

# United Water New Jersey - Company Overview



Service area population

800,000  $\pm$  (Bergen, Hudson, Sussex, Passaic and Hunterdon )  
UWNJ, UWMA North and UWL

Customers served

190,000 +

**Water delivered per year (UWNJ only)**

40 billion gallons  $\pm$  (2.6 BG Purchased, 2.8 BG NY)

**34.6 BG Net**

from three NJ reservoirs & Wanaque System

**Hackensack River Reservoir System - Three reservoirs capacity (NJ Only)**

**8.2 billion gallons**

Average daily demand

116 million gallons

Peak demand (Monthly)

165 million gallons

Size of watershed

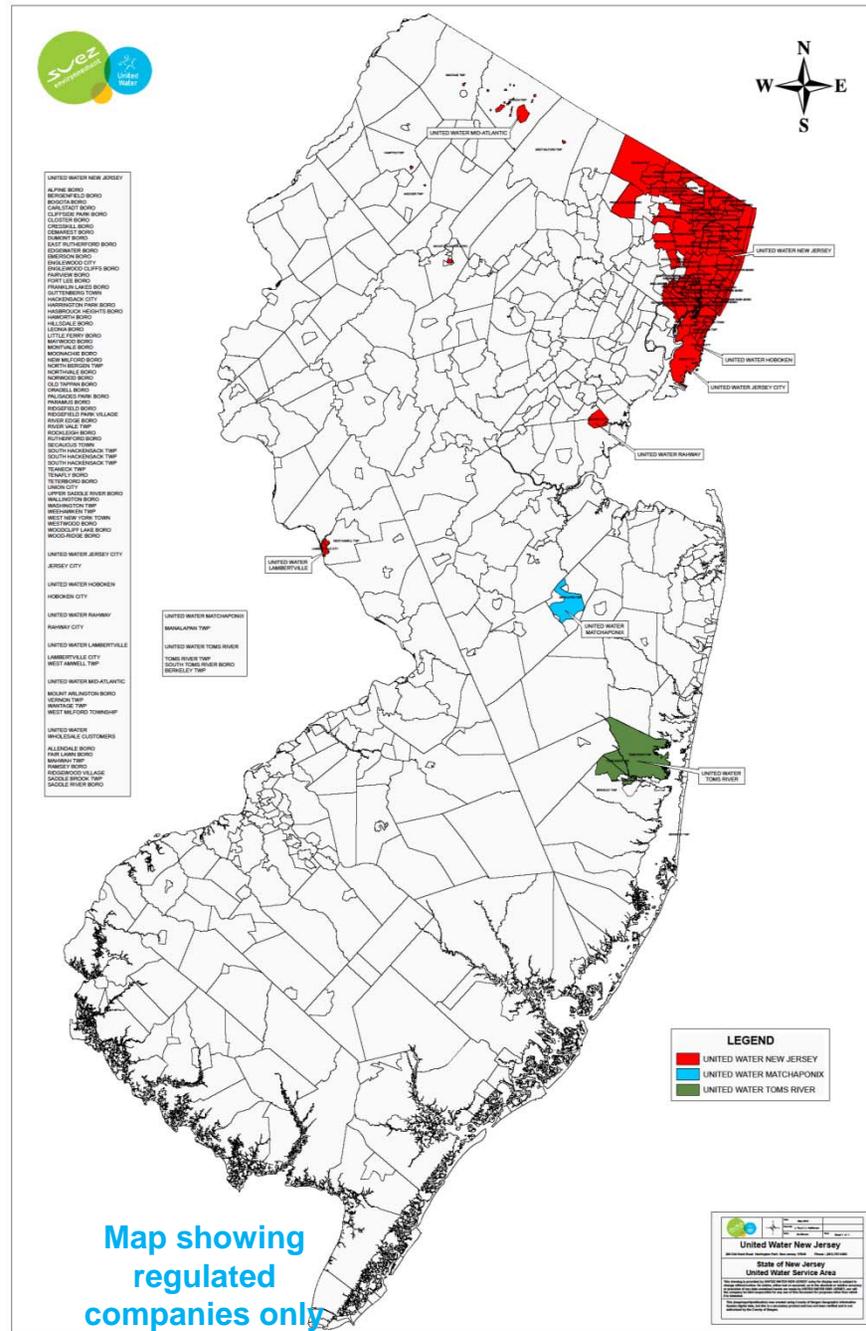
113 square miles

# United Water Service Areas in NJ

UW supplies water to over 1.14 million NJ residents (Regulated and Contract Services)

## Regulated Utilities

- United Water New Jersey: Bergen, Hudson, Passaic & Hunterdon Counties
- United Water Toms River
- United Water Lambertville
- United Water Manalapan
- United Water Plainsboro



## Contracted Services

- Allamuchy
- Andover
- Bayonne
- Camden
- Chester
- Dover
- Hampton
- Hoboken
- Jersey City
- Kearny
- Lafayette (Merck)
- Mount Arlington
- Orange
- Oxford
- Phillipsburg
- Rahway
- Union (Merck)
- West Milford



# Franklin Lakes minimum and maximum water consumption

Franklin Lakes System Draft					
	2008	2009	2010	2011	2012
Peak Day - Daily Flow [MGD]	3.653	2.316	3.844	4.001	3.620
Max Month - Average Daily Flow [MGD]	2.402	1.473	2.718	2.654	2.675
Min Month - Average Daily Flow [MGD]	0.457	0.436	0.441	0.555	0.493
Yearly - Average Daily Flow [MGD]	1.443	0.887	1.246	1.106	1.213
<b>Peak Month to Min Month Ratio</b>	<b>5.3</b>	<b>3.4</b>	<b>6.2</b>	<b>4.8</b>	<b>5.4</b>



## Franklin Lakes projects 2012 - 2015

- Franklin Lakes Wyandotte Well Manganese and Iron removal project - **\$7.5 M in 2012 & 2013**
- Franklin Lakes 5.3 MG tank and 24" main **\$15.4 M in 2012, 2013 and 2014**
- Franklin Lakes Pumping Station and main to the Riding Center - **Over \$4 in 2014**





## Project Drivers

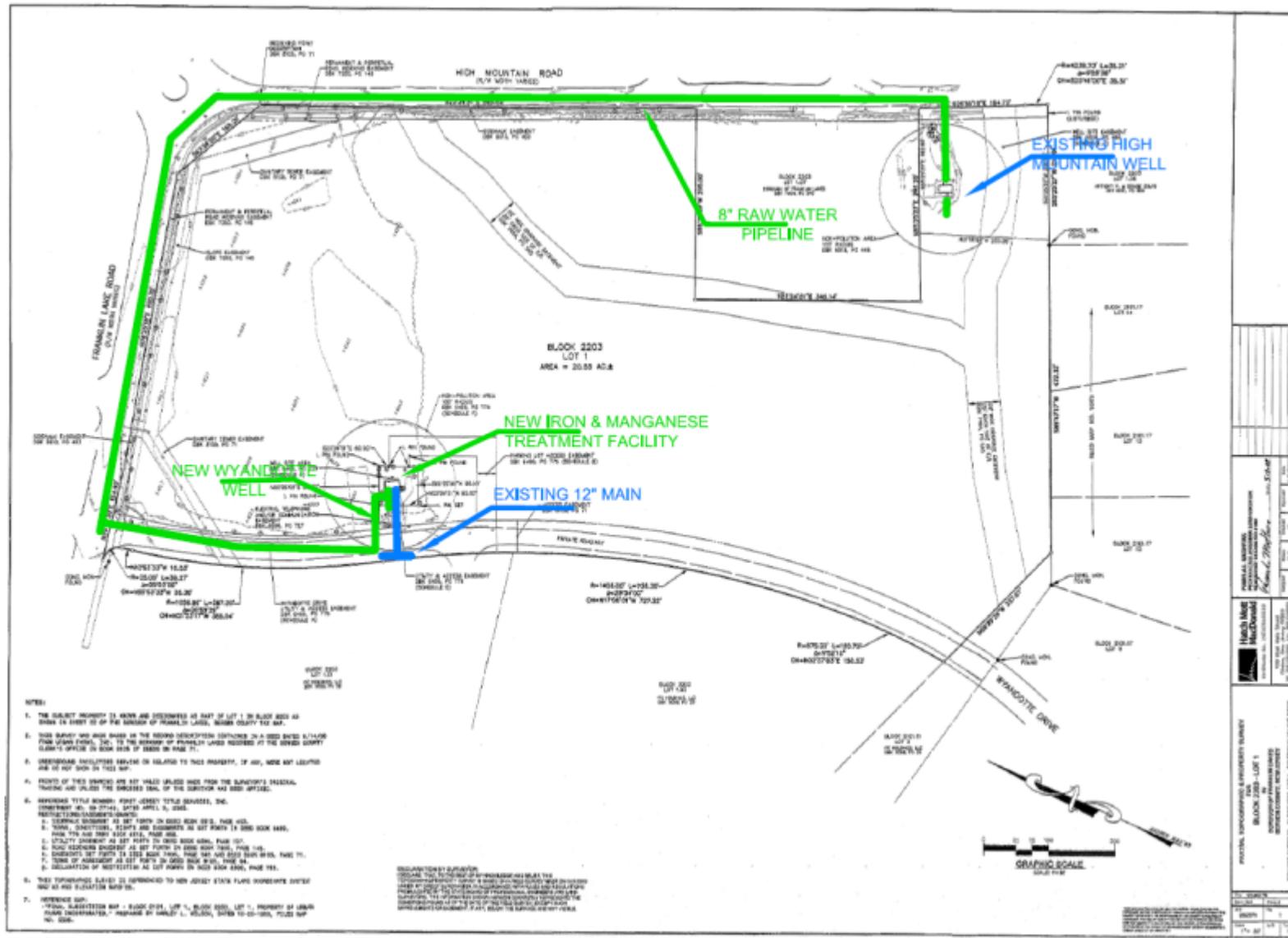
- Deteriorated Pumping Capacity at both of Wyandotte and High Mountain Wells.
- Both wells are experiencing increasing levels of Iron and Manganese. Iron and Manganese are regulated as a secondary standard. The EPA National Secondary Drinking Water Standard for Iron is 0.3 mg/l and for Manganese is 0.05mg/l. Since 2004 both wells have exceeded this standard. Testing indicated these levels are continuing to rise.
- United Water received major complaints from Franklin Lakes officials and residents about the discolored water issues.



## Project Description

- **Abandon existing wells (2) at Wyandotte Site**
- **Drill a new well at the Wyandotte Site**
- **Re-develop the existing well at the High Mountain Site**
- **Interconnect the 2 wells with an 8" pipeline and fiber optic communication cable**
- **Treat the combined well flows for Fe and Mn removal with traditional greensand filtration at the Wyandotte Site**
- **Construct pipeline to obtain adequate CT (disinfection credit)**

# Site Plan of Wyandotte and High Mountain Wells



# Proposed Treatment Facility @ Wyandotte Well



**BRICK: RED MATT**  
**TRIM: DARK BRONZE ANODIZED**  
NOTE: COLORS AND TEXTURES SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY  
AND ARE NOT AN EXACT REPRESENTATION OF ACTUAL MATERIALS

# Proposed Treatment Facility @ Wyandotte Well



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# Proposed Franklin Lakes 5.3 MG Tank and Pumping Station

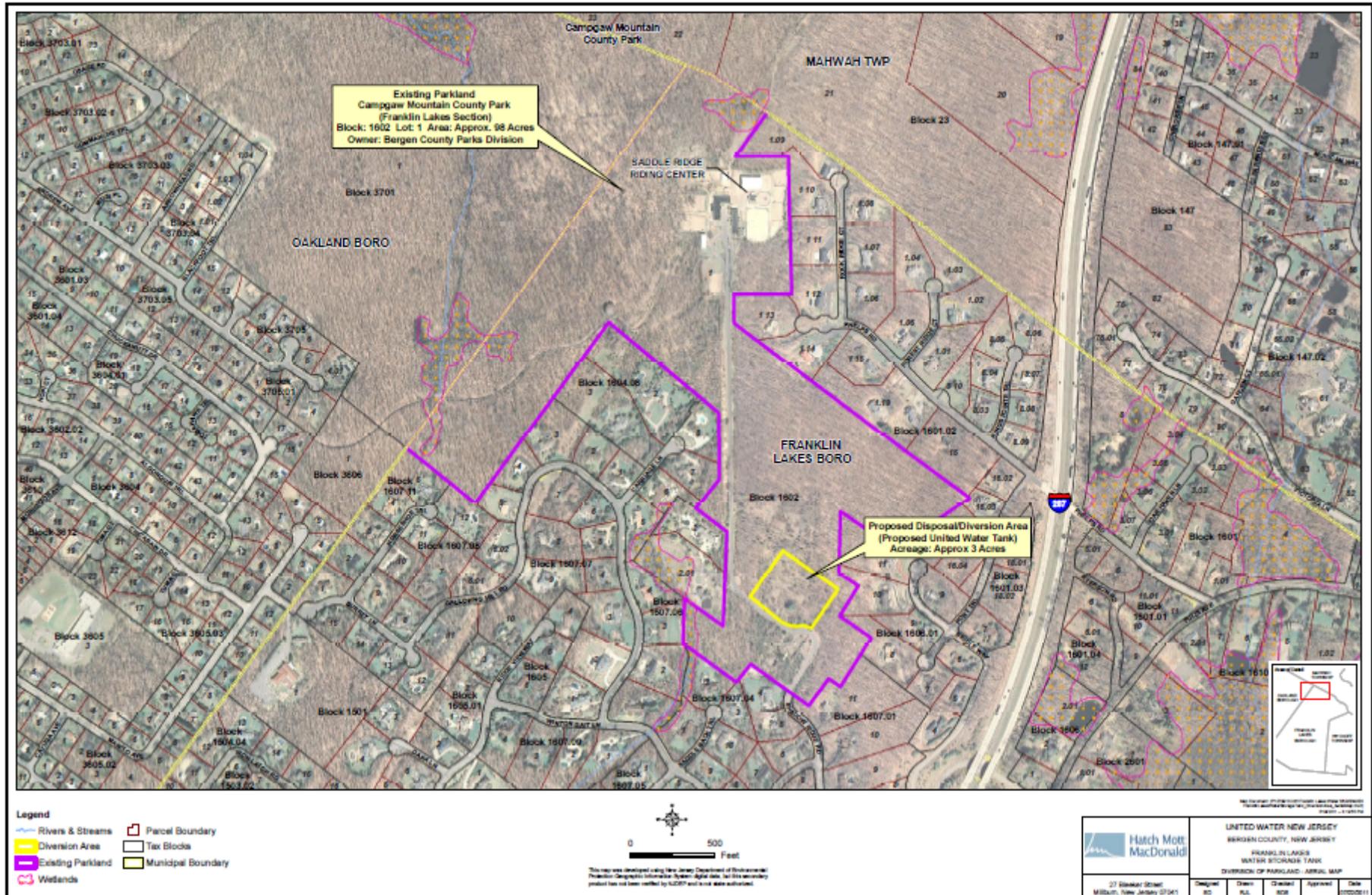
- Three acres of Green Acres Land
- All Rock excavation
- Tank will be partially below grade
- Water supply and fire protection
- 6" main to the county riding center
- 24" main to existing Shadow Ridge PS

## FL tank Project - Purpose and drivers of Project



- The existing storage facility within the FL Borough (approx 1.25 mgd) is insufficient to support emergency or peak demand conditions.
- The proposed tank will be capable of back-feeding the Franklin Lakes Pipeline in the event of an emergency. UWNJ provides wholesale water to several neighboring Boroughs via the Franklin Lakes Pipeline.
- The proposed tank would help UWNJ meet s the NJDEP imposed at least 50% average day water storage requirements.
- The proposed tank is needed to provide the necessary gravity storage to meet fire flow requirements in Franklin lakes and North Western NJ service area.

# Franklin Lakes 5.3 MG tank and pumping station – Green Acres Diversion



# Franklin Lakes 5.3 MG tank and Pumping Station - Rendering

