

# UV Project Update

#### SUBREGIONAL TECHNICAL ADVISORY COMMITTEE MEETING

13 FEBRUARY 2020

MARK KASRAIE, PE

SUPERVISING ENGINEER, CAPITAL PROJECTS ENGINEERING

## Project Objective and Background

#### Aging UV disinfection system (21 years old) w/ inadequate capacity

#### 2012 - 2015

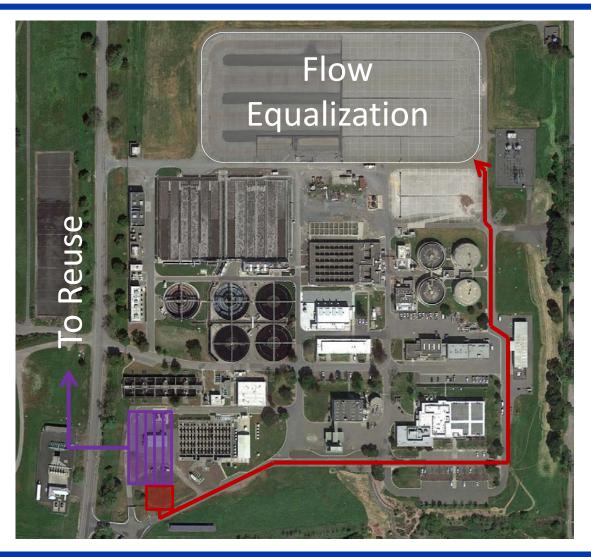
- Performed bioassay
- Evaluated technology/treatment alternatives
- Developed interim O&M plan
- Held charrette and wrote design TMs

#### 2016 - 2017

- Began design with Carollo Engineers
- Pre-selected Calgon Carbon as UV supplier
- Performed value engineering study



## Design Layout



### **Ultraviolet Disinfection System:**

- 5 channels, 5 banks EA
- 67 MGD
- 61% UVT

#### **On-Site Diversion System:**

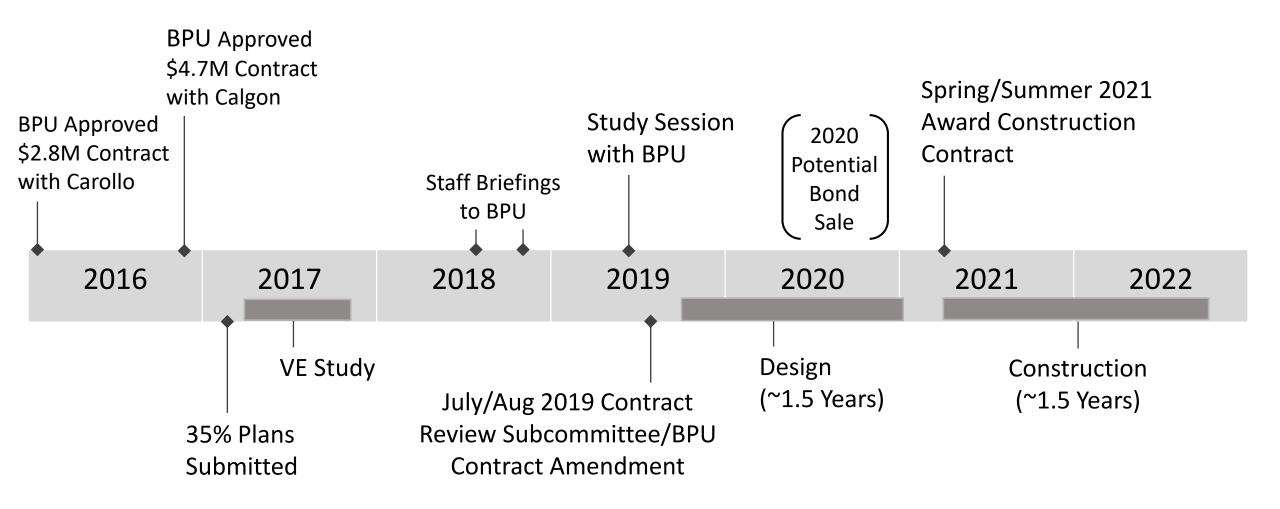
- Holding tank and pump station
- 2,200 LF 42-inch pipeline

### Project Cost

<u>ltem</u>	Estimate (\$M)
UV Disinfection	35
Diversion	12
Total Construction Cost	47
Project Delivery Costs (1)	17
Total Estimated Project Cost	64

(1) Project Delivery Cost represents 35% of Total Construction Cost, and <u>Includes</u>: Design, ESDC, CM/Inspection, Fees, and Overall Contingency

## Project Timeline





<u>Task</u>	<b>Estimated Date</b>
75% design submittal and workshop	March 2020
Execute new MOU with Calgon Carbon	March/April 2020
90% design submittal and workshop	October 2020
Complete design	December 2020
Advertise for bids	January 2021
<b>Construction Notice to Proceed</b>	Summer 2021

### Thank you

