

## Communication from Public

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**Comments for Public Posting:** My name is Jordy Coutin and I've been volunteering with Water Drop LA for more than 2 years. I'm a current PhD student in Public Policy at USC and I study homelessness policy. On a weekly basis, Water Drop LA distributes nearly 2000 gallons of water and other necessities to our unhoused neighbors in Skid Row. Our team recently completed a research brief which was sent to each of your offices last week, assessing the state of water access in Skid Row, and comparing alternative interventions. We find that there are severely insufficient water resources in the neighborhood and that a significant investment in permanent and accessible water infrastructure is required to meet the need. These access gaps are particularly concerning given unhoused Angelenos disproportionately experience heat-related illnesses and deaths. The lack of access is likely experienced by unhoused Angelenos across LA, not just Skid Row. We urge you to take immediate action to address this major failure by installing water spigots and increasing the number of alternatives available to unsheltered residents to access water. The crisis is only going to get worse as things start to heat up. You can't afford to let more people die on the streets of LA due to lack of basic necessities.



# Recommendation to Fund and Maintain Potable Water Spigots in Skid Row

## Executive Summary

Water resources in the Skid Row neighborhood of Los Angeles are insufficient to meet international standards of water access for Skid Row's 2,695 unsheltered residents.<sup>1</sup> Based on the UN Refugee Agency (UNHCR) minimum standard of 15 liters of water per day, Water Drop Los Angeles (Water Drop) recommends that the city of Los Angeles provide Skid Row's unsheltered residents with a minimum of 40,425 liters or 10,679 gallons of water per day (74,754 gallons per week).<sup>2</sup> **To meet this need, Water Drop proposes that the city of Los Angeles fund the installation of publicly accessible, permanent water spigots in the neighborhood.**

## Water Insecurity in Skid Row

Water insecurity presents a lethal danger<sup>3</sup> for people experiencing homelessness in the city of Los Angeles, where approximately 28,458 people live unsheltered.<sup>4</sup> The Skid Row neighborhood, located within City Council District 14 and County District 1, contains the highest concentration of unhoused individuals in Los Angeles County on any given night.<sup>5</sup> Unsheltered individuals in Skid Row are especially vulnerable to environmental factors like heat waves and storms, the effects of which are exacerbated by the urban heat island effect and the shortage of green space. Constant exposure to harsh weather conditions increases the need for water use, which is essential for proper hydration and sanitation.

At present, water access in Skid Row does not meet existing community needs or basic international standards. According to Harvard Medical School, the **minimum fluid intake for survival is roughly 1/3 gallon per day**.<sup>6</sup> According to UNHCR and UNICEF, **a person needs access to approximately 4 gallons of water per day to meet their full water needs**, including water for drinking, cooking, cleaning, and hygiene.<sup>7</sup> Based on UNHCR and UNICEF minimum survival/emergency standards, in total, Skid Row residents should have access

<sup>1</sup> LAHSA 2022 Homeless count, <https://www.lahsa.org/documents?id=6560-skid-row-hc2022-data-summary>

<sup>2</sup> See Table 1 in appendix for calculation.

<sup>3</sup> [Dehydration and Heat Stroke | Johns Hopkins Medicine](#)

<sup>4</sup> [6516 - City Of LA Hc22 Data Summary \(lahsa.org\)](#)

<sup>5</sup> [6560 - Skid Row Hc2022 Data Summary \(lahsa.org\)](#)

<sup>6</sup> [How much water should you drink? - Harvard Health](#)

<sup>7</sup> [UNHCR WASH Manual: Practical Guidance for Refugee Settings United Nations High Commissioner for Refugees Case Postale 2500. CH-1211 Genève 2 Dépôt Suisse.](#)

to 10,679 gallons of potable water per day.<sup>8</sup> While these numbers may seem high, the average person in a middle-income urban environment uses approximately 13 gallons per day.<sup>9</sup>

## Existing Water Access

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Current water sources in Skid Row do not supply water at levels necessary for survival. **There are 8 hydration stations in Skid Row,<sup>10</sup> which is roughly 1 station for every 337 unsheltered residents.<sup>11</sup>** UNHCR standards for refugee camps require at least 1 water access point for every 100 residents.<sup>12</sup> Many of Skid Row's hydration stations are dysfunctional and have low water pressure, broken buttons, or are regularly clogged, causing residents to distrust their cleanliness when operational. Two of the stations are locked inside park gates at closing, restricting access. Other free water sources include bottled water from non-profits (when available), Water Boxes at the Midnight Mission and Skid Row Community Refresh Spot during operating hours, and tapped fire hydrants.<sup>13 14</sup> Residents who can afford to purchase water report relying on grocery and corner stores. As of February 2023, **the price for one gallon of water at stores in Skid Row ranged from \$2.00-\$4.00.**

## Community Health Impacts

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Data from the University of California, Los Angeles suggests that the rate of excess visits to the emergency room for heat-related illness in Skid Row is over double Los Angeles's average.<sup>15</sup> According to data from the Los Angeles County coroner's office, unhoused residents made up 42% of those who died from heat illness or heat exposure in 2022, even though they make up less than 1% of Los Angeles' population.<sup>16 17</sup> **The continued failure to provide sustainable points of water access in Skid Row will only contribute to rising mortality rates for unhoused residents in Los Angeles County and will intensify long-term cost burdens to government agencies.**

## Precedent of Interventions

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In considering the evaluation of potential solutions to address the crisis on Skid Row, it is imperative to understand that there are few solutions that have been applied in similar contexts. Additionally, WaSH (Water, Sanitation, Hydration) inequities are well documented in unhoused communities in the U.S., but there is limited research on solutions for unsheltered communities.<sup>18</sup> Water Drop's years of service provision and outreach have allowed for a review of solutions to the water shortage in Skid Row. The alternatives listed

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<sup>8</sup> See Table 1 in appendix for calculation.

<sup>9</sup> [CCC | WATER SANITATION AND HYGIENE ... | Humanitarian UNICEF](#)

<sup>10</sup> [WeTap.org](#)

<sup>11</sup> See Table 2 in appendix for calculation. If every resident used the drinking fountains, each person would have 4 minutes and 16 seconds per day (24 hours) to access a drinking fountain. The amount of time would be halved if calculated for daylight hours only (12 hours). See Table 3 in appendix for calculation.

<sup>12</sup> [WASH in camps | UNHCR](#)

<sup>13</sup> [Skid row homeless shelter pleads for water donations - Los Angeles Times \(latimes.com\)](#)

<sup>14</sup> [Solis, SoCalGas, LA Mission bring 'Water Box' to Skid Row | News | ladowntownnews.com](#)

<sup>15</sup> [UCLA Heat Maps - Map \(google.com\)](#)

<sup>16</sup> [Heat waves are killing more L.A. homeless people - Los Angeles Times \(latimes.com\)](#)

<sup>17</sup> There were 69,144 [unhoused residents](#) and 9,829,544 [total residents](#) in LA County in 2022.

<sup>18</sup> ['You feel how you look': Exploring the impacts of unmet water, sanitation, and hygiene needs among rural people experiencing homelessness and their intersection with drug use | PLOS Water](#)

explore potential interventions that could improve the health and safety of the unsheltered Skid Row community while reducing reliance on single-use plastics.

Figure 1: Analysis of Primary Interventions

ADVANTAGES	Water Spigots	Water Box	Water Fountains
Improves sustained potable water access to community members	✓	✓	
Improves sustained personal hygiene	✓	Uncertain	
Durable	✓		Uncertain
High volume distribution	✓	✓	
Reduces plastic use	✓	✓	Uncertain
Reduces health inequities	✓	✓	Uncertain
No barriers to access	✓		✓
Potential for community stewardship/employment	✓		✓

DISADVANTAGES	Water Spigots	Water Box	Water Fountains
Upfront infrastructural investment	✓		✓
Requires empty space for installation	✓		✓
Requires outside maintenance/repair		Uncertain	
Requires round-the-clock supervision		✓	
Needs to be moved at night		✓	

Alternative 1: Spigots

Spigots are a simple water dispensing apparatus with a faucet attached to a pipe and a lever for starting and stopping water flow. Water spigots are currently in use at parks and campsites across the U.S.<sup>19</sup> Additionally, the City of San Francisco is in the process of installing spigots in the Tenderloin Neighborhood to expand

<sup>19</sup> [Water Use in National Parks - Protecting Water \(U.S. National Park Service\) \(nps.gov\)](#)

water access to unhoused residents.<sup>20</sup> Spigots are durable and allow for a large volume of water flow, enabling people to meet comprehensive WaSH needs. Depending on design, spigots can be engineered to include a drinking fountain spout and to drain excess gray water into grates installed on the street, preempting clogs. Challenges with spigots include a complex installation process, an open area for installation, and the potential need for regular maintenance or stewardship.

## Alternative 2: Hydration Stations

Hydration stations include drinking fountains and water bottle filling stations, designed for daily hydration in small quantities. Benefits to hydration stations include minimal monitoring requirements, general durability, and the potential for community employment opportunities if stewardship were secured. In addition, there is potential to partner with LA Department of Water and Power's Hydration Station Initiative Program (HSIP) to access up to \$10,000 in reimbursement for installation costs. However, as previously discussed, there are 8 hydration stations in Skid Row that exhibit a plethora of functional challenges, including the need for frequent maintenance and community distrust in the water quality resulting from lack of repairs and a proper cleaning schedule.

## Alternative 3: Water Boxes

A Water Box is a portable water filtration system developed by the non-profit WaterBox.org, that dispenses 10 gallons of drinkable water per minute.<sup>21</sup> Benefits of the Water Box include minimal installation requirements, the ability to dispense different volumes of water for versatile needs, mobility, and daily water quality testing to assure drinkable standards are met. Despite the relative ease of installation, Water Boxes still require a water connection point. Water boxes also require constant supervision which may restrict access and deter use by community members and may require that maintenance be conducted by the WaterBox.org which could delay repairs.

## Recommendation

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**Water Drop recommends that the city of Los Angeles allocate funding for the installation of permanent water spigots in Skid Row. Spigots would both increase water accessibility and provide the volume of water that many unsheltered residents seek to meet their WaSH needs.** Currently employed interventions (hydration stations and Water Boxes) either do not provide the volume of water necessary to meet resident needs, have restrictive access, require supervision and frequent repairs, or are not well trusted by community members. The city of Los Angeles should engage in a participatory process to determine the location of new water access points and utilize a combination of water interventions to maximize water access for unhoused residents.

While upfront expenses for spigot installation may be higher than the presented alternatives, the long-term benefits of this public infrastructure investment are substantial. The addition of permanent water access points that meet the full range of community water needs can be expected to decrease the unauthorized use of fire hydrants, reduce the use of hydration stations for non-drinking purposes, and prevent costly emergency room visits due to dehydration and hyperthermia. **Most importantly, an expansion of public**

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<sup>20</sup> [SF to Add Water Outlets in Neighborhoods With Large Homeless Populations - San Francisco Public Press \(sfpublicpress.org\)](https://sfpublicpress.org)

<sup>21</sup> [Jaden Smith donates fourth Water Box to give Flint residents clean water | Flint Water Emergency | abc12.com](https://abc12.com)

drinking water infrastructure has the potential to decrease mortality rates in the largest unsheltered community in the country.

The city of Los Angeles has the opportunity to become a leader in water access solutions for cities across the nation that are struggling with increasing rates of homelessness. By taking the first steps to address water insecurity in unsheltered communities, the city can prevent hundreds of unnecessary deaths in the years to come.

## Appendix

Table 1. Minimum Water Requirement for Residents of Skid Row

Assumptions					
Gallons per liter	Unsheltered residents in Skid Row				
0.26	2,695				

Source	Standard	Liters per day per person	Gallons per day per person	Liters per day for Skid Row unsheltered residents	Gallons per day for Skid Row unsheltered residents
Harvard Medical School	Drinking	1.42	0.38	3827	1011
UNICEF	Survival	15	3.96	40425	10679
UNHCR	Potable water (unspecified)	15	3.96	40425	10679

Source	Standard	Liters per week per person	Gallons per week per person	Liters per week for Skid Row Unsheltered Residents	Gallons per week for Skid Row unsheltered residents
Harvard Medical School	Drinking	9.94	2.63	26788	7077
UNICEF	Survival	105	27.74	282975	74754
UNHCR	Potable water (unspecified)	105	27.74	282975	74754

Table 2. Water access points per person

Unsheltered residents in Skid Row	Hydration stations	Residents per hydration station
2,695	8	337

Residents in Skid Row	Water access points (hydration stations + Water Boxes)	Residents per access point
2,695	10	270

Table 3. Amount of time per day water access points are available for residents

Assumptions		
Total unsheltered residents	2,695	
Hours per day	24	
Minutes per day	1440	(A)
Residents per hydration station	337	(B)
Residents per water access point	270	(C)

	Estimate	Equation
Minutes per 24-hour period that a hydration station is available per resident	4.27	(A)/(B)
Minutes per 24-hour period that a water access point is available per resident	5.34	(A)/(C)

Resident Perspectives

*Submitted by a volunteer on July 2, 2022:*  
“One person standing by a fountain told me that he and his friends don’t trust the drinking fountains because they’re always so dirty and they think the water just cycles through the fountain and is never fresh. They’re concerned about contracting a stomach virus from the contamination.”

*Submitted by a volunteer on June 20, 2022:*  
“A resident sitting near one of the fountains stated that he would only drink the water from the fountains in extreme cases. He said that he was told that the water is good and filtered but doesn’t drink it. He prefers to get his water from missions or other organizations”

*Submitted by a volunteer on October 31, 2022:*  
“One individual I encountered stated that he did not use water from the fountains because he didn’t know of any, except at the parks. Because he only got water from Water Drop, by the end of the week his pee would be dark yellow. It would remain that way until Water Drop provided water the following Sund

