

MADISON WATER UTILITY

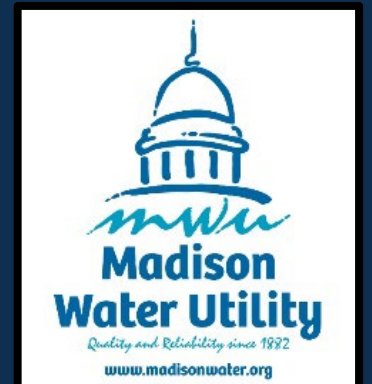
WELL 15 PFAS TREATMENT PROJECT

Public Information Meeting & Listening Session - 1

East Madison Community Center

June 30, 6:30 – 8:00 PM

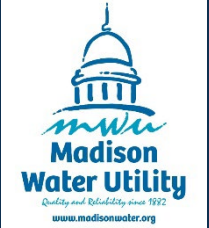
Joe Grande, Water Quality Manager – Project Manager
Krishna Kumar, General Manager



Meeting Agenda

1. Welcome!
2. Well 15 Background & Context
3. PFAS Health Advisory Limits
4. Project Schedule
5. Planned Funding Sources
6. Next Steps
7. Listening Session

Your Madison Water Utility



Water Infrastructure:

22 Production Wells

- Average daily pumping (2020): 24 MG

32 Water Tanks/Towers

- 42 million gallons of storage

30 Pumping Stations

904 Miles of Water Main

65,000 Service Connections

Human & Financial Capital:

Employees (FTE): 128

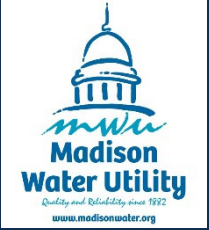
Annual Budget (2021)

Operating: \$45.6 million

Capital: \$6.6 million



Water Utility Continuing Commitments

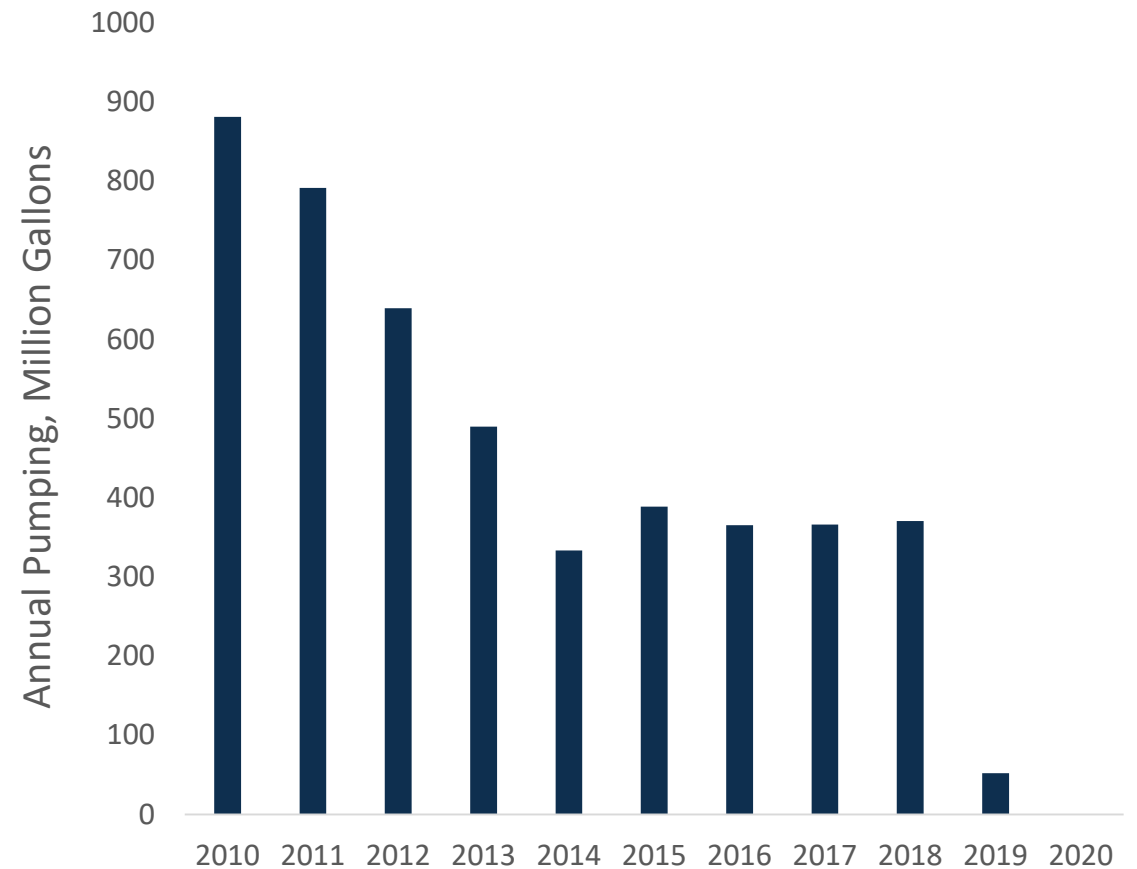


- **Our top priority:** Providing good, healthy and safe water
- We will not operate Well 15 until after the PFAS Treatment Project is complete
- We support US EPA in taking critical first steps toward the development of drinking water standards (MCLs) for PFAS
- We will continue to closely follow developments in this area
- ***Our drinking water more than meets all existing federal and state standards for health & safety***

Well 15 Background

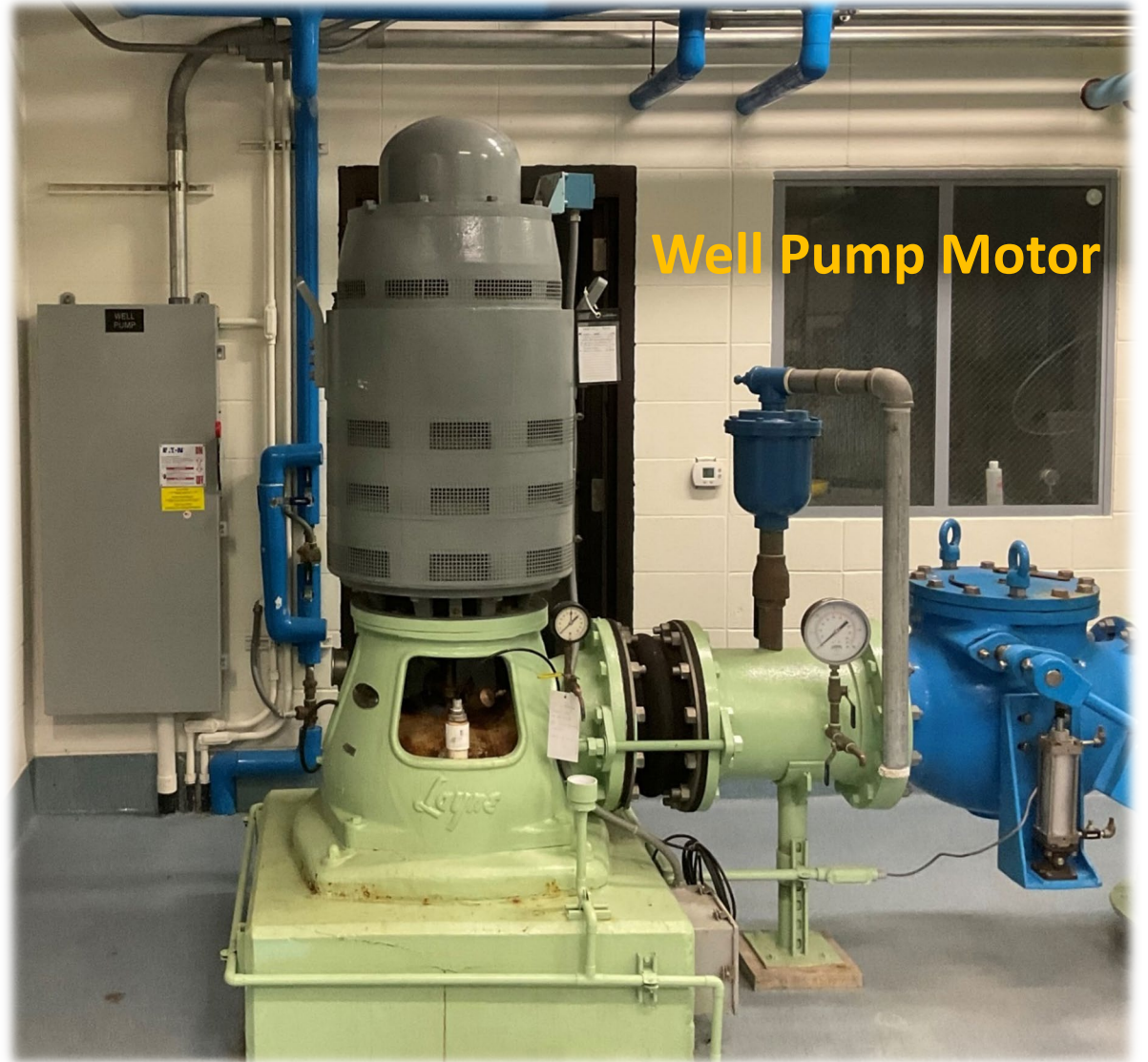


- Constructed in **1965**
- Workhorse on Madison's East Side
 - Up to 1 billion gallons per year
- Air Stripper installed in **2013** (\$2.3M)
 - Removes contaminants (VOC)
- PFAS detected in **2017**
- Well shut down in early **2019**





Madison Well 15



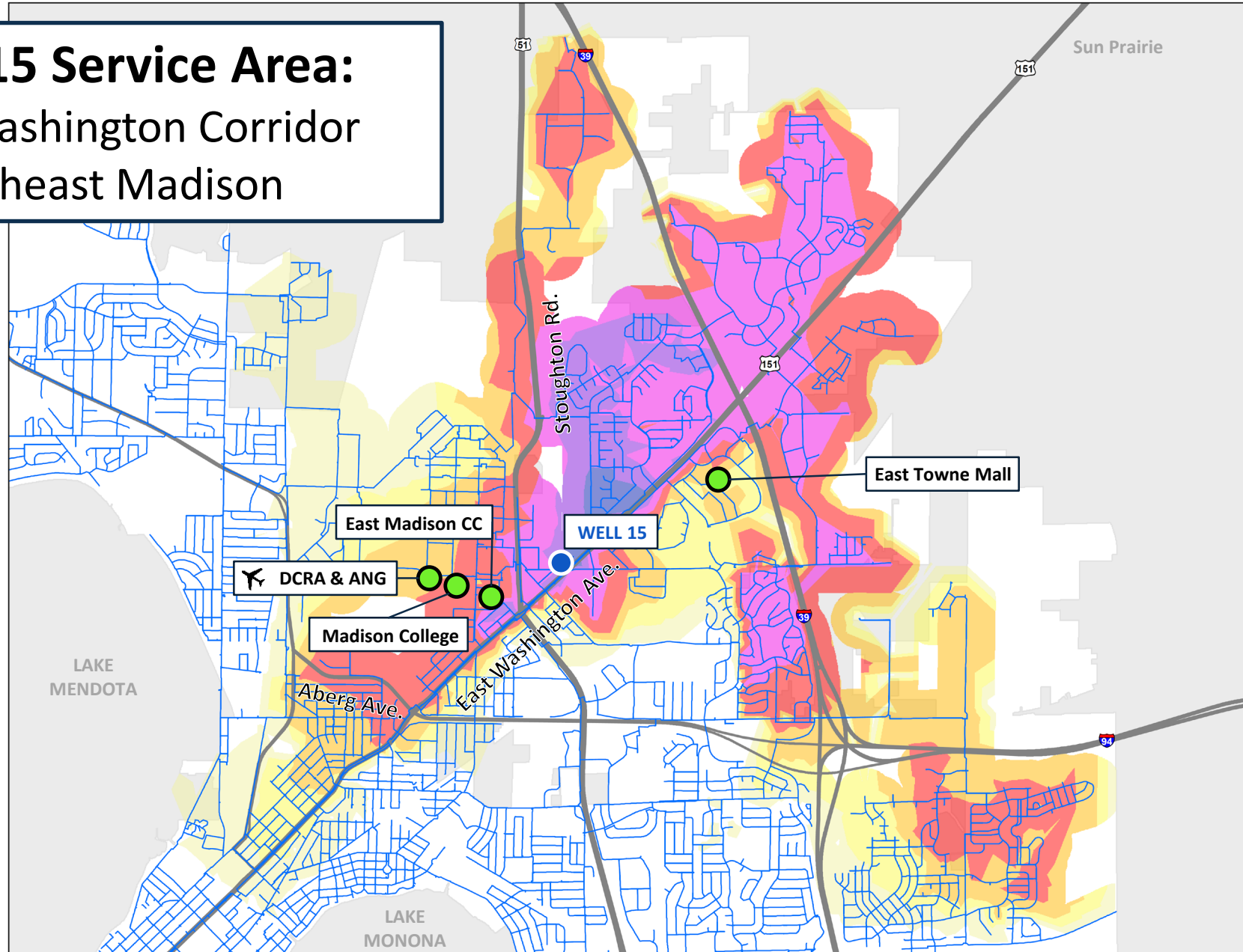
Well Pump Motor



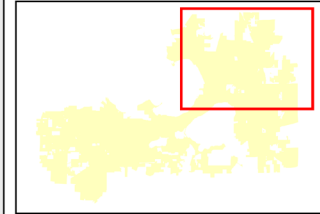
Air Stripper

Well 15 Service Area:

- E. Washington Corridor
- Northeast Madison



Well 15
Influence Zone
2/19/2019



Legend

- Unit Well
- Water Main
- Well Source %**
 - 80 - 100
 - 60 - 80
 - 40 - 60
 - 20 - 40
 - 10 - 20
 - 5 - 10
 - 1 - 5



Disclaimer: The City of Madison makes no representation about the accuracy or completeness of these records and in no event shall the City be liable for any damages whatsoever resulting from the use of these records. The information provided is based on computer simulations of 2017 operating conditions. This information will be updated every three to five years, or as necessary, to reflect general changes in operating conditions, such as the development of new water sources and the abandonment of older ones.

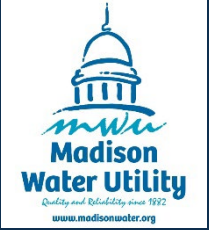
What are PFAS*



- A group of human-made chemicals that enter our environment from:
 - Things we use every day, like fast food packaging, non-stick cookware, stain and water resistant carpeting and fabrics
 - Fire-fighting foam containing PFAS
- PFAS build up over time in humans, fish, and wildlife, and do not break down naturally in the environment. They are linked to harmful health effects in people, particularly pregnant people and infants.

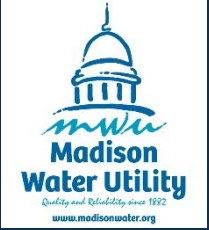
*Per- and Polyfluoroalkyl Substances

Well 15 - PFAS Action Plan



- **2017** - PFAS first detected at Well 15
- **2019** - Well 15 shut down, thanks largely to community advocacy
- **2022** - Water Utility is proactively planning a PFAS Treatment Project at Well 15:
 1. In anticipation of US EPA setting drinking water standards in **2023**
 2. To take advantage of attractive funding opportunities under the *Bipartisan Infrastructure Law*

Acknowledging Community Advocates

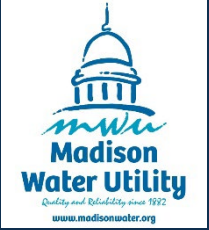


The Utility acknowledges the significant contributions from Community Members:

- Madison Environmental Justice (MEJO): Dr. Maria C. Powell, PhD
- Neighborhood Associations: Carpenter-Ridgeway; Eken Park / Emerson East; Greater Sandburg; and Glendale

This and future community meetings serve as forums for the Utility to consider concerns, recommendations, and priorities identified by the community served by Well 15

PFAS Health Advisory Limits



**US EPA announced PFAS Health Advisory Limits on
06/15/2022**

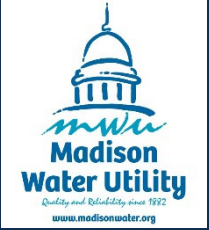
1. Interim Health Advisory Limits

- **PFOA – 0.004 ppt** (parts per trillion)
- **PFOS – 0.02 ppt**

2. Final Health Advisory Limits

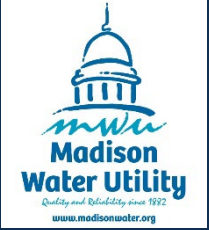
- **PFBS – 2,000 ppt**
- **GenX – 10 ppt**

Health Advisory Limit (HAL)



- The **HAL** is the minimum concentration of a substance which may present health risks to a person ***over a lifetime of exposure***
- It is set based on risks to the most sensitive populations: infants, young children, and expectant mothers
- Announcement of an HAL is a critical step undertaken by the EPA in developing a drinking water regulation

Health Advisory Limits



- Useful guidance before EPA develops a formal regulation
 - Non-regulatory and non-enforceable
 - A precursor to creating an MCL – a standard that all drinking water must meet
 - Not the same as an enforceable drinking water standard (MCL); **it is important not to conflate the two**
- EPA recommends that utilities: **Assess, Inform, & Reduce** potential exposures (**Lower levels = Lower risk**)

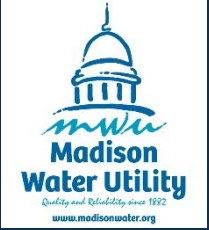
Well 15 Test Results (2019)



Compound	HAL (Health Advisory Limit)	MCL (Maximum Contaminant Level)	Well 15 Results
PFOA	0.004	??	6.1
PFOS	0.02	??	5.9
PFBS	2,000	??	3.4
GenX	10	??	Non-Detect

All Values are in parts per trillion

Well 15 PFAS Treatment Project Schedule

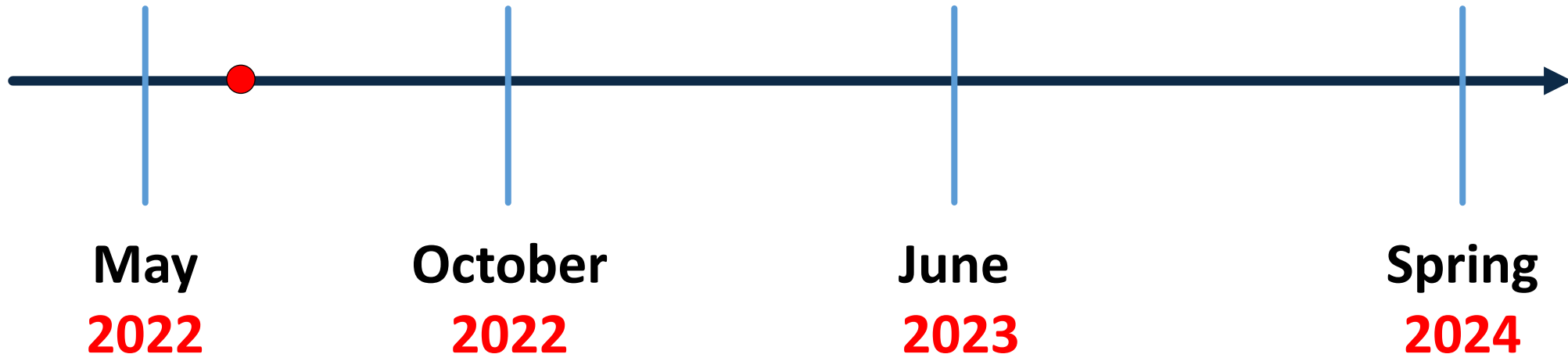


AECOM contract:
bench scale testing,
alternatives analysis,
construction design

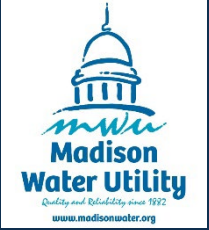
Bench scale test
and **preliminary
design report**

**Final construction
design:** detailed
plans and specs

Begin construction
of PFAS treatment
facility

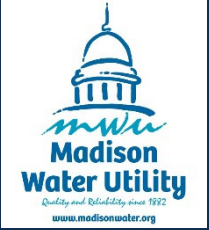


Available Statewide Funding from WI DNR



Type	Annual Allocation	5-Year Allocation
Bipartisan Infrastructure Law: <i>Emerging Contaminants (PFAS)</i>	\$12.8 Million	\$64 Million
Bipartisan Infrastructure Law: <i>Drinking Water State Revolving Fund (SRF)/Supplemental</i>	\$30.0 Million	\$150 Million

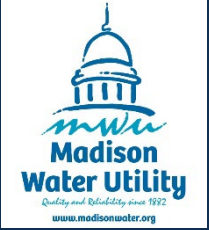
Well 15 Project - Planned Funding Sources



	Amount	Funding Source
Grant Portion (80%)*	\$4.8 Million	BIL: <i>Emerging Contaminants</i>
Loan Portion (20%)*	\$1.2 Million	BIL: <i>SRF/Supplemental</i>
Total Estimated Project Cost	<i>\$6.0 Million*</i>	

*Tentative and for illustrative purposes

Recap of Next Steps



- Jul 2022:** **Bench Scale Testing** of media & resin
- Aug 2022:** Alternatives Analysis;
Public Information Meeting & Listening Session #2
- Oct 2022:** Complete **Preliminary Design Report**
- Fall 2022:** US EPA expected to propose a national drinking water regulation for PFAS
- Fall 2023:** US EPA expected to finalize a national PFAS regulation



Questions / Concerns/ Comments?

Contact Information:

Krishna Kumar (kkumar2@cityofmadison.com)

Joe Grande (jgrande@cityofmadison.com)

Marcus Pearson (mpearson@cityofmadison.com)