00 · Other Types of Income	4.00	0.00	4.00	100.0%
Total Income	132,754.00	141,000.00	-8,246.00	94.15%
Gross Profit	132,754.00	141,000.00	-8,246.00	94.15%
Expense				
6100.00 · Program Expenses				
6150.00 · Membership Expenses				
6151.00 · Membershi Plaques/Awards	0.00	0.00	0.00	0.0%
6150.00 · Membership Expenses - Other	0.00	0.00	0.00	0.0%
Total 6150.00 · Membership Expenses	0.00	0.00	0.00	0.0%
6200.00 · Annual Conference				
6203.00 · Printing, Materials and Admin	0.00	0.00	0.00	0.0%
6200.00 · Annual Conference - Other	0.00	0.00	0.00	0.0%
Total 6200.00 · Annual Conference	0.00	0.00	0.00	0.0%
6300.00 · Events				
6360.00 · Spring Mixer Expense	0.00	0.00	0.00	0.0%
6380.00 · Fall Mixer Expense	0.00	0.00	0.00	0.0%
6300.00 · Events - Other	0.00	0.00	0.00	0.0%

CALDESAL Profit & Loss Budget vs. Actual

July through August 2024

	Jul - Aug 24	Budget	\$ Over Budget	% of Budget
Total 6300.00 · Events	0.00	0.00	0.00	0.0%
Total 6100.00 · Program Expenses	0.00	0.00	0.00	0.0%
6500.00 · Operating Expenses				
6110.00 · Board Expenses				
6113.00 · Board Meeting Expenses	0.00	0.00	0.00	0.0%
Total 6110.00 · Board Expenses	0.00	0.00	0.00	0.0%
6510.00 · Bank/Credit Card Fees	890.15	150.00	740.15	593.43%
6531.00 · Accounting/ Audit/ Tax	0.00	0.00	0.00	0.0%
6533.00 · Administrative- Management Fees				
6533.10 · Management Contracted Fees	8,652.80	8,999.00	-346.20	96.15%
6533.30 · Management Travel	0.00	0.00	0.00	0.0%
6533.50 · Management Expenses	0.00	0.00	0.00	0.0%
Total 6533.00 · Administrative- Management Fees	8,652.80	8,999.00	-346.20	96.15%
6535.00 · Communications Contractors	0.00	140.00	-140.00	0.0%
6537.00 · Executive Director				
6537.10 · ED Fees	18,334.00	18,332.00	2.00	100.01%
6537.30 · ED Expenses	0.00	0.00	0.00	0.0%
6537.50 · ED Travel	0.00	0.00	0.00	0.0%
Total 6537.00 · Executive Director	18,334.00	18,332.00	2.00	100.01%
6545.00 · Meeting Expense	0.00	0.00	0.00	0.0%
6550.00 · Office Expenses				
6550.40 · Office Supplies/Expenses	0.00	8.00	-8.00	0.0%
6550.45 · Telephone Expense	0.00	100.00	-100.00	0.0%
6550.50 · Postage/Delivery-Admin	0.00	8.00	-8.00	0.0%
6550.60 · Printing/Copy- Admin	0.00	6.00	-6.00	0.0%
6550.90 · Storage	18.13	28.32	-10.19	64.02%
Total 6550.00 · Office Expenses	18.13	150.32	-132.19	12.06%
6550.80 · Website/Database	0.00	0.00	0.00	0.0%
6590.00 · Miscellaneous Operating Expense	0.00	0.00	0.00	0.0%
Total 6500.00 · Operating Expenses	27,895.08	27,771.32	123.76	100.45%
Total Expense	27,895.08	27,771.32	123.76	100.45%
Net Ordinary Income	104,858.92	113,228.68	-8,369.76	92.61%
Net Income	104,858.92	113,228.68	-8,369.76	92.61%

9:13 AM 09/07/24

CALDESAL A/R Aging Detail As of August 31, 2024

Type Date Num Name Amount

,	. 7 00	Duto	ITUIII	Italiio	Amount
Current					
Total Current					
1 - 30					
Total 1 - 30					
31 - 60					
Total 31 - 60					
61 - 90					
Total 61 - 90					
> 90					
Total > 90					
TOTAL					

CALDESAL Monthly Detail August 2024

	Туре	Date N	ım Name	Memo	Debit	Credit	Balance
Ordinary Income/Expense							
Income							
4100.00 · Program Income							
4200.00 · Annual Conference Inco	me						
4200.02 · Annual Conference Reg	gistration						
	Sales Receipt	08/20/2024 292	South Coast Wa	ter Di: 2025 Annual Conference Registration		1,250.00	1,250.00
Total 4200.02 · Annual Conference	Registration			<u> </u>	0.00	1,250.00	1,250.00
Total 4200.00 · Annual Conference I	Income				0.00	1,250.00	1,250.00
Total 4100.00 · Program Income				•	0.00	1,250.00	1,250.00
4600.00 · Other Types of Income							
4605.00 · Interest Income							
	Deposit	08/31/2024		Interest		2.27	2.27
Total 4605.00 · Interest Income				•	0.00	2.27	2.27
Total 4600.00 · Other Types of Income	е			-	0.00	2.27	2.27
Total Income				•	0.00	1,252.27	1,252.27
Gross Profit				•	0.00	1,252.27	1,252.27
Expense							
6500.00 · Operating Expenses							
6510.00 · Bank/Credit Card Fees							
	Check	08/19/2024	Stripe		20.00		20.00
	Sales Receipt	08/20/2024 292	South Coast Wa	ter Di: Stripe credit card processing fee	36.55		56.55
	Deposit	08/22/2024 Strip	e Mesa Water Dist	rict Deposit	145.30		201.85
	Check	08/22/2024		Service Charge	10.00		211.85
	Check	08/23/2024 EFT		Intuit Fee	35.30		247.15
Total 6510.00 · Bank/Credit Card Fe	ees			•	247.15	0.00	247.15
6533.00 · Administrative- Manager	ment Fees						
6533.10 · Management Contracte	ed Fees						
	Bill	08/01/2024 2024	0200 Smith Moore and	d Assc August Monthly Contracteed Fee	4,326.40		4,326.40
Total 6533.10 · Management Contr	racted Fees			•	4,326.40	0.00	4,326.40
Total 6533.00 · Administrative- Mana	agement Fees			-	4,326.40	0.00	4,326.40
6537.00 · Executive Director							
6537.10 · ED Fees							
	Bill	08/31/2024 1187	Glenn Farrel	August 2024 Executive Director Srvs	9,167.00		9,167.00
Total 6537.10 · ED Fees				•	9,167.00	0.00	9,167.00
Total 6537.00 · Executive Director				-	9,167.00	0.00	9,167.00
Total 6500.00 · Operating Expenses				-	13,740.55	0.00	13,740.55
Total Expense				-	13,740.55	0.00	13,740.55
Net Ordinary Income				-	13,740.55	1,252.27	-12,488.28
Net Income				-	13,740.55	1,252.27	-12,488.28



CalDesal Budget Performance Worksheet – August 31, 2024

Income

	Approved Annual	2 Months Ended	
Item	Budget – 2024-25	August 31, 2024	% of Budgeted Revenue
Membership Dues – Regular	145,000	110,000	76%
Membership Dues – Associate	25,000	21,500	86%
Annual Conference Registration	30,000	0	-
Annual Conference Sponsorships	15,000	1,250	8%
Fall Virtual Program Registration	0	0	-
Webinar Income	0	0	-
Spring Mixer Sponsorship	7,000	0	-
Fall Mixer Sponsorship	8,000	0	-
Interest Income		4	
TOTAL Income	230,000	132,754	58%

Expenses

Item	Approved Annual Budget – 2024-25	2 Months Ended August 31, 2024	% of Budget Expended
Accounting/Audit/Tax	2,000	August 31, 2024	70 01 Budget Expended
Bank/Credit Card Fees	3,000	890	30%
Board Meeting Expenses	3,000	0	3070
Fall Mixer	8,000	0	
Spring Mixer	8,000	0	
Communications	800	0	
Contract Services	0	0	
Dues and Subscriptions	0	0	_
Executive Director Fees	110,000	18,334	17%
Executive Director Expenses	0	0	-
Executive Director Travel	0	0	_
Management Fees	53,993	8,653	16%
Management Travel	2,000	0	-
Management Expenses	0	0	_
Office Supplies and Expense	50	0	_
Postage/Delivery – Admin	50	0	-
Print/Copy – Admin	40	0	-
Storage	170	18	11%
Taxes & Licenses	0	0	-
Telephone	600	0	-
Website/Database	600	0	-
Annual Conference	32,000	0	-
Miscellaneous Expense	0	0	-
Membership Plaques/Awards	500	0	-
TOTAL Expenses	224,803	27,895	12%



CalDesal 2024 Executive Committee Roster

NAME	ORGANIZATION	CONTACT	TYPE
Mark Donovan	GHD	mark.donovan@ghd.com	Non-Water
(Chair)			Purveying
Marice DePasquale	Mesa Water District	marice@mconsensus.com	Water
(Vice Chair)			Purveying
Jeremy Crutchfield	San Diego County Water	jcrutchfield@sdcwa.org	Water
(Treasurer)	Authority		Purveying
Michelle Peters	Channelside Resources	mpeters@channelsidedesal.com	Non-Water
(Secretary)			Purveying
Kim Adamson	Kiewit Infrastructure	kim.adamson@kiewit.com	Non-Water
		_	Purveying
Lacy Carothers	California American Water	<u>Lacy.Carothers@amwater.com</u>	Water
			Purveying
Jeff Armstrong	Eastern Municipal Water	jeffarmstrong100@verizon.net	Water
	District		Purveying
Bill Green	South Coast Water District	bgreen@director.scwd.org	Water
			Purveying
Clifford Maurer	City of Santa Barbara	cmaurer@santabarbaraca.gov	Water
			Purveying
Jeff Quimby	Contra Costa Water	jquimby@ccwater.com	Water
	District		Purveying
Ed Stevenson	Alameda County Water	ed.stevenson@acwd.com	Water
	District		Purveying
Warren Teitz	Metropolitan Water	wteitz@mwdh2o.com	Water
	District of Southern		Purveying
	California		
Vacancy			
Vacancy			

Water purveying organizations: At least 7 (current 9)

Non-water purveying organizations: At least 3 (current 2)



Meeting with CA Natural Resources Secretary Wade Crowfoot

Agenda

- Overview of January 2024 brine discharge study from Carlsbad Desalination Plant
 - Results and conclusions
 - <u>CalDesal Request:</u> Help the desalination community promote the study because it demonstrates California is protecting the environment and advancing desalination responsibly
- Upcoming Ocean Plan Amendment Process
 - Anticipated proposed amendments to the Ocean Plan raise concerns about the viability of desalination in California going forward
 - De facto prohibition on open ocean intakes
 - Improving timing and mechanisms for mitigation (including consideration for elimination of shearing mitigation for projects in compliance with SWRCB streamlining recommendations by utilizing subsurface intakes and commingling discharge with an existing wastewater outfall)
 - Determination of "need" for desalination
 - Improving streamlined opportunities for pilot seawater desalination projects to proceed expeditiously
- Ensuring that seawater desalination remains a viable resource strategy including through new innovations and emerging approaches for California. What needs to be done and how can CalDesal partner with the Newsom Administration to achieve these objectives?
- Next steps and future discussions

OPA 2.0 Working Group – Issues Matrix

KEY TALKING POINTS

All brine dilution methods should be

CONTEXT

(What Issues are Implied Within This Item?)

Flow augmentation can result in less impact

ISSUE

Allowance of flow

7 mowanee of now	1 low augmentation can result in less impact	All office dilution methods should be
augmentation	than diffusers and should be included in	included in analysis to determine which
without bias	discharge analysis.	has least impact project by project.
Elimination of brine		
diffusers as best		
available technology		
Improving science		
around		
determination of		
shearing mortality		
and related		
mitigation		
requirements		
Eliminate shearing	Differentiating brine from freshwater in an	Using the BTA for intake and discharge
mitigation for	existing wastewater outfall ignores the fact that	should result in no mitigation needed as
projects that comply	the brine makes the freshwater more similar to	the impacts to all forms of marine life
with the SWB	the receiving waters and thereby reduces	have been minimized to the extent
streamlining	shearing effects because the more similar water	possible. Freshwater causes shear just
recommendations by	masses mix more readily. Just as a subsurface	like brine because dissimilar liquids
utilizing subsurface	intake is assumed to minimize entrainment and	(freshwater and marine receiving
intakes and	impingement to the point no mitigation for	waters) are being forcibly mixed. Pre-
commingling	marine life impacts is needed, the same logic	mixing brine and freshwater wastewater
discharge with an	should be applied to commingled discharges.	reduces the liquid dissimilarity and
existing wastewater		results or less energetic mixing needing
outfall.		less shear. An overall environmental
		benefit.
		The state does not regulate shearing in
		wastewater discharge and it's
		scientifically inconsistent to apply this
		standard only to desalination plants.
De facto prohibition	Subsurface intakes are not feasible everywhere	Subsurface is not possible everywhere.
on open intakes	and cannot provide sufficient source water for	We cannot replace the water volumes
	the large plants the arid southwest will need to	lost to aridification without open
	offset the aridification-induced water losses.	intakes.
		Cost must be considered. Lots of small
		plants with subsurface intakes could
		result in higher water costs. Brings in
		the EJ/SJ issue opponentts have been
		focused on.

Commented [1]: CalDesal should be careful with shearing. Roberts has produced reports with conflicting conclusions. The peer-reviewed literature he cites in his reports confirms that larvae larger than 1 mm are killed more than those less than 1 mm. The biggest issue with the Roberts shearing work is that it all cites invertebrate larval studies while we are mostly concerned with fish larvae from the ETM/APF analytical standpoint. This is mainly due to Robert's reliance on Kolmogorov scales. There is literature on the effect of shearing on larval fish but they do not express shearing energy as Kolmogorov but at dynes. They find high turbulence is very lethal and not tied to time or frequency of exposure. A turbulent jet with enough force tears apart fish larvae that lack shells or exoskeletons like invertebrate larvae. I personally do not know how/if dynes and Kolmogorov scales can be converted into similar units. In this list, we also have conflicting requests about diffusers, shearing, etc. I added a different route that hopefully sidesteps the shearing issue and benefits those projects that are using what the State says is the "streamlined" route.

Commented [4]: Just added "pre" to indicate we are talking about com-mingling

Commented [3]: I think this could complicate the already complicated shearing issue. Shearing results from a high velocity jet being injected into stagnant water. The salinity perspective is only relevant in that co-mingled effluent would no longer need high velocity to mix efficiently.

Commented [2]: I think this is a slick solution. It preserves flexibility in compliance which is usually is a benefit to industry.

Commented [5]: OK - you captured it here. Great

Specify a sequential	Each Water Code element needs to be evaluated	The current process is untenable for
order for assessing	with equal weight for each project. No project	most developers municipalities when
site, design,	should be summarily denied because an element	there are so many potential ways to stop
technology, and	reviewed early in the process is determined to	a project. Making stage-gates, reduces
mitigation under the	be less than ideal.	risk for project proponents and increases
Water Code Section		certainty.
13142.5(b)		
determination		
process (Siting		
Criteria Report)		
Offshore/deep-sea	Should be given a pathway to compliance like	Flexibility in the final regulations is
desalination	all rather than disregarded because its in a less	required to leave space for new
evaluation and	studied habitat.	technologies
permitting		
Articulate criteria		
for studies necessary		
to demonstrate		
subsurface intake		
feasibility (Siting		
Criteria Report)		

Align the desalination provisions with the Coastal Act requirements regarding energy consumption and Resolution No. 2017-0012 (Siting Criteria Report)		
Timing – requirement for mitigation to be in place prior to operations of a facility is problematic	Mitigation need is quantified too late in the permitting process to allow for a mitigation project to be feasibly designed, permitted, constructed, and demonstrated as successful. Either allow after the fact mitigation or increase the range of mitigation banks allowed in CA that can be used by desalination developers, or both.	This proposed provision is not legal because it renders projects infeasible. Evidence shows that coastal wetlands take 20 years to site, design, permit and build, not taking into account demonstrating performance. Such a provision s in conflict with the state's definition of feasible as a project cannot be successfully development in a reasonable period of time. No project - public or private - would be
		able to secure construction financing with such a permit condition, leaving a project in limbo for an unspecified period of time.
Mechanisms – Fee- based mitigation; artificial reef efficacy		Establishing a fee-based program, as contemplated by the 2016 OPA, is the best way to streamline the development of desalination projects.
Elimination of mitigation for shearing mortality		
Establish definitions for terms such as "restoration," "creation," and "expansion" to		
improve clarity around mitigation planning expectations (Siting Criteria Report)		
Clarify that "preservation" is not an acceptable means of mitigation under		

Commented [6]: I would say "allowed". It was in there.

Commented [7]: I just dont see the WB saying yes. This is a heavy hammer they can use against big projects. They wielded it, in part, to kill HB. More than 50% of the HB mitigation was due to shearing.

Commented [8]: Without shearing, flow augmentation will always result in more impact based on the current assessment methods. Earlier we request FA be allowed as a method. Having FA as an option for future big plants could be a huge reduction in impact and cost, especially if the intake can be located in a low-productivity habitat.

the Ocean Plan		
(Siting Criteria		
Report)		
Who makes		
determinations or		
evaluations?		
Factors comprising		
determination of		
"need"		
Provide guidance on		
the information)
needed to prepare a		
Water Supply and		
Demand Assessment		
(Siting Criteria		
Report)		
Provide guidance on		
the application of		
existing policies and		
regulatory		
requirements		
relating to EJ,		
including siting		
projects with		
proactive		
community		
engagement and		
locally scoped EJ in		
mind at the onset of		
the permitting		
process (Siting		
Criteria Report)		
Align the		
desalination		
provisions with the		
Human Right to		
Water and all		
applicable racial		
equity resolutions		
(Siting Criteria	▼	
Report)		
Cost of water as a		
consideration (rate-		
making)		

Commented [9]: Instead of trying to fix a bad provision let's discuss spiking the entire "need" discussion in the OPA. It's an overreach.

Commented [10]: See my previous comment on water cost associated with lots of small subsurface intake plants.