Public Attitudes Toward Potable Use of Recycled Water

Key Findings from Survey and Focus Group Research

July 1, 2015

Data instincts
Public Outreach Consultants

Fairbank, Maslin, Maullin, Metz & Associates
FM3

330-211

2014 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

2015 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	Location	Profile
May 18	Flagship Research	Latinos
May 18	Flagship Research	Republicans
May 19	Taylor Research	Seniors
May 19	Taylor Research	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
- Those with family members who worked in market research, advertising, or water-related fields were excluded from the sessions

CAUTION

- Focus groups do not measure directly the frequency by which opinions and attitudes may exist within a particular universe of people.
- In addition, these sessions were specifically designed to include only *opponents* of potable reuse.
- Accordingly, the results of these focus groups may be considered suggestive of the attitudes of San Diego County residents, but cannot be considered to represent their views with any kind of statistical precision.
- However, they do provide great insights into language, core values and the “why” behind overall views.

Issue Context

Participants were generally pleased with the direction of the region, but concerned about the economy and the impacts of growth.

LATINO MALE: Everywhere you see downtown they're renovating and it's just getting bigger. The pace just speeded up. L.A. was different, fast-paced, and San Diego was moderate to slow. But it's catching up. We're not there, but it's growing fast.

REPUBLICAN MALE: In some areas there is growth, but there's a lot of moving pieces and there's a lot of things yet to be determined. I think a lot of the growth is speculative and a lot of it is just kind of hectic. There's a lot of moving pieces and a lot of neighborhoods going in different directions. Just a lot of different things happening at once.

- In initial discussion about overall issues facing the region, there was a broad consensus that growth and development is moving rapidly again, which sparked some resentment from participants.
- For many participants, the clearest manifestation of the impact of growth was increased traffic congestion as well as a rising cost of living – affordability concerns appeared particularly acute in the Latino group.
- Participants were generally dismayed about a lack of preparation and planning for growth, and its impacts on water and infrastructure.
- A number of other issues were frequently mentioned, including schools and immigration.

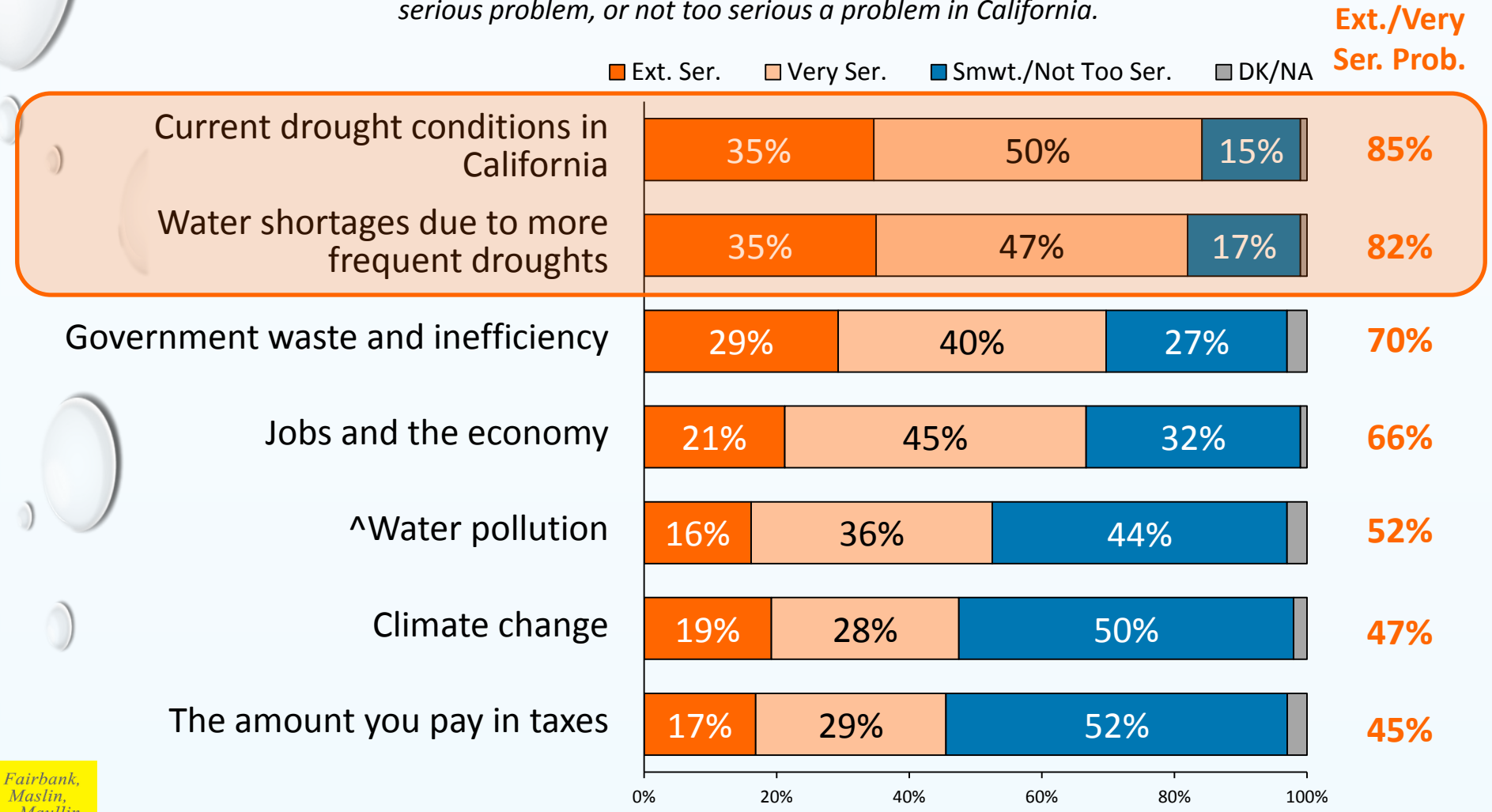
Participants had little awareness of where their water came from.

- Participants were asked whether they could identify where their water came from; most freely admitted that they could not and had never given it much thought.
- Others understood pieces of the puzzle, and mentioned the Colorado River, northern California, and other sources of imported water.
- Few seemed to have much latent concern about the region's reliance on imported water.
- Seniors seemed to have somewhat greater understanding of the region's water sources.

CHALDEAN MALE: The only thing I think about is when I took a field trip to the water district. That's all I think about. I just think of big pools and piping everywhere.

The drought and water shortages remain major concerns for voters across the state.

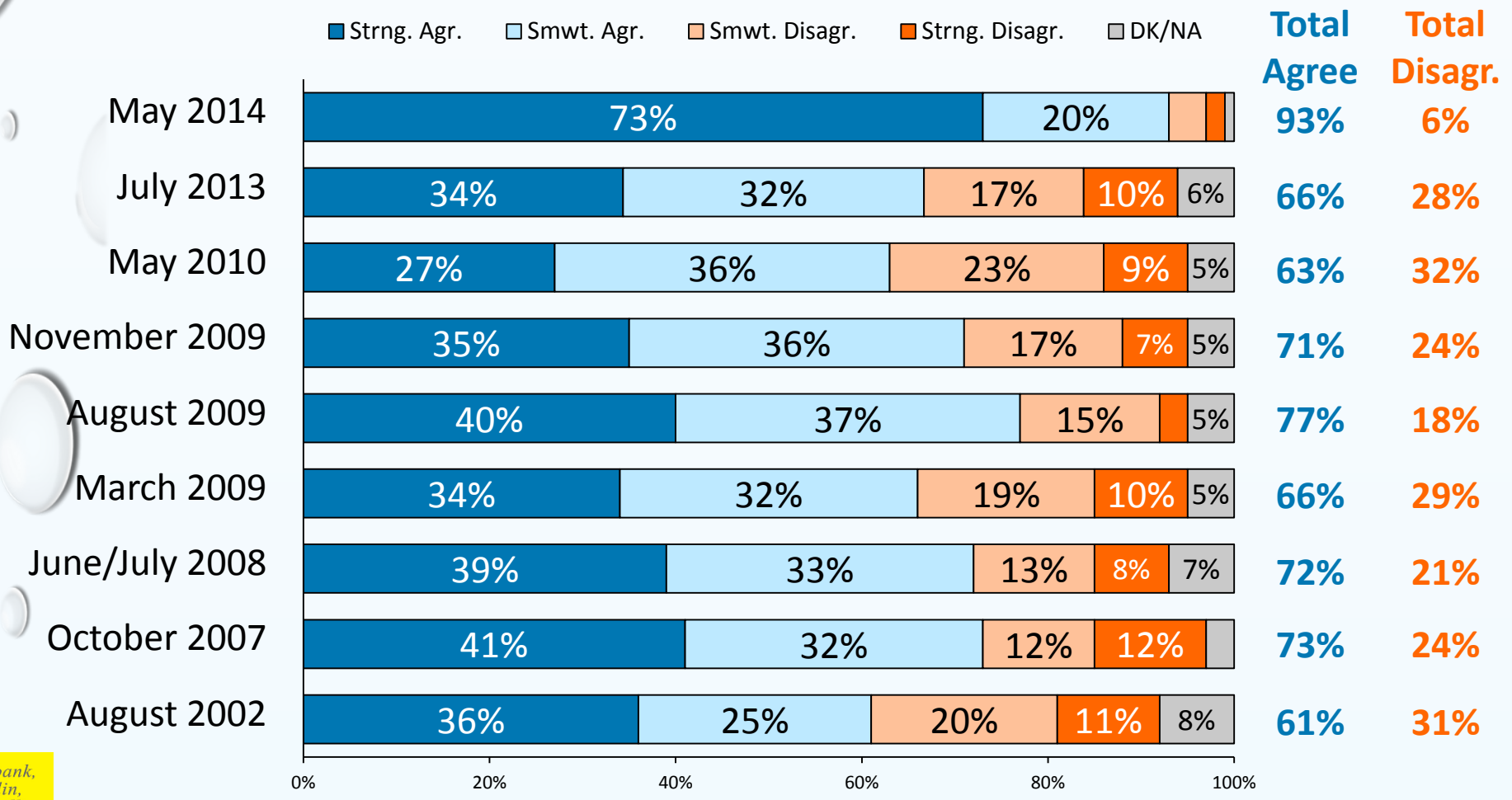
I'd like to read you some problems facing California that people have mentioned. Please tell me whether you think it is an extremely serious problem, a very serious problem, a somewhat serious problem, or not too serious a problem in California.



DATA FROM JUNE 2014 FM3 STATEWIDE SURVEY

The consensus that California is in a severe drought is greater than at any time in the past decade.

"California is currently in the middle of a severe drought."



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However, the drought was <u>not</u> a visceral concern for most focus group participants.

- Strikingly, most participants did not appear to attach much urgency to current drought conditions – despite ample polling data illustrating great concern in the broader population.
- Most seemed to think that California moved in and out of cycles of drought, and that the current experience is part of that pattern.
- A handful did see a more severe problem – raising the specter, for example of a new Dust Bowl.

LATINO MALE: It's more well-known. Previous droughts – I can't remember one that has been so advertised in the media. Everywhere you go it's "conserve water." Even if you go to a public place, they won't serve you water unless you ask. It's big enough to advertise to get in everybody's head. So you open the faucet and you think about it.

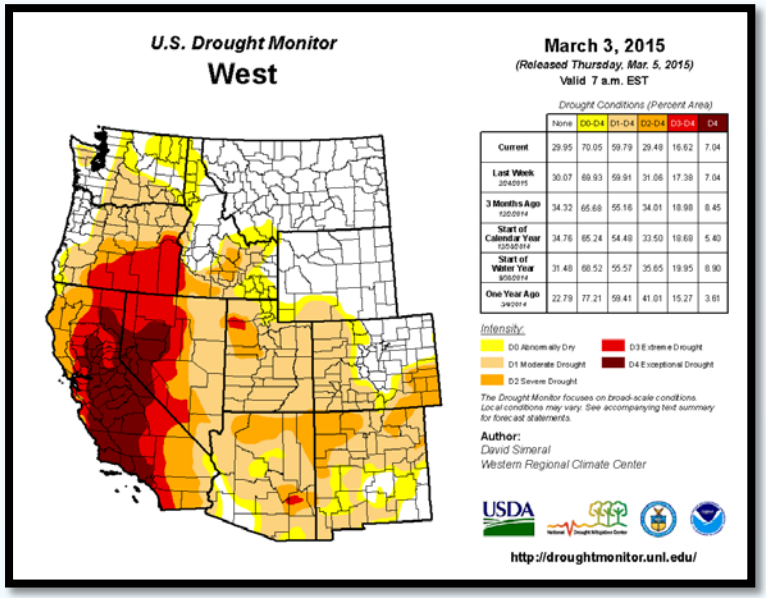
CHALDEAN MALE: I think it's waves. Some people don't seem to be concerned. Like the place I live, it's raining one day and the next day they're fixing the fountain or running their sprinklers still while it's raining. So it's in waves, but people -- it doesn't seem to bother them.

REPUBLICAN FEMALE: We still have beautiful golf courses, don't we? They have beautiful green grass.

Few 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.

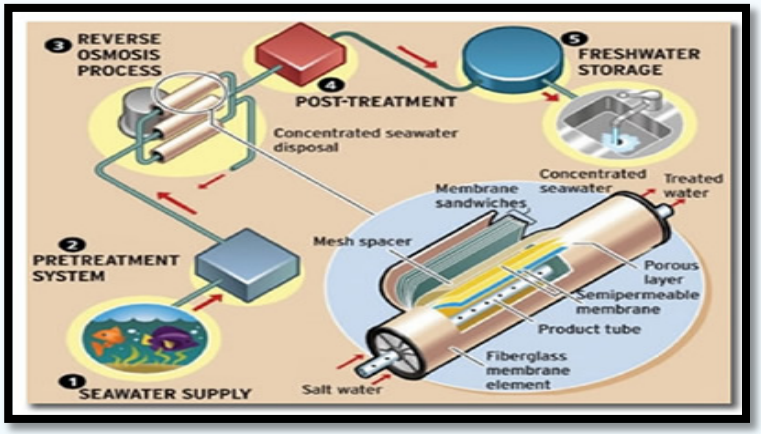
REPUBLICAN MALE: The water bill has gone up a little bit, but other than that it hasn't really hit me. I think that's the point where real change or a real responsibility for saving our water or being a little more thrifty about water will come. If I lived somewhere out on the Grapevine or somewhere 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.



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.

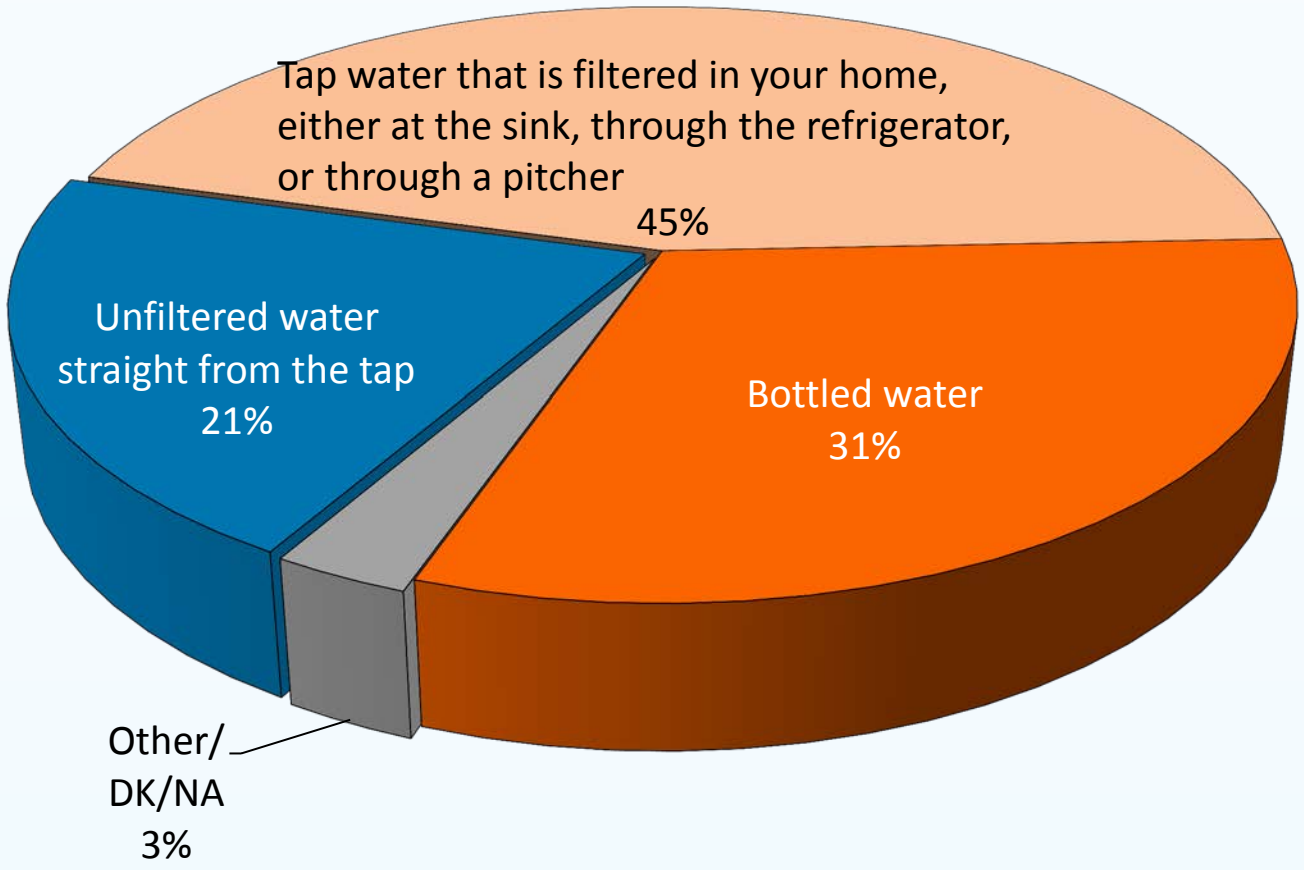
SENIOR FEMALE: Actually desalination is one of the things that I have probably been more in favor of than others. My concern…is that if you take the salt out of the water so that we can use the water, does the concentrated salt in the ocean then start affecting the fish and all of those things in the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

Most voters do not drink water straight from the tap.

Thinking about the water that you drink at home, do you <u>most</u> often drink?



Q4.

In the focus groups, concerns revolved around taste and potential contaminants.

CHALDEAN MALE: It doesn't taste good and I just don't think it's healthy for you. My parents growing up always told me the water is bad here, so I've learned that the water is bad here. Then you start paying attention and you're like "It does kind of taste weird." Even when I shower I'm like "Okay, my hair is going to fall out." So I grew up thinking that way.

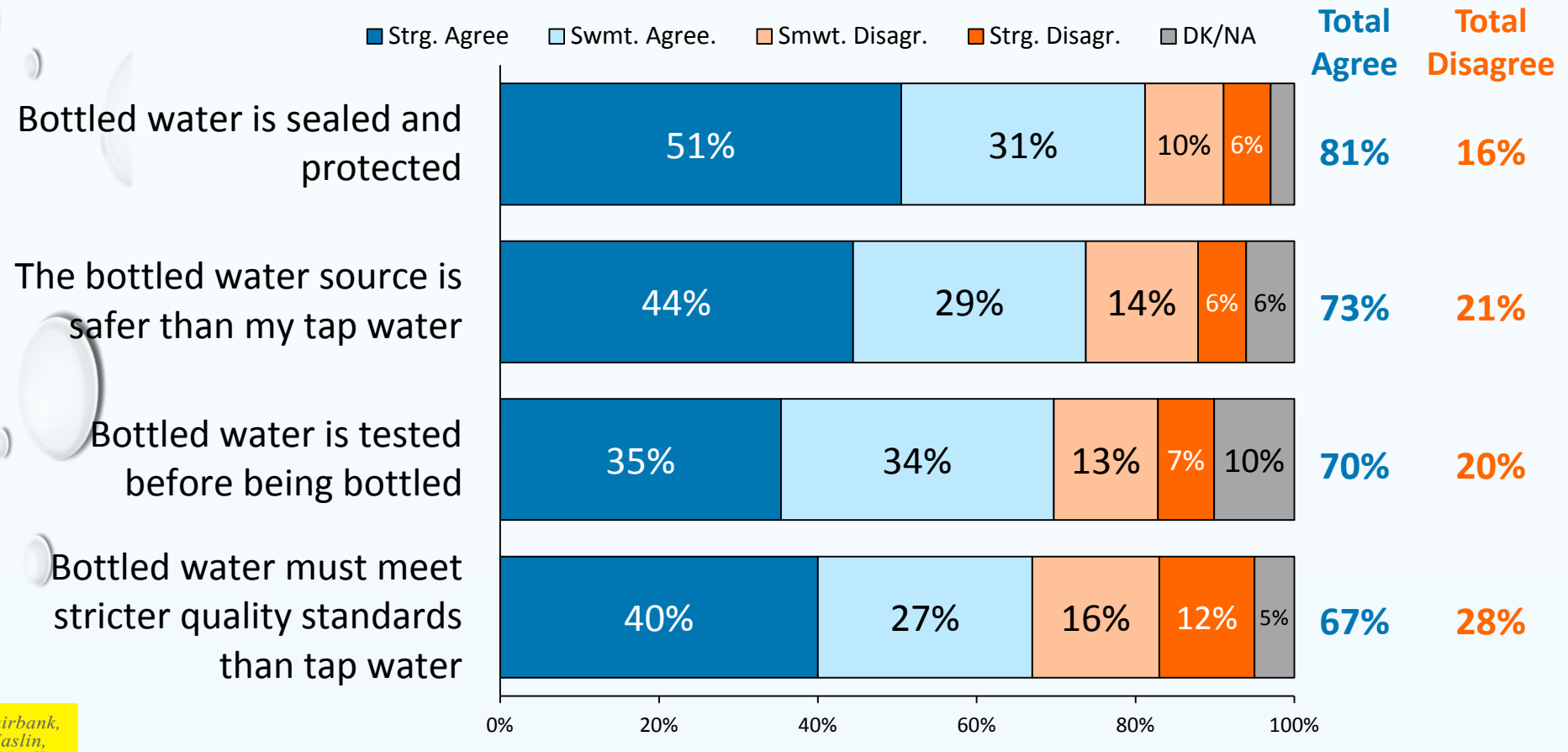
LATINA FEMALE: I don't trust the pipes it's coming out of. I don't trust the water itself. I feel better if it's filtered and it doesn't taste good. I can tell the difference in the taste between tap water and bottled water.

SENIOR FEMALE: I don't know exactly how to describe it. To me it's like foul. It just tastes foul and that's a hard thing to explain.

- No more than a few reported drinking unfiltered water straight from the tap.
- Most used some type of water filter, but a sizable minority also reported drinking bottled water.
- Few could articulate any *specific* problem with the water. General issues with taste, odor and appearance dominated participants' concerns.
- However, many also cited safety concerns about a number of potential contaminants, ranging from rust to bacteria to chemical contaminants or fluoride.

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.



Q6. ASKED ONLY OF THOSE WHO DRINK BOTTLED WATER (31% OF SAMPLE)

Most expressed satisfaction with their water agency; there was little latent concern about water bills.

- Most participants had positive feelings toward their water agency; most found their service reliable and did not remember notable disruptions.
- Few saw what they currently paid for water as upsetting, though when asked some saw it as too high. Most were entirely comfortable with rates – though tiered rates struck some as unfair.

LATINA FEMALE: I think it's one of those things you don't think about, you just use it. It's not like electricity where sometimes it will go off or anything like that. It's always there. It's never not been there so you never think about it. You just pay the bill and move on.

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

Latinos: 7%

Republicans: 14%

Seniors: 15%

Chaldeans: 14%

Average (All Groups): 13%

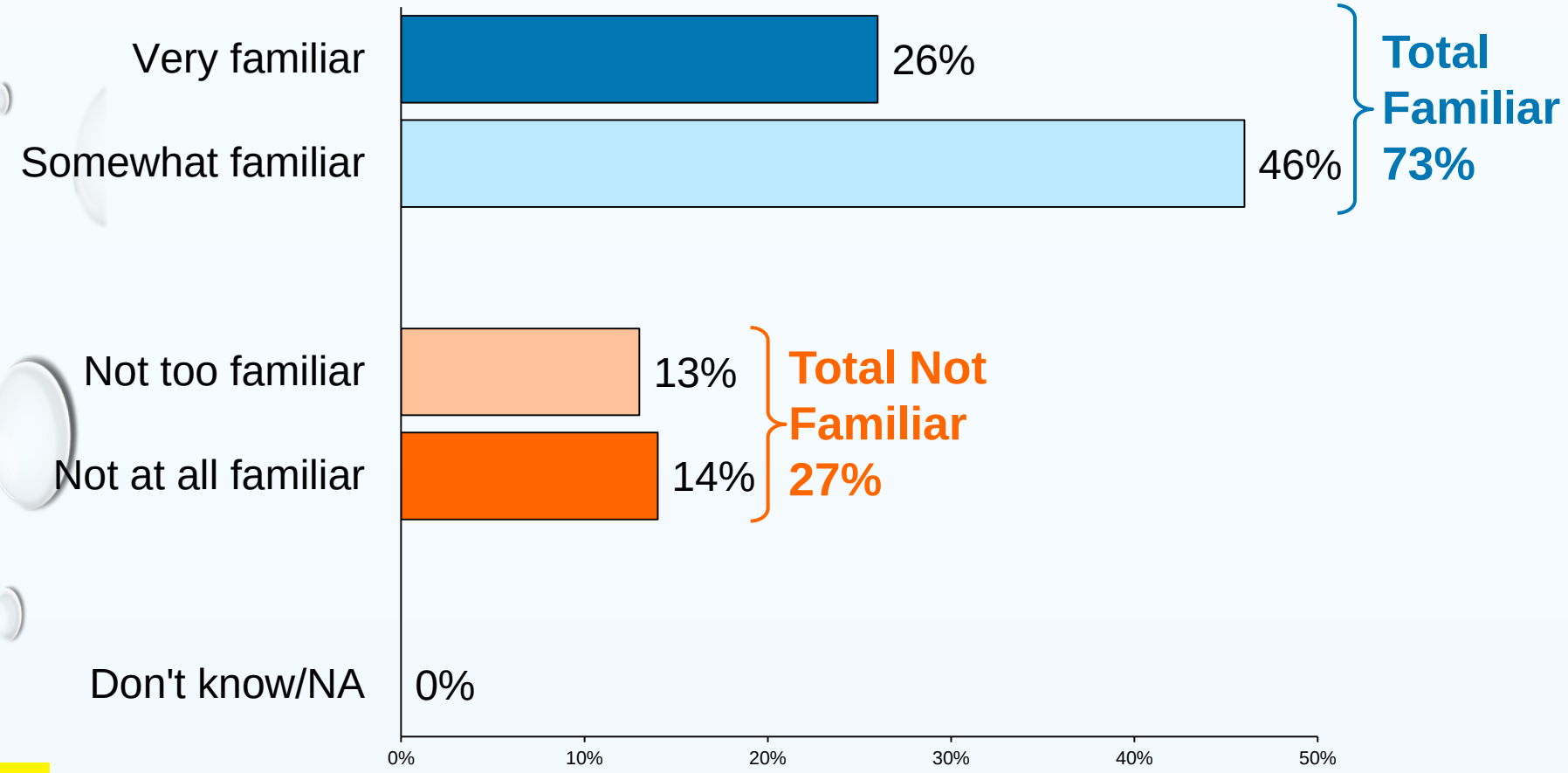
Participants in each group were asked to write down how much more they would be willing to pay on their water bill each much to ensure a reliable supply of water.

On average, participants were willing to spend 13% more across all four groups.

Attitudes Toward Recycled Water

Most voters are at least somewhat familiar with recycled water.

Are you familiar with the concept of recycled water?



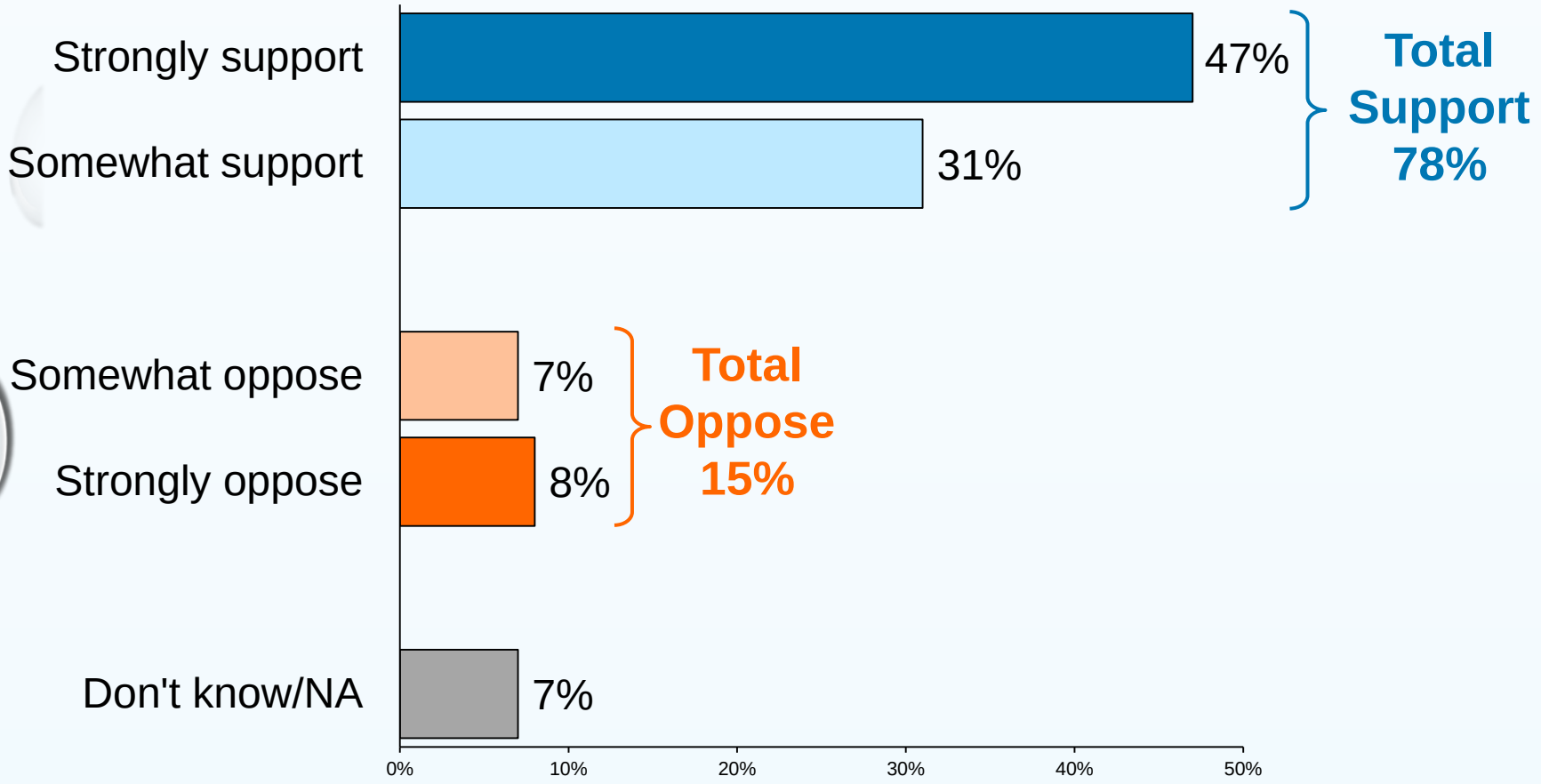
Q7.

Mind-Mapping “Recycled Water”

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

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

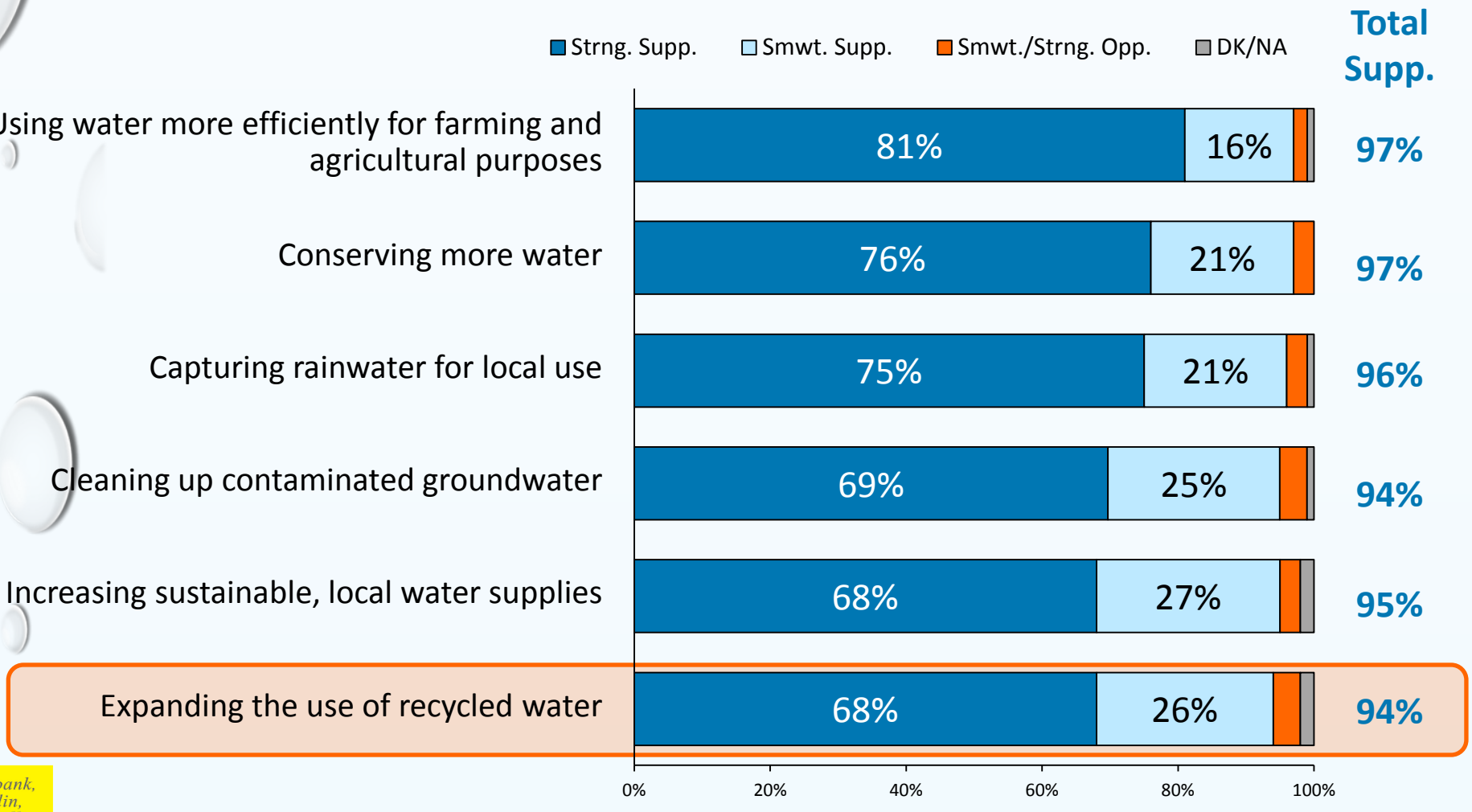
Do you support or oppose recycling water for local reuse on a community-wide scale?



Q8. ASKED ONLY OF THE 73% FAMILIAR WITH RECYCLED WATER

Voters statewide rank expanded use of recycled water among their highest priorities.

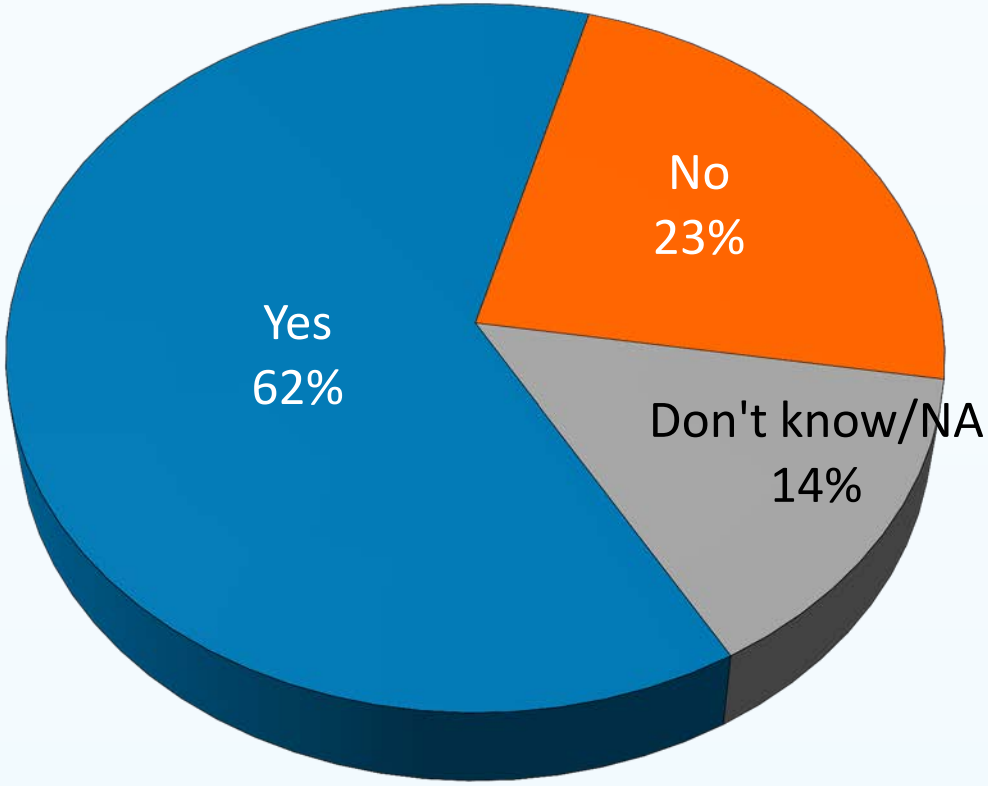
I'm going to read several different approaches to addressing California's water supply issues. Please tell me whether you generally support or oppose each approach.



DATA FROM JUNE 2014 FM3 STATEWIDE SURVEY

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

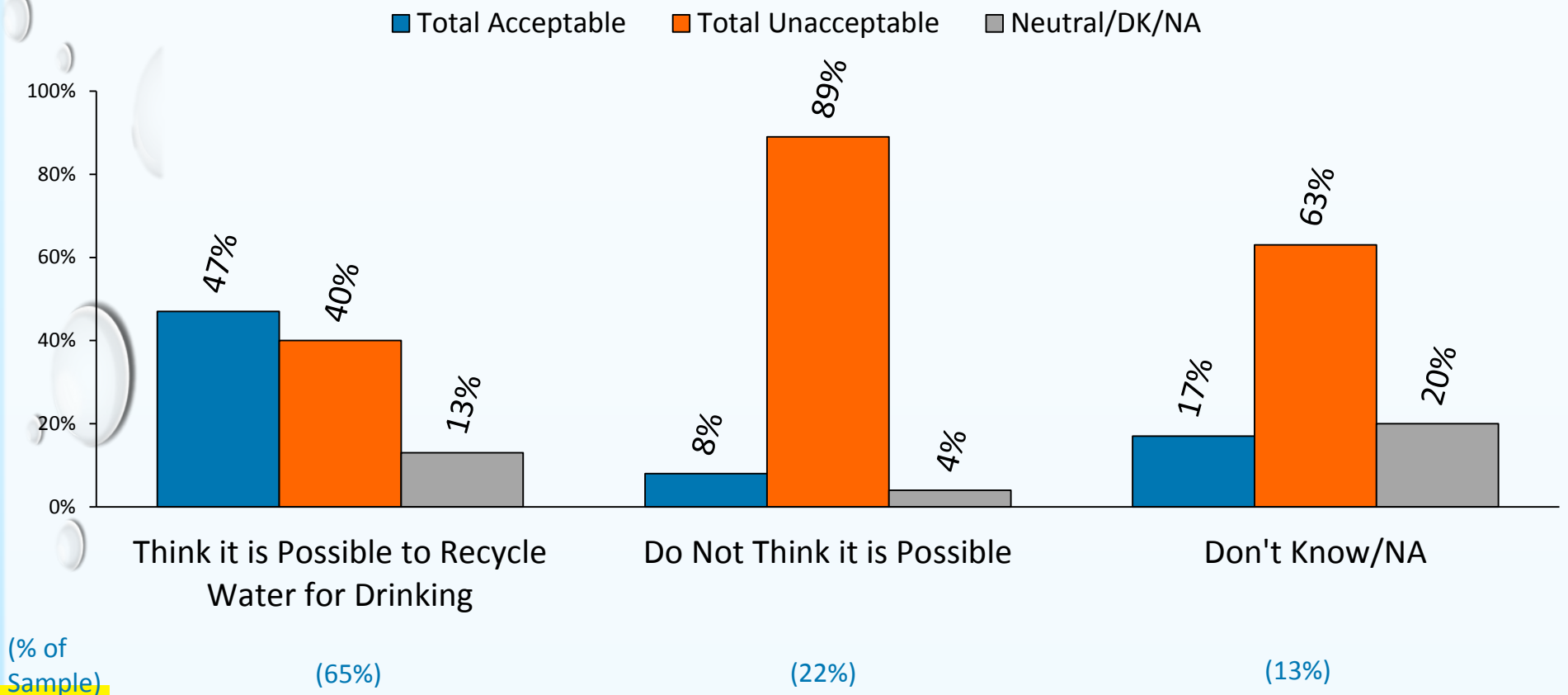
Do you believe that it is possible to further treat recycled water used for irrigation to make the water pure and safe for drinking?



Q10.

. . . but even those who believe that do not necessarily accept the idea of potable reuse.

Acceptability of Recycled Water for Drinking by Belief in its Feasibility



9E. I AM GOING TO READ YOU A LIST OF POTENTIAL USES FOR RECYCLED WATER. PLEASE INDICATE WHETHER YOU CONSIDER EACH ITEM TO BE A COMPLETELY ACCEPTABLE, SOMEWHAT ACCEPTABLE, SOMEWHAT UNACCEPTABLE, OR COMPLETELY UNACCEPTABLE USE FOR RECYCLED WATER. DRINKING WATER

Participants were generally favorable toward recycled water in concept, but found it distasteful.

- Most participants had some familiarity with recycled water.
- Their associations were generally positive; they liked the idea of more efficient use of water, and saw landscaping and non-potable uses as completely appropriate.
- However, most found the subject unpleasant. The term "toilet to tap" came up regularly, and participants indicated that it was difficult to think about the original source of the water.

SENIOR FEMALE: What if the whole filtering system broke down, would they be honest enough to tell us or let us keep using it and drinking it?...It's thrifty, it's wise, it's useful, it's necessary, but my feeling word was "ambivalent" because I think for some purposes. The blanket toilet-to-tap thing I disagree with, but if there's a way to funnel the toilet to tap into irrigation and non-drinking and save the first-use water for drinking, than I would be all in favor of it. People flush drugs down the toilet, among other things. I'm not convinced that any amount of filtering gets it all out.

LATINO MALE: It's just the thought of where it came from, that's what's going to mess with everybody. Like I don't want to drink poop water.

REPUBLICAN FEMALE: In Northern California, I was reading in the paper where there are some faucets, and they go to turn their faucet on and there is no water. If that's the route we're headed down, I would much rather take a risk that we know that we can trust them. Maybe not for our kids but our grandkids. We have to start thinking ahead at some point.

Participants overwhelmingly favored non-potable uses, but drew a line at household use.

- As shown below, participants were asked to indicate whether they found various uses of recycled water to be "acceptable."
- While there was near-unanimity about irrigation and industrial uses, only a handful were initially comfortable with household uses – even those that did not involve drinking.

LIST OF USES FOR RECYCLED WATER	LATINOS	GOP	SENIORS	CHALDEANS	TOTAL RATING THE USE AS "ACCEPTABLE"
Irrigation	9	9	10	6	**34**
Industrial uses (like machinery, factories, etc.)	10	10	10	4	**34**
Household uses (laundry, showers, dishwasher) but not drinking	0	2	2.5	1	**5.5**
Drinking water	0	0	1	0	**1**

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.

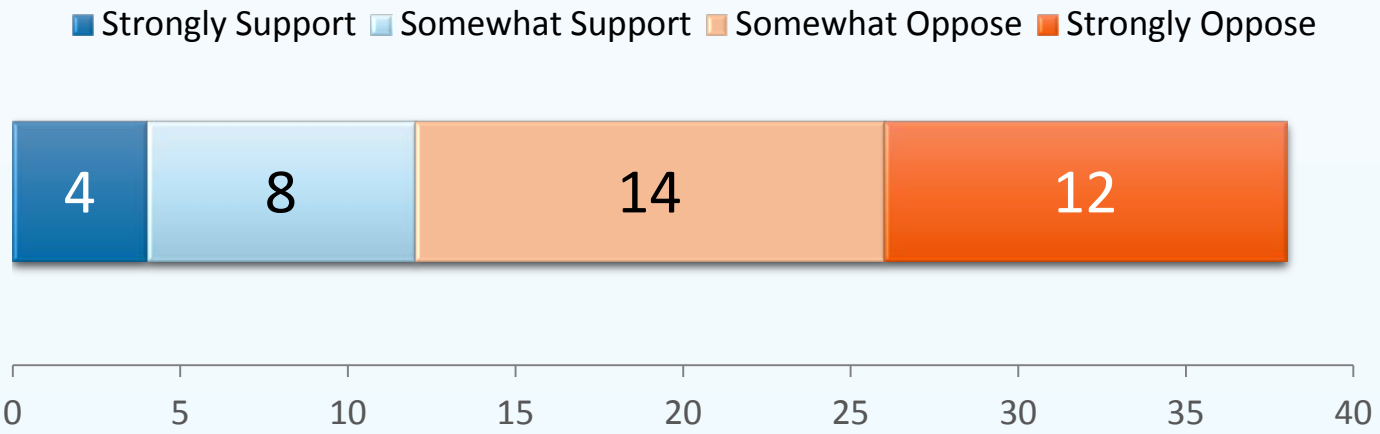
REPUBLICAN MALE: Every time you see where it says recycled water, it says, "Do not drink." I agree with watering the freeways and all the commercial landscape. If we're using fresh water now we've got to cut that off. Catalina has been having salt water in their toilets for 50 years.

Initially, participants opposed potable reuse by more than two to one.

Potable reuse of recycled water refers to the process of taking wastewater that comes from the sewer system; treating and purifying it to high standards; and then adding it back to groundwater, reservoirs, or mixing it with other water sources. From there, it is treated again, as all water supplies are, before being sent to homes and businesses for all purposes – including drinking.

Total Support
12

Total Oppose
26



The GOP and Chaldean groups were somewhat more accepting.

- Many of the GOP participants seemed to take a practical approach to the issue, arguing that potable reuse made financial and logistical sense.
- The Chaldean group was younger, which may have contributed to its higher level of acceptance; several immigrants noted that water quality in Iraq was so bad that recycled water would still be an improvement; and in general, there was a high degree of confidence in American technology and ingenuity.

POSITION	LATINOS	REPUBLICANS	SENIORS	CHALDEANS	TOTAL
Strongly Support	0	0	2	2	4
Somewhat Support	0	4	1	3	8
TOTAL SUPPORT	**0**	**4**	**3**	**5**	**12**
Strongly Oppose	7	3	2	2	14
Somewhat Oppose	3	2	5	2	12
TOTAL OPPOSE	**10**	**5**	**7**	**4**	**26**

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.

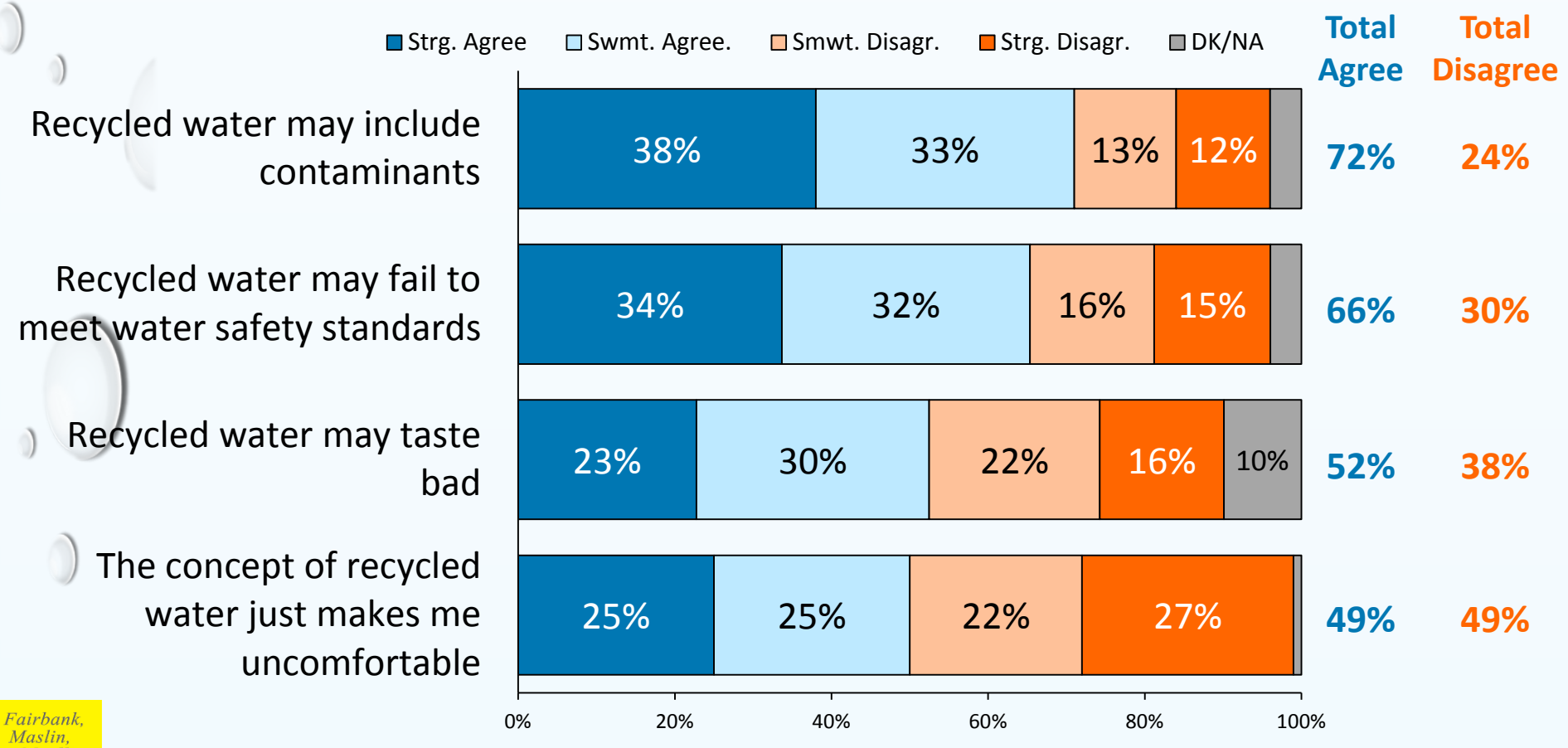
CHALDEAN MALE: I just wouldn't know the health risk in the future or the present. I'm kind of picky about my drinking water, like I only drink spring water. I don't even drink the purified, like Dasani….So with it being recycled, I would never touch it.

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.

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

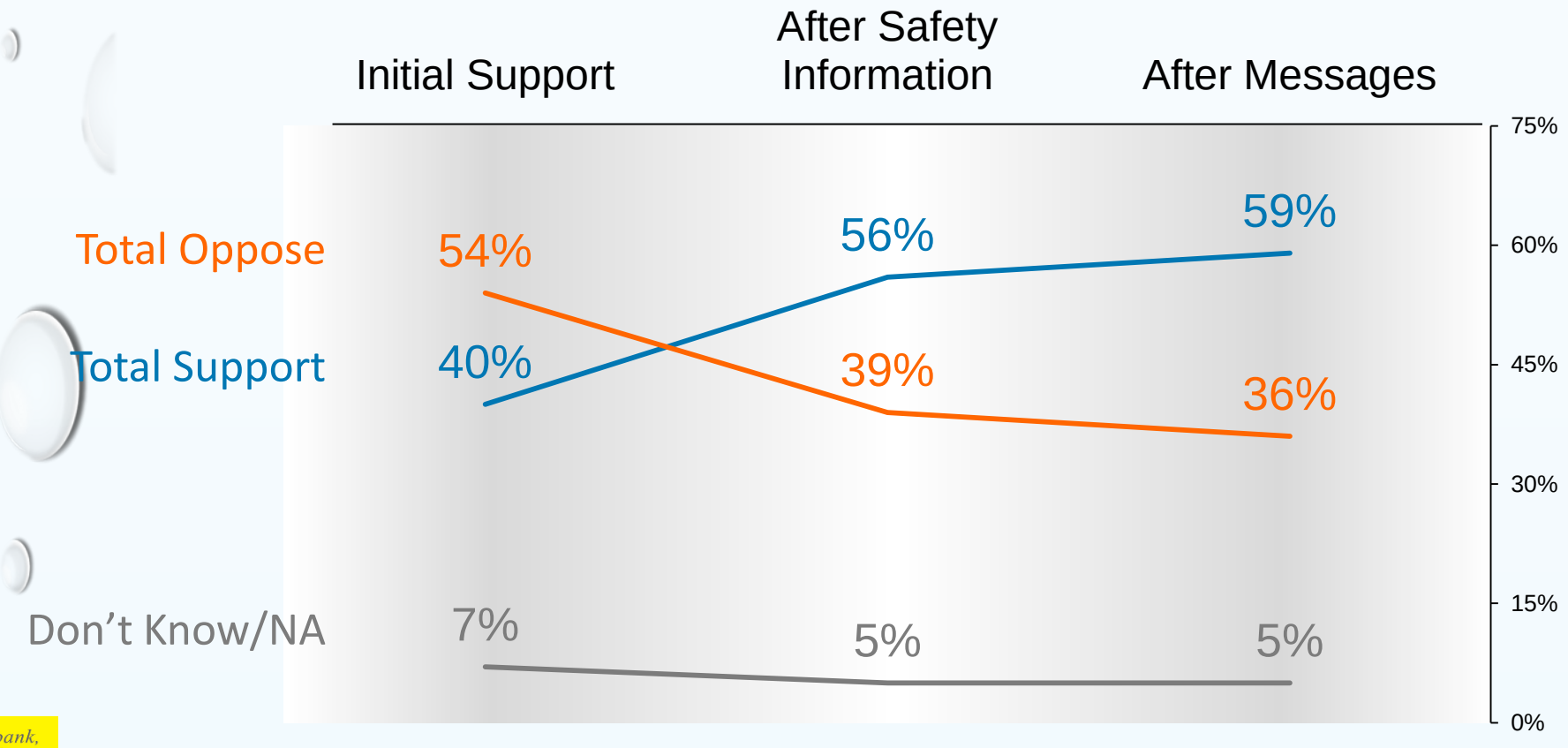
I am going to read you a list of concerns some members of the public have expressed about direct reuse of recycled water for drinking. Please tell me whether you personally agree or disagree with that concern.



Q16.

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?



Q13 TOTAL/Q18/Q20.

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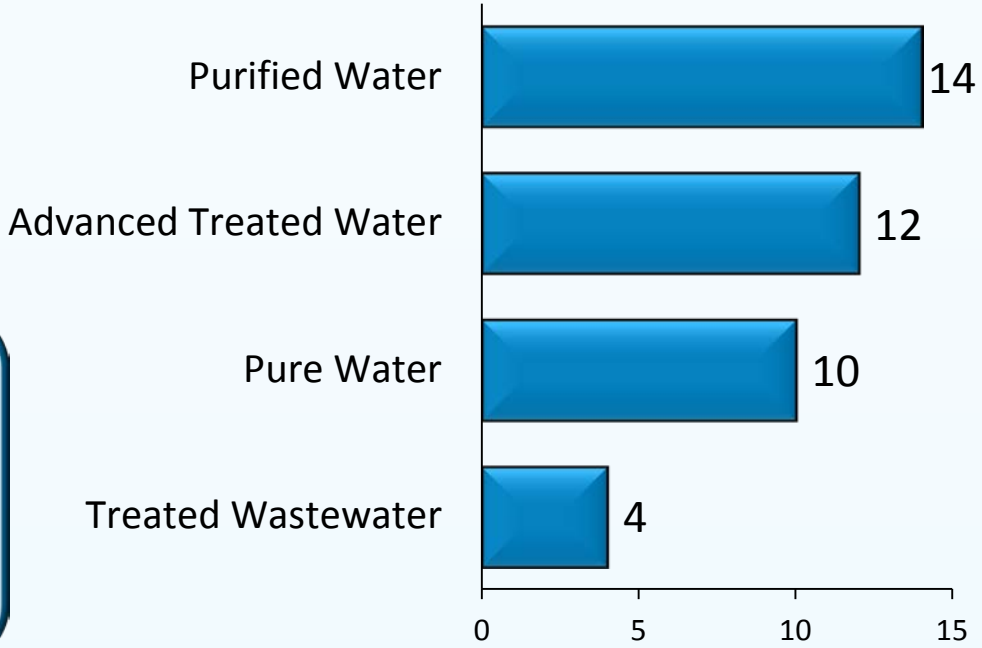
Participants were split on the best term for recycled water, but rejected "treated wastewater."

- Participants were asked to choose the most appealing of four terms to describe potable reuse – their preferences are graphed below.
- A reference to "wastewater," even in the context of treatment, was rejected.
- "Purified water" implied water that had been cleaned to a high standard – whereas for some, "pure water" was water that had not been touched.
- "Advanced treated water" was reassuring to some, and raised suspicious for others.

REPUBLICAN FEMALE: "Purified" makes me think it's been treated and "pure" water doesn't make me think of water being treated. It just makes me think there's water there.

CHALDEAN MALE: It seemed like more care is taken to clean the water rather than pure. You say "pure water," I'm thinking spring water. You say "purified" I'm thinking there's a filtration system, regardless of where it came from.

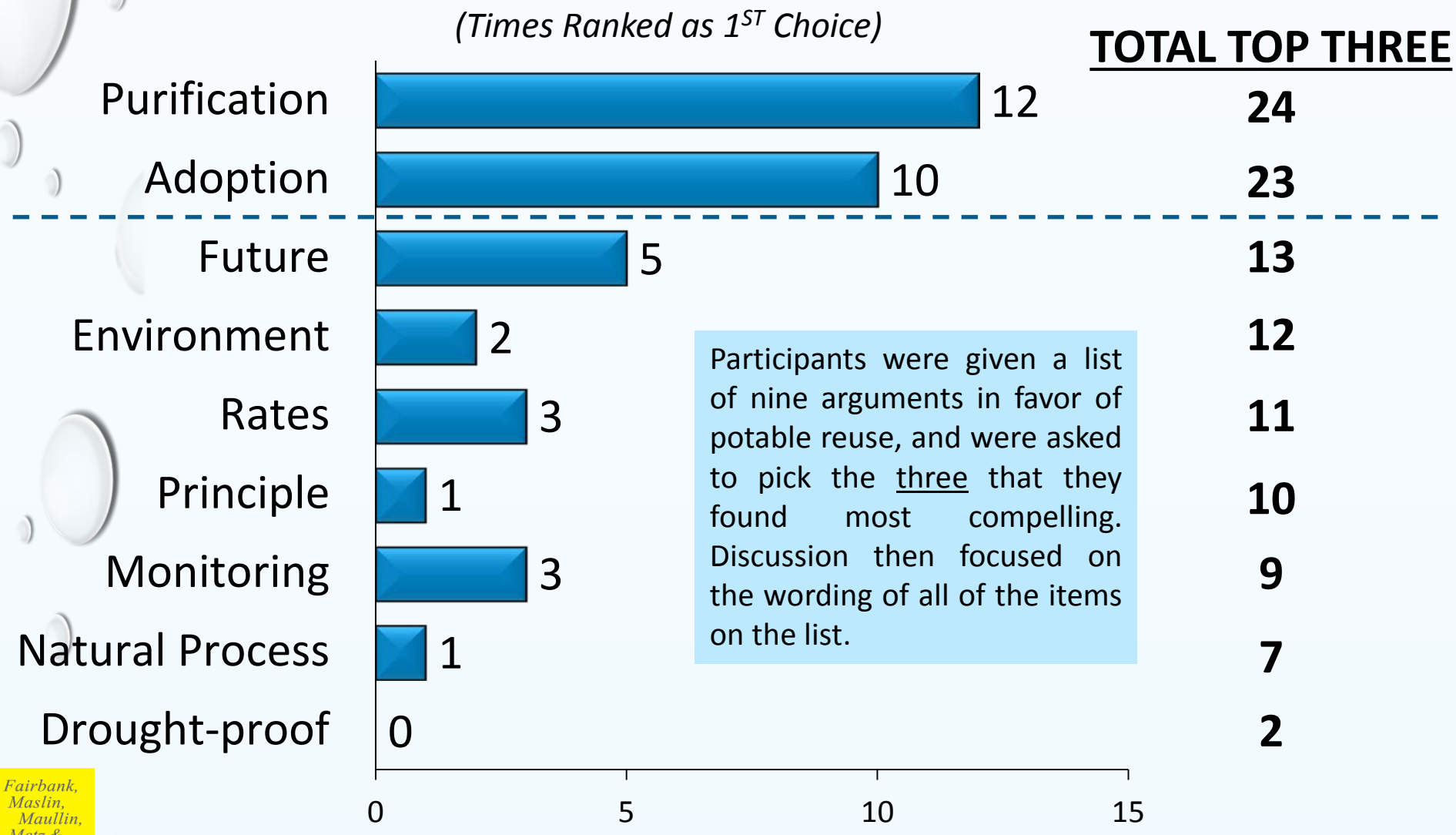


Some participants in the Chaldean group were torn between terms, and thought "treated wastewater" was most realistic.

TERM	LATINOS	REPUBLICANS	SENIORS	CHALDEANS	TOTAL
Purified Water	2	7	2	3	**14**
Advanced Treated Water	2	2	5	3	**12**
Pure Water	6	0	2	2	**10**
Treated Wastewater	0	0	0	4	**4**

Messaging

Participants drew clear distinctions between the messages tested.



The preference for the same top messages was generally present across all four groups.

(Times Ranked as 1ST Choice)

MESSAGE	LATINOS	REPUBLICANS	SENIORS	CHALDEANS	TOTAL
Purification	3	1	4	4	**12**
Adoption	3	2	3	2	**10**
Future	0	3	1	1	**5**
Environment	0	1	1	0	**2**
Rates	2	0	0	1	**3**
Principle	0	0	0	1	**1**
Monitoring	2	1	0	0	**3**
Natural Process	0	0	1	0	**1**
Drought-proof	0	0	0	0	**0**

The strongest argument focused on safety.

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(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.

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

(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.

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 <u>today</u> 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.

J

(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 local 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.

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.

A message centered around recycling didn't take off.

(PRINCIPLE) We all recycle as often as we can – glass, plastic, paper, and even yard waste. It's the right thing to do. For the same reason, we should reuse as much of our limited water supplies as we possibly can. Water is too valuable to be used just once.

- Participants agreed with the message in principle.
- However, the message did not seem particularly compelling in moving opinions.

A few participants rated monitoring as highly important.

(MONITORING) California's drinking water standards are among the strictest in the nation, and water from potable reuse would comply with those standards. Potable reuse water would be continuously tested with online sensors. And the quality of the potable reuse water, once it has been purified, will be monitored by the State of California Division of Drinking Water.

- While relatively few rated this message highly, a handful felt strongly about it.
- A lack of familiarity with the State Division of Drinking Water hampered some of the message's appeal.
- However, reminders about the state's high water quality standards and about continual monitoring were helpful.

REPUBLICAN MALE: What turned me off was "monitored by the State of California Division of Drinking Water." Our past Public Utilities Commission, the president of that is now being indicted for something….And so I have no idea who the State of California Division of Drinking Water, what they're going to do.

LATINA FEMALE: "N" came up as the number one for me only because it again talked about what the standards are, what California's standards are and the fact that it was constantly being monitored and tested, and so to me that was a tiny little bit reassuring to know that it was constantly being tested. Because you figure that if something goes wrong, they will be aware and there will be some adjustments made.

A message about the natural process of recycling didn't move many.

(NATURAL PROCESS) The amount of fresh water on the planet does not change. Through nature, all water has been used and reused since the beginning of time across every river system in the world. Using advanced technology to produce potable reuse water merely speeds up a natural process – and in fact, the water produced through advanced purification meets a much higher standard of quality than what occurs naturally.

CHALDEAN FEMALE: I think it's not confusing, just not clear like the other ones. It just has so much.

CHALDEAN MALE: This was interesting to me because it says a much higher standard of quality than what occurs naturally. I liked that it says that.

- Some participants found this concept appealing and thought-provoking, as they did in response to the video.
- However, that was a distinct minority position.

Drought messaging had surprisingly little impact.

(DROUGHT-PROOF) Potable reuse water could supply as much as ten percent of our local drinking water supplies, even in the face of a drought. Potable reuse water is a drought-proof way to help ensure a reliable supply of water to meet local needs, independent of climate change or weather in other locations.

SENIOR MALE: I think the 10% is not very compelling. That's the first thing I noticed about that.

CHALDEAN MALE: I think the fact that it just states to prevent drought through potable uses. It doesn't talk about how safe it is. That's why I didn't pick it at all. I could care less about what "O" is stating….I'm more concerned about the safety of it.

- As noted earlier, these participants seemed less drought-sensitive than others.
- In addition, the "ten percent" figure really under-whelmed people and seemed like a distinctly minor contribution to the state's water needs.

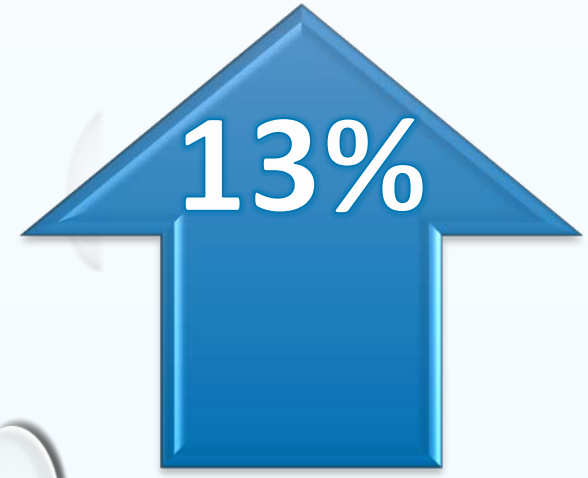
Collectively, the messages led to an impressive increase in support for potable reuse.

POSITION	INITIAL POSITION	AFTER POSITIVE MESSAGES	CHANGE
Strongly Support	4	9	+5
Somewhat Support	8	18	+10
TOTAL SUPPORT	**12**	**27**	**+15**
Strongly Oppose	12	5	-5
Somewhat Oppose	14	9	-7
TOTAL OPPOSE	**26**	**14**	**-12**

SENIOR FEMALE: We need the water. [Potable reuse] is going to come…whatever we say, it's coming. We have no control over it so it just needs to be. When I saw the reverse osmosis and the ultraviolet and I know how they work, so that really sold me.

CHALDEAN FEMALE: I was kind of still torn…but I think I'm more convinced with all the information I was given…. It's really not fair for us to be selfish and think about us today. Like the future generations, the economy and environmentally safe, it's like I just got to psychologically do it for everybody's welfare.

However, willingness to pay for water supply improvements *declined* with the introduction of potable reuse.



Initial Average Monthly Willingness to Pay for Water Supply Expansion

Average Monthly Willingness to Pay After Discussion of Potable Reuse

LATINO MALE: We should be getting a discount here because we're not bringing it in from other places. I understand that there's a process that we have to go through and make it filtered, but come on. Look what you're serving us?

REPUBLICAN MALE: I went from 10% to 5%, just with the basic thinking being that I would want to see some sort of cost reduction or a reduction in the percentage increase if we were going with this alternative solution.

This decline was evident in all groups with the exception of the seniors.

Groups	Initial Average Monthly Willingness to Pay for Water Supply Expansion	Average Monthly Willingness to Pay After Discussion of Potable Reuse
Latinos	7%	6%
Republicans	14%	11%
Seniors	15%	15%
Chaldean-Americans	14%	9%
Averages (All Groups)	**13%**	**10%**

Spreading the Word

- Participants consistently expressed a desire for more information about potable reuse, and specified some ways they would like to receive it:

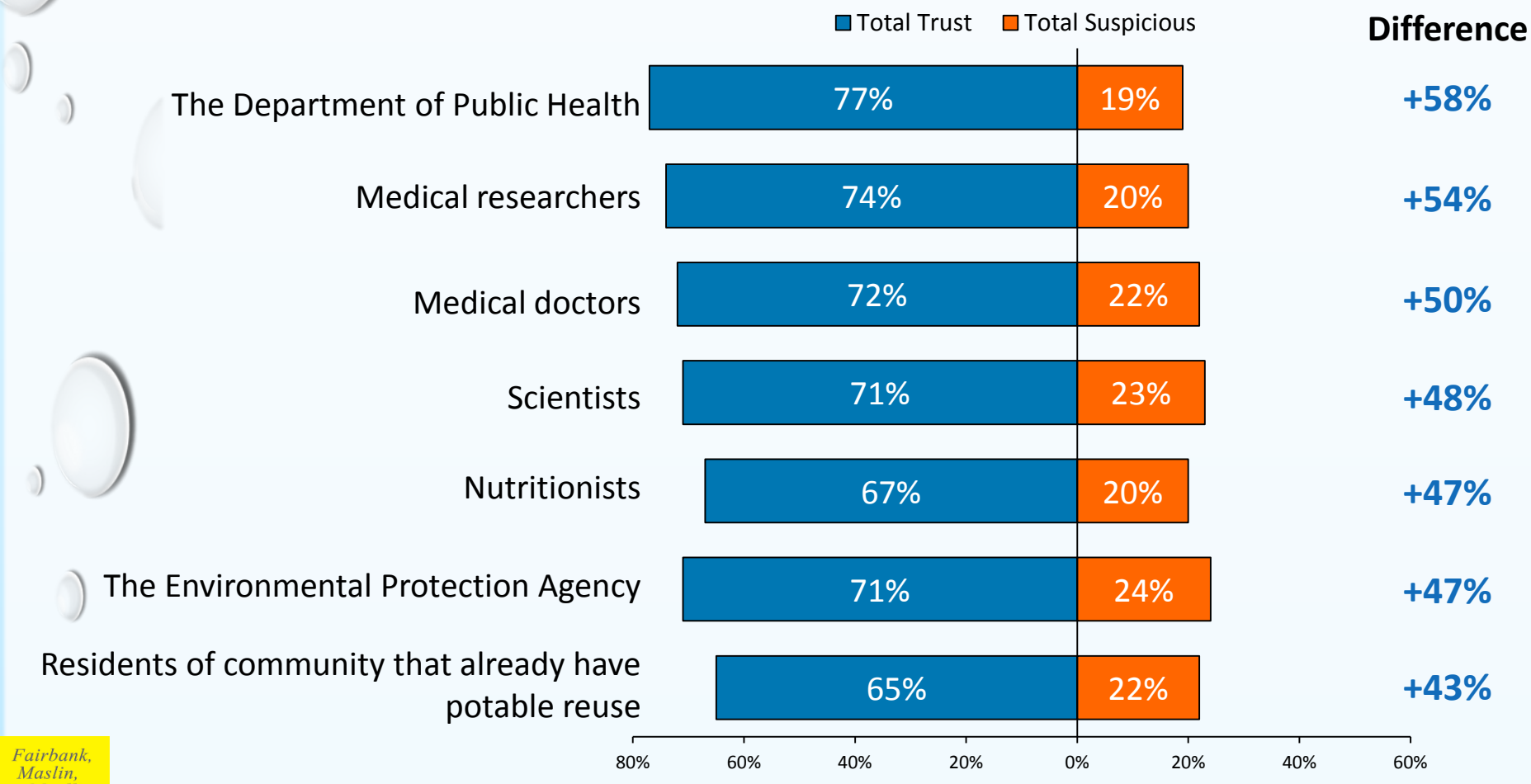
  - ✓ They wanted to hear from experienced authorities – water agencies, scientists, and regulators
  - ✓ Learning more from communities that are already using potable reuse was key
  - ✓ Many said mass messages on TV or in the mail were the best ways to reach them
  - ✓ Having a detailed website was important
  - ✓ Participants were divided on whether they would pay attention to bill inserts
  - ✓ Chaldeans said organizations within their community would play an important role
  - ✓ Chaldeans also noted the key role of he young in helping to build confidence among older members of their community

SENIOR FEMALE: When you talked about people in the community who are using it, my skepticism would say you've picked out the ones who are in favor of it. So maybe what I would put a little more faith in is if there were a random large-scale survey of peoples' satisfaction with the water in places like that and then I might be more willing to say, "It sounds like it."

LATINO MALE: How about the people who are actually doing the process itself? Scientists, the engineers, the people who are on the front lines.

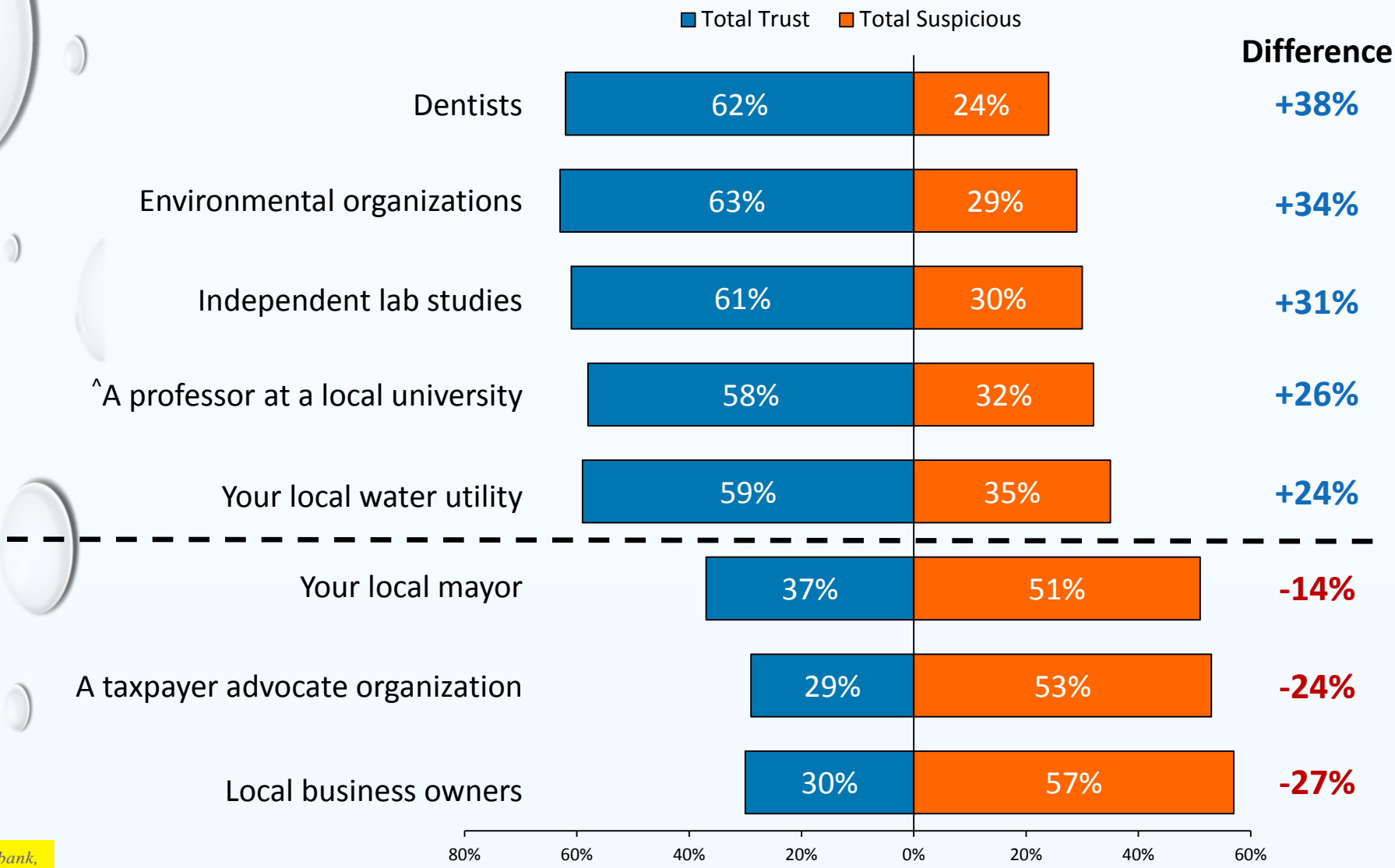
Top messengers are generally those with scientific expertise.

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.



Q22. ^NOT PART OF SPLIT SAMPLE

Those with a political or economic perspective are less credible.



22. 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. ^NOT PART OF SPLIT SAMPLE

Communications Recommendations

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.

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