### Public Attitudes Toward Potable Use of Recycled Water

Key Findings from Survey and Focus Group Research

March 3, 2016



Fairbank, Maslin, Maullin, Metz & Associates FM3

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### **Telephone Survey Methodology**

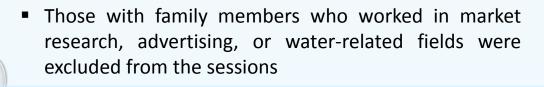
- Telephone survey of 1,200 randomly-selected voters:
  - 600 in the City of San Diego
  - 600 in the Santa Clara Valley Water District
- Interviews were conducted via landline and cell phones
- Survey conducted June 4-11, 2014
- Interviews in English and Spanish
- The margin of sampling error is +/-2.8% at the 95% confidence level
  - Margins of error for population subgroups will be higher
  - Some percentages do not sum to 100% due to rounding
- Selected comparisons to statewide June 2014 survey conducted for the California Water Foundation

### **Focus Group Methodology**

 FM3 held a total of four focus groups with different groups of residents of the San Diego County Water Authority service area, as detailed below:

Date	Profile
May 18	Latinos
May 18	Republicans
May 19	Seniors
May 19	Chaldean-Americans

- Aside from these criteria, respondents were recruited to reflect the demographic diversity of their community
- Participants who initially supported recycling water for household use were screened out of participation
- Limits were placed on the number of participants "very familiar" with recycled water







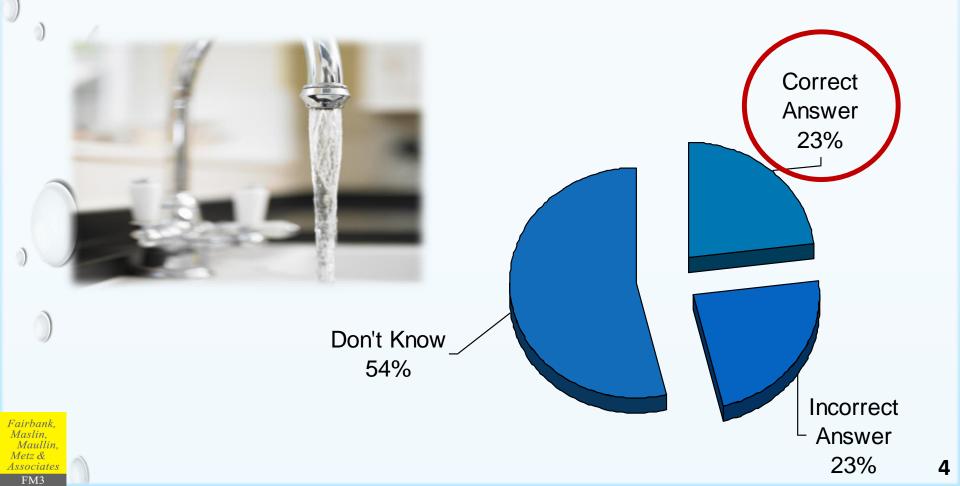
### **Issue Context**

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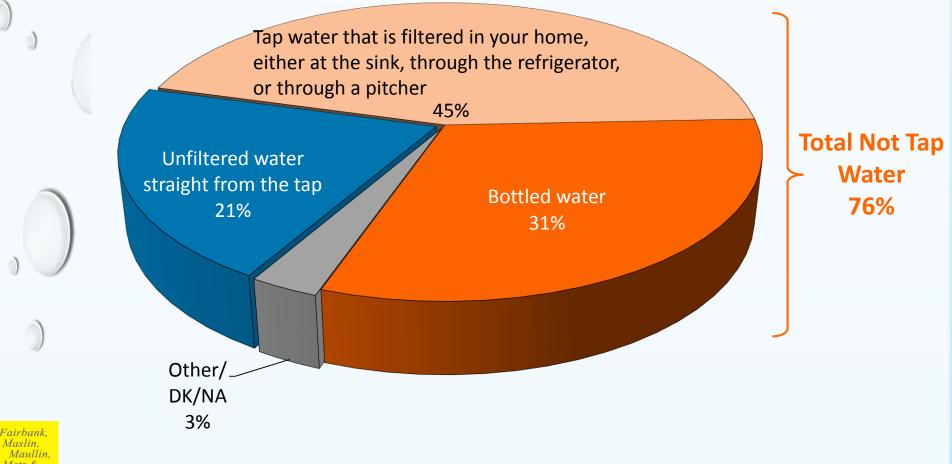
## Nationally, only one-quarter of voters know where their water comes from.

(March 2011 FM3 / POS National Survey of 961 Voters; Responses Among Those Not on Wells)



## Most voters do not drink water straight from the tap.

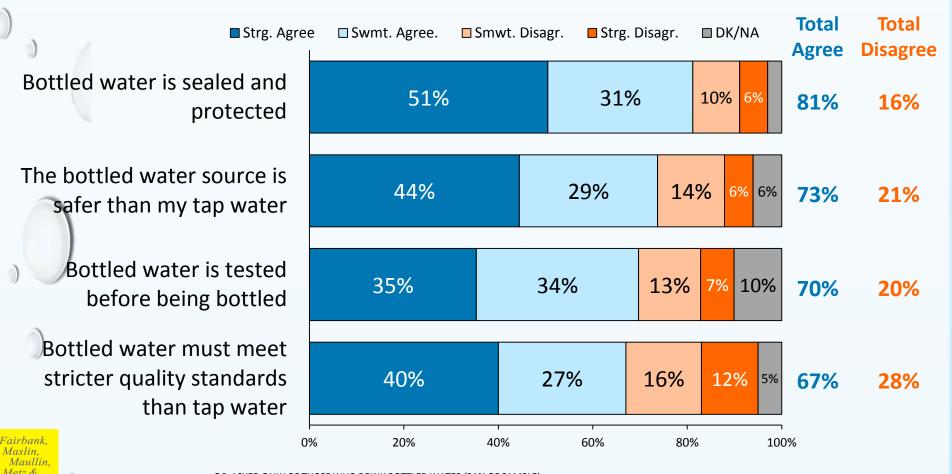
Thinking about the water that you drink at home, do you most often drink?



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## Bottled water drinkers have a number of misperceptions of its quality.

I am going to read you a list of reasons why people think bottled water is safer than their tap water. Please tell me whether you agree or disagree with the following statements.



# Voters are more concerned about the drought than about government waste, health care costs, or education.

Ext	. Ser. Prob. 🛛	Very Ser. Prob.	Smwt. Ser. F	Prob. 🗖 Not	Too Ser. Prol		Prob.	
^Current drought condit Cal	ions in ifornia	56%			30%	11%	86%	
The impact of the drou California's enviro	<u> </u>	51%		3	4%	11%	85%	
The impact of the drou agrie	ght on culture	48% 3		33%	6	12% 7%	81%	
Government waste and ineff	iciency	37%		32%	22%	10%	<mark>69%</mark>	
The cost of heal	th care	35%	3	31%	20%	14%	<mark>66%</mark>	
The quality of public edu	ication	34%	3	1%	20%	15%	65%	
airbank,	0%	20%	40%	60%	80%	1009	%	

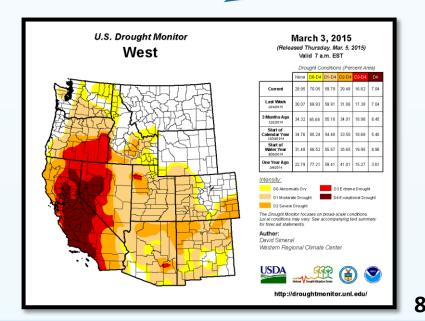
DATA FROM JULY 2015 FM3 STATEWIDE VOTER SURVEY

Ext./Verv Ser.

#### At the same time, few focus group participants were able to cite major ways that the drought had impacted them.

- Participants expressed an intellectual understanding of the importance of conservation, and had clearly received messages about reducing their water use.
- Yet at the same time, few seemed to have undertaken major changes in their behavior, or undergone notable hardships due to the drought.
- A handful did note that the drought might constitute a "new normal" which would require significant alterations in the way that the state manages its water supplies.

**REPUBLICAN MALE:** The water bill has gone up a little bit, but other than that it hasn't really hit me. I think that's the point where real change or a real responsibility for saving our water or being a little more thrifty about water will come. If I lived somewhere out on the Grapevine or somewhere where agriculture was important to me and important to my community, then I'd have a different view because I could probably see it on a day-to-day basis.



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## When pressed for solutions, desalination came up more often than recycling water.

**SENIOR MALE:** They so easily do away with desalination, and the reason I say that is because being that I was in the Navy for 10 years; three trips to Vietnam. I was on an old, old ship...and our duties were we took fresh water to the Vietnamese and all the ships that came tied up alongside of us, we made the fresh water. And it was never a problem.

#### SENIOR FEMALE: Actually

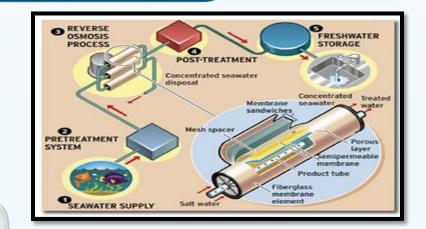
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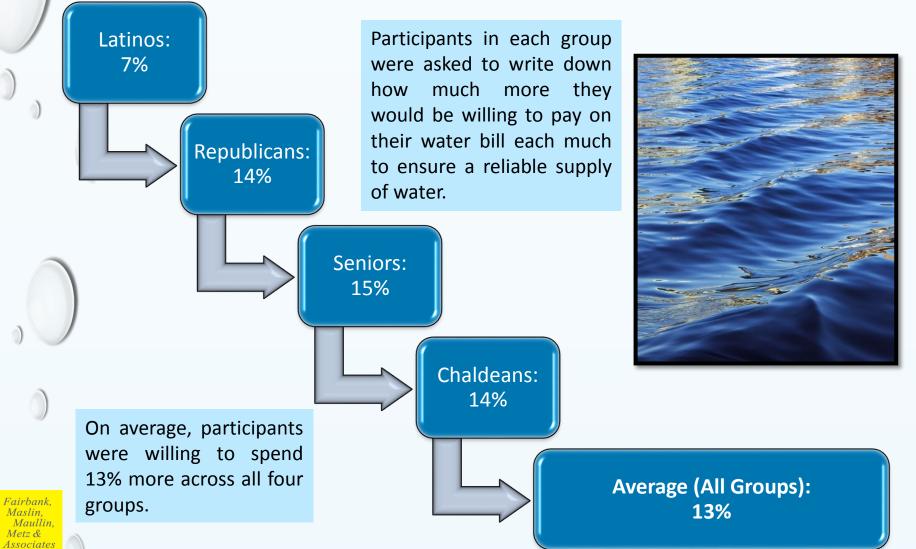
desalination is one of the things that I have probably been more in favor of than others. My concern...is that if you take the salt out of the water so that we can use the water, does the concentrated salt in the ocean then start affecting the fish and all of those things in the ocean?





- When asked about potential solutions for the drought, many pointed to growth and said that there must be stricter controls on new building in the face of limited water supplies.
- Desalination came up repeatedly, with many arguing that if brought to scale it could represent a complete solution to the problem.
- Only a handful volunteered recycled water as a potential strategy for addressing the drought.

#### Initially, participants were willing to pay about 13% more on each water bill to secure a reliable supply.



10

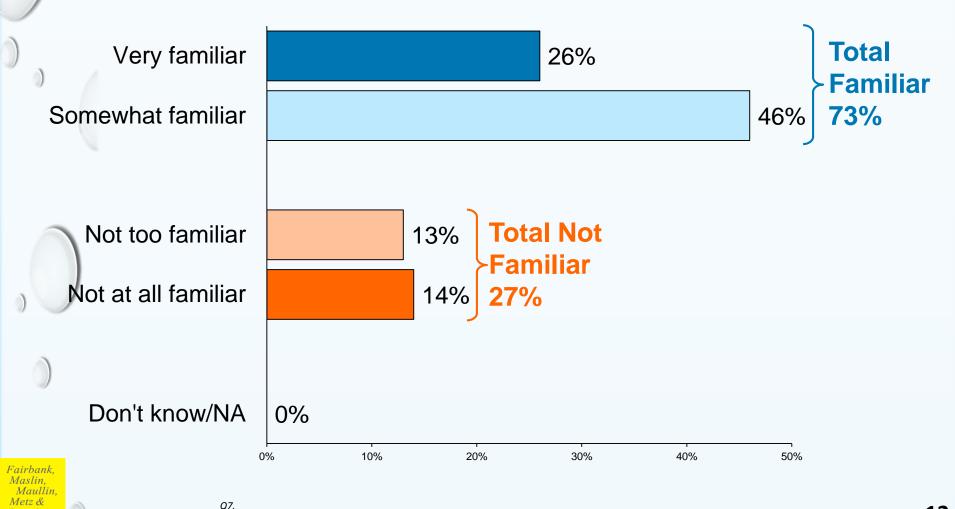


### Attitudes Toward Recycled Water •

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#### Most voters are at least somewhat familiar with recycled water.

Are you familiar with the concept of recycled water?



### Mind-Mapping "Recycled Water"

initial "mind-An mapping" activity asked participants to write down any associations they had with "Recycled Water." Some of the most language common they used is shown to the right, with the font reflecting the frequency with which it was used.

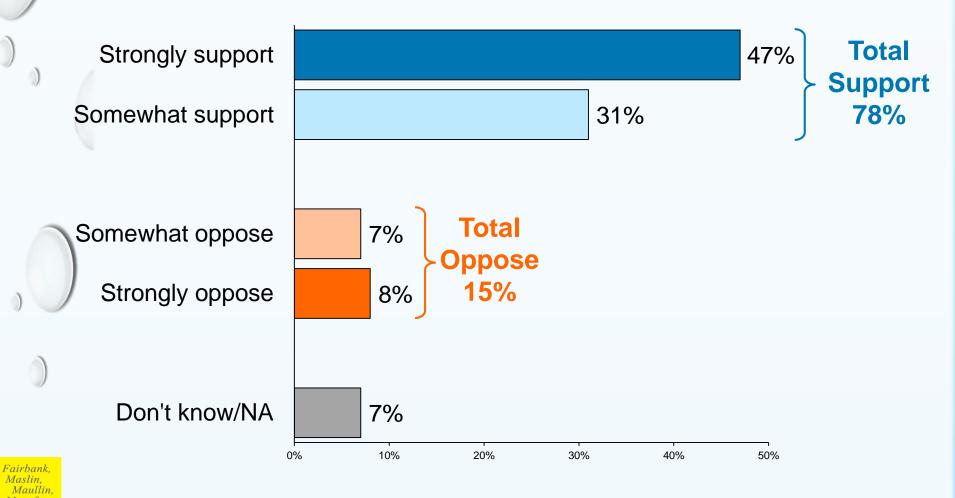
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#### Among those familiar with recycled water, most support its use.

Do you support or oppose recycling water for local reuse on a community-wide scale?



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#### Focus group participants were aware of recycled water being used for non-potable purposes, and generally did not object.

- Most participants had seen recycled water in use in various locations – many were familiar with "purple pipe" or signs designating recycled water as "not for drinking."
- Many saw this as not only appropriate, but as the only real appropriate source of water for such uses.
- Conscious of the state's water shortage, many did not want to see fresh water used for purposes where recycled water would suffice.

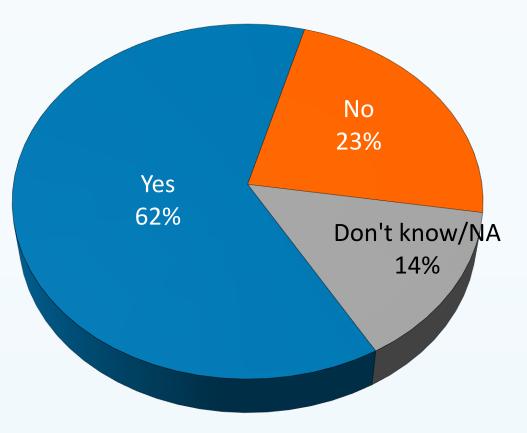
**SENIOR FEMALE:** You go places like the wild animal park and the zoo and they say that the majority of the water they use is recycled water. I think that especially corporations and big businesses should be required to have some sort of system so that they use recycled water. But not that we're going to drink it.



**REPUBLICAN MALE:** Every time you see where it says recycled water, it says, "Do not drink." I agree with watering the freeways and all the commercial landscape. If we're using fresh water now we've got to cut that off. Catalina has been having salt water in their toilets for 50 years.

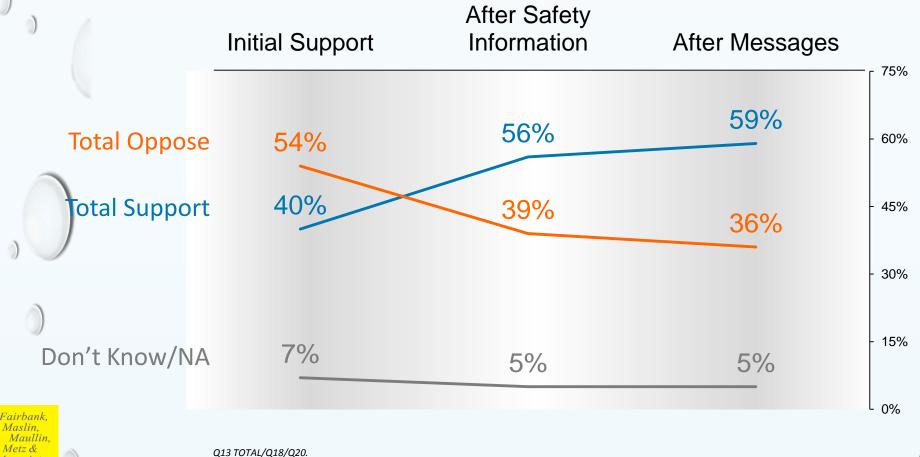
#### Voters are confident that it is *possible* to treat recycled water to drinking water quality standards.

Do you believe that it is possible to further treat recycled water used for irrigation to make the water pure and safe for drinking?



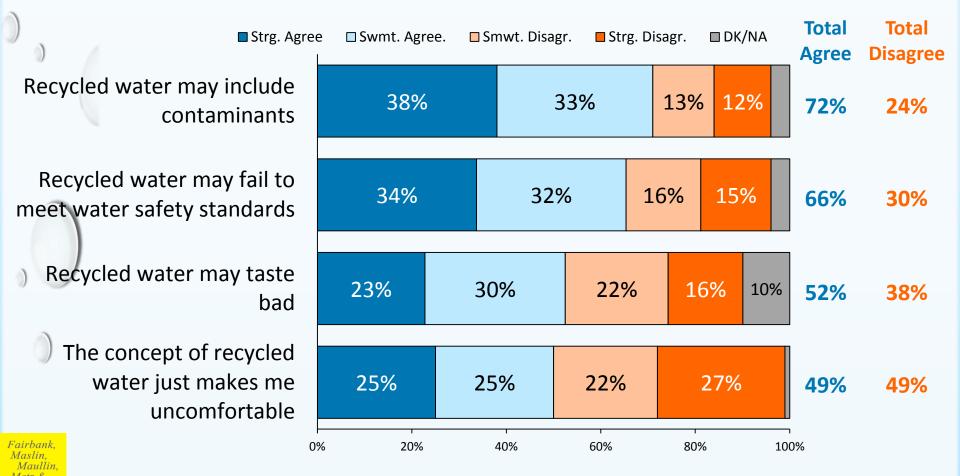
Though they are initially opposed, voters quickly become more comfortable with direct potable reuse after information about safety.

Do you support or oppose direct reuse of recycled water in your community for all household purposes, including drinking?



## In the survey data, safety concerns drive reservations about direct potable reuse.

I am going to read you a list of concerns some members of the public have expressed about direct reuse of recycled water for drinking. Please tell me whether you personally agree or disagree with that concern.



#### A Sampling of Initial Comments About Potable Reuse

**REPUBLICAN MALE:** Mine is a question of trust. I'm not willing to take a chance of spreading disease by some type of accident or malfeasance. These have already happened. I'm not trying to change anybody's minds here, but in the Eastlake Industrial Park, somehow multiple purple pipes were switched with regular pipes and it spread through and people drank it and a lot of people got sick. So you can tell me all you want about how safe we are and my answer to you is "San Onofre." Best atomic engineers on the planet and how long did those new things last?...What I'm getting at is I do not trust government or private industry for that matter, to continually maintain what they originally say: "This water is going to be safe."

**CHALDEAN MALE:** I think if it's treated and purified back to the high standards, I would [support it]. I think you just have to get past the part of where it came from originally. If you didn't know it came from the sewer line or it came from the toilet, you would drink it no problem, especially if it's purified that well. And for any use, I think it's fine.

SENIOR MALE: A mistake or lapse in the process could be disastrous, possibly contaminating a source like a reservoir for a very long time. The end result would be several steps backward. If it is 100% successful, it would be a great advantage. **CHALDEAN MALE:** I just wouldn't know the health risk in the future or the present. I'm kind of picky about my drinking water, like I only drink spring water. I don't even drink the purified, like Dasani....So with it being recycled, I would never touch it.

**SENIOR FEMALE:** One, it just disgusts me, just on a gut level. Two, I already mentioned the overuse of bottled water and I think that would increase and I don't want to see that happen. And I really question whether we've looked at all of the alternatives. It's like this is the only place we're looking and maybe there's another alternative that would be better, but we just haven't looked there yet.

LATINA FEMALE: My head just can't conceptualize something being complete wastewater, and then the chemicals that would be involved. At that point, okay -- your water tastes fine, your water tastes clean, but look at all the stuff that's in it to get it to this point. So it almost feels like you're harming yourself, no matter what.

*Metz &* Associate. FM3

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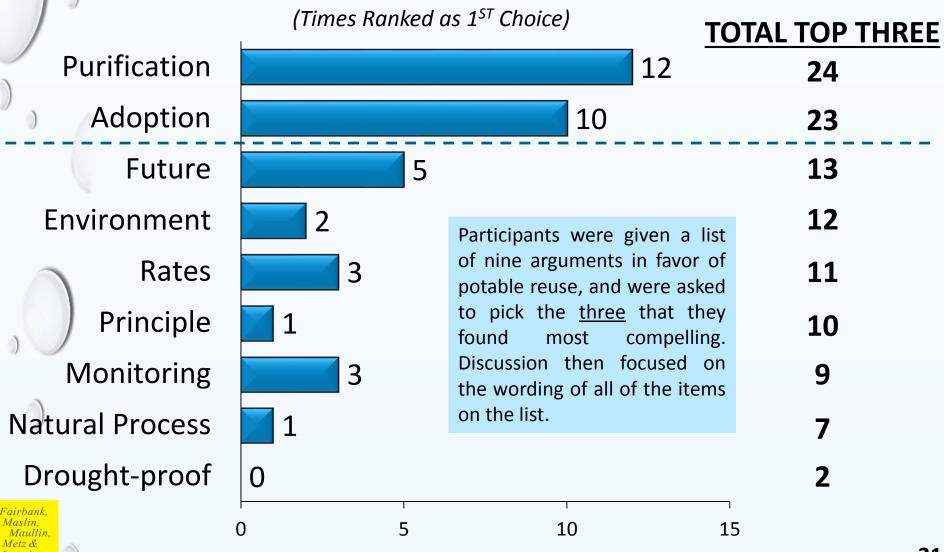


### Messaging

20

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## Participants drew clear distinctions between the messages tested.



#### The strongest argument focused on safety.



(PURIFICATION) Thanks to advances in modern technology, it no longer matters where water comes from. The water purification process uses state-of-the-art multi-stage technology, including microfiltration, reverse osmosis and ultraviolet light. This process cleans water to a very high standard, and ensures that drinking water produced is safe and free of harmful chemicals and toxins. The purification process produces water that is purer than bottled water.

LATINO MALE: I like the whole filtration system. It also said there's no chemicals and toxins, "is safe and free of harmful chemicals and toxins," so that was a plus. And then the same thing, "produces water that is purer than bottled water." The more you tell me about all this filtration – like the one that says it's going through this process and this process and this process, and they say it's chemical-free. That's a plus for me.

- The assertion that the process produces water purer than bottled was critical.
- References to the three-stage treatment process also stood out.
- Directly addressing lingering concerns about chemicals was also significant for many participants.

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## Messaging about use of recycled water in other communities stood out.

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**(ADOPTION)** Several California communities already use advanced purification processes to produce potable reuse water suitable for drinking and household use – including Orange County since 2008. They have been taking advantage of the more reliable and diverse water supply that recycled water provides, and there have been no health problems whatsoever from this use of potable reuse water.

**LATINA FEMALE:** There hasn't been any health problems, which is a great plus. No one has gotten sick.

**SENIOR MALE:** I have grandchildren, eight-year-old twins that live in Orange County and they've been drinking this water their whole life. No problems at all. We went through a lot to get them here and they're great. They live in Costa Mesa.

- Many participants were impressed by the fact that other communities already had potable reuse in place; it implicitly answered some of their concerns about the practicality and safety of the idea.
- The fact that Orange County a nearby community – had experience with potable reuse was also critical.

23

### A generational message also held appeal.

(FUTURE) We need to consider all options to ensure a reliable and locally-controlled supply of water for ourselves and future generations. In order to make sure our children and grandchildren have a reliable supply of water, we need to make investments today to make sure it is there.

- A generational message was appealing, because participants were cognizant that the state and region's water needs were not likely to diminish over time.
- Some participants seemed to have greater confidence that challenges around potable reuse could be worked out successfully over a longer time horizon.

**CHALDEAN FEMALE:** Just the fact that in order to make sure our children and grandchildren have a reliable supply. I underlined "to make investments today," to make sure it's there. Even though I'm still not convinced.

## An environmental message was attractive, but at a more intellectual level.

**(ENVIRONMENT)** Using potable reuse water is good for our environment. The more potable reuse water we use, the less we have to take out of rivers and streams, and our scarce groundwater supplies. That's good for rivers, streams, and the fish, plants and wildlife that rely on them.

LATINO MALE: I liked the fact that we're not taking it out of the rivers and streams and not taking from our wildlife and all that. Because there's a lot of endangered species nowadays.

**REPUBLICAN MALE:** It was the idea that it's not just good for one use, but that it's environmentally responsible in a number of ways. It's going to be an enhancement to the community, not just our drinking water but to other parts of the natural resources.

- Participants valued the idea of protecting the environment, and recognized that some aspects of the environment are threatened or at risk.
- At the same time, the environmental message seemed to lack emotional urgency with these participants.

## Participants wanted to believe rates would fall, but were skeptical.

**(RATES)** With the economy just coming out of a recession and many families having a hard time making ends meet, we need to make the most of our existing water resources. Over time, importing water from other parts of the state will get more and more expensive. Making better use of existing <u>local</u> water supplies through potable reuse may keep rates lower than they would be if we continue to rely so heavily on imported water.

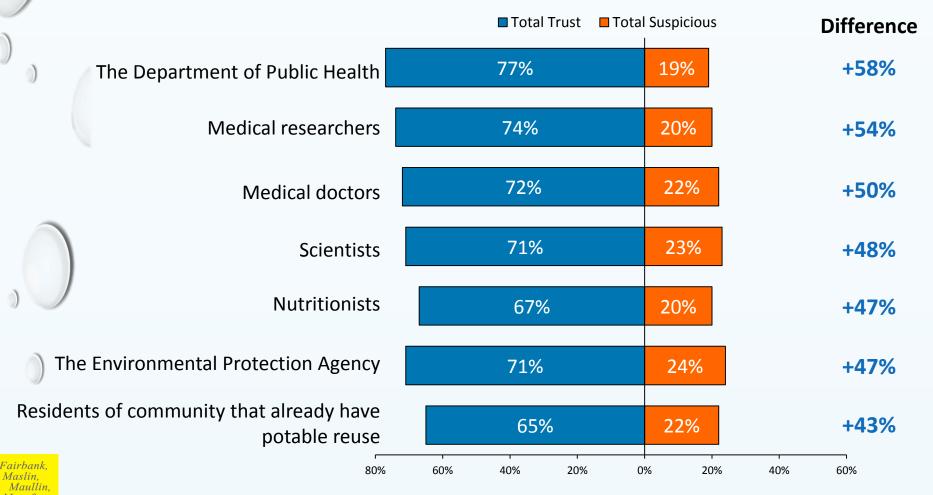
- While not currently very concerned about rates, participants realized they would likely rise.
- Avoiding that was a high priority for many.
- However, some were skeptical that potable reuse would really result in much rate difference.

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SENIOR FEMALE: It's also very speculative. I'm not sure that it's going to be cheaper than importing it because we're talking about a facility that's going to have a treat all this and the maintenance of the facility. It could actually end up costing more. LATINO MALE: The number one thing, to avoid further rate increases. That hits all of us and hits us in the pocketbook, so it's going to hurt. And if the rains don't come it's going to keep on going up and up and up. With the economy kind of recovering a little bit but not so much, we're still \$4 gas and all that, it's hard to get where we're supposed to be. So I think we need to do something now to avoid further increases.

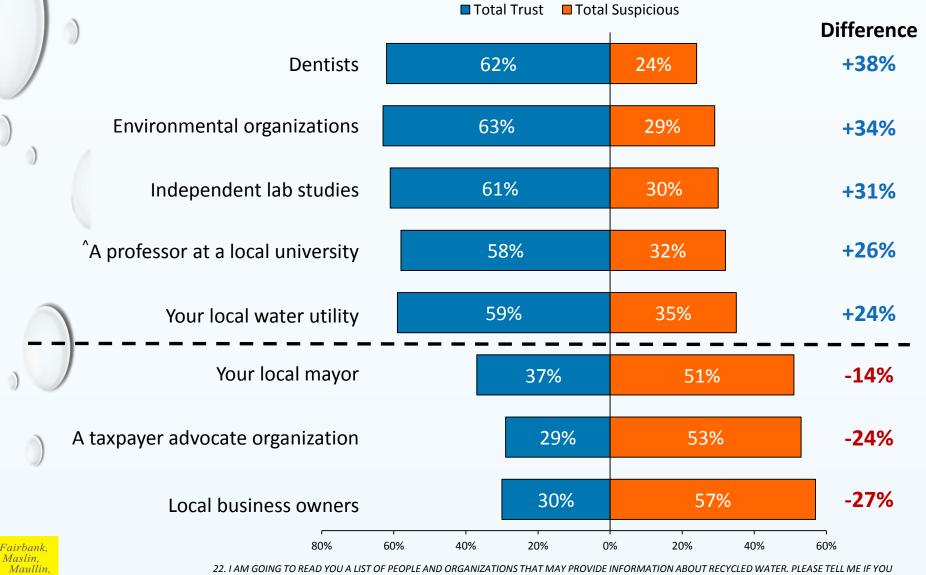
## Top messengers are generally those with scientific expertise.

I am going to read you a list of people and organizations that may provide information about recycled water. Please tell me if you would generally trust that person's or organization's opinion on this issue, or if you would be suspicious of it.



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## Those with a political or economic perspective are less credible.



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WOULD GENERALLY TRUST THAT PERSON'S OR ORGANIZATION'S OPINION ON THIS ISSUE, OR IF YOU WOULD BE SUSPICIOUS OF IT. ANOT PART OF SPLIT SAMPLE



### Communications Recommendations

29

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### **Communications Recommendations**

- **DO** understand that voters who are uncomfortable with potable reuse may not be highly concerned about the drought.
- **DO NOT** assume that the public will be willing to pay a lot more for recycled water; in fact, they may expect rate reductions.
- **DO** leverage substantial public acceptance of non-potable reuse; the public believes it has been implemented effectively.
- DO consider use of the term "purified water...."
- But **DO NOT** use language that incorporates "wastewater."
- **DO NOT** talk about potable reuse providing ten percent of our water supply; it strikes many as too low.
- **DO** emphasize the three-stage process for making wastewater safe to drink, both in words and visuals.
- DO highlight successful potable reuse in other communities, most prominently Orange County.

#### **Communications Recommendations (Cont.)**

- **DO** emphasize provisions in place to monitor water quality continually.
- **DO** underscore the need to act now in order to ensure an adequate supply of water for future generations.
- DO use comparisons to bottled water many think it has a high standard of purity.
- **DO NOT** rely on messaging about the broad principle of recycling.
- DO position water agencies as key messengers on this issue voters trust them.
- **DO** err on the side of presenting the public with more information rather than less: detailed, well-sourced, credible information is capable of moving the public, even given strong initial opposition.

### For more information, contact:

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