



## Laytonsville Community Meeting

Tuesday, March 28, 2023



# Agenda

- Introduction to Project Team
- WSSC Water Overview
- Overview of Low Chlorine Issue
- Anticipated Timeline
- Questions and Answers

## **Project Team**



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# WSSC WATER AT A GLANCE

Established in 1918, WSSC Water is the largest water/wastewater utility in Maryland and among the largest in the nation. Our service area spans approximately 1,000 square miles in Prince George's and Montgomery counties. We proudly serve 1.9 million residents with safe and reliable drinking water and help protect the Chesapeake Bay by treating and returning clean water back to Maryland waterways.







# **WSSC** Water Overview





## **Background – Laytonsville**



- Plan for Town of Laytonsville issued in 2015
- Area on wells and septic
- In 2015,WSSC Water agreed to bring public water to developing area due to failing septic systems
- Drinking water only due to cost of installing sewer collection system, and it allowed for expanding existing septic systems

## **Background – Distribution System**



- Building out involved installing pipe system and storage tank
- Pump station distributes 1.72 million gallons per day (MGD)
- Storage tank has 500,000 gal capacity
- Tank capacity based on domestic storage, fire protection, emergency storage
- Property records indicate Barberry/Birdie Lanes homes built 2019-2020

# **Background – Chlorination**



- Free chlorine  $(Cl_2)$  is added at treatment plants
- Residual disinfectant protects water from microbial activity in distribution system
- Required to maintain 0.1 mg/L residual chlorine or heterotrophic plate counts less than 500 /mL
- Low chlorine is localized issue and can be caused by heat, low use, end of water main lines
- Normally resolved through targeted hydrant flushing
- Odors can be associated with many things, including low chlorine, water heater, sewer line. Naturally occurring compounds are more noticeable



# **Project Map**



#### Low Chlorine Issue

![](_page_9_Picture_1.jpeg)

- Water Quality received a number of water quality complaints from Birdie/Barberry
  Lanes in summer of 2021
- Low chlorine at some end of lines, but all locations meet minimum detectable chlorine residual as required by MDE
- No evidence of total coliform contamination
- Started flushing hydrants, checking chlorine levels
- Unidirectional Flushing (UDF) completed in Fall 2021, improved WQ for limited duration
- Issues subsided in winter, began again in summer
- In 2022, more flushing, began routine hydrant checks in area
- Extensive sampling in 2022
- WSSC begins evaluating alternative measures to improve chlorine

#### Summer 2023 Plan

![](_page_10_Picture_1.jpeg)

- Operating Plan: Closing valve to reroute water
- Installation of automatic flusher
- No-des (Neutral output discharge elimination system aka flushing) truck possibly in summer
- Will continue to monitor hydrants in area for chlorine

   Hydrant in front of 263 Barberry Lane 3/15 Chlorine: 0.86 mg/L
   Hydrant in front of 21320 Birdie Lane 3/15 Chlorine: 0.65 mg/L

# **Operational Plan**

![](_page_11_Picture_1.jpeg)

- Customer demand below expected for normal elevated tank operations
- Original solution: Open flow control valve to drain daily and fill it back up at night
- Result: Turnover not well dispersed through zone, still stagnations in certain residential areas
- New solution: Close mainline valve; when flow control valve is opened, fresh water is forced into areas currently experiencing stagnation

#### **Operational Plan – Original**

![](_page_12_Picture_1.jpeg)

![](_page_12_Figure_2.jpeg)

#### **Operational Plan – Current**

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![](_page_13_Figure_2.jpeg)

# **Automatic Flusher**

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![](_page_14_Picture_2.jpeg)

![](_page_14_Picture_3.jpeg)

Location selected due to chlorine levels, end of line, optimal from a hydraulic standpoint to bring in fresher water

#### Timeline

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- Operational plan in progress
- Continue monitoring at hydrants and collecting chlorine data
- Evaluate impact of automatic flusher • Installation Spring 2023
- Outcomes evaluated after weather cools down
- Follow-up meeting in late 2023
- As more information is gathered and analyzed further updates will be provided

![](_page_15_Picture_8.jpeg)

#### **Contact WSSC Water**

- Customer Service | Monday-Friday, 7:30 a.m. to 7:00 p.m. Phone: 301.206.4001 | 1.800.634.8400 Email: <u>customerservice@wsscwater.com</u>
- 24-Hour Emergency Call Center

Water Emergency, Sewer Emergency or Discolored Water

Phone: 301.206.4002 | Email: <u>emergencycallcenter@wsscwater.com</u> Report a Problem: <u>wsscwater.com/customer-service/report-problem</u>

Discolored Water: wsscwater.com/discoloredwater

• File a Claim

Phone: 301.206.7095

Online: wsscwater.com/claims

WSSC Water Financial Assistance Programs

Online: <u>https://www.wsscwater.com/assistance</u>

Customer Notification System Sign-Up

Online: <u>www.wsscwater.com/cns</u>, email and/or text alerts on work in your neighborhood

Water Quality Complaints

Email: waterqualityinquiry@wsscwater.com

Online: www.wsscwater.com/customer-service/report-water-and-sewer-emergencies/report-waterquality-complaint

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