

Spring Gardens Wastewater Pump Station Replacement

Project No. CP6698A19

November 17, 2020



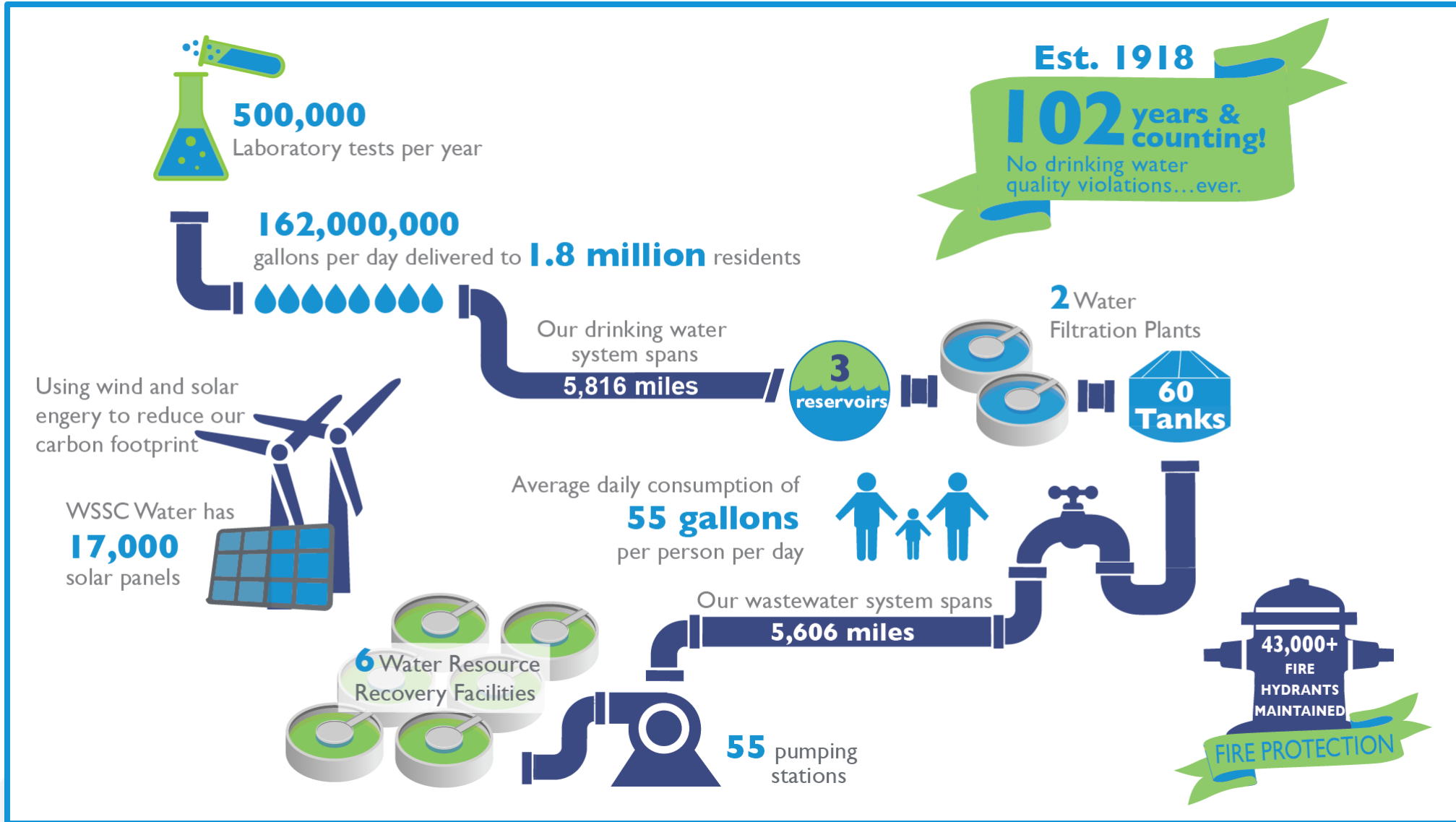
AGENDA

- Introduction of Project Team
- WSSC Water Overview
- Need for the Study
- Pump Station Location
- Study Area with Prospective Sites
- Study Approach for Site Selection
- Site Study
- Next Steps in the Schedule
- Questions & Answers

Project Team

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- Melanie Deggins, Project Outreach Manager, WSSC Water, 301.206.8192, melanie.deggins@wsscwater.com
- Joshua Penn, Planner Coordinator, Montgomery County Planning Department,
- Alan Soukup, Senior Planner, Montgomery County DEP
- Nasser Kamazani, Senior Environmental Engineer, Montgomery County DEP
- Mott MacDonald, Study Consultant

WSSC Water Overview



What is a Pumping Station?

- Typically located in low lying areas
- Lifts wastewater to a higher elevation for collection



Need for the Study

- 1976: Spring Gardens Wastewater Pump Station installed.
- 2015: WSSC Water Business Case Evaluation (BCE) recommended replacement of the station.
- Why?
 - Station is beyond its intended service life
 - Experiences higher peak flows than it can pump
 - Flood-prone and environmentally sensitive site



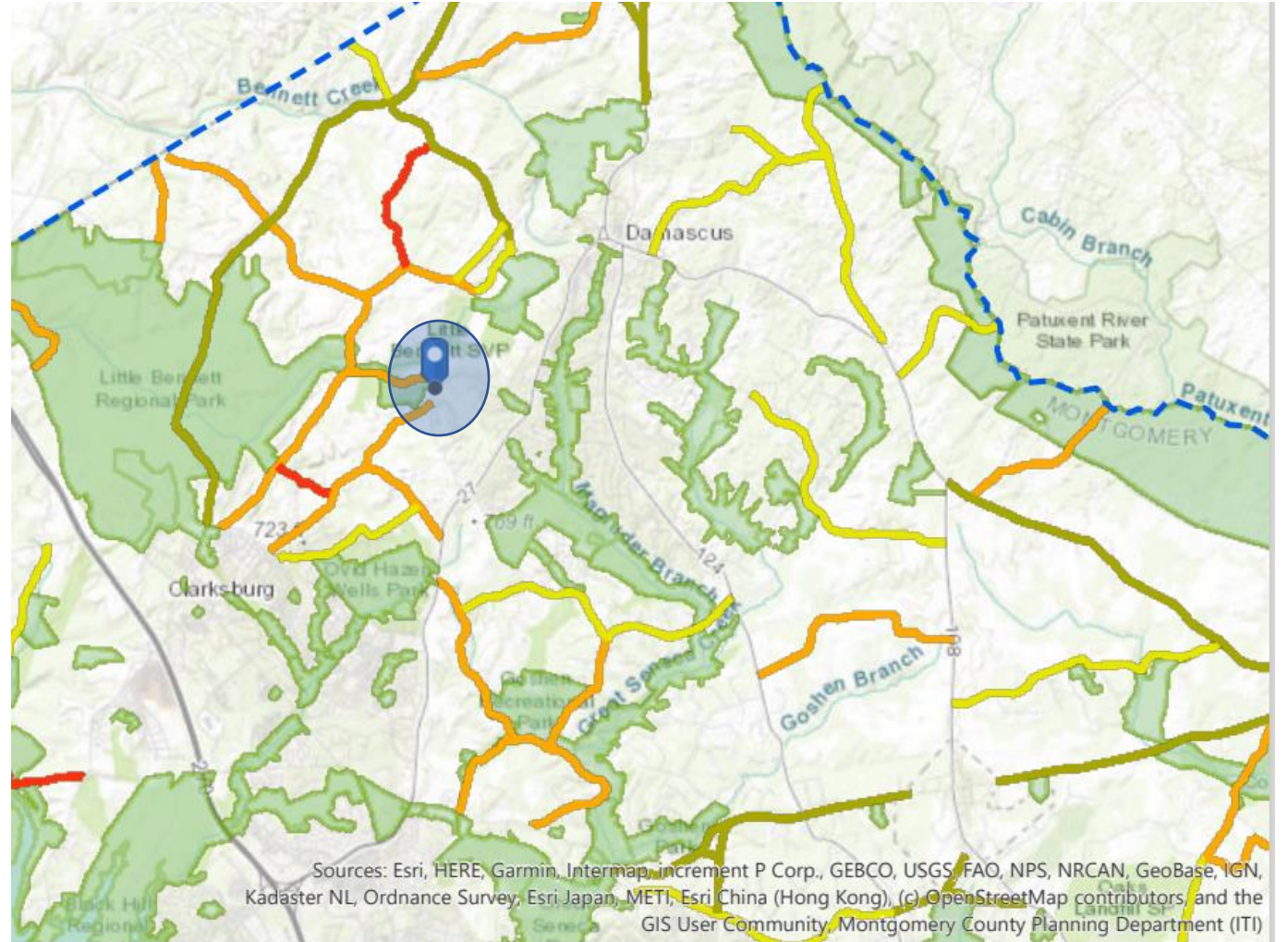
Need for the Study

- Replacing the station will:
 - Properly size to handle projected growth
 - Improve operational reliability and overall aesthetics
 - Be in compliance with County Environmental, Historic, and WSSC Water Design Standards



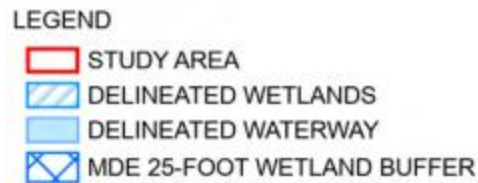
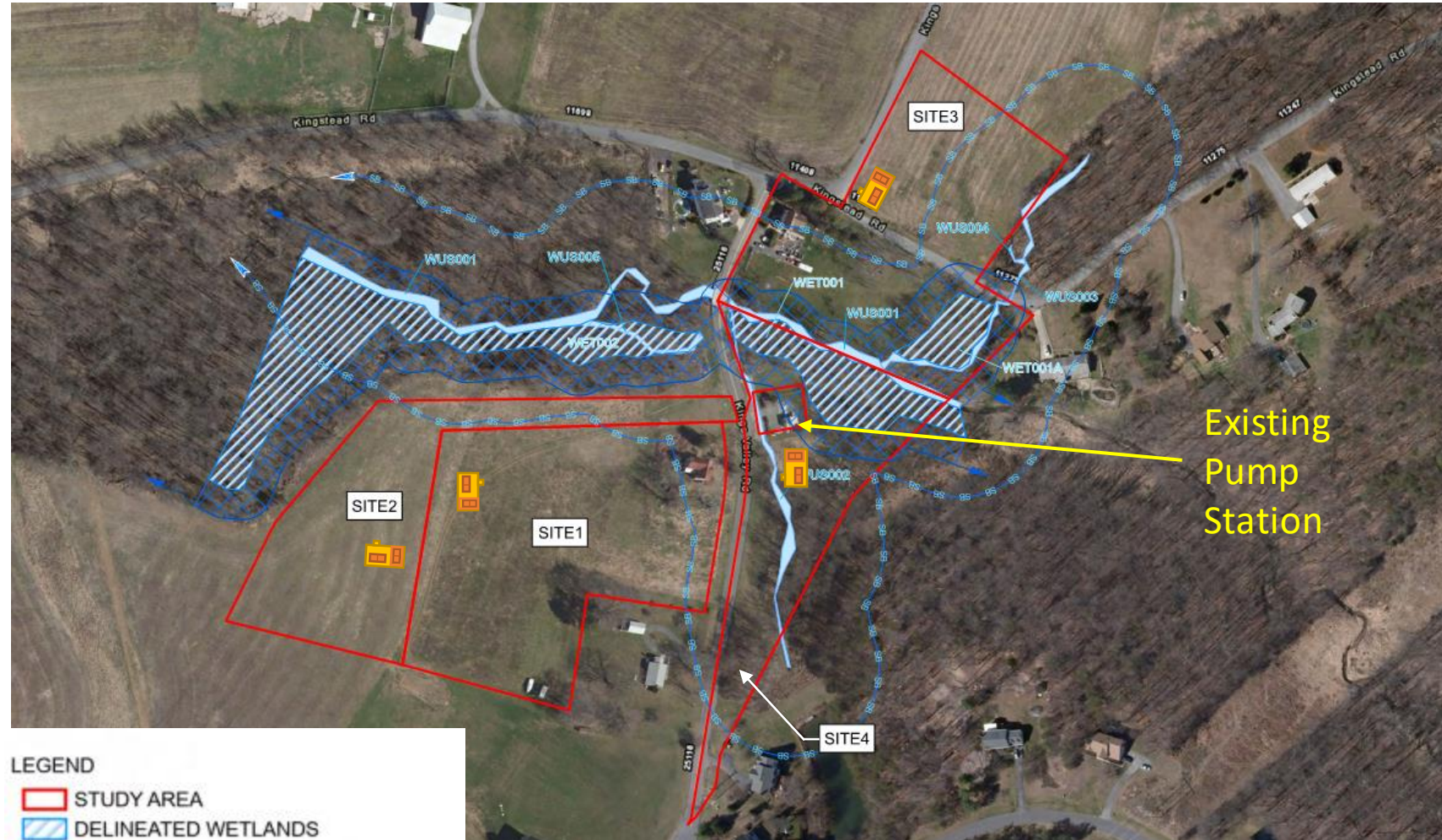
Pump Station Location

- Intersection of Kings Valley and Kingstead Roads, Damascus, MD
- Historically significant area
- Nearby Rustic Roads and proposed Rustic Roads
- Adjacent to County parkland



Study Area with Prospective Sites

- Site 1 – Residential Property across the street – historic farmhouse on the parcel
- Site 2 – Parkland to the west of Site 1
- Site 3 – Open farmland due north off Kings Valley Road
- Site 4 – Parcel owned by WSSC Water surrounding existing site



Study Approach for Site Selection

- Consultation with Montgomery Planning and M-NCPPC to ensure compliance with the mandatory referral process
- Established process in place
 - Identify alternative sites and stakeholders
 - Quantify/qualify selection criteria
 - Identify weightings for each criterion
 - Develop conceptual site plan for each site
 - Analyze/Score each site
 - Determine best site based on the scoring process
 - Present findings at Community Meeting for comment
- Make recommendation to the Board for review
- If Board approves, site plan moves forward to the Mandatory referral process



Site Study – Weighted Criteria

Quantitative Criteria

1. Total Life Cycle Cost
2. Construction Duration

Qualitative Criteria

1. Planning & Future Need
2. Easement/Right-of-Way
3. Operation & Maintenance
4. Constructability Risk
5. Permitting Requirements
6. Historic Preservation
7. Rustic Road Committee Master Planning
8. Environmental Impact
9. Community Impact
10. Parkland Impact

Site Study – Alternatives Scoring



Site	Score out of 5,940	Score (%)
Site 3: King Farm Property	5,680	96
Site 4: WSSC Water Property	5,335	90
Site 1: Historic Property	5,307	89
Site 2: M-NCPPC Property	5,080	86

Site 3 – New Pump Station Design

- King Valley Farm is historically significant for its collection of farm buildings
- Kings Valley Road is historically significant
 - Scenic roadways
 - Agricultural character
- Future Pump Station Design to consider:
 - Architecture to mimic agricultural character
 - Maintain the natural slopes
 - Screened entrance
 - Comply with environmental, historic, & WSSC Water Design standards



Next Steps

- Solicit feedback from the Community
- Recommendation to the Board
- If Board approves, Pump Station Preliminary Design commences
- WSSC Water acquires the necessary property
- Final Design and Permit Acquisition
- Construction



THANK YOU! QUESTIONS?

