

# Southwest Regional Pipeline

## 2020 Diversion Permit Tentative Determination

### Public Comment Meeting

January 6, 2021

Dan Lawrence – Aquarion:

Ingrid Jacobs– Aquarion:

Peter Galant – Tighe & Bond:

Vice President, Engineering, Planning & Real Estate  
Manager, Water Resources & Infrastructure Planning

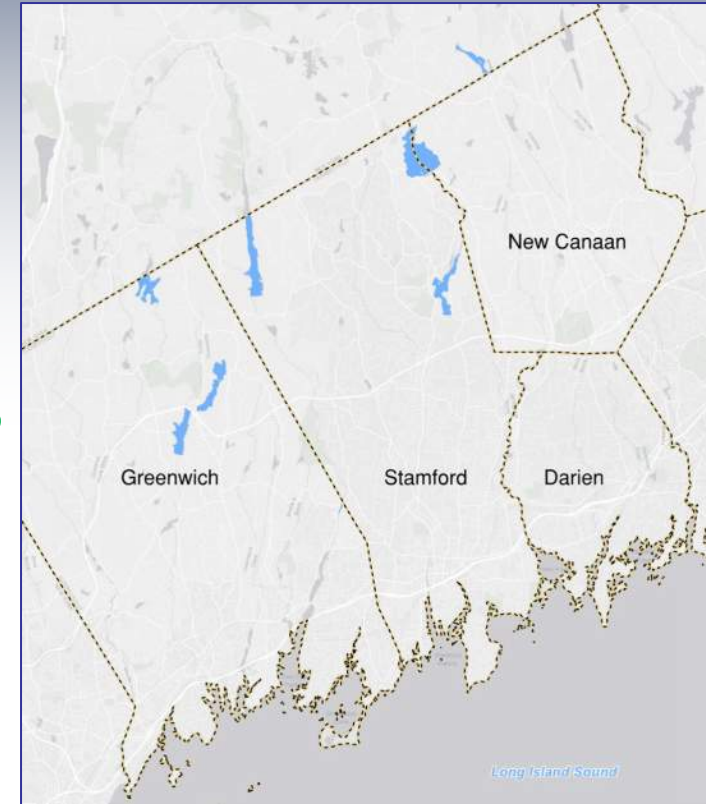
Vice President

# Objective

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To provide:

- Adequate public water supply
  - Improve drought resilience
  - Meet reservoir release requirements
- in Southwest Fairfield County.



# Where We are Today

## Southwest Regional Pipeline Diversion Permit Application

Task	2020												2021	
	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	
Stakeholder Notification/Meetings			█											
Filed Application			★											
DEEP Requests for Information						█			█					
Public Information Meeting								▲						
Respond to Public Questions								█						
Notice of Tentative Determination												★		
Public Comment Period													█	
Public Comment Meeting													▲	

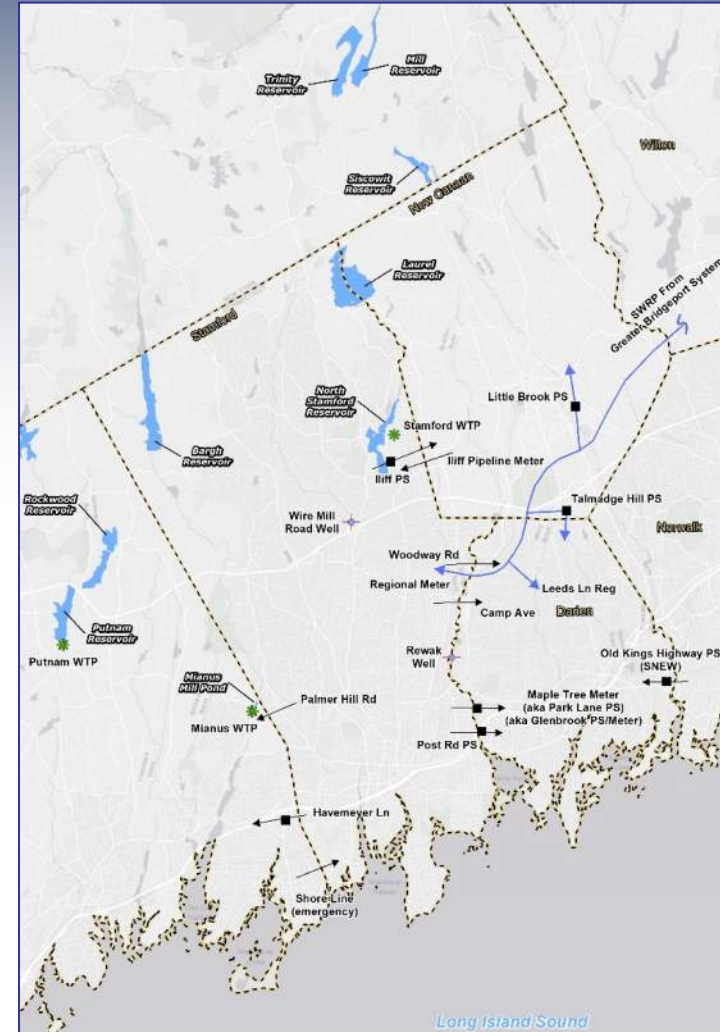
# Outline

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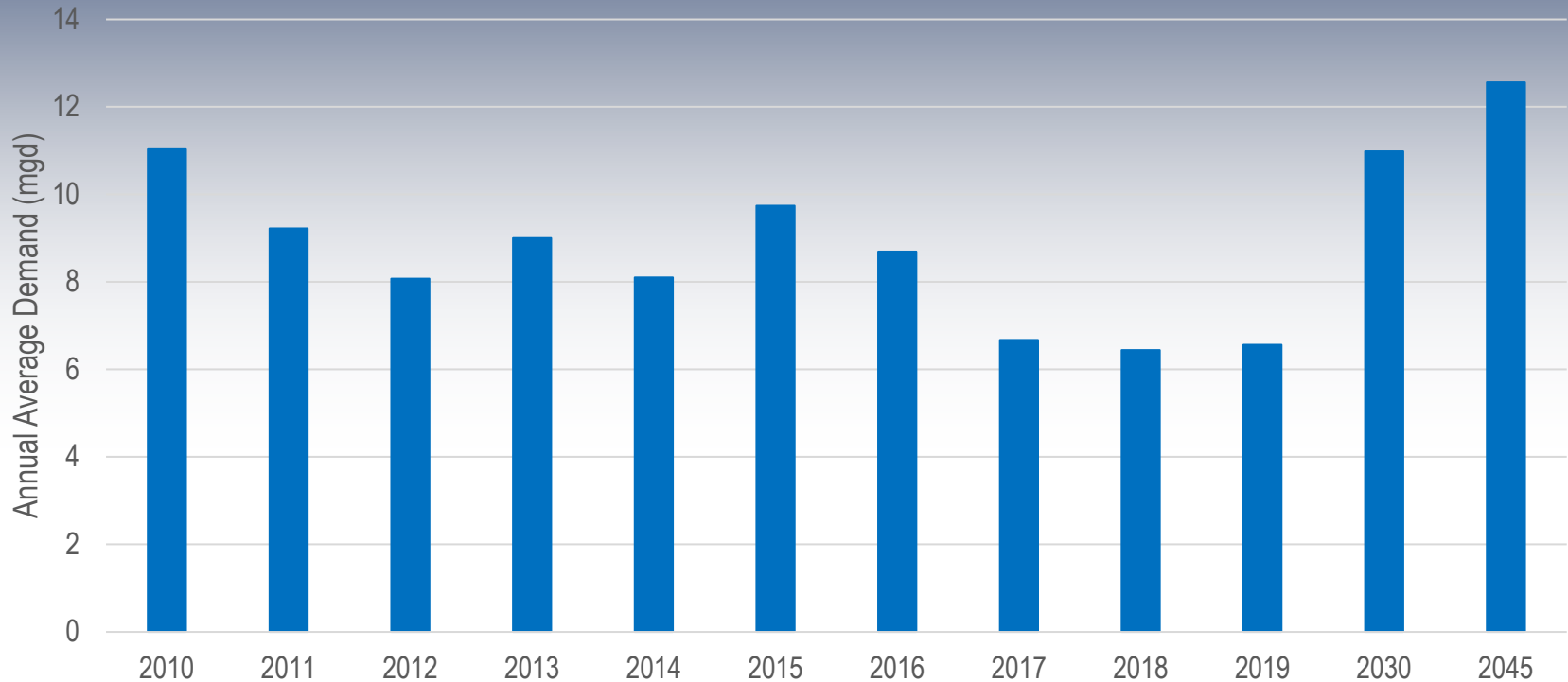
- What is the Southwest Regional Pipeline (SWRP)
- Water Supply Need
- Solution
  - Increase capacity to transfer water from the Greater Bridgeport System through the Southwest Regional Pipeline (SWRP)
- Impact on Greater Bridgeport System
- Response to Public Questions

# Southwest Regional Pipeline (SWRP)

- From Greater Bridgeport System
- In service since 1990
- Diversion Permit
  - DIV 97-13
  - 7.26 mgd
  - Expires June 2023



# Capacity Needed In Addition to Local Sources

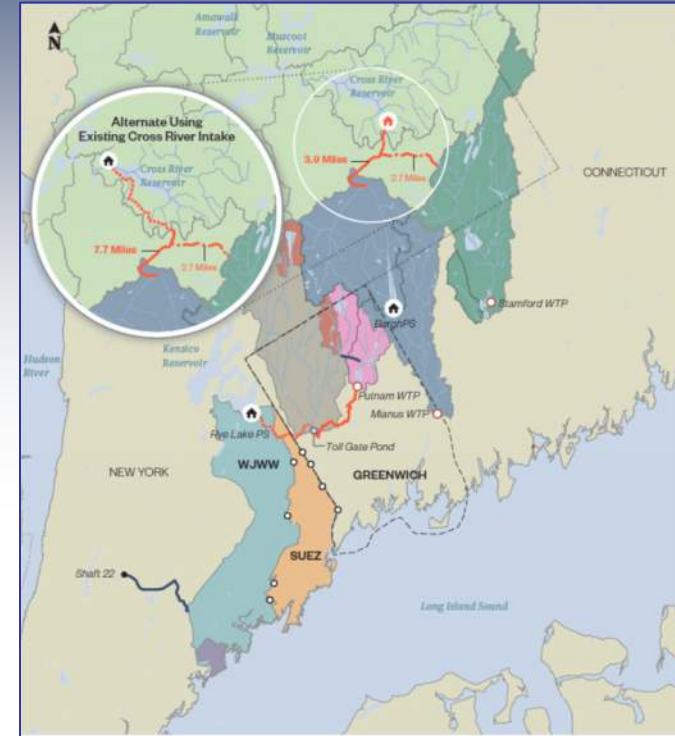


1. Based on Margin-of-Safety (Supply/Demand) = 1.15
2. Projections include increased demands and reduced available water.

Annual average supply of 12–13 mgd is required from the SWRP to meet DPH target for adequate supply.

# Alternatives Considered

- Purchase water from New York City
  - Treated
  - Raw
- Increase reservoir storage
- Develop groundwater supply



**Increase Southwest Regional Pipeline (SWRP) capacity**

# Conservation is Key To All Alternatives

- Amy Vickers & Assoc.
- Irrigation Restrictions
  - SWFCR: 2017
  - Westport/Newtown: 2018
  - Continued expansion
- Demand reductions observed
  - Additional 2030 savings: 0.2-1.5 mgd
- Success Will:
  - Reduce transfers
  - Delay Improvements

<http://aquarionwater.com/CT/waterconservation>

## Conservation Tips to Reduce Outdoor Water Usage



## Responsible Watering Starts Here

For Aquarion Customers in Darien, Greenwich, New Canaan, Newtown, Stamford and Westport



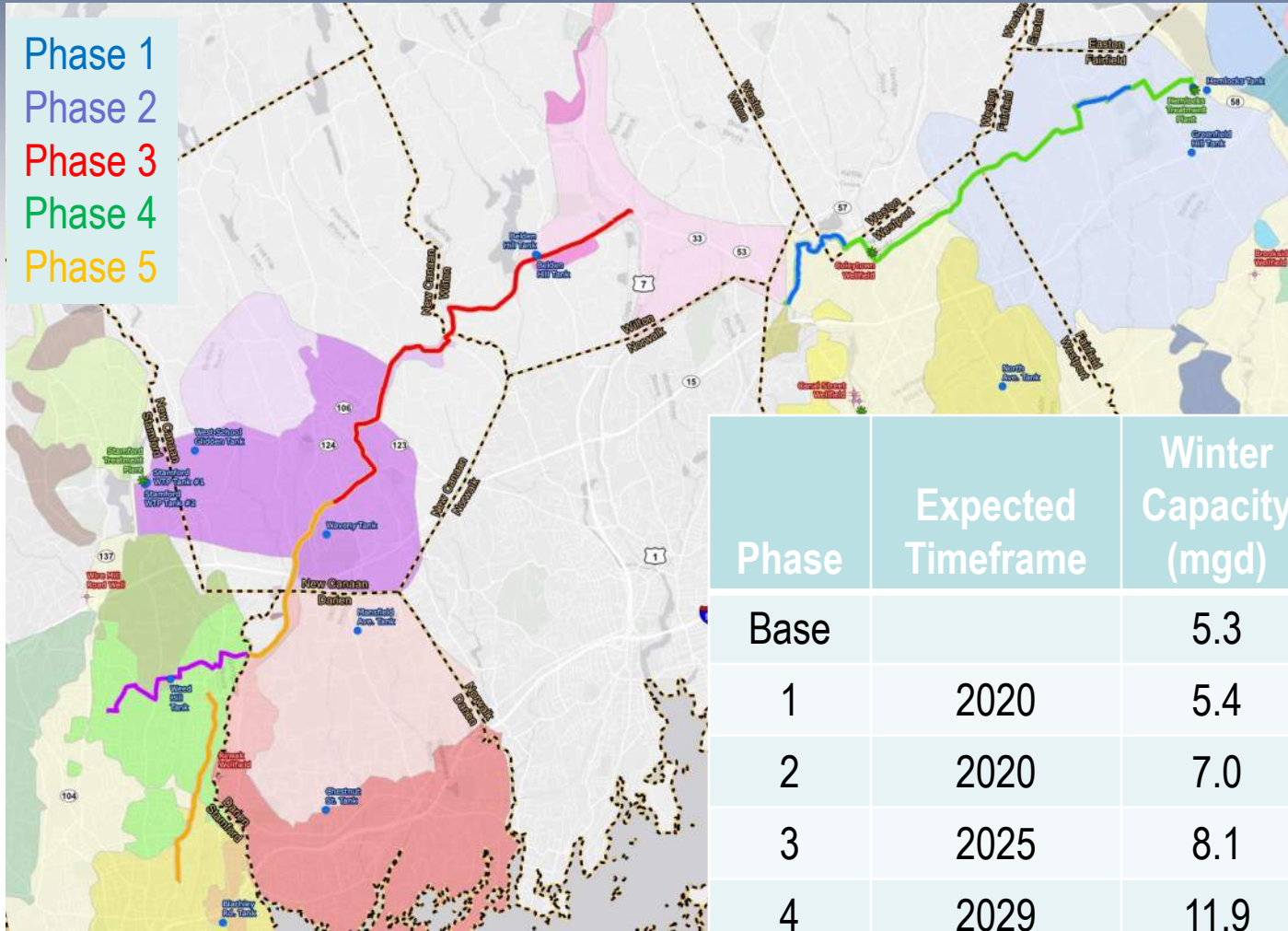
### Mandatory, Maximum Twice-Weekly Sprinkler Irrigation Schedule

Last Digit of Your Address Number	Please Water Only On:
0, 2, 4, 6 or 8 (even numbers)	Sunday & Wednesday 12:01 am – 10:00 am, or 6:00 pm – Midnight
1, 3, 5, 7 or 9 (odd numbers)	Saturday & Tuesday 12:01 am – 10:00 am, or 6:00 pm – Midnight
No address number	Sunday & Wednesday 12:01 am – 10:00 am, or 6:00 pm – Midnight



# SWFCR Improvement Plan

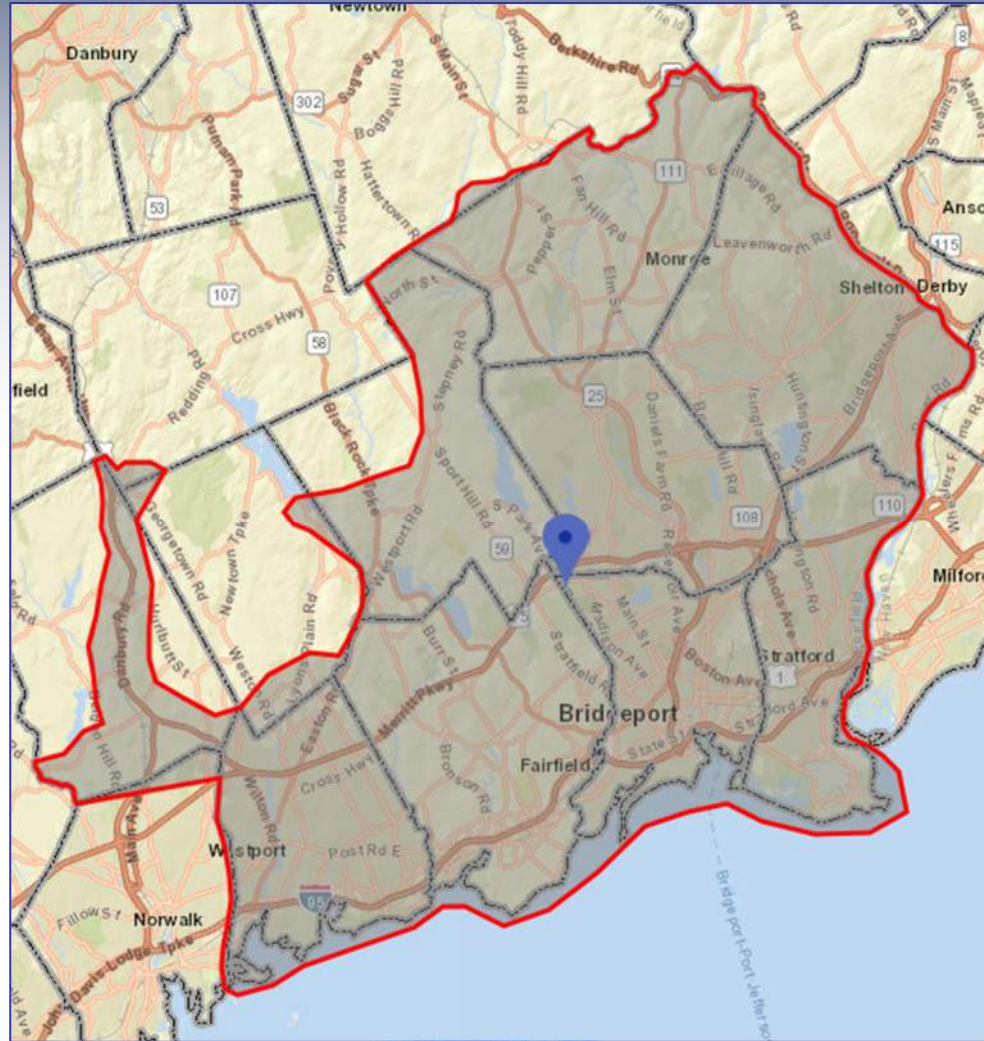
- Phase 1
- Phase 2
- Phase 3
- Phase 4
- Phase 5



Phase	Expected Timeframe	Winter Capacity (mgd)	Summer Capacity (mgd)	Average Capacity (mgd)
Base		5.3	4.2	4.8
1	2020	5.4	7.5	6.5
2	2020	7.0	7.8	7.4
3	2025	8.1	9.2	8.7
4	2029	11.9	14.2	13.1
5	≈2045	16.5	17.0	16.8

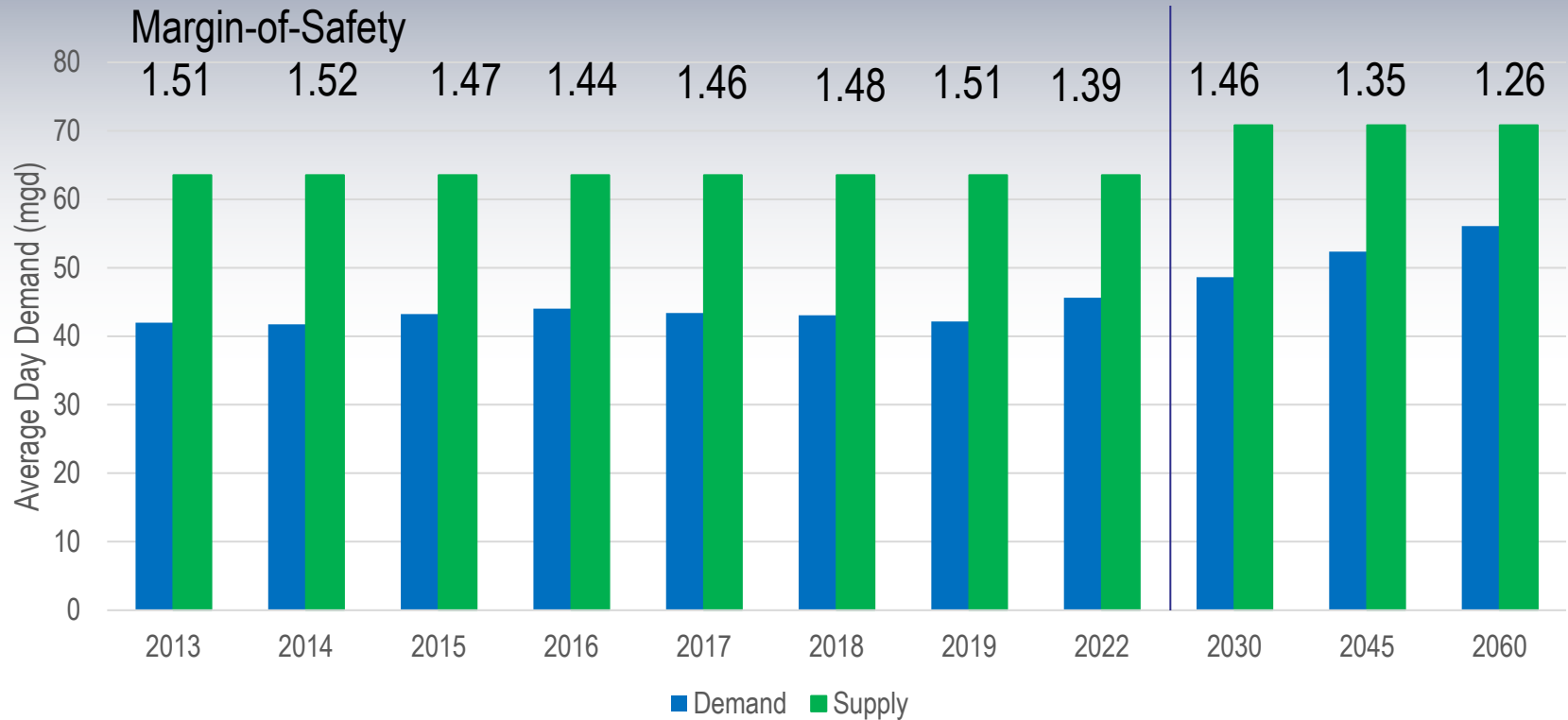
# Greater Bridgeport System

- Regional System
  - 11 towns served
- Sources of Supply
  - Trap Falls Reservoir System
  - Easton Reservoir
  - Hemlocks Reservoir System
    - Saugatuck Reservoir
    - Aspetuck Reservoir
    - Hemlocks Reservoir
  - Canal Street Wellfield
  - Coleytown Wellfield



# Impact on Greater Bridgeport System

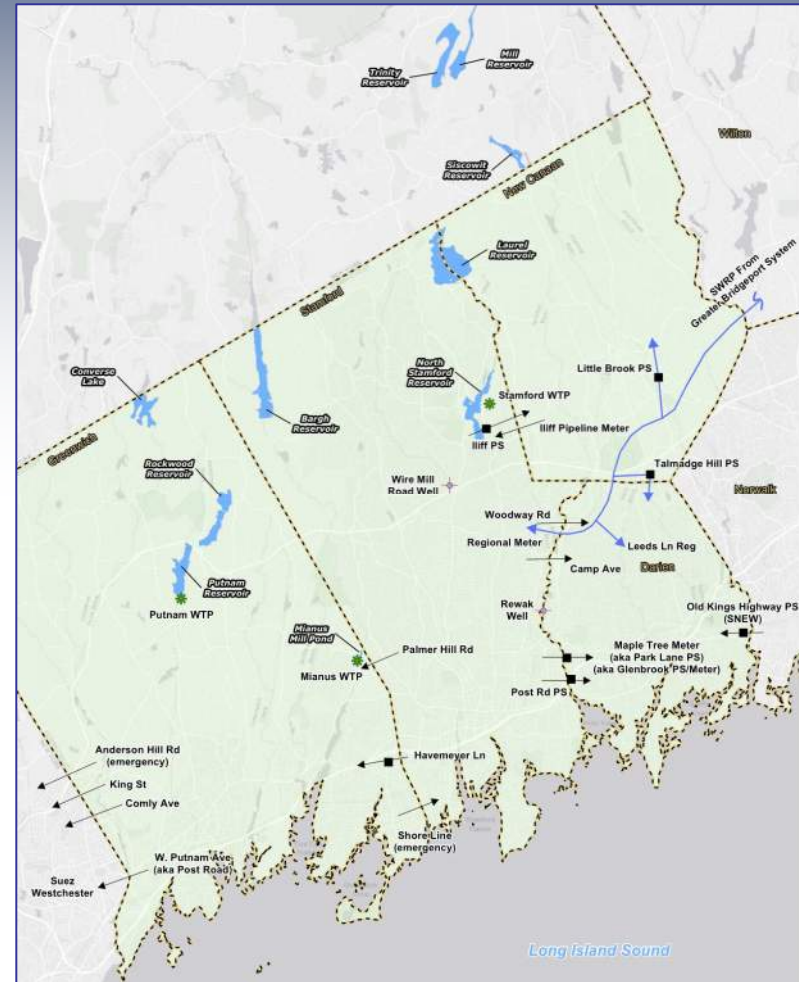
Start of streamflow releases and reactivation of Housatonic Wellfield @ 11.58 mgd



With reactivation of the Housatonic Wellfield the Greater Bridgeport System has adequate supply to meet increased demands and make all required reservoir releases.

# SWRP Diversion Permit Application

- Greater Bridgeport System to SWFCR
- Maximum daily limit = 14.2 mgd
- Confirm four towns in SWFCR are one service area
- Term = 25 years
- Tentative Determination adds 12.56 mgd annual average limit



# Public Question Themes

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- **What was the basis for the projected increase in demands?**
  - Historical demands (including drought restriction years)
  - DOT population projections
  - Average 70 gpcd
- **What will the impact of the diversion be on streamflow?**
  - Downstream flow controlled by releases and will not change
- **Does the Greater Bridgeport System have adequate supply?**
  - Margin-of-Safety
- **Is the Housatonic Wellfield contaminated?**
  - Manganese, Nitrate

# Objective

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By implementing improvements and obtaining this permit we will:

- Provide adequate public water supply
  - Improve drought resilience
  - Meet reservoir release requirements
- in Southwest Fairfield County.

