# Straightway & Hyannisport Water Treatment Facilities - Improvements Project

**Public Informational Meeting** 

August 6, 2024 6:00 PM Zoom



Town of Barnstable Department of Public Works Water Supply Division – Hyannis Water System



Engineer: Kleinfelder, Inc.



Continuing a Program of Community Drinking Water Improvements

- Quality
- Reliability
- Resiliency



# Interpretation for this meeting is available / A interpretação para esta reunião está disponível / Hay interpretación disponible para esta reunión

Interpretation

#### **How to listen to Language Interpretation**

In your meeting/webinar controls, click Interpretation.

Click the language that you would like to hear. (Optional) To hear the interpreted language only, click Mute Original Audio.

#### Notes:

- You must join the meeting audio through your computer audio/VoIP. You cannot listen to language interpretation if you use the dial-in or call me phone audio features.
- As a participant joining a language channel, you can broadcast back into the main audio channel if you unmute your audio and speak.

#### Como ouvir a interpretação de idioma

Nos controles da sua reunião/webinar, clique em Interpretação.

Clique no idioma que você gostaria de ouvir. (Opcional) Para ouvir apenas o idioma interpretado, clique em Silenciar áudio original.

#### Notas:

- Você precisa acessar o áudio da reunião através do áudio do seu computador/VoIP. Você não pode ouvir a interpretação de idioma se você usa os recursos de áudio de telefone <u>discagem</u> ou <u>ligar para mim</u>.
- Como um participante acessando um canal de idioma, você pode transmitir de volta para o canal de áudio principal se você ativar o seu áudio e falar.

#### Cómo escuchar la interpretación de idiomas

En los controles de la reunión o el seminario web, haga clic en Interpretación.

Haga clic en el idioma que desee escuchar. (Opcional) Para escuchar solo el idioma interpretado, haga clic en Silenciar audio original.

#### Notas:

- Debe unirse al audio de la reunión a través de audio/VoIP del equipo. No puede escuchar la interpretación de idiomas si utiliza las funciones de audio de teléfono marcar o recibir llamada.
- Como participante que se une a un canal de idioma, puede transmitir de nuevo en el canal de audio principal si reactiva el audio y habla.

# **Tonight's Presenters & Agenda**

#### Town of Barnstable – Department of Public Works

- Matt Wrobel, PE, Sr. Project Manager
- Hans Keijser, DPW Water Supply Division Supervisor

#### Kleinfelder – Engineering Consultant

- Kirsten Ryan Sr. Project Manager
- Kate Riley Community Relations

#### Interpreters:

- Maurita Chukwuezi, Portuguese
- Natasha Mejia-Alvarez, Spanish

# Agenda

- 1. Hyannis Water System Overview
- 2. Project Overview
- 3. Project Purpose and Benefits
- 4. Existing Conditions & Improvements
- 5. Project Schedule & Next Steps
- 6. Where to Find more Information
- 7. Questions?

## Where does my tap water come from?

## The Town of Barnstable's Hyannis Water System

- Serves approximately 18,000 people year-round
- Serves approximately 35,000 people in summer
- 119 miles of water mains (pipes)
- Meets all state and federal health regulations

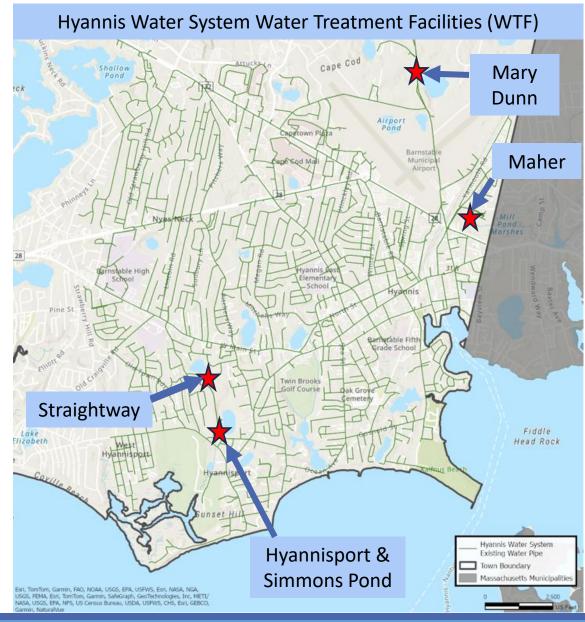




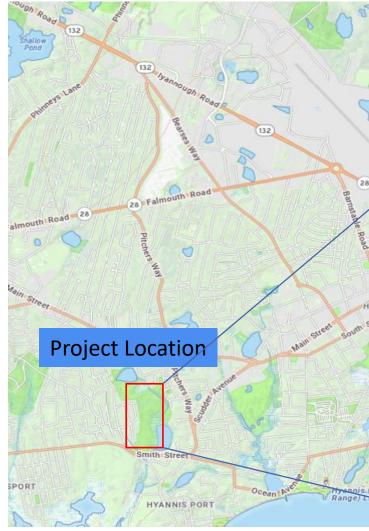
## Where does my tap water come from?

### Town of Barnstable's Hyannis Water System (HWS):

- 12 wells at 4 water treatment facility (WTF) locations
- 6 treatment buildings
- Due to increases in water usage during the summer months, all Hyannis Water System wells and treatment facilities must operate continuously to meet demand.
- HWS has been constructing upgrades in stages to improve water quality, reliability, and resiliency while maintaining operations.

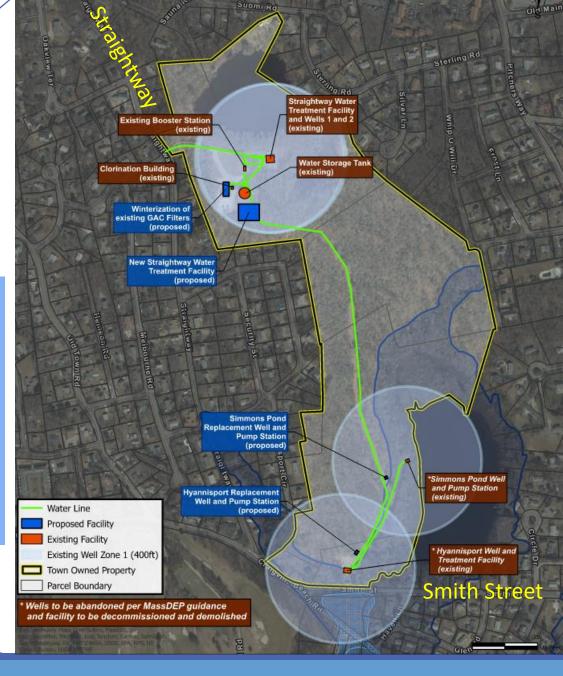


Project: Straightway & Hyannisport Treatment Facilities Improvements Overview



## **Existing Infrastructure:**

- 4 wells
- 3 treatment buildings
- 2 pump stations
- 1 tank
- 1 set of unwinterized
  PFAS filters



# **Straightway-Hyannisport Project Purpose**

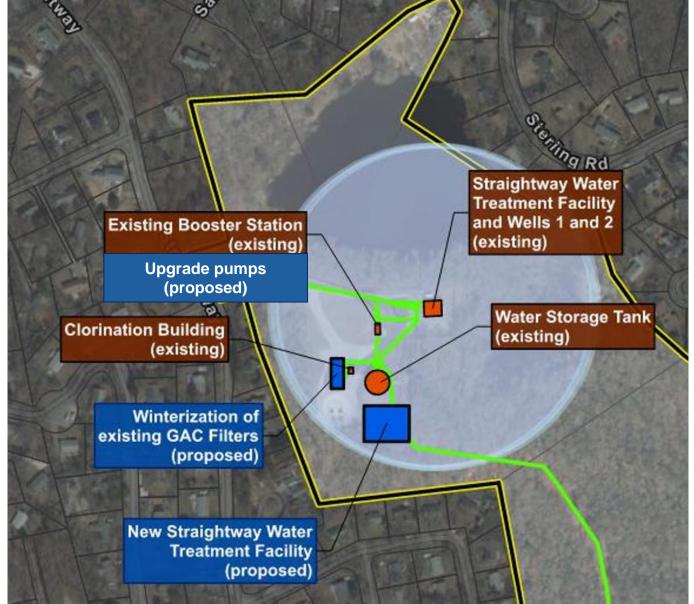
## Project Improvements Will:

- Maximize the permitted capacity of the Hyannis Water System
- Increase the amount of water that the wells can supply
- Allow the water treatment facility to be operated year-round
- Improve the water treatment process to further improve water quality
- Protect the wells and buildings from flooding
- Improve overall system resiliency

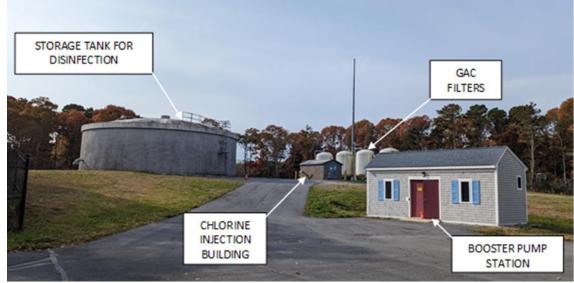
# **Straightway-Hyannisport Project Need & Benefits**

Need or Challenge	Solution
The facility cannot be used year-round because PFAS filters are unwinterized.	✓ Build enclosure over PFAS filters.
2 of the 4 wells (Simmons Pond & Hyannisport) are not supplying enough water.	✓ Replace the wells with new wells to maximize the permitted capacity.
SP & HP Wells and Hyannisport WTF are located within areas prone to flooding.	✓ Locate the new wells at higher elevation out of the floodplain. Relocate all treatment to the Straightway site which is at a higher elevation.
Naturally occurring iron and manganese are clogging the PFAS filters, making them more expensive to operate	✓ Add pre-filters to remove iron & manganese
1,4 –dioxane levels are close to the MA guideline of 0.3 mg/L	✓ Add new treatment technology to remove 1,4-dioxane
Treatment and pumping is undersized.	✓ Add more treatment and pumping capability to maximize the permitted capacity.

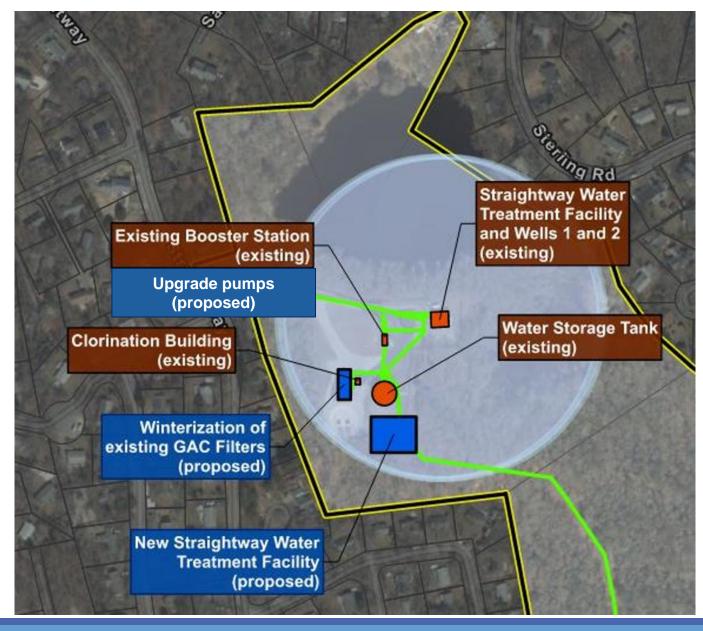
## **Straightway Site - Existing Conditions**







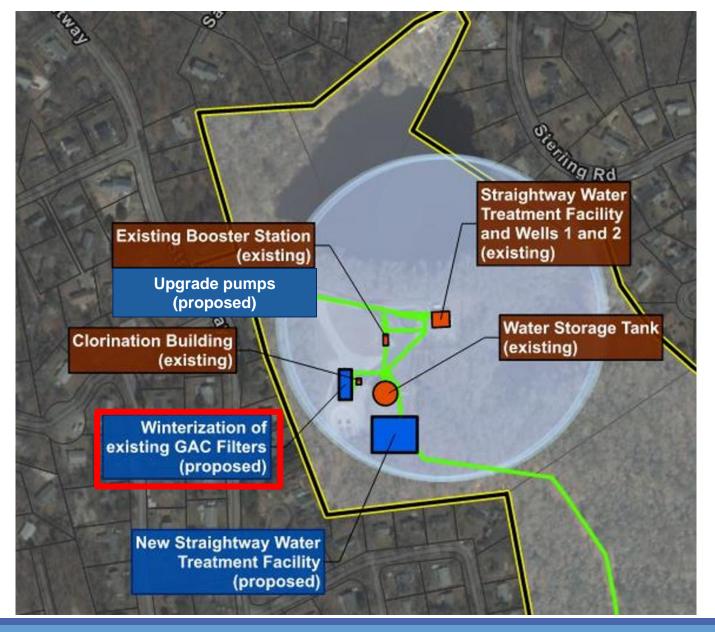
## **Straightway Site - Existing Conditions**



Existing GAC PFAS filters are unwinterized, so the Straightway & Hyannisport Water Treatment Facilities must be turned off from October to April.

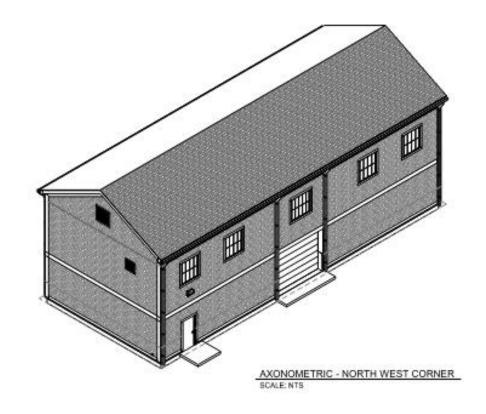


## **Straightway Site - Project Improvements**



## **Winterization of Existing PFAS filters**

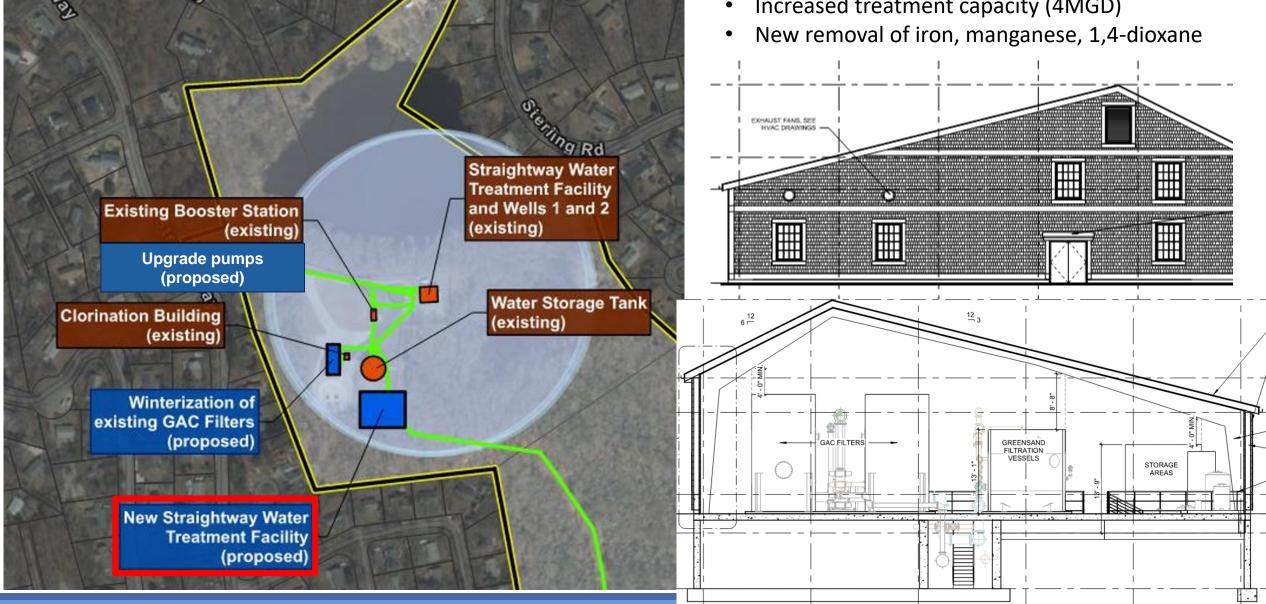
- Add climate-controlled enclosure on existing slab to existing PFAS units at Straightway
- Critical for year-round resiliency
- Completion of the emergency project constructed in 2019



## **Straightway Site - Project Improvements**

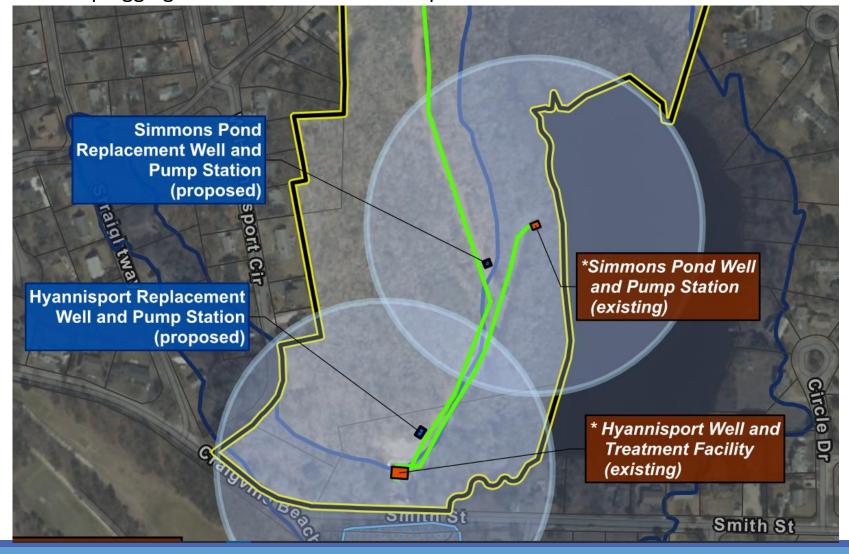
## **New Straightway Treatment Facility**

Increased treatment capacity (4MGD)



## **Hyannisport Site – Existing Conditions**

Existing wells and buildings are prone to flooding. Well yields currently are reduced due to plugging of the well screens and aquifer.





Simmons Pond Pump Station



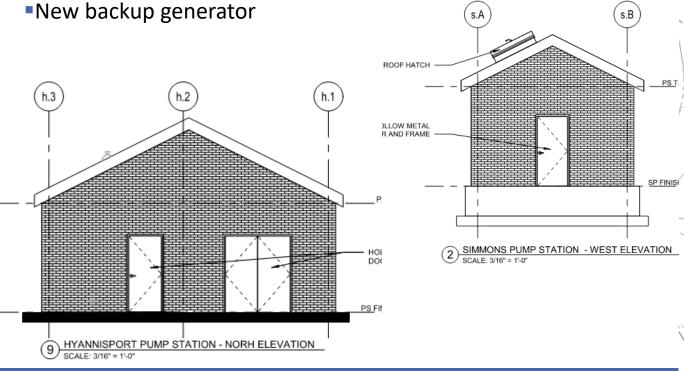
**Hyannisport Well & Treatment Building** 

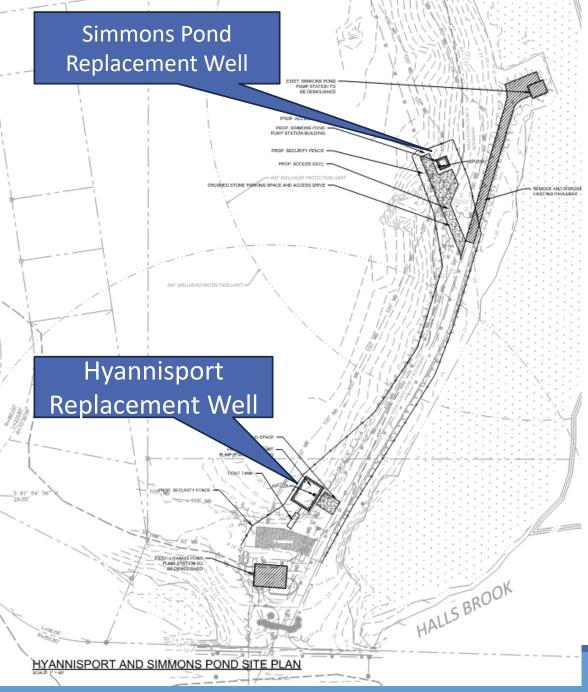
## **Hyannisport Site – Project Improvements**

## Hyannisport & Simmons Pond Replacement Wells and New Pump Stations

Redrill wells at higher elevations out of floodzone

New pump stations will send water to the new Straightway WTF



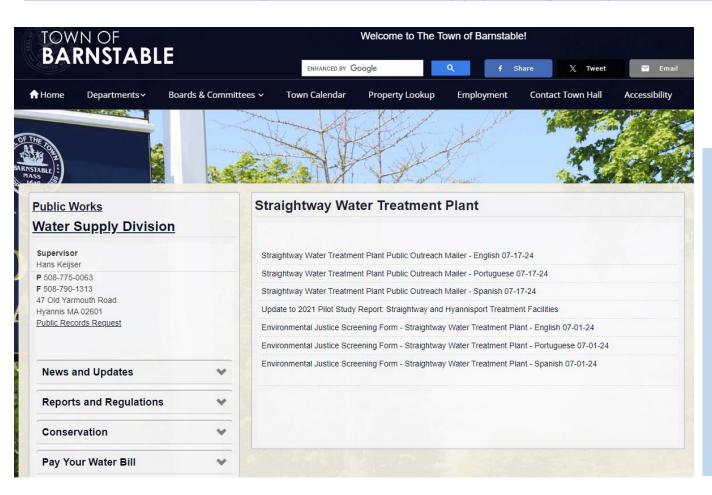


# **Project Schedule & Next Steps**

- August 2024:
  - Design is in progress towards 60%
- September 2024:
  - filing Environmental Notification Form / Environmental Impact Report
    - Anticipated Public comment period 9/11 10/11/24
- Fall Winter 2024:
  - Final Design & Permit Approvals
- Spring Summer 2025:
  - Bidding and Contract Award
- Fall 2025 Construction start. Approximately 2-year duration.

## For More Information:

townofbarnstable.us/Departments/watersupply/Straightway-Water-Treatment-Plant.asp





Thank you!

**Questions?**