
WATER UTILITY BOARD

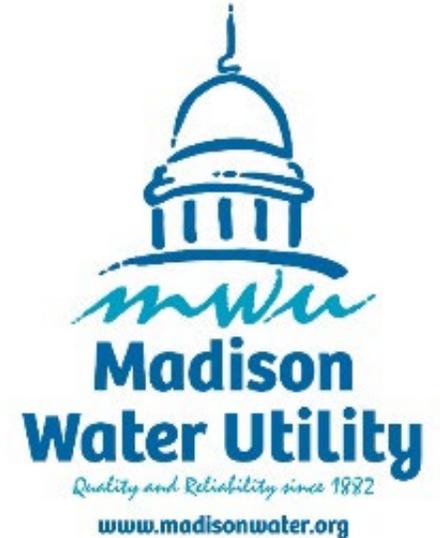
PFAS DRINKING WATER STANDARDS SETTING

STATUS UPDATE

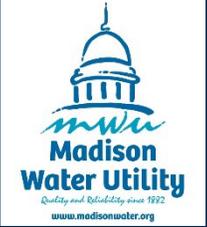


Krishna Kumar, General Manager
Joe Grande, Water Quality Manager

January 25, 2022

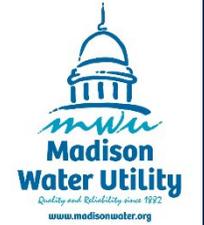


PFAS Drinking Water Standards Setting



- Presentation Focus:
 1. Primary **Players**
 2. Key Elements of the **Process**
 3. EPA and WI DNR **Timeline**
 4. MWU Well Test **Results / Frequency**
 5. Well 15 **Status Update**

PFAS Drinking Water Standards Setting - **Players**



Sets Standards

US EPA



Implements Standards

WI DNR

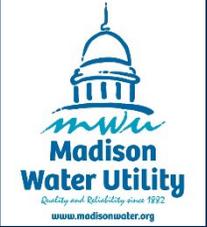


Meets Standards

Public Water Utilities



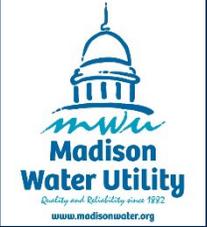
PFAS Drinking Water Standards Setting – Role of EPA



- **Sets standards** for both naturally-occurring and human-made contaminants - **MCLs** (**94** contaminants regulated)
- **Establishes non-mandatory guidelines** related to taste, appearance, or odor – **Secondary MCLs** (**15** guidelines)
- **Prescribes** monitoring requirements for priority unregulated contaminants – **UCMRs** (**30** contaminants)
 - Including PFOA, PFOS, PFHxS, and PFBS



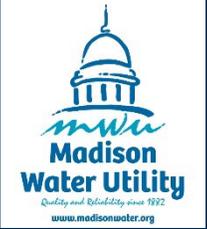
PFAS Drinking Water Standards Setting – **Role of DNR**



- **WI DNR implements & enforces** drinking water standards
- Rules are codified in **Wisconsin Administrative Code** and include:
 - Drinking Water Standards - MCLs & Secondary MCLs
 - Monitoring Frequency & Analytical Requirements
 - Reporting Requirements & Public Notification
 - Best Available Technology for Treatment



PFAS Drinking Water Standards Setting – Role of MWU



Meets Standards through Testing & Reporting to DNR:

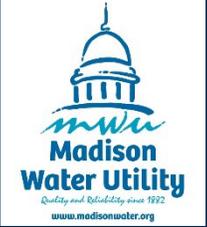
- **Daily** – chlorine, fluoride, coliform
- **Monthly** – iron, manganese, chloride
- **Quarterly** – VOC, radium, DBP
- **Annually** – IOC, PFAS, VOC
- **Periodically** – lead & copper, SOC,

Madison Water Utility – 2020 Testing

Test Type	Samples	Tests
Chlorine	10,621	10,621
Fluoride	6,856	6,856
Total coliform/E. coli	2,905	2,905
Others	788	5895
Total	21,170	26,277



PFAS Drinking Water Standards Setting – Process (EPA)



Step 1. Identify

- ✓ Contaminants of concern identified
- ✓ **Contaminant Candidate List (CCL)** published
- ✓ Contaminants prioritized using monitoring data & risk assessments

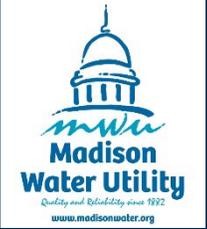
Step 2. Evaluate

- Human health effects data
- Occurrence at levels of public health concern
- “Meaningful opportunity for health risk reduction”**

Step 3. Regulate

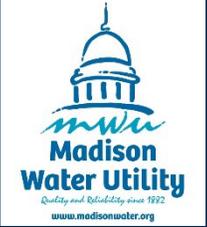
- ✓ Publish Preliminary **Regulatory Determination**
- ✓ Receive and review public/agency comments
- ✓ Publish final regulation in the Federal Register

PFAS Drinking Water Standards Setting – Timeline (EPA)



EPA announces an aggressive timetable for PFAS regulation

PFAS Drinking Water Standards Setting – Timeline (DNR)



Summer 2019

Fall 2019

Winter 2020

Spring/Summer 2021

Scope Statement Developed

NRB Authorizes Public Hearing

Scope Approved; Rule Drafting Begins

Preparation of Proposed Rule

Public Hearing, Proposed Rule

NRB Adoption, Legislative Review, Governor Approves

Rule Signed by DNR Secretary

Rule Becomes Effective

December 1, 2021

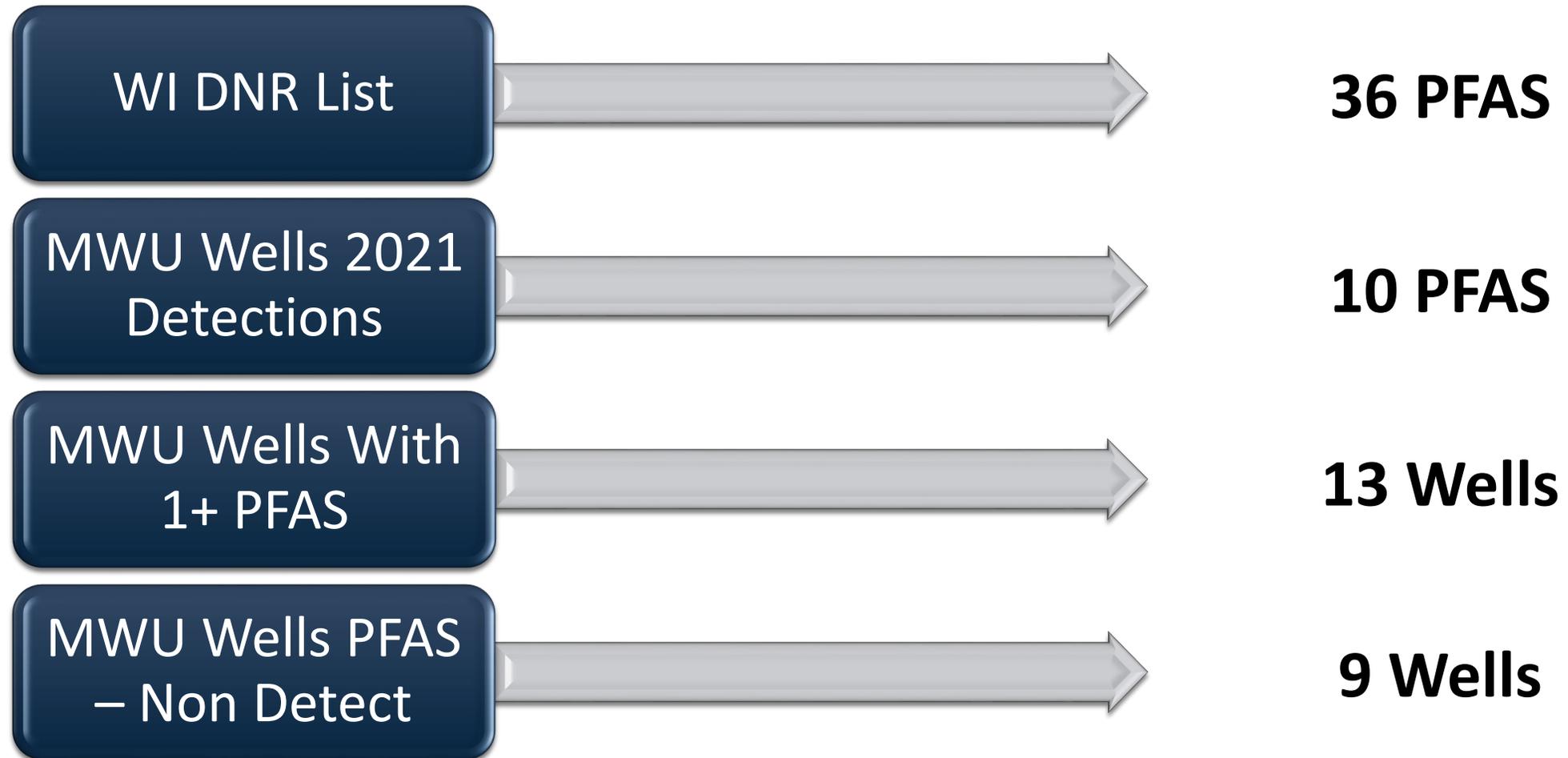
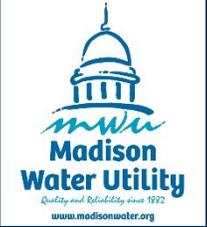
Winter 2021/2022

Spring 2022

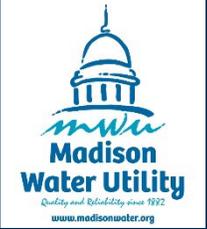
Summer 2022

DNR headed to the home stretch after a 30-month journey

PFAS Drinking Water Standards Setting – MWU Results



PFAS Drinking Water Standards Setting – MWU Results

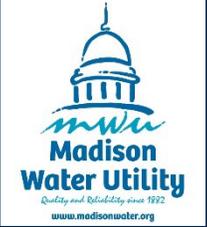


	PFAS Compound	WI DHS Recommendation (ppt)	Maximum (2021)	Maximum (2020)
1	PFOA	20 [#]	1.38	1.8
2	PFOS	20 [#]	1.33	1.8
3	FOSA	20 [#]	ND	4.4*
4	NEtFOSE	20 [#]	ND	1.5
5	PFBA	10,000	25.5	37
6	PFBS	450,000	36.9	1.7
7	PFHxA	150,000	1.89	2.2
8	PFHXS	40	4.4	5.0
9	PFDoA	500	ND	0.56
10	PFTeA	10,000	ND	0.52

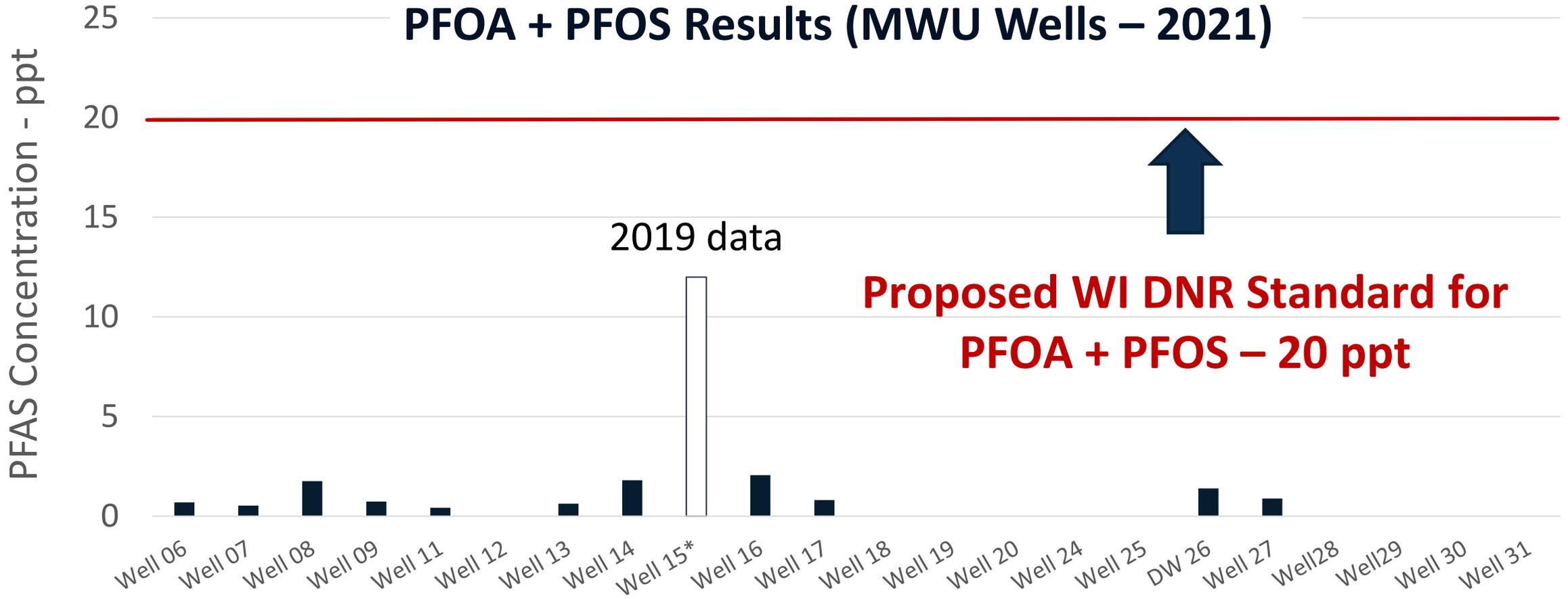
Sum of **six PFAS** must be below **20 ppt**

* May reflect cross-contamination at lab

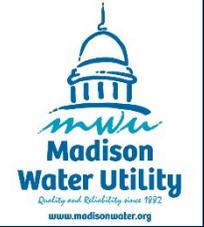
PFAS Drinking Water Standards Setting – MWU Results



PFOA + PFOS Results (MWU Wells – 2021)



PFAS Drinking Water Standards Setting – MWU Results



MWU Impact

PFOA + PFOS

EPA Health Advisory Level: 70 ppt
DNR Proposed Standard: 20 ppt

0 Wells

PFOA + PFOS + 4
Additional PFAS

WI DHS Guidance: 20 ppt

0 Wells

4 + 12 Additional PFAS

WI DHS Guidance: Individual
Recommendations for 16 PFAS

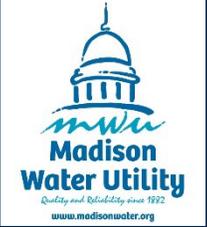
0 Wells

PFOA + PFOS + 16 PFAS

WI DHS Hazard Index: <1.0

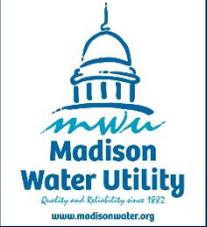
**1 Well (#15) –
Not in Service**

PFAS – MWU Testing Frequency



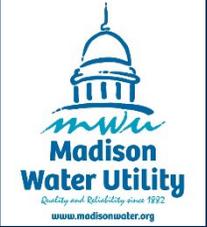
- **Current Frequency – Annual**
- **Proposed Frequency from 2022– Semi Annual**
 - March
 - October

Well 15 – Public Input



- **Acknowledging the Critical Role of Community Advocacy**
 - Madison Environmental Justice (MEJO) & Dr. Maria C. Powell, PhD
 - Neighborhood Associations:
 - Carpenter-Ridgeway; Eken Park / Emerson East; Glendale; and Greater Sandburg
 - Other Interested and Involved Citizens

Well 15 – Status Update



- The Water Utility will not place Well 15 back in service unless filtration is added if PFAS measurements exceed the WI DHS Hazard Index
- The Utility fully commits to inform and engage the public, especially those in the Well 15 service area, and policy makers before a decision is made to place Well 15 back in service
- Filtration efforts could potentially result in increased costs to the Utility's customers; hence the Utility is proactively seeking WI PSC's approval for introducing a Customer Assistance Program to help with affordability



Questions / Comments?

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