

# **INTERLOCAL AGREEMENT NO. 2022-005-WEM**

FOR:

**HARRIS-GALVESTON SUBSIDENCE DISTRICT AND  
HARRIS COUNTY MUNICIPAL UTILITY DISTRICT  
NO. 50**

CobbFendley Project No. 1612-043-01

AUGUST 7, 2023

**FINAL REPORT**

Submitted By:

Jennifer Steen, PE



Construction Management ▪ Geographic Information Systems ▪ Hydraulics and Hydrology ▪ Land Development  
Public Works ▪ Right-of-Way Acquisition ▪ Site Development ▪ Subsurface Utility Engineering  
Surveying ▪ Telecommunications ▪ Transportation ▪ Utility Coordination and Design

16610 IH 45, Suite 250 | Conroe, Texas 77384 | 936.224.7114 | fax 713.462.3262 | [www.cobbfendley.com](http://www.cobbfendley.com)

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## 1. Introduction

Harris County Municipal Utility District No. 50 (HCMUD 50) entered into an interlocal agreement with Harris-Galveston Subsidence District (HGSD) for the purpose of reducing groundwater usage for HCMUD 50 by purchasing and distributing 1,300 new EPA WaterSense labeled showerheads. HCMUD 50 conducted outreach to customers and distributed showerheads to 258 residents.

The following report documents the customer outreach and showerhead distribution over the past year.

## 2. Timeline and Milestones

MUD 50 provided a quarterly reimbursement request to HGSD including project status updates with number of showerheads distributed and used fixtures collected, number and type of outreach conducted that quarter and budget status updates. The table below provides a summary of the information provided in the quarterly update. The full quarterly reports can be found in **Attachment A – D Quarterly Report**.

Figure 1 Annual Outreach and Distribution for Showerheads

Quarter	Showerheads Purchased	Showerheads Distributed	Customer Outreach	Showerheads Collected <sup>2</sup>
First Quarter 7/1/22 – 9/30/22	69 \$1,090.59	69	Information added to MUD 50 website	29
Second Quarter 10/1/22 – 12/31/22	85 \$934.71	50	Christmas in the Park 12/17/22	0
Third Quarter 1/1/23 – 3/31/23	100 \$972.84	66	MUD 50 Website flyer	0
Fourth Quarter <sup>1</sup> 4/1/23 – 7/31/23	50 \$675.48	117	Banner at MUD 50 Town Hall 7/11/23 Homecoming 7/15/23	0
<b>TOTAL</b>	<b>304</b> <b>\$3,673.62</b>	<b>302</b>		

1. The fourth quarter was extended to the end of July, due to a special homecoming event.
2. The MUD 50 properly disposed of the collected showerheads. The number of collected showerheads is approximate.

## 3. Texas Water Development Board Water Loss Report for 2022

MUD 50's operator, Municipal Operations and Consulting, submitted the 2022 Water Audit Report to Texas Water Development Board. The average customer meter accuracy is 98%. The total assessment score is 79. The full report can be found in **Attachment E – Texas Water Development Board Report**.

## 4. MUD 50 Outreach

MUD 50 participated in multiple outreach events throughout the 2022/2023 year. In the first quarter outreach was completed via utility bills. Flyers were included in the monthly bills providing information on how each residential household could obtain a new WaterSense showerhead. MUD 50 also added a popup alert on their website. The alert provided information regarding the

showerhead replacement program. 69 showerheads were distributed in the first quarter. During the first quarter 29 used showerheads were collected and disposed of.

In the second quarter MUD 50 attended the Christmas in the Park community event on December 17, 2022. 25 showerheads were distributed at that event. A flyer was added in the utility bills providing information regarding the Christmas in the Park and the Shower Head Giveaway. A total of 50 showerheads were distributed in the second quarter.

In the third quarter MUD 50 updated the website banner providing showerhead replacement details. All 66 distributed showerheads were at the MUD 50 office.

In the fourth quarter MUD 50 distributed showerheads at their office. On July 11, MUD 50 distributed showerheads during a Town Hall meeting. On July 15, MUD 50 participated in a Homecoming parade and distributed showerheads. 117 showerheads were distributed during this quarter. A new banner was placed on the fence at the MUD 50 office providing details on the showerhead replacement.

## 5. Calculated Water Savings

MUD 50 distributed 302 new WaterSense showerheads to residents in 2022/2023. The WaterSense showerheads reduce the water usage from 2.5 gpm to 1.8 gpm, a 28% reduction in water usage. EPA estimates showering accounts for 17% of residential indoor water use.

The following table assumes an increase of 7.44% in connections every year based on the Texas Water Development Board Population Projection 2021. MUD 50 has been providing one new WaterSense showerhead to every new residential connection. The average water usage for MUD 50 for 2021 and 2022 was 63,132 gallons per connection. For the purposes of this report the average water usage per connection used was 63,100 gallons per residential connection that received a new WaterSense showerhead.

Figure 2 Water Savings from 2022 through 2028

Year	Residential Connections W/ Showerhead	Gallons Saved Per Year
2022	302	907,075
2023	324	974,562
2024	349	1,047,069
2025	375	1,124,971
2026	402	1,208,669
2027	432	1,298,594
2028	465	1,395,209
<b>TOTAL</b>		<b>7,956,147</b>

## 6. Summary

The purpose of the interlocal agreement between HGSD and MUD 50 is to reduce the groundwater usage by MUD 50 by replacing residential showerheads with low flow showerheads. The interlocal agreement includes grant funding with a 50 percent match with a total project cost not to exceed \$20,312. The total amount incurred by MUD 50 was \$3,673.62 or 10.71% of the grant. The total grant match was \$1,836.81.

The interlocal agreement was based on MUD 50 purchasing and distributing 1,300 new WaterSense showerheads. MUD 50 distributed 302 WaterSense showerheads (approximately 23% of the grant) in 2022/2023. The estimated water savings between 2022 and 2028 is approximately 8 million gallons.

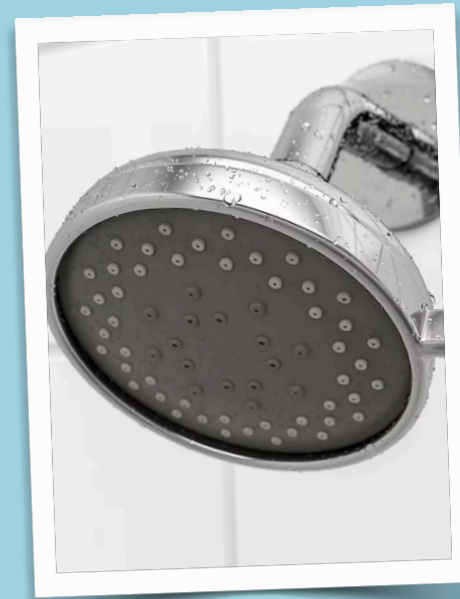
# SHOWER HEAD REPLACEMENT PROGRAM 2022



HARRIS COUNTY MUD 50  
WATER CONSERVATION  
EFFORT

IN PARTNERSHIP WITH  
HARRIS GALVESTON  
SUBSIDENCE DISTRICT

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SUBSIDENCE DISTRICT

**Every active residential household is eligible to receive a brand new shower head!** Here is how:

1. Come in to District Office with identification
2. Pick up your new shower head
3. Install the new shower head in your home
4. Enjoy the perks!

What to do with your old shower head? Feel free to drop it off to the District office to be disposed!

Any questions, contact the District Office at 281.328.2041

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**Harris County MUD 50**  
*"Proudly Serving Barrett Station and Surrounding Areas"*

(281) 328-2041  
[Contact Us](#)

Home Customer Service ▾

Search this website ... 🔍

**BILL PAYMENT**  
 Water Quality Report

**Local Weather**

Today	Tomorrow	Thursday
Few clouds 88°/67°	Few clouds 89°/66°	Few clouds 88°/70°

**Alerts**

**SHOWER HEAD REPLACEMENT PROGRAM 2022**  
 September 02, 2022

**Sign Up for Alerts**  
 Unsubscribe

**Alert** [X]

**SHOWER HEAD REPLACEMENT PROGRAM 2022**  
 September 02, 2022

EVERY ACTIVE RESIDENTAL HOUSEHOLD IS ELIGIBLE  
 TO RECEIVE A BRAND NEW SHOWER HEAD!  
 PICK UP A NEW SHOWER HEAD FROM THE DISTRICT OFFICE  
 AND INSTALL THE NEW SHOWER HEAD IN YOUR HOME  
 AND ENJOY THE PERKS!  
 ANY QUESTIONS, CONTACT THE DISTRICT OFFICE AT 281-328-2041

**Ok, Got It!**

**By Mail.**  
  
**Check out**

Welcome to the Official Website of Harris County MUD 50

Our Mission Bill Payment Options Conservation Tips

**Harris County MUD 50**  
*"Proudly Serving Barrett Station and Surrounding Areas"*

(281) 328-2041  
[Contact Us](#)

Home Customer Service ▾ Forms & Reports ▾ News & Notices ▾ Resources ▾

Search this website ... 🔍

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**Local Weather**

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**Alerts**

**SHOWER HEAD REPLACEMENT PROGRAM 2022**  
 September 02, 2022

**Sign Up for Alerts**  
 Unsubscribe

**ALERTS**

Stay tuned here to the latest alerts from your water utility.

**Subscribe** to have News & Notices, and Alerts delivered via email or text! Just another way we are working to better serve our community.

**SHOWER HEAD REPLACEMENT PROGRAM 2022**  
 September 02, 2022

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 ANY QUESTIONS, CONTACT THE DISTRICT OFFICE AT 281-328-2041









# Alert



## **SHOWER HEAD GIVEAWAY**

December 09, 2022

**Come out and join us at**

**Community Christmas in the Park on**

**Decmeber 17, 2022 @ 6:30 pm!**

**We will be giving away Shower Heads to further our  
water conservation efforts!**

**Don't forget to bring your ID for verification**

**Ok, Got It!**

**Our Mission**

Harris County  
MUD 50

# *Shower Head Giveaway*

Community Christmas  
in the Park

December 17, 2022 @ 6:30pm

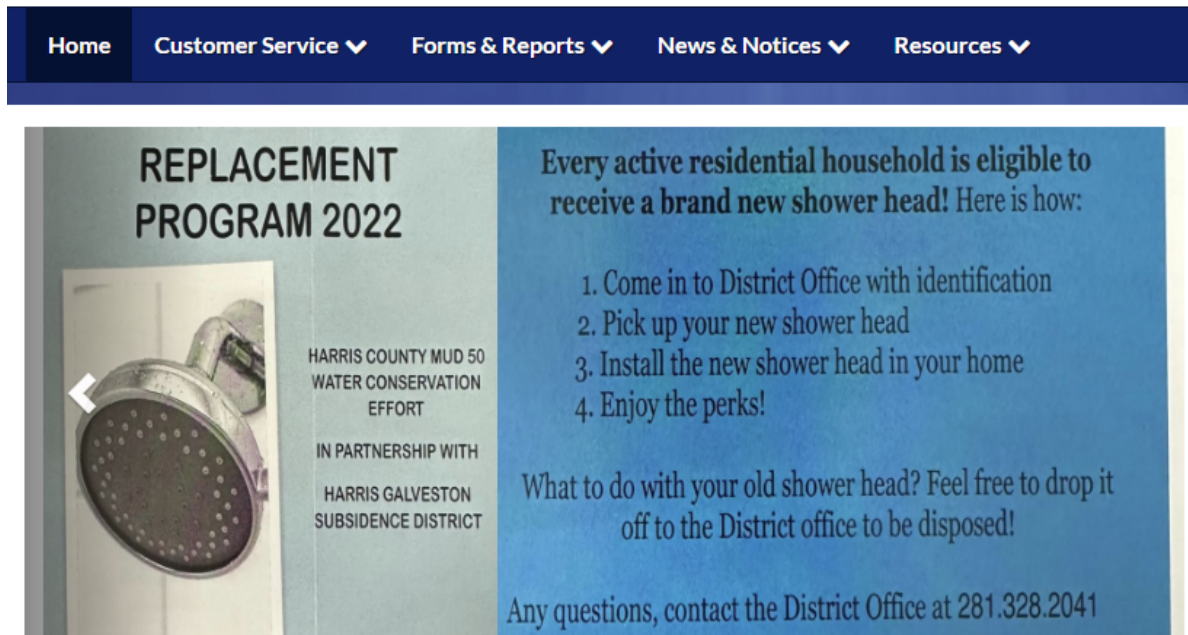
Don't forget your  
ID for verification!



# EXHIBIT A - Shower Head Replacement Program HCMUD 50 Website Advertisement

## Harris County MUD 50


*"Proudly Serving Barrett Station and Surrounding Areas"*



The screenshot shows a website navigation bar with the following links: Home, Customer Service, Forms & Reports, News & Notices, and Resources. Below the navigation bar is a promotional banner for the 'REPLACEMENT PROGRAM 2022'. The banner features a photograph of a shower head on the left. To the right of the photo, the text reads: 'HARRIS COUNTY MUD 50 WATER CONSERVATION EFFORT' and 'IN PARTNERSHIP WITH HARRIS GALVESTON SUBSIDENCE DISTRICT'. The main body of the banner has a blue background and contains the following text: 'Every active residential household is eligible to receive a brand new shower head! Here is how:' followed by a numbered list: 1. Come in to District Office with identification, 2. Pick up your new shower head, 3. Install the new shower head in your home, 4. Enjoy the perks! Below the list, it says: 'What to do with your old shower head? Feel free to drop it off to the District office to be disposed!' and 'Any questions, contact the District Office at 281.328.2041'.

Home Customer Service Forms & Reports News & Notices Resources

### REPLACEMENT PROGRAM 2022



HARRIS COUNTY MUD 50  
WATER CONSERVATION  
EFFORT

IN PARTNERSHIP WITH  
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<https://www.hcmud50.com/>



## EXHIBIT A - Shower Head Replacement Program HCMUD 50 Banner



### July 11 - Town Hall



### July 15 - Homecoming Parade

