Opinion of Value, Costs & Capital Implementation Alternatives for the Housatonic Water Works

DPC Engineering, LLC

Dave Prickett, P.E.

Justin Skelly, P.E.

August 9, 2021 at 6:00 PM

Selectboard Meeting

Town of Great Barrington

TONIGHT'S TOPICS

- Project Purpose & Scope
- Key Sources of Information
- Value of HWW System
- Capital Implementation Alternatives
- Possible Next Steps
- Questions & Discussion

Project Purpose & Scope

- Review of Available Information
- Estimate Value of HWW System
- Capital Implementation Alternatives
  - #1, HWW as Standalone Utility
  - #2, HWW as Combined Utility with GBFD
- Summarize Opinions of Estimated Value, CIP Exposure, Management Risk and Possible Next Steps

How Do Residents Get Their Water?

- **Housatonic Water Works (surface water)**
  - **Private Utility**
  - **Smaller Customer Base**
- **Great Barrington Fire District (groundwater)**
  - **Private (Semi-Public) Utility**
  - **Larger Customer Base**
- **Private Wells**

Key Sources of Information

- **Past Planning Documents**
  - **2017 Preliminary Evaluation of HWW January 2016 Master Plan (DPC Engineering)**
  - **2017 Massachusetts Water Rates Survey (Tighe & Bond)**
  - **2018 Conceptual Water Systems Management Framework Public Presentation (DPC Engineering)**
  - **2021 HWW Water System Evaluation Report (AECOM)**
- **This Project is comprised of Engineering opinions and is not a formal appraisal of value**

Estimated Value of HWW System

1. Opinion of current-day costs to construct assets
2. Convert to past-day costs (using dates of installation)
3. Past-day costs depreciated to current-day value
4. Compare current-day depreciated costs to estimated capital needs (net-value)

Estimated Value of HWW System

1. Current-Day Costs to Construct Assets

Component	Current-Day OPPC
Supply / Treatment	$5.6M
Storage	$3.0M
Distribution	$46.4M
TOTAL =	**$55.0M**

Estimated Value of HWW System

2. Convert to Past-Day Costs

Component	OPPC (constructed today)	Average Year Installed	Past-Day OPPC
Supply / Treatment	$5.6M	1939 & 1997	$1.7M
Storage	$3.0M	1997	$1.5M
Distribution	$46.4M	1958	$13.9M
TOTAL =	**$55.0M**	**-**	**$17.1M**

Estimated Value of HWW System

3. Past-Day Costs Depreciated to Current-Day

Component	OPPC (past-day costs)	Estimated Design Life	OPPC (Depreciated Value)
Supply / Treatment	$1.7M	50 years	$0.5M
Storage	$1.5M	50 years	$0.4M
Distribution	$13.9M	100 years	$4.9M
TOTAL =	**$17.1M**	**-**	**$5.8M**

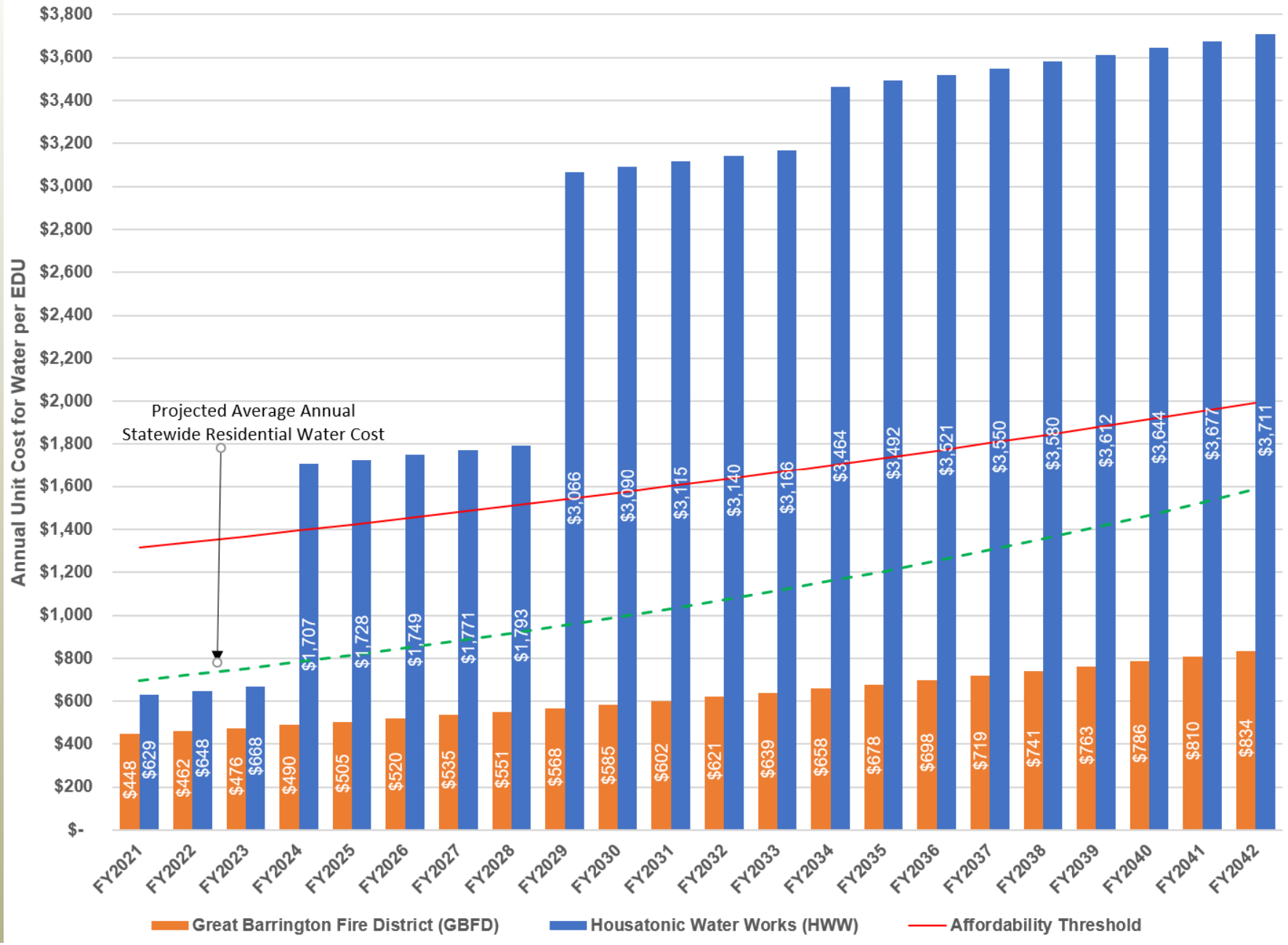
Estimated Value of HWW System (HWW as Standalone Utility)

4. Estimated Current-Day Net-Value

Component	Depreciated Value	Capital Improvements Plan (AECOM)	Estimated Current-Day Net-Value
Supply / Treatment	$0.5M	($3.6M)	($3.1M)
Storage	$0.4M	($0.1M)	$0.3M
Distribution	$4.9M	($27.3M)	($22.4M)
TOTAL =	**$5.8M**	**($31.0M)**	**($25.2M)***

*Estimated current-day net-value is a negative value

Capital Implementation Alternative #1
HWW as Standalone Utility



Estimated Value of HWW System (HWW as Combined Utility with GBFD)

Estimated Current-Day Net-Value

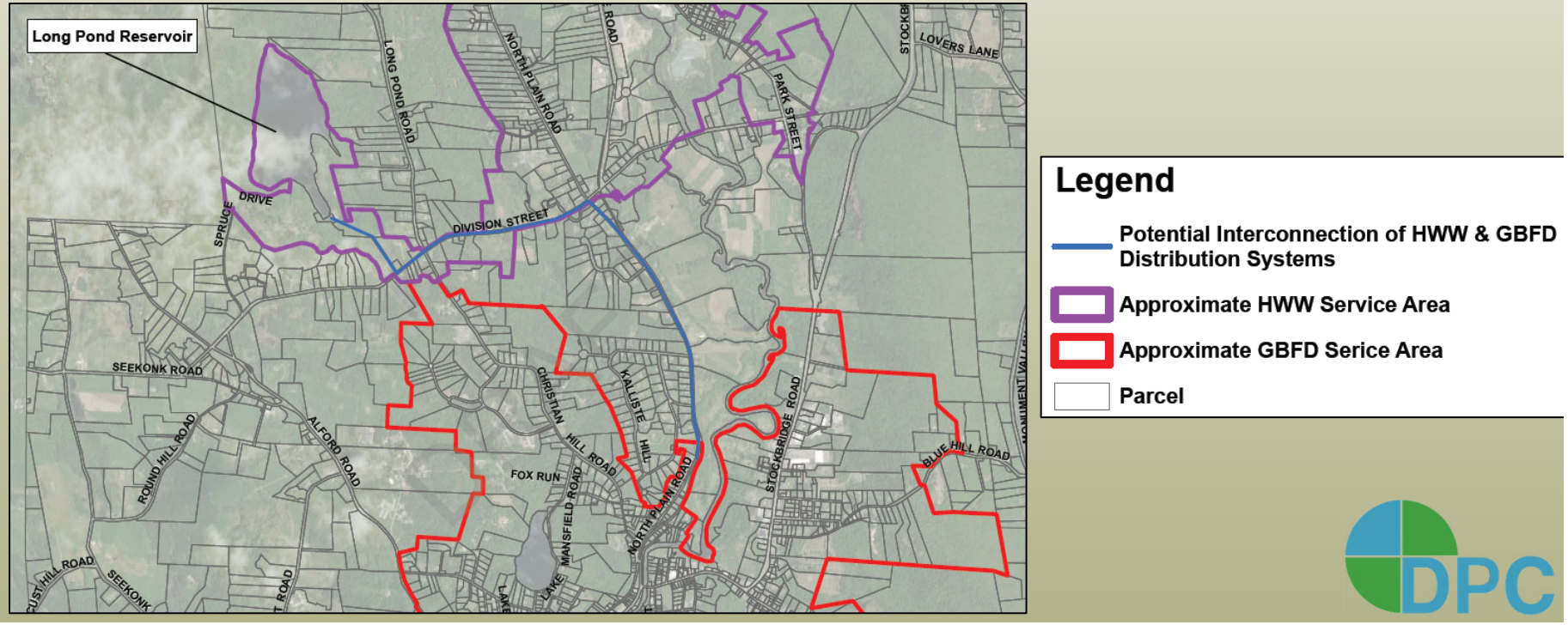
Component	Depreciated Value	Capital Improvements Plan (AECOM)	Estimated Current-Day Net-Value
Supply / Treatment	$0.5M	($3.6M)	($3.1M)
Redundant Supply & Conveyance	$0.0M	($10.0M)	($10.0M)
Storage	$0.4M	($0.1M)	$0.3M
Distribution	$4.9M	($27.3M)	($22.4M)
TOTAL =	**$5.8M**	**($41.0M)**	**($35.2M)***

*Estimated current-day net-value is a negative value

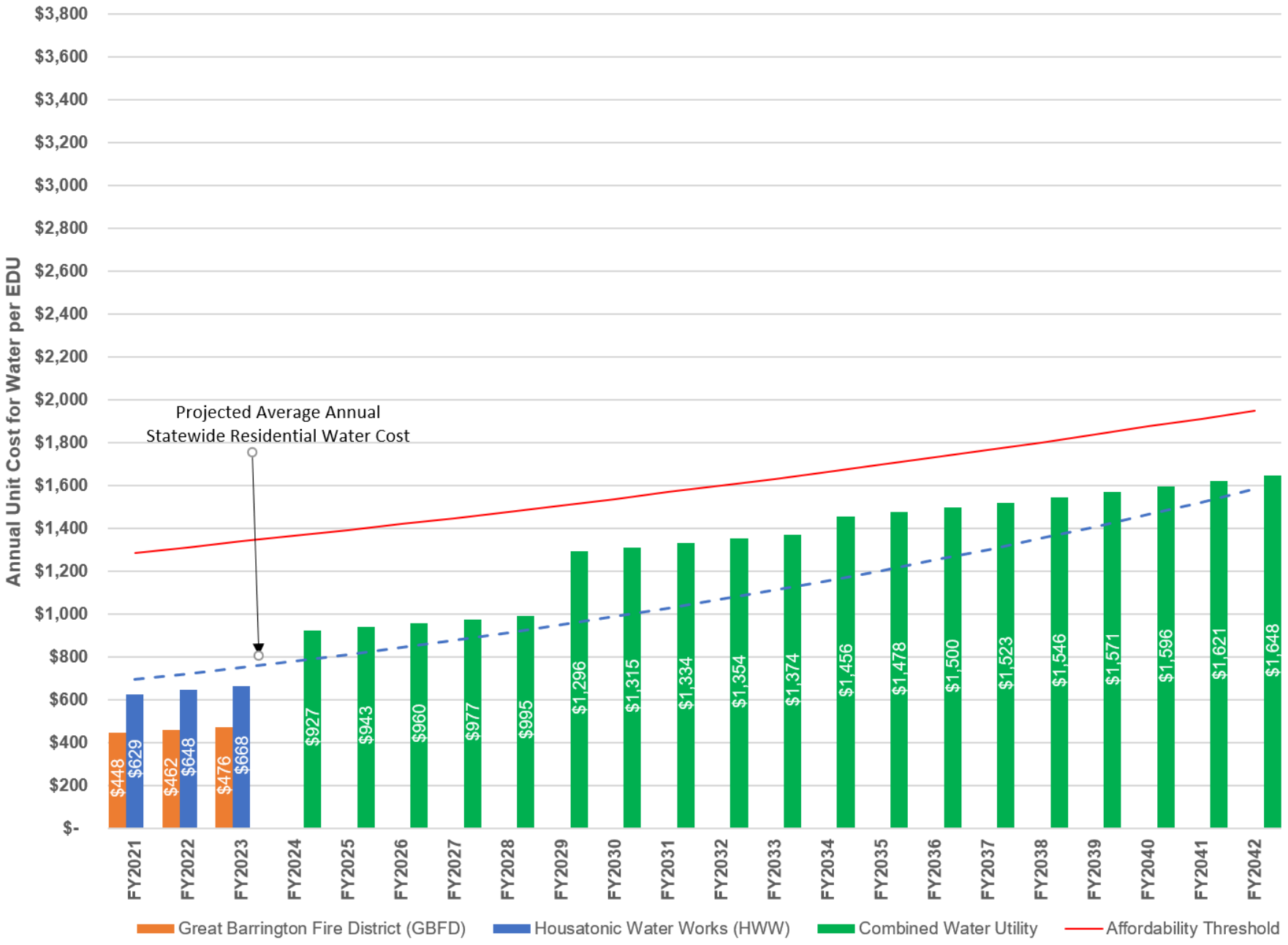
DPC

Capital Implementation Alternative #2 HWW as Combined Utility with GBFD

- **Same Current Net-Value of HWW System, with additional Capital Improvements for:**
  - **Inter-Connection Pipes to GBFD**
  - **Pressure Regulation and Booster Station**



Capital Implementation Alternative #2
HWW as Combined Utility with GBFD



Conclusions & Observations

- **Value**
  - **Planned CIP exceeds estimated current-day net-value of HWW System**
- **Capital Implementation Alternative #1**
  - **Net annual cost per EDU not sustainable for HWW alone if capital plan is implemented**
- **Capital Implementation Alternative #2**
  - **Net annual cost per EDU more sustainable/affordable for HWW users**
  - **Increased net annual costs for GBFD users**

Possible Next Steps

- Town to consider management alternatives
- Public input following this presentation
- Follow-up discussions with Town, DPW, HWW & GBFD
- Confirm Town's anticipated level of involvement
- Input from Legal, MassDEP, permitting, etc.
- Hydraulic & water quality analyses
- Revisit recommendations and refine implementation plan

Questions & Discussion