From:	Kristine Knecht-Larribas (kristine_knecht@yahoo.com) Sent You a Personal Message <kwautomail@phone2action.com></kwautomail@phone2action.com>
Sent:	Thursday, January 9, 2025 2:47 PM
То:	Board of Directors
Subject:	Please Vote NO on Delta Tunnel Funding
Categories:	1 Email Threads

*** This email originated from outside of Valley Water. Do not click links or open attachments unless you recognize the sender and know the content is safe. ***

Dear Valley Water Board of Directors,

Dear Chair Estremera and the Board of Directors,

I am writing to urge Valley Water not to allocate any additional funds to the proposed Delta Conveyance Project and vote no on Agenda Item 3.5.

The Delta tunnel project is a proposal to construct a single underground tunnel to divert millions of acre-feet of freshwater that would otherwise flow naturally through the Bay-Delta, diverting up to 6,000 cubic feet per second (cfs) from the Sacramento River without preserving sufficient flows for salmon species and Delta smelt.

For years, the Bay-Delta ecosystem has been severely depleted of its essential freshwater flows, causing the destruction of natural habitat for endemic species and worsening the livelihood of residents in Delta communities. This project will absolutely hasten the decline of the Delta.

Ratepayers will face increased water bills and property taxes, with no assurance of a sustainable water supply if Valley Water continues to spend millions of dollars - nearly \$650 million by the final construction vote - on this project! Remember that the board is ultimately accountable to their ratepayers who do not want their bills to rise amid an era of constant inflation and an affordability crisis.

The Delta tunnel project is an expensive and environmentally harmful project - failing to ensure new water resources in a time of climate change. Valley Water must prioritize limited public funds for projects that will deliver tangible improvements in water security and the overall health of the Delta.

I urge you to make a responsible and informed decision by rejecting this funding, and voting NO on Agenda Item 3.5.

Sincerely,

Sincerely,

Kristine Knecht-Larribas 536 Sugar Hill Way, Oakley CA 94561 Oakley, CA 94561 kristine_knecht@yahoo.com (408) 881-2826

From:	Jessica Ruppert (jazzdance@cutey.com) Sent You a Personal Message <kwautomail@phone2action.com></kwautomail@phone2action.com>
Sent:	Thursday, January 9, 2025 2:39 PM
То:	Board of Directors
Subject:	Please Vote NO on Delta Tunnel Funding
Categories:	1 Email Threads

*** This email originated from outside of Valley Water. Do not click links or open attachments unless you recognize the sender and know the content is safe. ***

Dear Valley Water Board of Directors,

Stop wasting our time. Stop wasting money. Stop destroying ecosystems and condemning creatures to extinction. How does it make any sense for a Bay Area water district to spend billions of dollars to send water AWAY? Your duty is to protect water here. The Delta isn't even in your jurisdiction! Valley Water's involvement and support for this brainless project makes no sense.

Dear Chair Estremera and the Board of Directors,

I am writing to urge Valley Water not to allocate any additional funds to the proposed Delta Conveyance Project and vote no on Agenda Item 3.5.

The Delta tunnel project is a proposal to construct a single underground tunnel to divert millions of acre-feet of freshwater that would otherwise flow naturally through the Bay-Delta, diverting up to 6,000 cubic feet per second (cfs) from the Sacramento River without preserving sufficient flows for salmon species and Delta smelt.

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I urge you to make a responsible and informed decision by rejecting this funding, and voting NO on Agenda Item 3.5.

Sincerely,

Sincerely,

Jessica Ruppert 1085 Tasman Drive Sunnyvale, CA 94089 jazzdance@cutey.com (408) 253-4780

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Patrick ONeill (ptrck_oneill@yahoo.com) Sent You a Personal Message <kwautomail@phone2action.com></kwautomail@phone2action.com>
Sent:	Thursday, January 9, 2025 1:20 AM
To:	Board of Directors
Subject:	Please Vote NO on Delta Tunnel Funding
Categories:	1 Email Threads

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Dear Valley Water Board of Directors,

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I urge you to make a responsible and informed decision by rejecting this funding, and voting NO on Agenda Item 3.5.

Sincerely,

Sincerely,

Patrick ONeill PO Box 1473 Yucca Valley, CA 92286 ptrck_oneill@yahoo.com (760) 829-2295

From:	Kathy Monteleone (kathymonteleone1999@yahoo.com) Sent You a Personal Message <kwautomail@phone2action.com></kwautomail@phone2action.com>
Sent:	Wednesday, January 8, 2025 8:03 PM
То:	Board of Directors
Subject:	Please Vote NO on Delta Tunnel Funding
Categories:	1 Email Threads

*** This email originated from outside of Valley Water. Do not click links or open attachments unless you recognize the sender and know the content is safe. ***

Dear Valley Water Board of Directors,

NO on Delta Tunnel Funding!!!!

Dear Chair Estremera and the Board of Directors,

I am writing to urge Valley Water not to allocate any additional funds to the proposed Delta Conveyance Project and vote no on Agenda Item 3.5.

The Delta tunnel project is a proposal to construct a single underground tunnel to divert millions of acre-feet of freshwater that would otherwise flow naturally through the Bay-Delta, diverting up to 6,000 cubic feet per second (cfs) from the Sacramento River without preserving sufficient flows for salmon species and Delta smelt.

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I urge you to make a responsible and informed decision by rejecting this funding, and voting NO on Agenda Item 3.5.

Sincerely,

Sincerely,

Kathy Monteleone 24136 Corte Valente Murrieta, CA 92562 kathymonteleone1999@yahoo.com (951) 970-8913

From:	Clerk of the Board
Sent:	Wednesday, January 8, 2025 6:26 PM
То:	Board of Directors
Subject:	FW: Please Vote NO on Delta Tunnel Funding
Categories:	1 Email Threads

-----Original Message-----From: Ken Sanford (kenssailtime@gmail.com) Sent You a Personal Message <kwautomail@phone2action.com> Sent: Wednesday, January 8, 2025 6:20 PM To: Clerk of the Board <clerkoftheboard@valleywater.org> Subject: Please Vote NO on Delta Tunnel Funding

*** This email originated from outside of Valley Water. Do not click links or open attachments unless you recognize the sender and know the content is safe. ***

Dear Valley Water Board Clerk,

A concern of mine is the total cost of this project. Has MWD provided a solid estimate of the full cost of this project if it is ever started or worse yet-completed. Local water users are being asked to support the large growers and real estate industries that are looking to make great sums of money developing property that will add additional polution and traffic too and overburned So. California. Please vote not to provide more money to this bad project.

Dear Chair Estremera and the Board of Directors,

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I urge you to make a responsible and informed decision by rejecting this funding, and voting NO on Agenda Item 3.5.

Sincerely,

Sincerely,

Ken Sanford 2180 Amanda Ln Escondido, CA 92029 kenssailtime@gmail.com (760) 522-5930

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Ken Sanford (kenssailtime@gmail.com) Sent You a Personal Message <kwautomail@phone2action.com></kwautomail@phone2action.com>
Sent:	Wednesday, January 8, 2025 6:20 PM
То:	Board of Directors
Subject:	Please Vote NO on Delta Tunnel Funding
Categories:	1 Email Threads

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This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Masheika Allgood <founder@allai-us.com></founder@allai-us.com>
Sent:	Monday, January 13, 2025 10:07 AM
То:	Clerk of the Board
Subject:	Public Comment 1/14 Meeting
Attachments:	When will the taps run dry - SCV Water District.pdf

*** This email originated from outside of Valley Water. Do not click links or open attachments unless you recognize the sender and know the content is safe. ***

Hello,

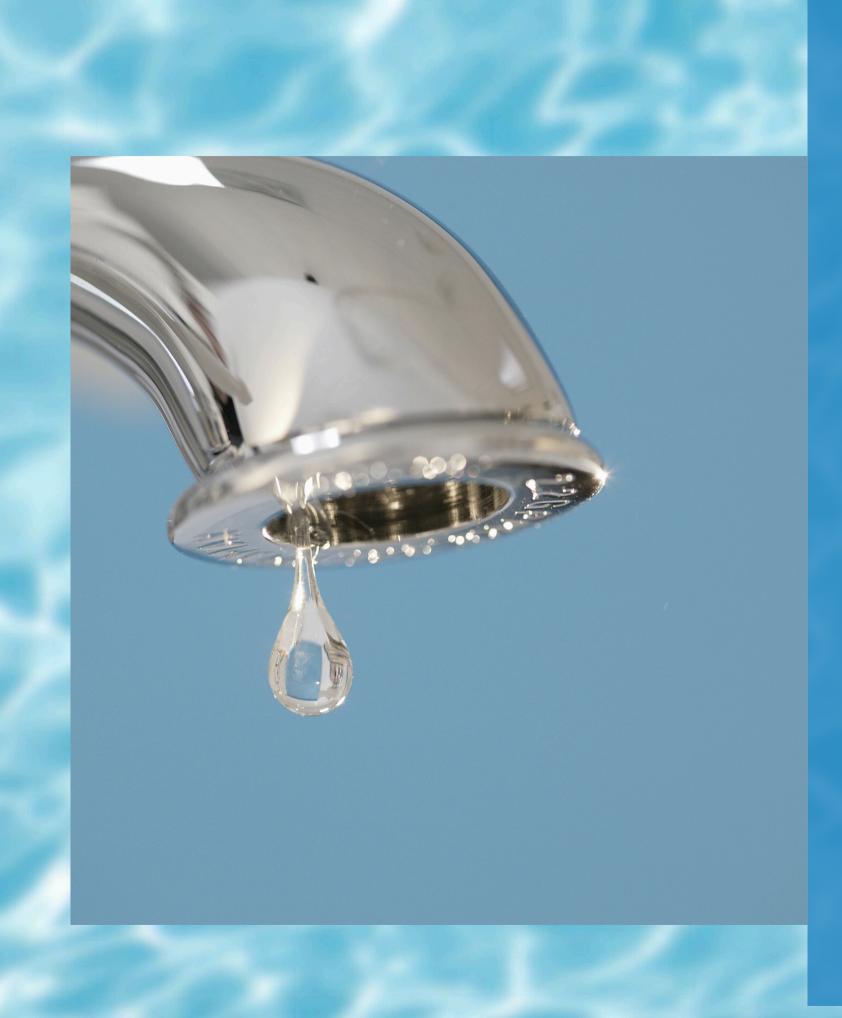
I'd like to file the attached pdf as a public comment to agenda item 3.3.

Masheika Allgood 718 Old San Francisco Road

Sunnyvale, CA 94086 (669) 291-6143 AllAl Consulting, LLC | <u>allai-us.com</u> Environmental Platform: <u>Taps run dry</u> <u>founder@allai-us.com</u>

×

*Handout 3.5-D Page 13 of 24





DRY?

WATER DISTRICT

Handout 3.3



WHEN WILL THE TAPS RUN

PUBLIC COMMENTS - VALLEY January 13, 2025

Handout 3.5-D Page 14 of 24



AGENDA



WHEN WILL THE TAPS RUN DRY?

- 07
- **O8** CALL TO ACTION

WHY WATER?

DATA CENTERS AND DRINKING WATER

O 3 ROLE OF GENERATIVE AI

O4 CURRENT CONSUMPTION RATES

05 INNOVATION LANDSCAPE

06 WHAT IS THE TIMEFRAME?

KEY DECISIONMAKERS

WHY WORRY ABOUT WATER?

Water scarcity is <u>increasing across the world</u>. The US is <u>no</u> <u>exception</u>. Virginia <u>is sinking</u>, along with most of the east coast, Arizona is requiring a <u>100 year water plan</u> for new construction, states are implementing <u>wastewater to tap</u> <u>water</u> systems, and state v. state water battles are becoming more fierce (<u>Alabama / Florida / Georgia</u>, <u>Mississippi / Tennessee</u>, the West Coast: <u>Colorado River</u>, <u>Ogallala Aquifer</u>).

It is against this backdrop of a <u>drying planet</u> that we consider the question of <u>Day Zero</u> water scarcity in America.

WHEN WILL THE TAPS RUN DRY?









WHY DO DATA CENTERS USE DRINKING WATER?

Every generation of AI chip consumes more electricity and <u>generates more heat</u> than the previous generation. The chips must be kept cool <u>to meet vendor performance expectations</u>. The quality of the water used in these cooling methods <u>can directly</u> <u>impact the lifespan of data center equipment</u>, as poor quality water can increase corrosion, scaling, and microbiological growth. W hich is why data center operators <u>prefer to use drinking water</u> for cooling.

WH



IEN WILL THE TAPS RUN DRY?





WHAT ROLE DOES GENERATIVE AI PLAY?

While governmental bodies typically look to water **withdrawal** for permitting, data centers are prolific **consumers** of water. **Energy of genAl v. regular Al**. The intense heat generated by generative Al systems has <u>significantly increased</u> the amount of water required for, and evaporated during <u>cooling processes</u>, which is <u>supercharging data</u> <u>center water consumption</u>. The evaporated water is not returned to the water source, and is removed from the <u>water reuse</u> cycle.

DATA CENTER WATER CONSUMPTION

Corporate-owned hyperscale data centers which currently account for <u>41% of worldwide data center capacity</u>, <u>with a</u> <u>projected increase to 60% in 2029</u>. Half of those hyperscale data centers are <u>located in the US</u>. Colocation Providers (like Equinix) currently account for <u>22% of worldwide data center capacity</u>. According to top companies' 2024 corporate reports, even the most efficient data center operators consume around 60% of the water they withdraw.

COMPANY	WUE	WITHDRAWAL	CONSUMPTION	%LOSS
<u>Microsoft</u>	<u>.01 - 1.63</u>	12,951 megaliters	7,844 megaliters	60%
<u>Google</u>	not reported	32,756 megaliters (converted)	24,044 megaliters (converted)	73%
<u>A W S</u>	.18	not reported	not reported	
<u>Meta</u>	.18	5,274 megaliters	3,078 megaliters	58%
<u>Equinix</u>	1.63	5,970 megaliters	3,580 megaliters	60% *Handout Page 19

CAN'T WE JUST INNOVATE There are a variety of innovations that are targeted at addressing data center energy and water needs. They face major challenges.

Carbon v. water tradeoff

There is a lot of investment in traditional and small modular reactors to address carbon emissions, but nuclear power is water-intensive.

Backwards compatibility

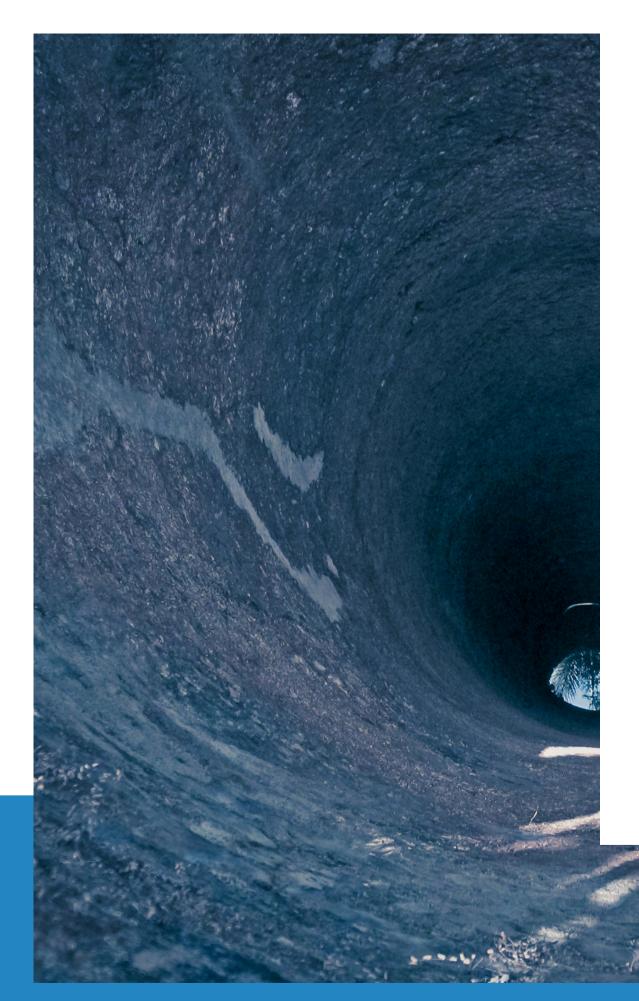
While new AI data center construction will use low or no-water cooling processes, retrofitting data centers to use liquid cooling is complex and will be gradual and staggered, based on business needs.

Experimental/unproven at scale

Immersion and two-phase liquid cooling processes raise PFAS concerns. Underwater cooling raises environmental concerns. Virginia is expanding its recycled water systems efforts after successful trial. Water replenishment, while promising, has had limited impact (<u>16% of consumption</u>).

APPEND 000





HOW MUCH TIME DO WE HAVE?

We know that innovations for sustainable data center power will take tie to deploy at scale and companies are ramping up use of the <u>most</u> <u>unsustainable energy sources</u> to meet current needs. But do we know the state of our water? Do we have enough water in the aquifers to sustain communities until the low/no water data center innovations ramp up?

<u>No one knows</u>. At least, no one who can speak about it without <u>violating</u> <u>an NDA</u>. While California provides significant <u>local groundwater data</u>, and we have access to <u>water use calculations</u>, it is difficult to make aquifer level assessments without specific facility/aquifer data.



HOW CAN YOU HELP?

While the issues raised in this document are deeply concerning, they are not insurmountable. Santa Clara Valley Water District is well positioned to meet these challenges. We propose the following actions as a start:



Consumptive Over-Threshold Withdrawal Enforcement

Water Waste Enforcement is largely education focused. Fines are only enforced during mandatory use reduction periods. Given the potential for extreme over threshold withdrawal by data centers for consumption, not use, consideration should be given to possible new enforcement triggers and methods.



Transparency

The District has made great strides in making groundwater data accessible through the public through <u>California Water Watch</u>. There is an opportunity for expert leadership within the local permitting and zoning processes. Assisting municipal leadership in btter understanding the implications of construction decisions.



Special Meeting

The significant pressure data center put on our groundwater systems, coupled with our drying environment warrant deeper study. We ask that the District convene a special meeting with experts to ensure that Santa Clara remains at the forefront of water management in these perilous times.

CONTACT US

If you would like to provide information, participate in the conversation, or join our team of partners, please contact us via one of the options listed below.



3

Masheika Allgood Founder, AllAI Consulting, LLC founder@allai-us.com tapsrundry.com



Ellina Yen

Founder, CEO only in San Jose onlyinsj@gmail.com



HEN WILL THE TAPS RUN DRY? Handout 3.5-D Page 23 of 24









January 13, 2025

andout 3.5-D Page 24 of 24