

# Clarksburg Ten Mile Creek Sewer Study - Conceptual Alternatives

Clarksburg/Ten-Mile Creek Citizens Advisory
Committee

February 12, 2015





#### **Agenda**

- 1. Introductions
- 2. Purpose of CAC review/discussion of draft statement
- 3. Overview of Draft Sewer Facility Plan
- 4. Highlights of Environmental Features of Clarksburg Ten-Mile Creek Area
- 5. Discussion of Alternative Wastewater Systems and use by WSSC
- 6. Next Steps and Discussion of Future Meeting Dates
- 7. Open Comments from Public



### Introductions



### Citizens Advisory Committee - Purpose

- Representatives of community, environmental, and development interests. Non-voting committee.
- Areas covered by Ten-Mile Creek Limited Master Plan Amendment (TMC-LMPA) of Clarksburg Master Plan (1994).
- Review of Sewer Infrastructure System Alternatives to provide sewer service to the areas envisioned to be served by public sewer in the TMC-LMPA.
- Forum for free exchange of ideas and perspectives on sewer infrastructure alternatives, facilitated by WSSC.
- Meeting summary notes will be sent out after each meeting for review and comment by CAC members. WSSC will revise but if any member feels the summary does not accurately reflect their input, they may submit comments in writing to be part of the meeting summary.



### Citizens Advisory Committee - Process

- WSSC will be asked to respond to proposed alternatives and mitigation options for feasibility of implementation, followed by CAC discussion.
- Once all feasible options evaluation and discussed, WSSC will propose a draft sewer infrastructure plan.
- Plan will be provided to CAC for review and comment. WSSC will complete a final draft plan with documentation of CAC input in the plan.
- Final draft plan, with CAC input included, will be forwarded by WSSC to the Montgomery County Planning Board and County Council for briefings.



#### Overview

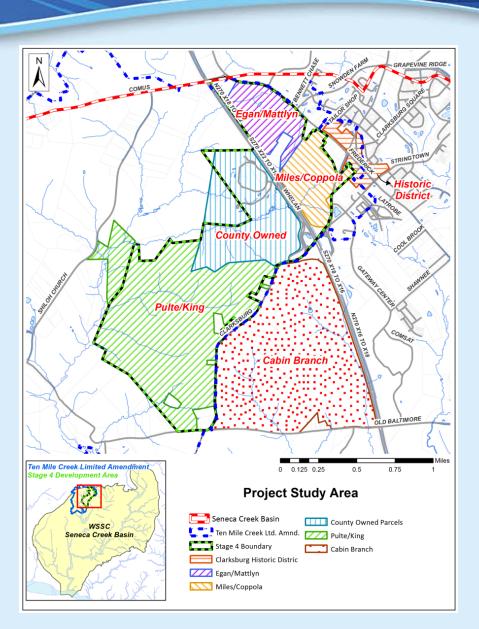
- 1994 Clarksburg Master Plan
- 2014 Clarksburg Ten Mile Creek Limited Amendment to the Master Plan
  - East and West Environmental Overlay Zones
  - Special Protection Areas/Legacy Open Space Program
- Rezoning of properties
- Conceptual study to determine preferred alternative for sewer service to Stage 4 Development Area



#### **Sewer Study Area**

- Approximately 980-acre sewershed
- Major Properties
  - Egan/Mattlyn
  - Miles/Coppola
  - County-Owned Property
  - Pulte/King
  - Clarksburg Historic District
- Conceptual alternatives based on Adopted Limited Master Plan Amendment:
  - Properties to be served
  - Imperviousness limits
  - Open space requirements
  - Environmental buffer zones





### **Study Limitations**

- Only considers "major" infrastructure to serve the Ten-Mile Creek and Historic Clarksburg areas
- Does not include all required 'local' sewers
- Detailed development/site plans for the major properties not yet finalized
- Site-specific infrastructure plans may have to be refined some as development progresses

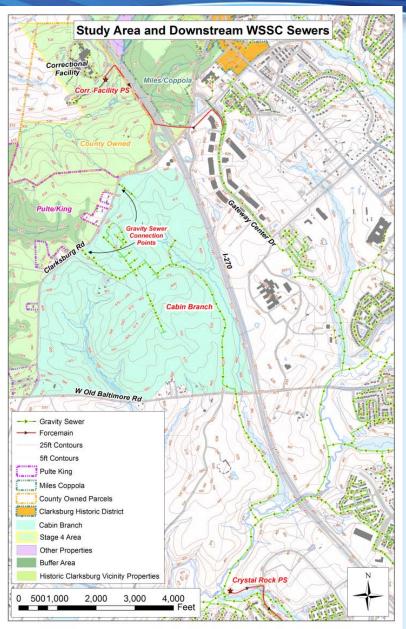


#### **Existing WSSC Facilities**

- Gravity sewers in Cabin Branch Development sized to convey wastewater from Stage 4 Development Area
- Wastewater conveyed to Crystal Rock WWPS, which then pumps to Seneca WWTP
- Major WSSC sewer facilities in the area have sufficient capacity to handle all wastewater from development in study area
- Existing WSSC pump station serving County Correctional Facility

   pumps wastewater to gravity sewers on Gateway Center Drive (East of I-270) using an existing tunnel under I-270

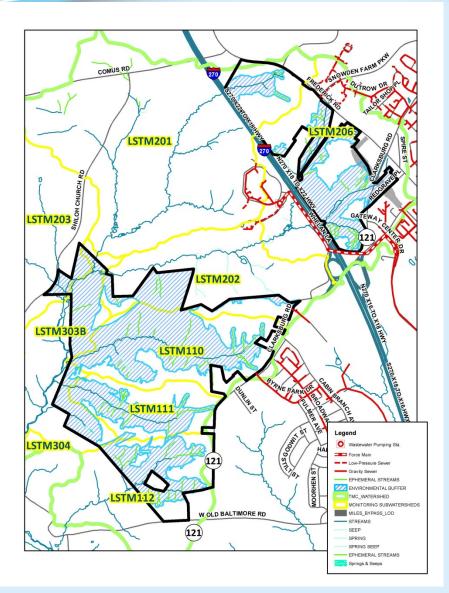




### **Environmental Features of Ten-Mile Creek Watershed**

Base map

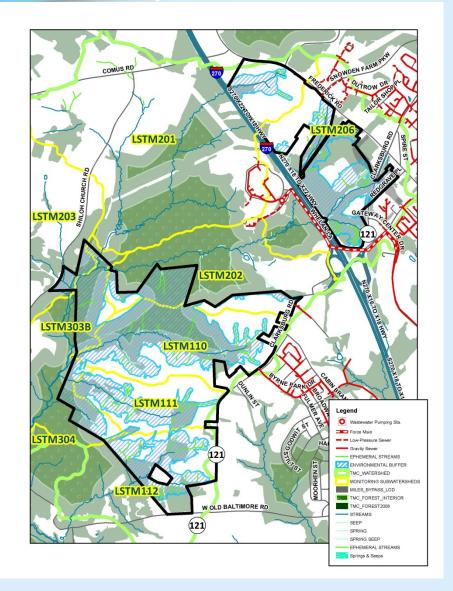




## **Environmental Features of Ten-Mile Creek Watershed (continued)**

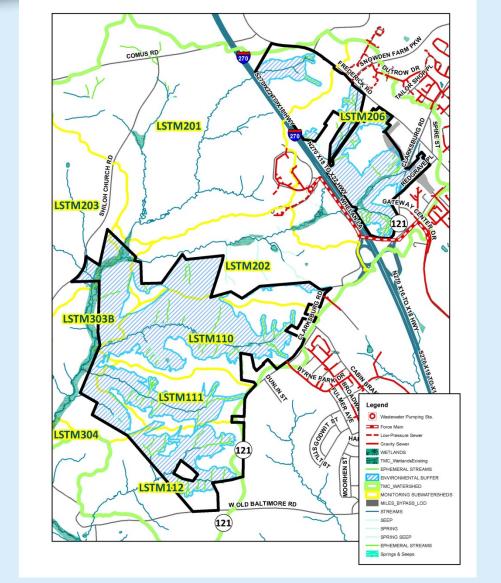
Forested Areas





### **Environmental Features of Ten-Mile Creek Watershed (continued)**

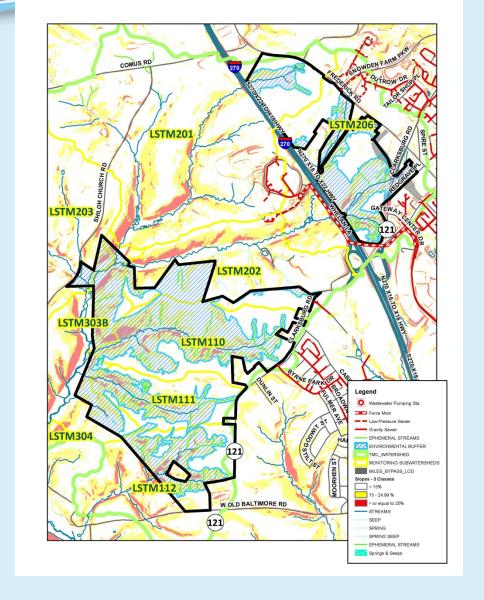
Wetlands





### **Environmental Features of Ten-Mile Creek Watershed (continued)**

Steep slopes





### **Alternative Systems**

- Per inquiries from citizens, County Council, and Planning Board
- WSSC Policy establishes preferred sequence of providing service to an area:
  - Gravity
  - Centralized Pumping
  - Low-Pressure/Grinder Systems



### **Grinder Systems**

- WSSC has extensive experience with Grinder Systems; currently properties is WSSD service area are served by over 2,000 grinder pumps (approximately 1,300 in Montgomery County);
- Most 'systems' of grinder pumps are limited to serve 50 and fewer homes. 'Systems' with grinder serving more than 50 homes are rare.
- As a result of WSSC's experience with these systems, WSSC has adopted the following policies/guidelines for the use of grinder systems:
  - 1. Grinder systems limited to residential properties only;
  - Non-residential properties require a dedicated unit;
  - Must meet criteria related to odor potential
- Subject to technical limitations (e.g.: flow and pressure head)



### **Vacuum Systems**

- WSSC has evaluated in the past
- Not currently approved for use in the WSSD:
  - Pressure head limitations
  - Operational complexity
  - Maintenance requirements
  - No apparent advantage vs. grinder pumps
- Other alternative systems
  - STEP System
  - Composting toilets
  - Incinerator toilets
  - None are applicable for the level of development proposed in Ten-Mile Creek



#### For Our Next Meeting...

- Presentation and review of new and/or modified alternatives
  - Incorporating more detailed information recently received for Egan and Miles-Coppola properties;
  - Incorporating possible use of grinder systems;
  - Incorporating comments and feedback from tonight
- Provide information on alternative construction techniques that may be feasible in environmentally sensitive areas.



### **Open Comments/Discussion from Public**



### Thank you for attendance

We appreciate your support, participation and cooperation.

