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Engaging the Public on Water Issues Through Art

WHAT'S ON TAP: L.A.'S WATER STORY...SOURCE TO SPIGOT



The Luskin Center for Innovation conducts actionable research that unites UCLA scholars with civic leaders to solve environmental challenges and improve lives. Our research priorities include the [human right to water](#), [community-driven climate action](#), [heat equity](#), [clean energy](#) and [zero-emission, transportation](#). We envision a future where everyone has healthy, affordable, and resilient places to live, work, learn, and play.

AUTHORSHIP

This report was produced by the UCLA Luskin Center for Innovation and authored by the following researchers:

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We acknowledge the Gabrielino/Tongva peoples as the traditional land caretakers of Tovaangar (the Los Angeles basin and So. Channel Islands). As a land grant institution, we pay our respects to the Honuukvetam (Ancestors), 'Ahihirom (Elders), and 'eyoohiinkem (our relatives/relations) past, present, and emerging.

The analysis, views, recommendations, and conclusions expressed herein are those of the authors and not necessarily those of any of the project supporters, advisors, interviewees, or reviewers, nor do they represent the University of California, Los Angeles as a whole. Reference to individuals or their affiliations in this report does not necessarily represent their endorsement of the recommendations or conclusions of this report. The author is responsible for the content of this report.

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Cover photo: Attendees at the opening reception of *What's On Tap: L.A.'s Water Story...Source to Spigot* at the first of three venue locations, Avenue 50 Studio in L.A.'s Highland Park neighborhood.

All photos by Shanley Kellis unless otherwise noted.

WHAT'S ON TAP: L.A.'S WATER STORY...SOURCE TO SPIGOT WAS CURATED BY EDITH & JOLLY DE GUZMAN.

Participating Artists

Susan Arena is a feminist artist whose paintings and ceramic sculptures explore the human figure and its endless possibilities for expression and often incorporate her love of the folk and sacred art of various cultures. She is the head of the art department at Crossroads Elementary School in Santa Monica.

Victoria Arriola is a mixed-media, interdisciplinary artist who draws inspiration from her Latin roots, her homes in Denmark and Iceland, and her travels. She has taught art and design at the University of California, Berkeley, and the University of Southern California. She is a Fulbright Specialist and guest lecturer at the Danish School of Media and Journalism in Copenhagen.

Chantée Benefield is a mixed-media artist and designer whose work expresses the often-ignored realities of the Black experience. Her work spans from representational portraiture to abstract expressionism. She received her training in painting at Howard University in Washington, D.C.

Cassandra Davis Ramon is an illustrator interested in the intersection between art and science. She focuses on illustrations of wildlife in urban environments, and serves as the director of volunteer services at the Aquarium of the Pacific in Long Beach.

dearantler is an anonym for Edith and Jolly de Guzman, a husband-and-wife duo whose artistic and curatorial work explore the relationship between humans and the environment. Joining the duo is Jed Antler — an alter ego who takes the form of an eight-point buck and pens witty posts on art and travel.

Pascaline Doucin-Dahlke is an artist whose work consists of conceptual, semi-abstract acrylic paintings, digital art, art installations, and mixed-media drawings based on local landscapes, nature, architecture, and still life. Her body of work largely consists of reinterpreting landscape space through personal observation, with a hidden message behind it.

Leslie K. Gray is a visual artist, writer, and director specializing in puppetry and other theatrical presentations. Her work has been seen locally and internationally at such places as The Music Center on Tour; The Skirball Cultural Center; The Getty Museum; Highways Performance Space; Ma Chere Artspace in Chiang Mai, Thailand; and El Museo Nacional in Montevideo, Uruguay. She teaches puppetry and art workshops for numerous community organizations and museums, and is a credentialed K-12 special education teacher and deaf education specialist.

Lois Keller is a multidisciplinary artist working in drawing, installation, and performance. Her annual plein air Matilija poppy series documents seasonal change, while her participatory works explore memory, presence, and environment. She has exhibited nationally and completed residencies at Château d'Orquevaux in France and the Residency Project in Pasadena.

Diana Kohne is a painter, printmaker, designer, and writer who uses English and American Sign Language. Her paintings and printmaking depict urban reality, while her three-dimensional works focus on the environment and social issues. She studied at the University of North Texas.

Ashley Kruythoff is a Black, Caribbean-American photographer and designer who brings strong art direction to her creative work. She believes in the power that the arts have to inspire minds and evoke societal change by elevating awareness of social, environmental, and cultural issues.

Robyn Sanford is an interdisciplinary artist whose work explores the shifting margins of social exchanges, particularly in the context of emerging technologies that emulate interpersonal relationships. She employs materials and references to technology fused with traditional media, spanning painting, photography, fiber arts, wood, metal, and electronics to create installations and sculptural projects.

Sarah & Adrian Symcox are a husband-and-wife duo whose work incorporates their experience in graphic design and creative production.

Arni Tecson is a Filipino-American artist whose work explores themes such as the pleasure and challenges of being outdoors and our relationship with nature.

Lisa Tomczeszyn is a Los Angeles-based artist whose work is in reaction to the wild and the tame in the natural world, and the histories of humankind's relationships with the planet and themselves. Her art practice is in constant response to current events and the wayward actions of humankind. She attended Parsons School of Design NYC for fashion and textile design, received a BFA at Southampton College for painting and lithography, and earned an MFA in theatrical design from the Yale School of Drama.

Programming for *What's On Tap* was generously supported by:

Accelerate Resilience L.A. (a sponsored project of Rockefeller Philanthropy Advisors, Inc.)
California Institute for Water Resources

Presented in partnership with:

Avenue 50 Studio
UCLA Luskin Center for Innovation
University of California Division of Agriculture and Natural Resources
City of Los Angeles El Pueblo Historical Monument
Los Angeles Center for Urban Natural Resources Sustainability

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EXECUTIVE SUMMARY

In summer and fall of 2024, the University of California Division of Agriculture & Natural Resources and the UCLA Luskin Center for Innovation presented *What's On Tap: L.A.'s Water Story...Source to Spigot*, a science-based traveling art exhibit that explored pressing water issues in the Los Angeles region. The exhibit engaged the public across three venues — Avenue 50 Studio, El Tranquilo Gallery, and the Water (R)evolution Symposium — with interactive installations and curated programming designed to spark dialogue around water equity, quality, and accessibility.

The exhibit was co-curated by Edith de Guzman, Water Equity and Adaptation Policy Cooperative Extension Specialist at the UCLA Luskin Center for Innovation, and Jolly de Guzman, and addressed five interrelated themes: the human right to water, local and groundwater sources, imported water, tap water (dis)trust, and affordability. Fourteen artists each used a wood panel with a spigot installed on it as their “canvas” and responded to one of five prompts corresponding to these water issues. Programming was supported by Accelerate Resilience Los Angeles and the California Institute for Water Resources, in partnership with Avenue 50 Studio and the City of Los Angeles El Pueblo Historical Monument.

Audiences participated in activities including a blind water tasting, where over 340 participants ranked and attempted to identify various water sources — Arrowhead, Dasani, Evian, and Los Angeles Department of Water and Power (LADWP) tap water — based on taste and texture. The overall identification accuracy was approximately 32%, indicating that participants struggled to correctly identify the brands. Dasani was most frequently identified correctly. Participants often confused LADWP tap water with Arrowhead and Evian, suggesting similar taste perceptions among these brands. Common taste descriptors like “neutral” and “mineral” were used across all brands. LADWP tap water had taste descriptions similar to Dasani, indicating comparable sensory perceptions. The difficulty participants had in distinguishing between brands based on taste and texture alone suggests that sensory differences may be subtle. This reinforces the idea that perception and branding significantly influence preferences more than taste. The fact that tap water was not easily distinguishable underscores the potential for it to be perceived as a high-quality option.

In addition to sensory experiments, the exhibit included open-ended prompts exploring participants' water concerns, consumption habits, and emotional connections to natural water bodies. Sentiment analysis pertaining to water concerns revealed that participants expressed fear, negativity, and trust/distrust, indicating that water-related issues can evoke emotional responses driven by uncertainty and quality concerns. Responses related to consumption habits and motivations revealed a diversity of water sources and the reasons for choosing them — ranging from safety and taste to environmental responsibility — underscoring the complexity of water-related decisions in daily life. Visitors also reflected about water bodies of significance to them, conveying positive associations with water, its cultural significance, and related emotional attachment.

Opening and closing receptions included moderated panel discussions that bookended the exhibit, bringing together experts and community voices to delve deeper into themes of water equity, local water, infrastructure, and public trust. By combining artistic expression, scientific engagement, and community dialogue, *What's On Tap* demonstrated an adaptable model for environmental communication and extension centered on making water issues visible, personal, and actionable.



The *What's On Tap* exhibit engaged audiences in water-related challenges and opportunities facing Southern California through art, interactive activities, and panel discussions.

1. INTRODUCTION

Communities throughout the Los Angeles (L.A.) region face a variety of water challenges, ranging from access to clean water to affordability. To engage a public audience in exploring the predominant water issues affecting the L.A. region, the UC Division of Agriculture and Natural Resources and UCLA Luskin Center for Innovation jointly conceived, curated, and secured participation and support for a science-based, interactive extension project titled *What's On Tap: L.A.'s Water Story...Source to Spigot*, which used art to engage audiences.

The exhibit explored five distinct themes: local water and groundwater; imported water; human right to water; tap water (dis)trust; and affordability. The exhibit was co-curated by Edith de Guzman, Water Equity and Adaptation Policy Cooperative Extension Specialist at the UCLA Luskin Center for Innovation, and Jolly de Guzman. Programming was supported by Accelerate Resilience Los Angeles and the California Institute for Water Resources, in partnership with Avenue 50 Studio and the City of Los Angeles El Pueblo Historical Monument.

This was a traveling show that was on view for nine weeks at three venues in the summer and fall of 2024. The first venue was Avenue 50 Studio, a nonprofit arts presentation organization rooted in Latino and Chicano culture located in L.A.'s Highland Park neighborhood. The exhibit was on view from July 13 to August 10, 2024. The second stop ran from August 24 to September 29, 2024, at El Tranquilo Gallery, located at the historic birthplace of Los Angeles, the City of Los Angeles El Pueblo Historical Monument. Finally, the exhibit was on view at the Water (R)evolution Symposium organized by the Council for Watershed Health in the City of Carson on October 15, 2024. Opening and closing receptions included moderated panel discussions about water equity and local water.



The *What's On Tap* exhibit engaged audiences in water-related challenges and opportunities facing Southern California through art, interactive activities, and panel discussions.

2. WATER THEMES EXPLORED



Fourteen artists each used a wood panel with a spigot installed on it as their “canvas” and responded to one of five prompts corresponding to water issues that affect communities in the region, contributing a statement to accompany their artwork. The resulting collection of works conveys a range of reactions, from the whimsical to the deeply apprehensive, capturing a multitude of dimensions of Los Angeles’ relationship to water.

2.1. Theme 1: Local Water and Groundwater

The Los Angeles River is the birthplace of the Los Angeles (L.A.) region and was once a thriving, unifying water source for the people and wildlife. For thousands of years, the river provided sustenance to the Gabrielino-Tongva, Fernandeño Tataviam, Gabrieleño-Kizh, and Chumash. But over the past century, drastic changes — from a dramatic growth in population to the advent of complex water import and management systems — have transformed Los Angeles' relationship to water.

ARTISTS' PROMPTS

Los Angeles was founded on the banks of the Los Angeles River, which provided sustenance for the region's original inhabitants for thousands of years. Today, a small portion of our water supply comes from groundwater beneath the L.A. River Watershed. How will Los Angeles look and feel once the river is revitalized, supporting communities in climate adaptation? Consider how the river might be transformed into a dynamic, functioning ecosystem that reduces flood risk, cleans the air, cools temperatures, and supports the biodiversity essential to our collective well-being.



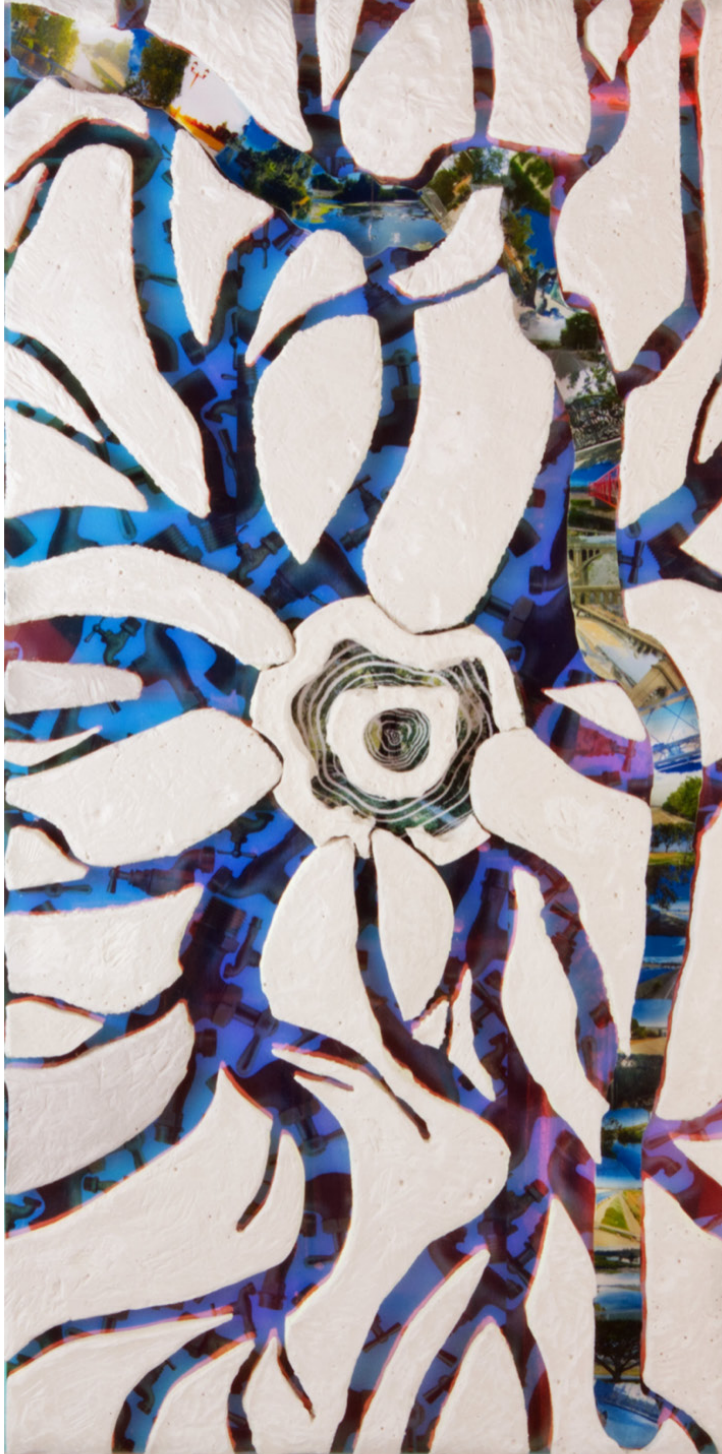
Lois Keller
Rewilding the LA River, 2024
Oil, pencil, spigot on
wood panel

“The L.A. River is undergoing a major revitalization project to restore its ecosystem and habitat, involving various government bodies and organizations. I’m inspired by this effort and have created a painting to showcase the positive impact of environmentalism on communities. The painting symbolizes the transformation of the concrete channel into a natural habitat.”



Victoria Arriola
Si Se Puede, The River
Endures, 2024
Mixed/dried seaweed from
the Pacific Ocean, gauze,
acrylic, wire, spigot on
wood panel

“The Los Angeles River is currently being revived mile by mile. Its spirit and the spirit of those who lived alongside it for centuries remains. It continues to endure through all attempts by humans to constrain and reconfigure its course. It can and will provide. Si se puede (Yes, it is possible!)”



Robyn Sanford

The Roots Between the Branches, 2024

Photographs, acrylic, plaster, iridescent film on wood panel

“*The Roots Between* “the Branches” evokes imagery of ancient old-growth trees integral to the lives and sacred springs of indigenous peoples. These trees have long drawn sustenance from the river’s waters, establishing profound historical and ecological connections throughout Los Angeles. The stone ‘roots’ of the work serve as a reminder that current constraints can be transformed to enrich and unify the communities along the river. Despite the river’s confinement in concrete, its roots and waters persist beneath, symbolizing resilience and continuity.”

2.2. Theme 2: Imported Water

In 1913, the first large water infrastructure project was completed that brought imported water to L.A. from the Owens Valley 200 miles to the northeast. This enabled L.A.'s population to grow from about 200,000 people to nearly four million people who today call the City of L.A. home (with an additional six million people living in the rest of L.A. County). From 1913 through 1972, more water import systems were built, bringing water from the Colorado River Basin and Northern California through the Sacramento-San Joaquin Delta. Meanwhile, historic floods in 1938 led to the Los Angeles River being encased in concrete and fenced, further severing L.A.'s relationship to its local water and distancing Angelenos' link to local hydrology as well as important aspects of its history and culture.

ARTISTS' PROMPTS

L.A.'s drinking water is sourced from places near and far. How is Los Angeles connected to the people, lands, and ecosystems of the Eastern Sierra Nevada, the Sacramento-San Joaquin Delta, and the Colorado River Basin?



Diana Kohne

Imported Water, 2024

Clay, soil, maps, tubing,
water, burlap, paint, glue,
synthetic turf, spigot on
wood panel

“In 1917, naturalist Joseph Grinnell described Owens Lake: ‘Great numbers of water birds are in sight along the shore — Avocets, Phalaropes and Ducks. Large flocks of shorebirds in flight over the water in the distance, wheeling about shown en masse, now silvery now dark, against the gray-blue of the water.’”

“Less than a decade later, Los Angeles drained this lake through our taps. Farms 200 hundred miles away had to be abandoned as the Owens Valley agriculture economy died. Today, the Los Angeles Aqueduct has expanded, and the Colorado River Aqueduct brings more water to our homes. The impact on the environment and on farmers continues. I created this work to raise awareness of the distance ‘our’ water travels and to connect the act of turning on the tap to this faraway reality.”



Arni Tecson
Symbiotic with Owens Valley, 2024 Acrylic, spigot on wood panel

“The upper half of my painting features a ‘slender salamander,’ a common amphibian in the Sierras. I admire salamanders not only for their beauty but also their symbiotic relationship with both land and water habitats. The lower half of my painting features a dam made of weaved plant fiber. The Paiute Native American tribe used to gather water from the lakes and creeks of the Owens Valley using water bottle baskets, which are made of plant fiber and pitch. The Paiute people live in harmony with the natural environment; under their stewardship natural life in the Owens Valley flourished. A strong contrast to a Paiute water basket is the Los Angeles Aqueduct, represented by a spigot that draws water from the lake. Importing water from the Sierras to Los Angeles was devastating to animal and plant life of the Owens Valley. Moreover, it also destroyed communities of people.”



Cassandra Davis-Ramon
Twenty-five Percent, 2024
Acrylic, spigot on wood panel

“The Metropolitan Water District (MWD) was formed in 1928 to bring water from the Colorado River across the Mojave Desert to supply the taps of Southern California. MWD estimates 25 percent of Southern California’s water in 2024 comes from the Colorado. At the mouth of the Colorado lies a thin tropical sea known as the Gulf of California. Water use over the past hundred years has changed this landscape dramatically. Dams and aqueducts have changed the river’s flow, sometimes slowing the flow of water at its mouth to only a trickle. There, the smallest and most endangered porpoise, the vaquita, hangs on by a thread. In 2024, drone footage caught two vaquita porpoises frolicking in turquoise waters of the gulf. These two are estimated to be 25 percent of the world’s population of vaquita.”

2.3. Theme 3: Human Right to Water

In 2012, California legally recognized a Human Right to Water (Assembly Bill 685). The law states that “every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.” However, reaching this goal presents many challenges. Large, established water systems provide safe drinking water to most of the population, but areas served by smaller community water systems lack the resources of larger utilities to serve residents adequately. Across California, an estimated one million people do not have access to safe, clean drinking water in their homes, including some communities in L.A. County.

ARTISTS' PROMPTS

A million people in California, including some in Los Angeles County, do not have access to clean drinking water through their taps. Through your artwork, convey this message to an audience that may or may not be aware that access to clean water is a very real issue for some of our fellow Angelenos and Californians.



Sarah & Adrian Symcox
Liquid Gold, 2024
Acrylic, spigot on
wood panel

“What is most precious in this world is life and that which sustains life. Clean and pure water is an inalienable right of all humanity. With this piece, we’re hoping to show that all people deserve access to clean water as a foundational human right. Class, race, gender, or economic factors should never turn off the tap, never cut off water, the giver of life.”



Lisa Tomczeszyn

*Water with a Side of
Plastic, 2024*

Collage using plastic and
paper, oil, spigot on
wood panel

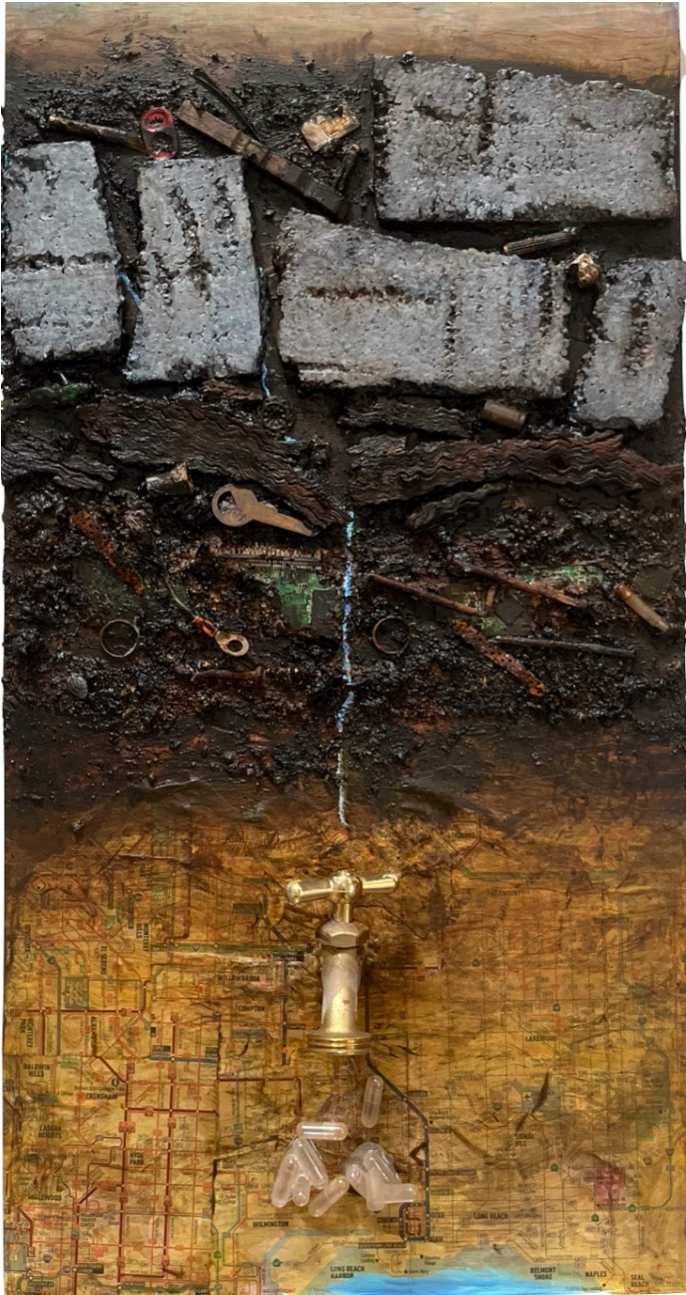
“The United Nations declared that all people have the right to have sufficient, safe, physically accessible, and affordable water for personal needs without any form of discrimination. Water is called a ‘universal solvent’ due to its unique molecular structure. Water facilitates the transportation of nutrients and regulates temperature in living organisms. In the absence of water, humans can survive only for a few days because water is necessary for maintaining cellular balance and sustaining life. Water’s special characteristics help ecosystems and maintain environmental balance. Lack of clean water poses challenges for communities in fulfilling basic needs, achieving economic growth, and protecting the environment. ‘PFAS’ is an acronym for a large family of manmade chemicals that all feature the carbon-fluorine bond, one of the strongest bonds in nature. They resist degradation in the environment, leading to widespread contamination across various sectors, including industry, consumer products, and even the water cycle itself.”

2.4. Theme 4: Tap Water (Dis)trust

For many reasons, people do not always trust the safety of tap water, even if they are served by a reputable water system and the water is safe to drink. If people distrust their tap, then they buy more bottled water or sugary drinks to quench their thirst. This is more costly, unhealthy, and damaging to the environment. Purchasing alternatives to tap water impacts low-income families in particular. A major reason people distrust tap water is undetected problems with the plumbing that moves water from a distribution network to the tap in a home, school, or business (known as “premise plumbing”). These problems can result in exceeding health standards or affect the water’s look, taste, and smell — all of which can cause tap water distrust.

ARTISTS’ PROMPTS

Many households that lack trust in the water delivered through their water provider buy bottled water or other bottled beverages instead, including sugary drinks. Through your artwork, explore any or all of the impacts this has: the financial and health impacts on households, and the environmental impacts this creates due to plastic pollution and transport of bottled beverages.



Chantée Benefield
Something in the Water (Does Not Compute), 2024
Mixed media, spigot on wood panel

“Water quality concerns affect many communities throughout Los Angeles County. My artwork references failing infrastructure as a source of tap water distrust and the unhealthy consequences of replacing drinking water with sugar-sweetened beverages.”



Ashley Kruythoff
Family Values, 2024
Mixed media, spigot on
wood panel

“We live in a time where corporate profits often trump fundamental human rights, convenience is preferred over the work needed for a more sustainable future, and global issues trickle down to personal accountability. Across the country — in places like Flint, Michigan — society and its arbitrary rules collectively account for dollars and profit instead of people’s health and dignity. The fabric of human decency has eroded as badly as pipes have corroded. Some health concerns drew me to test my apartment’s water and paint for lead, and the test strips seen in this piece are left over from the testing kit I needed — a month later, my landlord has not addressed positive results. *Family Values* begs the question — like and unlike the art of kintsugi — what exactly in our world needs repairing? I wonder what governmental and corporate ‘nuclear family’ advertising of the future will look like; will ads addressing the problems look as white as they did in the 1950s? What disturbing messages and values are hidden in plain sight?”



Leslie K. Gray
A Conundrum of Trust, 2024
Acrylic, cut paper, plastic,
spigot on wood panel

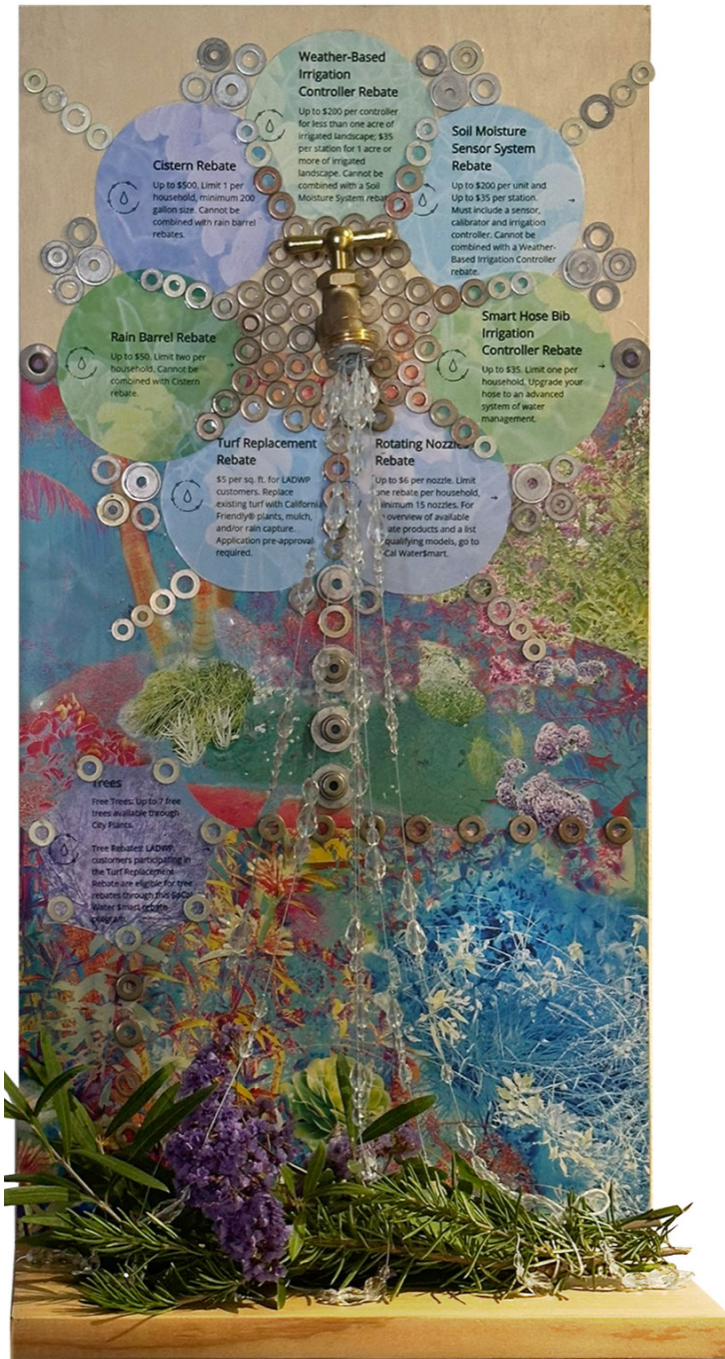
“Communities of color have long histories of experiencing discrimination even under the guise of public service. Having access to clean drinking water is a human right, water being no less vital for life than food or air. Even if municipal taps are safe, who is the final guarantor of this precious resource, its fair distribution, and cleanliness standard? And should they be trusted?”

2.5. Theme 5: Affordability

Water affordability is also a growing concern. While drinking water is a basic human need, California households find it increasingly difficult to satisfy this need as the retail cost of water has risen substantially over the last decade and is expected to continue to rise in the coming years due to climate change, new regulations, and infrastructure investments in support of more local water supplies.

ARTISTS' PROMPTS

For many low-income households, water rates are unaffordable. What might it feel like for a household to be in this situation? What are some solutions that can help improve water efficiency and thus reduce demand, such as water-efficient devices and climate-appropriate landscaping?



Pascaline Doucin-Dahlke
L.A. Drought Tolerant
Garden, 2024

Wood, crystal beads, digital print, metal hardware, ceramic pots, plants, spigot on wood panel

“Water is precious, as the flowing crystal beads in my work testify. Limited watering doesn’t prevent us from growing flowery, colorful, textured, drought-tolerant gardens in Los Angeles. On the upper part of the assemblage, guidelines from LADWP show how to save water for landscaping. My husband, a landscape architect, and I have experimented with different plants, which thrive with limited water. We saw a step-by-step change in our neighborhood with garden owners replacing turf for attractive drought-tolerant gardens. My mixed-media project includes digital prints of photos and a bouquet of dried plants, all from our garden. The two custom-designed pots show a sample of succulents from our garden that were grown and propagated. All metal hardware, ceramic pots, and the wood shelf are recycled or repurposed.”



Susan Arena
*Goddess of Native
Plants, 2024*
Acrylic, collage, spigot on
wood panel

“The laurel is said to be the nymph Daphne, who, in order to repulse Apollo’s sexual advances, was transformed by her father into a tree. Myths connect the ancient to the modern with stories that flow from the tap of human psychology. Gardens also have a way of connecting. A few years ago, my husband planted a garden of native plants at our home in Los Angeles with California poppies, ceanothus, sage, fuchsia, blue flax, and buckwheat. Most plants died, but others grew like wildfire, and quickly a host of hummingbirds, bees, and butterflies were drawn to the garden. People in the neighborhood were also drawn in by sight and smell. I invented a new goddess — sad, but with some hope toward the future. The Goddess is eternal.”



dearantler

*Water Cycle 1 and 2 and
Water Wheel, 2024*

Plastic water bottles,
acrylic, fishing line, beads,
bicycle wheel

“*Water Cycle* and *Water Wheel* are playful takes on how distant our relationship to water is from nature’s hydrological cycle. Our water systems are highly managed, delivering water through networks that rely heavily on technology (represented in simplified form by the bicycle wheel), and which, in many cases, have commodified and privatized this most precious of resources (represented by plastic water bottles). While we can thank technology for the fact that most of us have access to clean water, one wonders what is lost when we trade a direct relationship with nature’s cycles and replace it with highly engineered technology.”

Sculptures made of repurposed materials and exploring our society’s distant relationship to this natural resource were also part of the exhibition.

3. AUDIENCE INTERACTION AND PARTICIPATION

3.1. Blind Water Tasting



The exhibition featured a blind water tasting station. Visitors were invited to taste four brands of water: Arrowhead, Dasani, Evian, and the Los Angeles Department of Water and Power (LADWP) tap. Each was in one of four identical bottles marked with the letter A, B, C, or D. Participants were invited to record their observations on taste and texture, rank the samples by preference, and guess each one's brand.

We collected 349 surveys from participants. Not all participants filled out every field, and the following analysis uses the available data to delve into participants’ preferences and perceptions, aiming to understand:

- Which brands were preferred;
- How accurately participants identified the brands;
- The common taste and texture descriptors used; and
- The potential for predicting brands based on descriptors using machine learning.

3.1.1. Data Preparation

To ensure the integrity and reliability of the analysis, we undertook several preprocessing steps:

- Cleaning responses: We removed duplicate entries and incomplete responses to maintain data quality and eliminate potential biases.
- Addressing ambiguities: Ambiguous responses were marked as N/A, allowing for a clearer and more accurate analysis by focusing on definitive data.
- Mapping samples: The sample codes (A, B, C, D) were carefully mapped to their respective brands. This mapping was essential for correlating participant responses with the correct water brands.
- Standardizing inputs: We standardized rankings and descriptors to ensure consistency across all responses, facilitating a more coherent analysis.

3.1.2. Preference Rankings

To determine which water brands were most preferred by participants, we analyzed the rankings provided for each sample. By calculating the average ranking for each brand and counting the number of first-place selections, we hoped to uncover overall preference trends among the participants.

TABLE 1
Water Brand Rankings (with 1 being the favorite and 4 the least favorite)

Brand	Average Rank	Number of Rankings	Number of First Place Rankings
Dasani	2.28	243	70
LADWP Tap	2.44	244	65
Arrowhead	2.47	245	60
Evian	2.76	242	48

Table 1 shows Dasani emerged as the most preferred brand over the nine-week run of the exhibition, though LADWP tap water was the most preferred brand in the monthlong first leg of the show. LADWP tap water ranked second overall, indicating tap water was nearly as preferred as bottled water among participants. Arrowhead and Evian were less preferred, with Evian the least preferred.

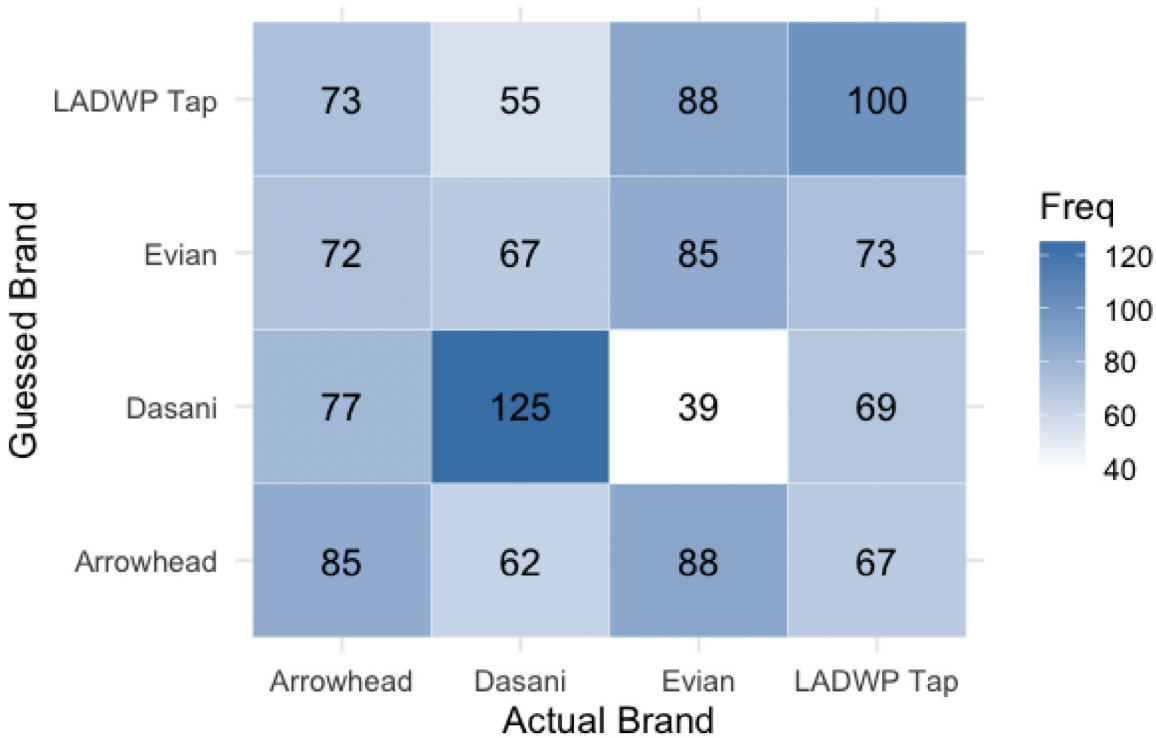
Notably, even though Dasani is a bottled water brand, it is largely sourced from municipal water. Therefore, the top two preferred water samples can both be considered tap water.

These results suggest that participants did not necessarily favor more expensive bottled waters over tap water, challenging common perceptions about bottled water’s superiority to tap water.

3.1.3. Brand Identification Accuracy

To assess participants’ ability to identify the water brands based solely on taste and texture, we constructed a confusion matrix (Figure 1). This matrix compares participants’ guesses with the actual brands, providing insights into their accuracy and potential confusion between brands.

FIGURE 1
Confusion matrix of brand guesses



The overall identification accuracy was approximately 32%, indicating that participants struggled to correctly identify the brands. Dasani was most frequently identified correctly, aligning with its status as the most preferred brand. Participants often confused the LADWP tap water with Arrowhead and Evian, suggesting similar taste perceptions among these brands. We also found a correlation between higher preference and higher correct identification rates.

The difficulty participants had in distinguishing between brands based on taste and texture alone suggests that sensory differences may be subtle. This reinforces the idea that perception and branding significantly influence preferences more than taste. The fact that tap water was not easily distinguishable underscores the potential for it to be perceived as a high-quality option.

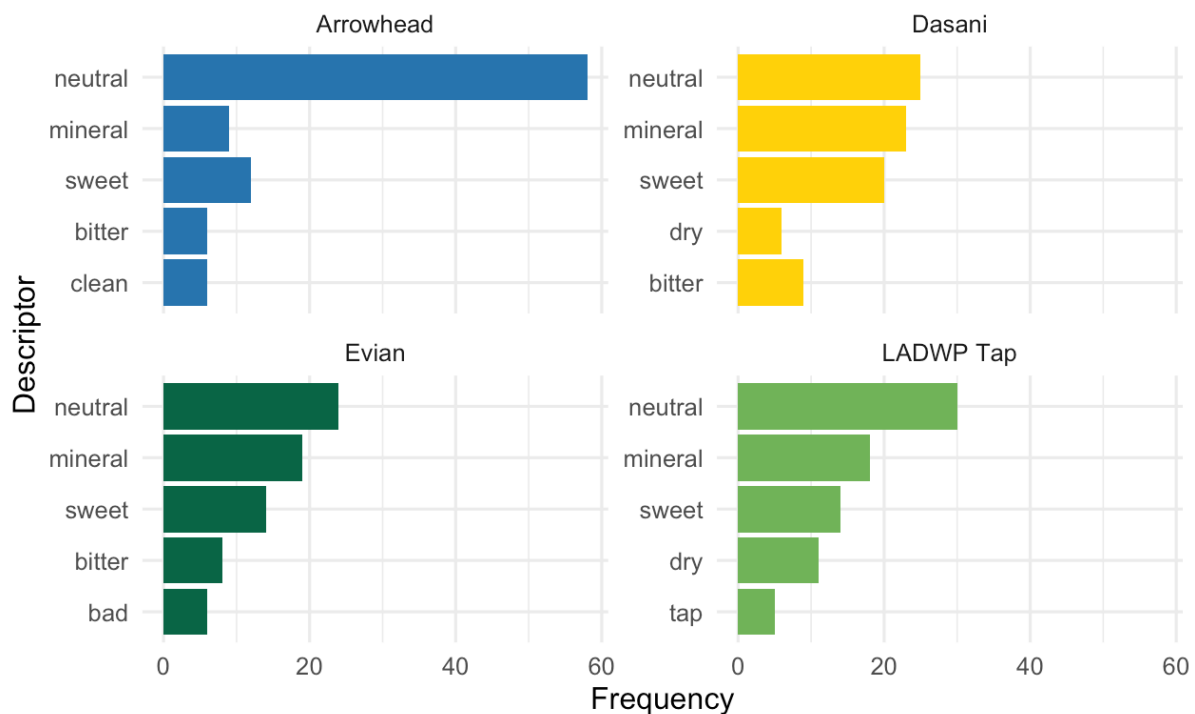
3.1.4. Descriptor Analysis

To delve more deeply into participants' sensory perceptions, we analyzed the taste and texture descriptors provided for each sample (Figures 2A and 2B). By identifying the most frequently used descriptors for each brand, we aimed to uncover common themes and attributes associated with each water brand.

Common taste descriptors like “neutral” and “mineral” were used across all brands. Dasani was often described as “clean” and “sweet,” aligning with its high preference. The LADWP tap water had taste descriptions similar to Dasani, indicating comparable sensory perceptions.

FIGURE 2A

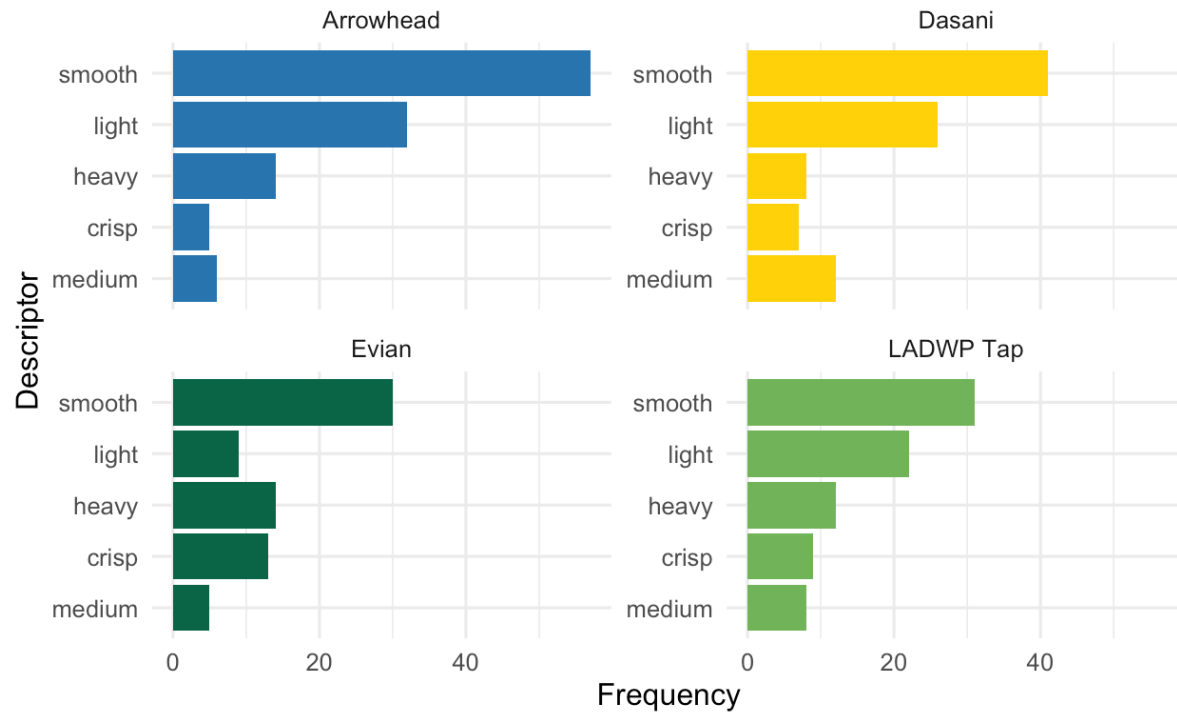
Top 5 descriptors for taste by brand



The most common texture descriptor was “smooth,” which was applied to all brands, followed by “light,” which was frequently used to describe all but Evian. Participants tended to either find a brand to be “light” or “heavy,” with few choosing “medium” to describe its body.

FIGURE 2B

Top 5 descriptors for texture by brand



4. VISITOR RESPONSES TO OPEN-ENDED PROMPTS



In addition to the blind water tasting analysis, participants were asked to provide written responses to several prompts related to their perceptions and experiences with water. These prompts were designed to elicit participants' concerns, habits, and personal connections to water, complementing the quantitative findings from the tasting data.

We conducted a sentiment analysis of participants' voluntary responses to three prompts provided via pre-printed cards in both English and Spanish. By examining responses, our analysis aimed to provide insights into perceptions, values, and potential worries related to water sources and their quality.

4.1. Data Overview

The three prompts and response counts were as follows:

- Prompt A: “What question or concern do you have about water?” received 63 responses, each ranging from one to four sentences.
- Prompt B: “What kind of water do you drink at home? Why?” received 36 responses. Participants mentioned a variety of sources, including bottled water, tap water, filtered tap water, and “dispensing machine water.”
- Prompt C: “What lake, river, beach, or other water body is meaningful to you? Why?” received 40 responses.

These prompts were open-ended, allowing participants to express their thoughts in their own words. The responses were cleaned, translated (where needed), tokenized, and subjected to sentiment analysis using a lexicon-based approach.

4.2. Sentiment Analysis Approach

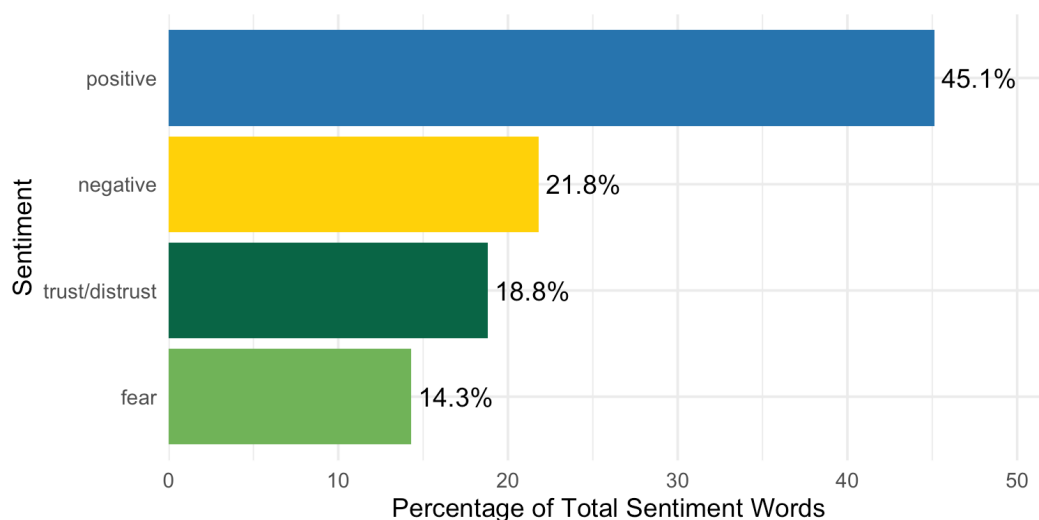
The sentiment analysis was conducted using a dictionary-based method, where each word in the responses was matched against a sentiment lexicon to determine its emotional tone. Words were categorized into sentiments such as positive, negative, fear, and trust/distrust. After categorizing the words, the relative frequencies of each sentiment were calculated.

4.3. Prompt A: Sentiment Distribution in Water Concerns

Prompt A asked participants about their questions or concerns regarding water. The sentiment analysis revealed a blend of apprehension, interest, and trust/distrust. Figure 3 shows the distribution of selected sentiments in these water concerns.

FIGURE 3

Distribution of selected sentiments in water concerns (Prompt A)



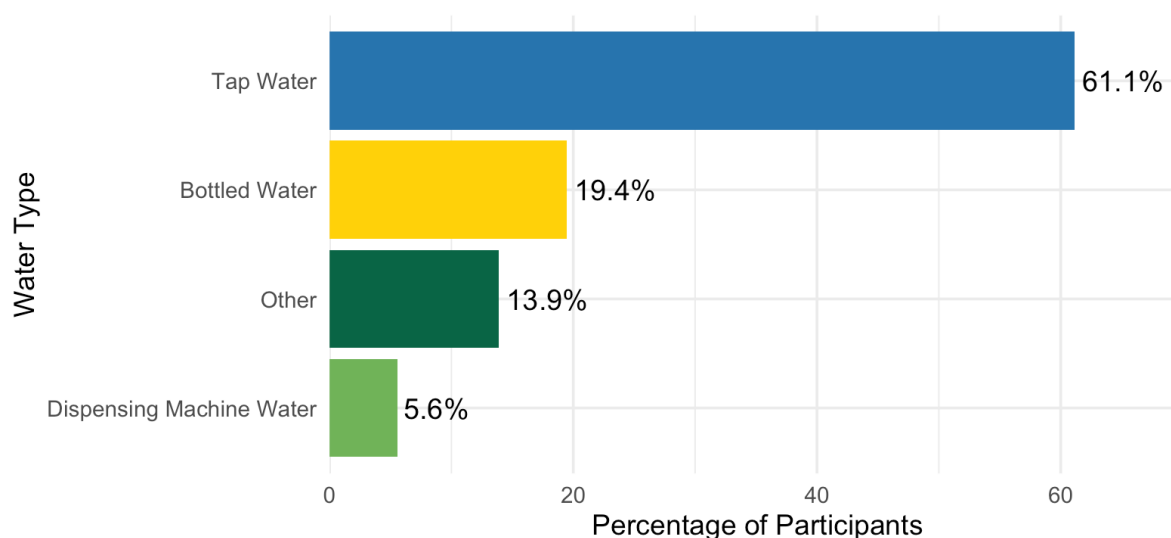
Responses indicated that negative and fear-related sentiments were present, reflecting concerns about water quality, contamination, or scarcity. Trust/distrust sentiments emerged as well, suggesting that while some participants trust their water sources, others remain skeptical or uncertain. Overall, the sentiment distribution indicates that concerns about water often carry an emotional weight and a mix of caution and hope.

4.4. Prompt B: Types of Water Consumed at Home

Prompt B explored participants' habits regarding the type of water they consume at home. Responses included bottled water, tap water, filtered tap water, and "dispensing machine water". One participant indicated using multiple sources. Figure 4 provides a visualization of the percentages of each type chosen.

FIGURE 4

Types of water consumed at home (Prompt B)



Perceived safety and cleanliness emerged as a major reason for water choice, with participants prioritizing the perception of greater purity and quality. Taste was also a significant factor, reflecting the importance of flavor and palatability in daily consumption. Environmental concern appeared as a notable theme, suggesting that some participants consider the ecological impact of their water choices.

4.5. Prompt C: Meaningful Water Bodies

Prompt C asked participants to reflect on a water body that is meaningful to them and explain why. Responses to Prompt C highlighted personal connections to lakes, rivers, beaches, and other water bodies. Many participants recounted memories, cultural significance, and emotional bonds tied to these natural resources. While the sentiment analysis for Prompt C was less structured due to its open nature, the positive and trust/distrust sentiments were observed in relation to cherished memories and the reliability of these water bodies over time. Participants frequently associated these places with relaxation, inspiration, and community ties.

4.6. Overall Themes of Open-Ended Prompts

The sentiment analysis of the three prompts reveals:

- Emotional weight of water concerns (Prompt A): Participants expressed fear, negativity, and trust/distrust, indicating that water-related issues can evoke emotional responses driven by uncertainty and quality concerns.
- Consumption habits and motivations (Prompt B): The diversity of water sources and the reasons for choosing them — ranging from safety and taste to environmental responsibility — underscores the complexity of water-related decisions in daily life.
- Personal meaning of water (Prompt C): Beyond practical concerns and consumption habits, participants' meaningful water bodies reflected positive associations, cultural significance, and emotional attachments.

These findings complement the results from the blind water tasting analysis, highlighting that participants' relationships with water are multifaceted, influenced by both sensory perceptions and emotional, cultural, economic, and environmental factors. Understanding these sentiments can guide more empathetic communication and policymaking around water quality, accessibility, and sustainability.

5. PANEL DISCUSSION ON WATER EQUITY, JULY 13, 2024 — AVENUE 50 STUDIO



The panel discussion held at the opening reception focused on themes related to water access and equity considerations.

Moderated by:

Gregory Pierce, Director, UCLA Water Resources Group and UCLA Human Right to Water Solutions Lab

Panelists:

Candice Dickens-Russell, President & CEO, Friends of the Los Angeles River

Silvia R. González, Director of Research, UCLA Latino Policy and Politics Institute

Victor Griego, Founder, Water Education for Latino Leaders

Alesia Montgomery, Assistant Professor, UCLA Department of African American Studies and Institute of the Environment and Sustainability

Monica Sánchez, Councilmember, City of Pico Rivera

The first panel discussion explored the evolving relationship between Angelenos and the Los Angeles River, highlighting efforts by Friends of the Los Angeles River to center restoration and stewardship through tribal engagement and community visioning. Panelists examined the importance of rebuilding trust in public water systems, emphasizing how historical neglect and environmental injustices have shaped skepticism in marginalized communities. The conversation also delved into models of community codesign and the role of grassroots engagement in shaping more equitable water infrastructure and policy. Victor Griego shared the origin and mission of Water Education for Latino Leaders and how its programming fosters informed civic leadership on water issues. Drawing on both local and national experience, panelists like Dr. Alesia Montgomery and Dr. Silvia González offered insights into the intersections of race, place, and environmental justice, including water access and sanitation challenges in South L.A. Dr. Monica Sánchez reflected on pressing water concerns in Pico Rivera and identified promising community-driven solutions.



Panel Discussion on Local Water, September 29, 2024 — City of Los Angeles El Pueblo Historical Monument

Moderated by:

Megan Mullin, Faculty Director, UCLA Luskin Center for Innovation and Professor of Public Policy

Panelists:

Amanda Begley, Associate Director of Watershed Health, TreePeople

Edith B. de Guzman, Cooperative Extension Specialist, UC Division of Agriculture and Natural Resources, and UCLA Luskin Center for Innovation

Conner Everts, Facilitator, Environmental Water Caucus, and Executive Director, Southern California Watershed Alliance

The second panel explored the past, present, and future of Los Angeles' complex water system through a wide-ranging discussion that began at Mono Lake — where panelist Conner Everts had just returned from the 30th anniversary of a pivotal regulatory decision that curbed Los Angeles' diversions and marked a turning point toward more sustainable water management. From there, the conversation moved to the challenges of imported water and the promise of a more resilient, locally sourced supply. Everts reflected on insights from moderating the Southern California Water Dialogue, highlighting under-recognized voices and innovative regional projects. Mark Gold built on these themes, emphasizing the importance of local water strategies for climate resilience and assessing L.A.'s progress toward greater self-sufficiency. Amanda Begley brought the conversation to the community scale, describing how programs like the Safe Clean Water Program are helping Angelenos reconnect with their local watersheds. Finally, Edith de Guzman spoke to the power of art and storytelling in shaping public understanding, inviting audiences to see water not only as an infrastructure issue, but as deeply connected to equity, climate, and co-benefits like urban greening and heat mitigation.



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