Clarksburg Ten Mile Creek Sewer Study

Clarksburg/Ten-Mile Creek Citizens Advisory Committee

April 30, 2015

Agenda

1. Confirm Approval of Meeting Summary – March 25, 2015
2. Updates
    1. Cost Estimates of Alternatives 3 through 7 (not including Pulte property)
    2. Review of alternatives by Montgomery County Department of Environmental Protection (MCDEP) Staff
3. Presentation by Mark Wehland, Freemire Associates
4. Presentation by Thomas Leedy
5. Next Steps/Next Meeting
6. Open Comments from Public
7. Adjournment

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Ground Rules

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Citizens Advisory Committee – Meeting Ground Rules

- Only CAC Members and official agency representatives are seated at tables and allowed to participate. All other please sit in the outer chairs.
  - CAC members can send a substitute if they are going to miss a meeting
- Comments/Questions from CAC Members and support staff during meeting. Members of the public will have an opportunity to comment near the end of the meeting
- Please be respectful of each others' opinions/comments. Membership of this CAC represent various and diverse points of views, goals, and perspectives.
- Reminder - WSSC proposed 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 member input and comments in the plan.

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Citizens Advisory Committee Approval of from March 25th Meeting Summary

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Cost Estimates and MCDEP Review of Alternatives

- Cost Estimates of alternative 3-7 still underway (alternatives will not include Pulte site/property). Cost Estimates will be provided at May meeting.
- Montgomery County asked for an extension of its review. Findings will be provided at May meeting.

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Disclaimer

- Tonight's speakers were added at the request of members of the Citizens Advisory Committee (CAC).
- The speakers and presentations this evening do not necessarily represent the views of WSSC.
- Please note that the application of grinder pumps and low-pressure systems must meet the requirements established in WSSC's Standard Procedure, ENG 04-10 (Grinder Systems Policy and Guidelines) and any proposed use will undergo review by WSSC.

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Presentation on Grinder Pump/Low Pressure Systems

Mark Wehland

Freemire Associates

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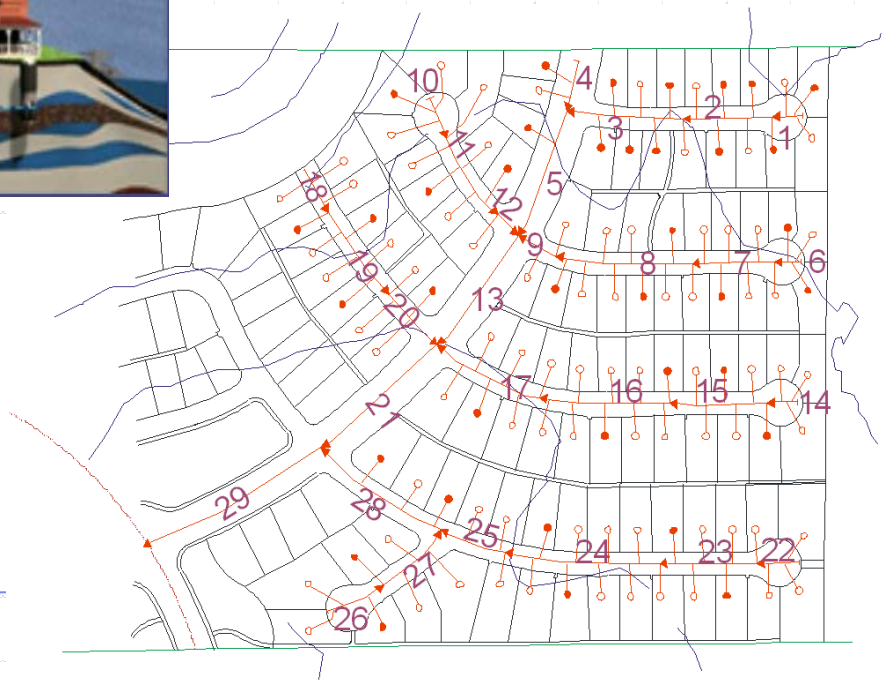
1 Q: Who are you?

There's no limit
to where we can go.

2 Q: What is a Low Pressure Sewer System?

A: It's a sewage collection system consisting of individual grinder pump units sharing a common forcemain.

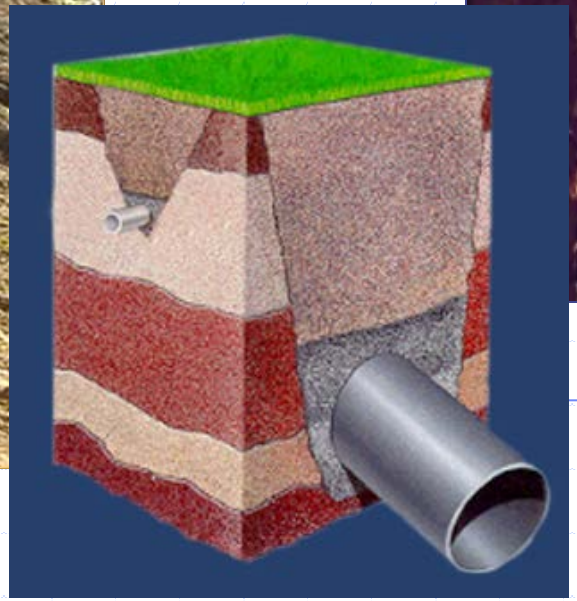


3 Q: When & Where would you use a LPS System?

A: Environmentally Sensitive Areas, existing communities with established landscapes and hardscapes, undulating terrain, rocky conditions, or high ground water locations.

4 Q: How does LPS compare to gravity sewer systems?

LPS Installation



Gravity Installation

5 Q: Why Use Low Pressure Sewer?

A: The E/One Sewer System can reduce costs by 50% or more.

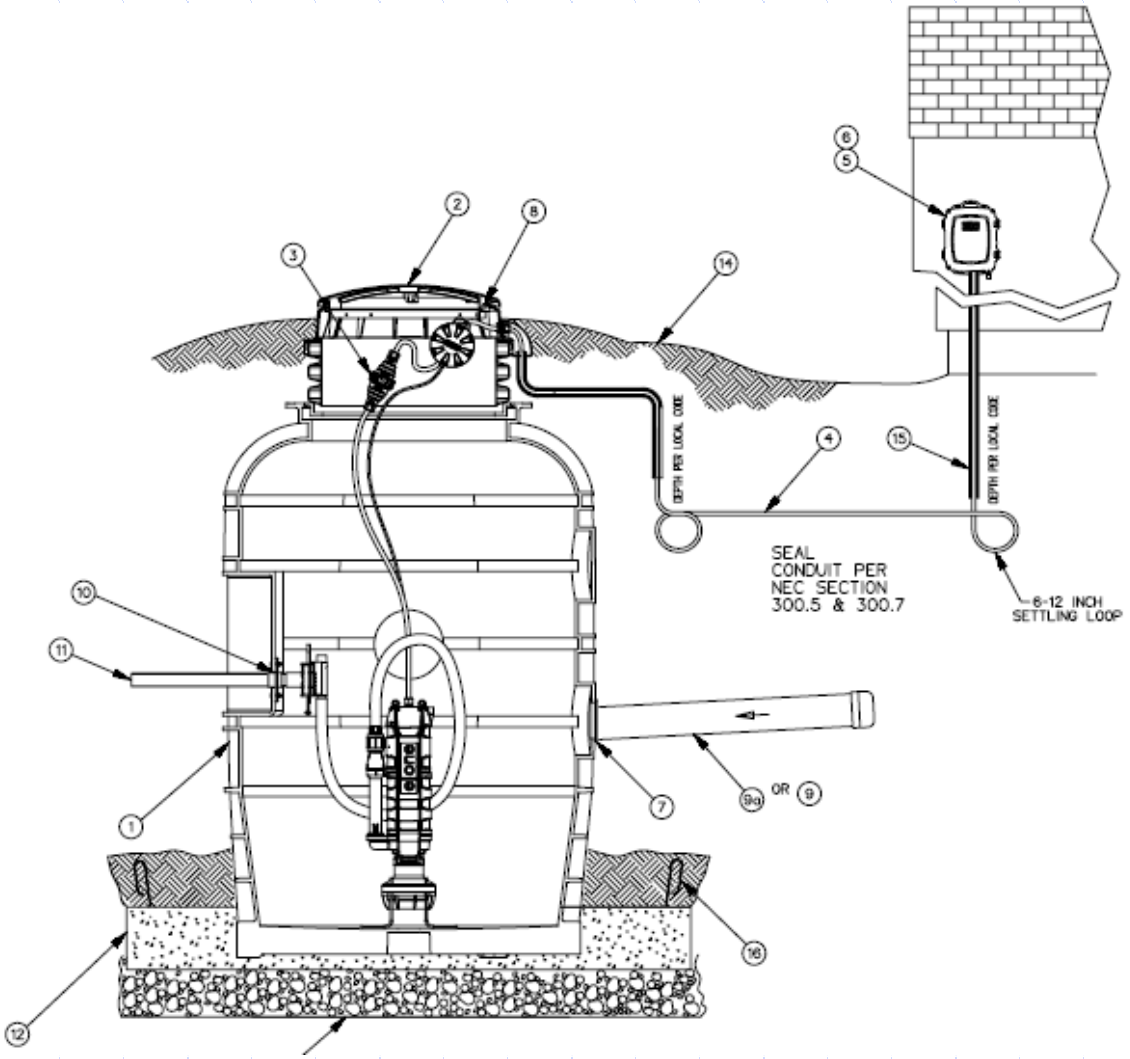
- Requires only shallow, narrow trenches.
- Deferred material and infrastructure costs.
- Accelerated site development
- Phasing of sewer infrastructure.

A: Reduced Environmental Impact

Q: What does it look like today?

7 Q: What does it look like after it's installed?

8 Q: What's going on under the ground?



9

Q: What kind of maintenance is required

A: Like most other Household “Appliance” periodic maintenance is not required. All pump components used are designed to provide years of trouble free service without maintenance.

10

Q: OK but how long will the pump last before it needs repair or replacement?

A: The E|One unit has been sewering single family homes since 1970. Excellent service records have been kept by some of the owners like Greenfield Twp. and E|One corp. The mean time between service calls has proven to be 8 to 10 years. The need for a major rebuild has been proven to be 15 to 20 years.

Q: Can that be proven to be true?

Bruce Evans
Greenfield Township Sewer Authority
Carbondale, Pa
570-222-4888

Greenfield Township is one of the largest and oldest grinder pump low pressure sewer systems in Pennsylvania. The system started installation in 1983 with approximately 280 grinder pump stations. Today, there are approximately 500 grinder pump stations in service. There are an average of 10 to 15 new homes added to the system each year.

We have the dollar figures for the parts that were purchased by Greenfield Twp. Lake for the years 1988 through 1997. They are as follows:

1988 $12,775.08	**1992** $20,931.58	**1996** $19,500.00
1989 $10,449.17	**1993** $14,175.10	**1997** $19,800.00
1990 $7,003.93	**1994** $17,989.00	
1991 $10,588.79	**1995** $16,806.91	

According to Bruce, an average of 300 man-hours per year, or 25 hours per month, is spent on the pressure sewer system. The labor cost for this time is $3,156.00 annually.

Parts	$19,800.00	
Labor	$3,156.00	
TOTAL	**$22956.00**	**Approx $46.00 per pump per year**

12

Q: What is the average yearly cost of electricity to operate a Grinder Pump in the typical family home.

A: A typical single family home will use 200 gpd. The E|One 1hp pump will consume about 16 kwh of electric per month.

At $0.11/kwh x 16kwh = $1.80 per month

Appliance	Typical Annual Usage kW h
Air Conditioner	2000
Clothes Dryer	1200
Refrigerator	750
Television	500
E/One Grinder Pump	200
Coffee Maker	100
Vacuum Cleaner	45
Clock	17

13

Q: What happens if there is a power outage?

A: The pump does require electricity to operate. During a power outage water usage in a home drops significantly because the appliances, which account for much of the water we use, are also not working.

The E|one pump is design is optimized with storage capacity for such events.

14 Q: Does the grinder pump emit any unpleasant odors?

15 Q: What about Third Party Agency Testing?

- ✓Under Writers Laboratory (UL)
- ✓NSF (National Sanitary Foundation)
- ✓CSA (Canadian Standards Association)
- ✓IAPMO (International Association of Plumbing and Mechanical Officials)
- ✓Countless State and Local Agency Listings

16 Q: Will the pump clog or jam?

Table 1- Household Items added to the Pump Basin	NSF 46-1997
Item	Frequency
Toilet tissue, 24 perforated sheets (wetted in test water)	4 times per day, 5 days per week
Facial Tissue	2 per day, 5 days per week
Filter Tip Cigarette	1 per day, 5 days per week
Egg	1 per day, 5 days per week
Paper towel*	1 per day, 5 days per week
Condom*	1 per day, 5 days per week
Sanitary napkin* (wetted in test water)	1 per day, 5 days per week
Chlorine laundry bleach* (8 ounces)	1 per day, 5 days per week
Cotton swab* (plastic stick)	1 per day, 5 days per week
Disposable diaper* (large childerns size)	1 per day, 5 days per week
Tampon* (plastic applicator added separetely)	1 per day, 5 days per week
Adhesive bandage* (paper wrapper added separetely)	1 per day, 5 days per week
Dental floss (12 inch piece)	1 per day, 5 days per week
Alkali drain cleaner (8 ounces)	1 per week, at random
Handi-wipe	1 per week, at random
Acidic drain cleaner (8 ounces)	1 per week, at random
Liquid animal fat (4 ounces)	1 per week, at random
One pair nylon panty hose (size large)	1 per week, at random
Cloth diaper (wetted in test water)	1 time during test, at random
Toothbrush	1 time during test, at random
Wood pencil	1 time during test, at random
Plastic table utensil	1 time during test, at random
Metal bottle cap	1 time during test, at random
HDPE bottle cap	1 time during test, at random
Metal, toy car (Matchbox or Hotwheels)	1 time during test, at random
Eight ounce drinking glass (crushed)	1 time during test, at random
* Items added separately each day in succession	

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Q: What materials or object will clog the pump?

A: The E|One pump is capable of accepting and pumping all materials commonly found in domestic wastewater as well as a wide range of material such as plastic-glass-diapers-sanitary napkins which regulatory agencies recommend not be introduced into a public sewer.

18

Q: What type of Warranty does E|One unit have?

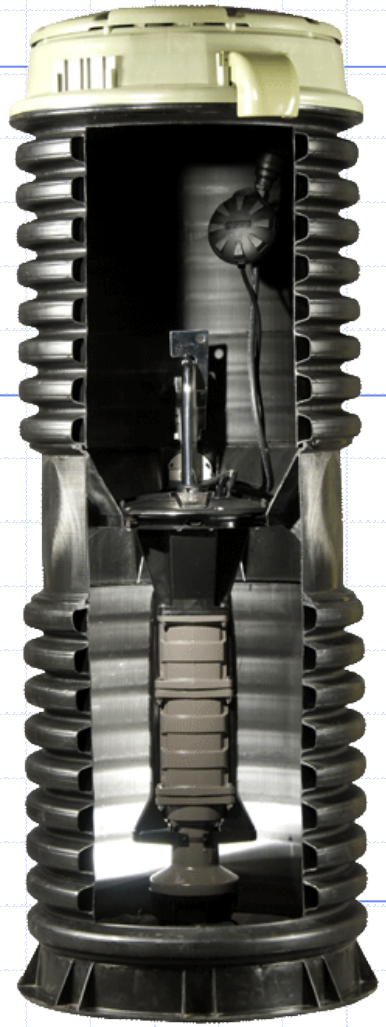
A: Environment One Corporation provides a two year, on site, parts and labor warranty from the date of installation or 27 months from the date of shipment. The warranty is for the entire pump unit (no pass through warranties) and includes parts and service which can be done on site.

19 Q: What happens when my pump needs service?

A: Freemire & Associates is your Factory Authorized Repair Center. We maintain a fleet of service trucks equipped to fix your pump 24/7.

20

Q: What did I forget?



A: Engineered to do one job perfectly!

Presentation on Reliability of Maintenance of Wastewater Pumping Stations

Thomas Reedy

WSSC
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Reliability of Sewer System Components

with observations from Maryland Reported Sewer Overflow Database

Friends of Ten Mile Creek and Little Seneca Reservoir

The Database of Reported Sewer Overflows in Maryland

- Database is available at:

http://www.mde.state.md.us/programs/Water/OverFlow/Pages/ReportedSewerOverflow.aspx

Data has been kept from January 2005 through present (approximately the past 10+ years).

- MDE requires that all public sewer system owners or operators report overflows (Code of Maryland Regulations (COMAR) 26.08.10, "Overflows and Bypasses").

- Penalties for "sewage overflows can range from $1,000 to $32,500 per day respectively for each overflow."

Penalties and Orders at http://www.mde.state.md.us/programs/Water/Compliance/Pages/ssoeinitiative.aspx

For all data, ***statewide***: (as of April 9, 2015);

- 16641 incidents of sewer overflows reported in Maryland ;
- 4.2 billion gallons reported spilled;
- $180,050 penalties reported collected ($0.00004/gallon); 23,000 gal → $1 in penalties

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How much Sewage is 4 Billion Gallons??

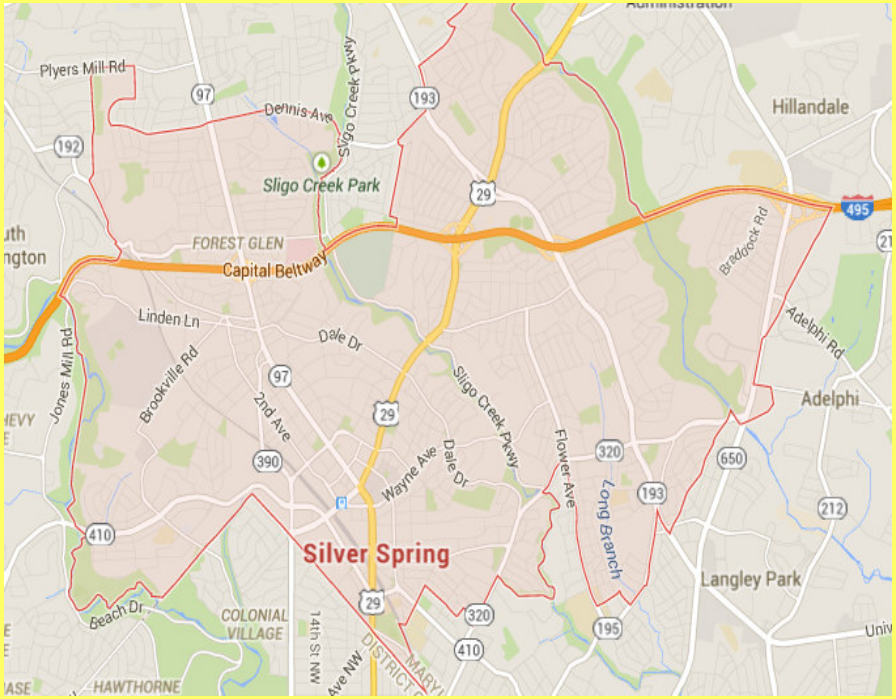
(***statewide***. . . a lot! But to help visualize this volume . . .)

If delivered at one time and in one place . . .

The volume of Seneca Lake

Montgomery County Department of Environmental Protection (MCDEP), Rockville, MD (2003). "Chapter 3: Water Supply Systems." *Ten-Year Comprehensive Water Supply and Sewerage Systems Plan, 2003-2012.* pp. 3-6, 3-11. The capacity of the lake is slightly greater at about 4.5 billion gallons (17 million m^3).

…or the volume of Silver Spring (9.4 square miles) covered to a depth of about two feet.



(4x10^{9}gal x 0.133 ft^3/gal) / 9.4mi^2 x (5280ft/mi)^2

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What data does the MDE Reported Sewer Overflow Database Contain?

- **Overflow Type** (Most are marked with SSO, Storm Sewer Overflows)
- **Municipality/Facility** (Who is responsible for the facility? WSSC, City of Baltimore, etc.)
- **NPDES #** (a number for report in National Pollutant Discharge Elimination System; generally blank)

- **Date Discovered;Time Discovered; Duration (Days/Hours/Minutes)**
- **Location; Zip Code; Latitude; Longitude** (street address, manhole number, etc.)
- **Collection-System** (Water treatment plant that received overflow)

- **Quantity in Gallons (Estimated); Net in Gallons (Estimated)** (Volume of spill)
- **Cause** (Grease, mechanical failure, blockage, etc.)
- **Receiving waters** (Eventual destination of sewer overflow)
- **County** (Montgomery, PG, Howard, etc.)
- **Comments** (Notation of data that was not collected)

- **Penalty Collected** (generally blank)
- **Penalty Collected** (generally blank)
- **Penalty Notes** (generally blank)

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Why are we looking at this data?

During last CAC meeting, it was stated that WSSC did not consider grinder pump systems as reliable as WSSC's central pump stations. This is our response:

1. Historically, 4 billion gallons shows that sanitary sewer overflows (SSO), combined sewer overflows (CSO), and bypassing sewer treatment plants have been a problem in Maryland. ► Many SSO events are due to equipment failures;
2. The data, as reported by WSSC and others throughout the State does not support the claim that reliability is less for grinder pumps (GP) than central pumping stations and associated infrastructure. ► GP failures make far less environmental damage than failures in central pump stations;
3. Reliability modeling of system does not support this claim; and
4. Most all pumps in the multi-HP range have about the same reliability, regardless of use, manufacturer, etc.

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Reliability of Grinder Pumps *vs*. Centralized Pumping Stations.

What do we mean by *reliability*?

- RELIABILITY: The probability that an item will perform its intended function for a specified interval under stated conditions.

From: In-Plant Quality Evaluation, United States. Defense Logistics Agency, Defense Logistics Agency, 1991, p. 4-4

- The INTENDED FUNCTION of a sewer is the transport of sewage from point of generation (generally homes) to the WSSC treatment plant without spillage or degradation of the environment.

We examined the database, countywide, for instances of spillage in Montgomery County for both failures in existing WSSC systems and also for grinder pumps. Failure in WSSC system was assumed when the data reported “mechanical failure” or obvious failure of a component (defective pipe, broken hose, etc).

But any mention of a “grinder pump” was assumed to be a failure.

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Reliability of Grinder Pumps *vs.* Centralized Pumping Stations.

Failures in the WSSC System (19 instances – at least 300,000 gal.)

Overflow Type	Municipality/Facility	NPDES #	Date Discovered	Time Discovered	Duration Days	Duration Hours	Duration Minutes	Location	Zip Code	Collection-System	Quantity in Gallons (Estimated)	Net in Gallons (Estimated)	Cause	Receiving waters	County	Penalty Collected	Notes
SSO	WSSC	N/A	3/12/2005	2:45:00 PM	0	4	0	18570 Split Rock Lane, MH 15025256N	20874		200	200	Pipe failure	Unknown	Montgomery		Collection system not provided
SSO	WSSC	N/A	4/12/2005	8:00:00 AM	0	2	0	14700 Kings Crossing Blvd, Air Release Valve / 185-T	20841		100	100	Mechanical failure	Unknown	Montgomery		Collection system not provided
SSO	WSSC	N/A	5/11/2005	9:00:00 AM	0	4	0	9800 Blk Darnstown Rd			600	600	Pipe failure	Unnamed Creek	Montgomery		Collection system not provided
SSO	WSSC	N/A	3/27/2006	8:42:00 AM	0	0	5	1261 Research Blvd., West Montgomery Ave & Gude Drive West, Rockville	20852		10	10	Mechanical failure	Unknown	Montgomery		Collection system not provided
SSO	WSSC	N/A	10/21/2006	2:12:00 AM	0	6	53	8040 Georgia Ave, MH 05989010, Silver Spring	20906		42	42	Mechanical failure	Rock Creek	Montgomery		Collection system not provided
SSO	WSSC	N/A	4/16/2007	10:13:00 AM	0	1	47	11313 Greenbrier Preserve Ln.	20854		214	214	Pipe failure	Watts Branch	Montgomery		Collection system not provided
SSO	WSSC	N/A	1/16/2008	8:24:00 AM	0	1	59	13101 Beaver Ter, 1301 Beaver Ter, MH05120007, Rockville	20852		3000	3000	Mechanical Failure	Rock Creek	Montgomery		Collection system not provided
SSO	WSSC	N/A	2/1/2008	10:53:00 AM	0	1	37	5 Jonesville Ct, Ss15999100, Poolesville	20837		5	5	Mechanical Failure	Seneca Creek	Montgomery		Collection system not provided
SSO	WSSC	N/A	3/4/2008	1:48:00 PM	0	0	42	11739-69 Veirs Mill Rd, SS05097012, Wheaton	20814		150	150	Mechanical Failure	Rock Creek	Montgomery		Collection system not provided
SSO	WSSC	N/A	7/8/2008	8:48:00 AM	0	1	42	12500 Blk Ardennes Ave, MH05986026, Rockville			100	100	Mechanical Failure	Rock Creek	Montgomery		Zip Code not provided
SSO	WSSC	N/A	9/4/2008	12:13:00 PM	0	10	47	104 Ashton Knolls Ln, 00439285800, Ashton			50	50	Mechanical Failure	Northwest Branch	Montgomery		Zip Code not provided
SSO	WSSC	N/A	8/18/2009	9:19:00 AM	0	0	56	10915 Montrose Ave., MH05082005, Garrett Park	20814		650	650	Mechanical Failure	Rock Creek	Montgomery		Collection system not provided
SSO	WSSC	N/A	9/17/2009	12:00:00 PM	0	0	15	10425 Kensington Pkw., Vacuum Truck	20895		20	20	Mechanical Failure	Rock Creek	Montgomery		Collection system not provided
SSO	WSSC	N/A	9/19/2009	3:45:00 PM				11305 Greenbrier Preserve Lane, Potomac			0	0	Mechanical Failure	Unknown	Montgomery		Collection system not provided
SSO	WSSC	N/A	5/17/2012	8:51:00 PM	0	2	9	10201 Lewis Dr., Damascus	20872		4	4	Mechanical Failure	Seneca Creek	Montgomery County		Blank fields = No Information Submitted
SSO	WSSC	N/A	3/5/2013	11:30:00 AM	3	4	30	19612 Olney Mill Road	20830		2028200	2028200	Force main failure	Rock Creek	Montgomery County	15000	Blank fields = No Information Submitted
SSO	WSSC	N/A	5/5/2013	12:14:00 PM	0	1	16	19505 Jerusalem Ch Terr	20837		15	15	Instrumentation Mechanical Failure	Seneca Creek	Montgomery County	125	Blank fields = No Information Submitted
SSO	WSSC	N/A	10/29/2013	6:36:00 PM	0	23	9	203 Market St., SS06179002, Brookville	20833		269325	269325	Pipe failure	Rock Creek	Montgomery County		
SSO	WSSC	N/A	7/27/2014	8:30:00 AM	0	2	30	18616 Jerusalem Ch Rd., Poolsville, 0035097260	20837		2	2	Mechanical failure	Seneca Creek	Montgomery County		Blank fields = No Information Submitted
										19	2302687						

All failures in the GP (4 instances – total 122 gal.)

Overflow Type	Municipality/Facility	NPDES #	Date Discovered	Time Discovered	Duration Days	Duration Hours	Duration Minutes	Location	Zip Code	Collection-System	Quantity in Gallons (Estimated)	Net in Gallons (Estimated)	Cause	Receiving waters	County	Penalty Collected	Notes
SSO	WSSC	N/A	9/12/2005	1:30:00 PM	1	1	0	10201 Lewis Drive, Grinder pump sewer lateral, Damascus	20872		100	100	Physical defect	Unknown	Montgomery		Collection system not provided
SSO	WSSC	N/A	5/9/2011	1:57:00 PM	0	3	33	19530 Jerusalem Ch Ter., Grinder Pump 00350994000, Poolesville	20837		1	1	Instrumentation/Mechanical Failure	Seneca Creek	Montgomery		Collection system not provided
SSO	WSSC	N/A	8/22/2011	5:30:00 PM	0	1	0	15545 New Hampshire Ave, grinder pump 00320158000, Silver Spring	20904		20	20	unknown	Paint Branch	Montgomery		Collection system not provided
SSO	WSSC	N/A	1/25/2015	10:06:00 AM	0	1	54	18640 JERUSALEM CH RD., POOLESVILLE, GRINDER PUMP 00350971800	20837		1	1	GREASE	UNKNOWN	MONTGOMERY COUNTY		BLANK FIELD = NO INFORMATION SUBMITTED
										4	122						

Selected 23 entries from the MDE database of ~749 entries

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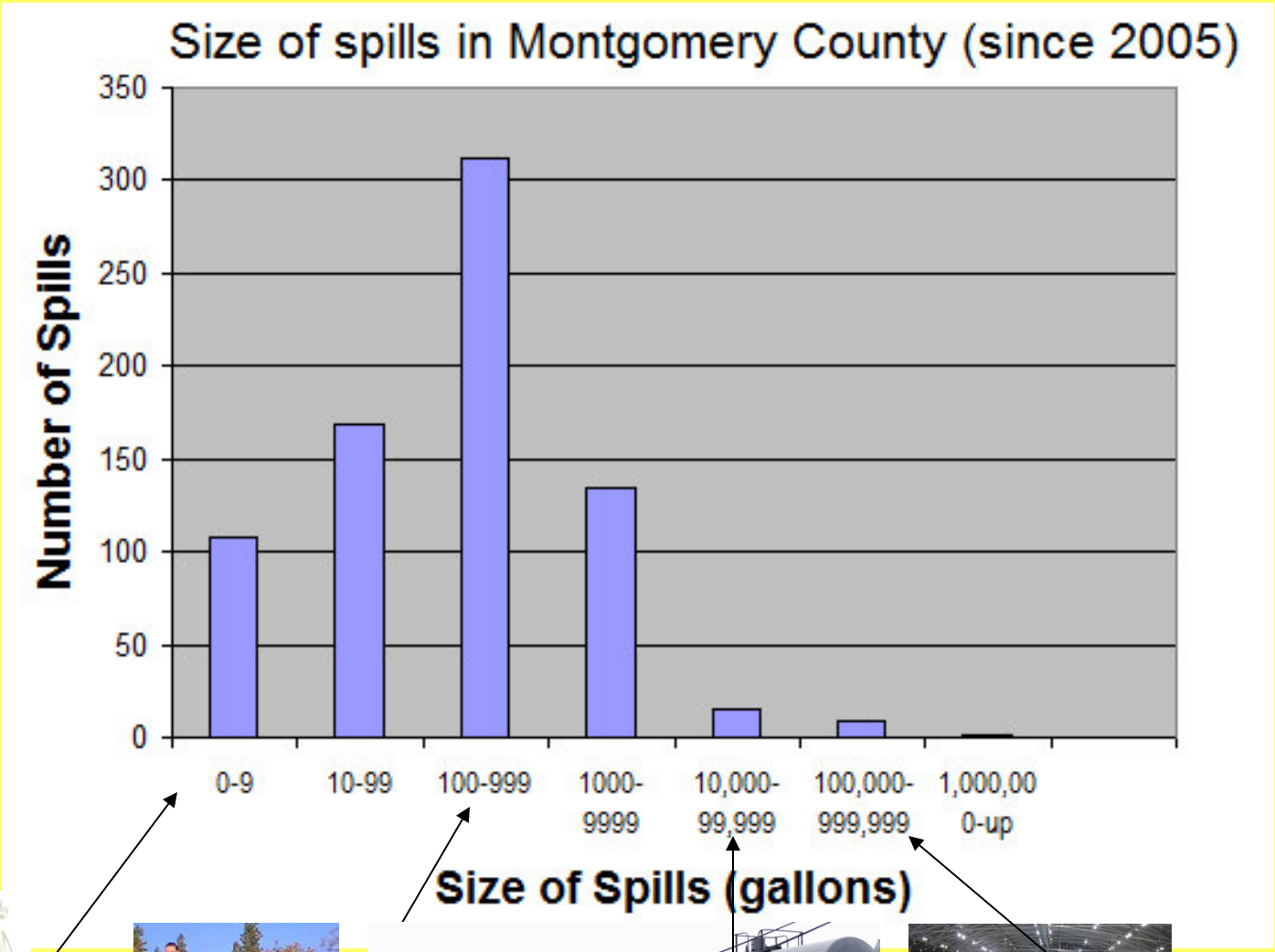
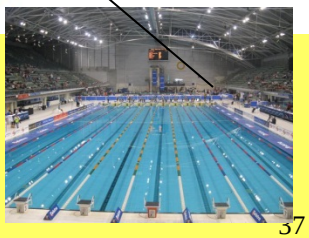


Pail = 6 gal

600 Gal Propane Tank

Two rail cars = 40,000 gal



Olympic pool = 600,000 gal

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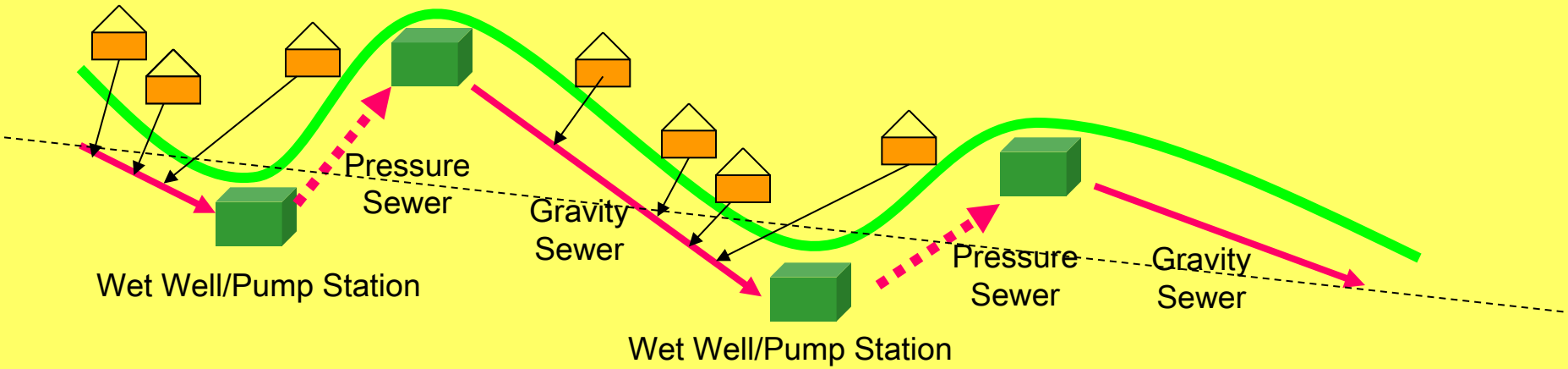
Reliability of transport of sewage

Using the traditional gravity sewer



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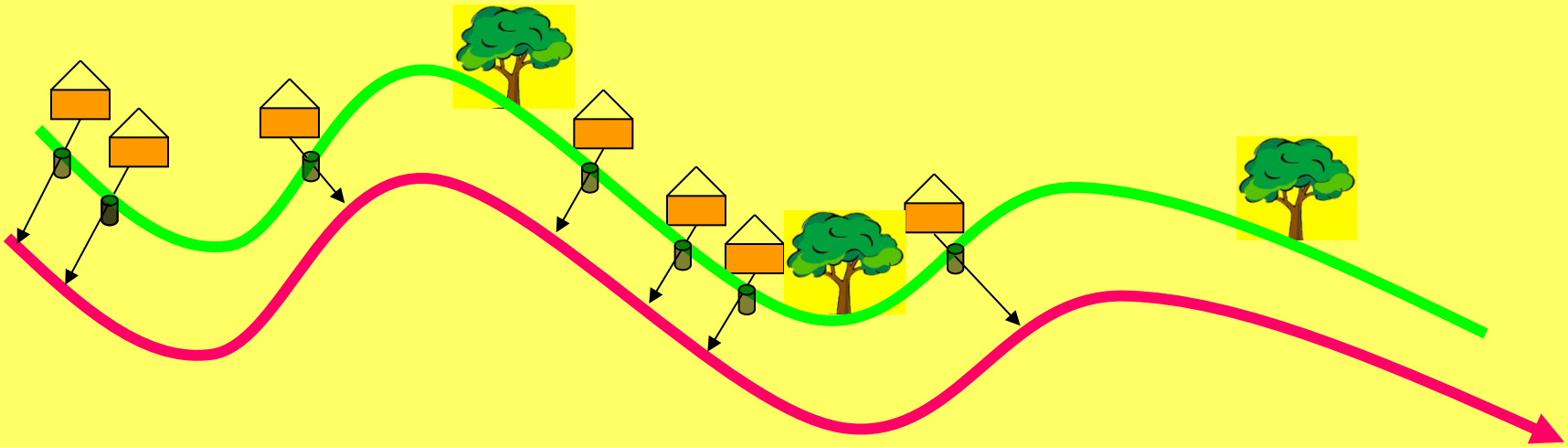
Reliability of transport of sewage

Using the newer pump-grinder technology.



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What do Grinder Pumps look like?

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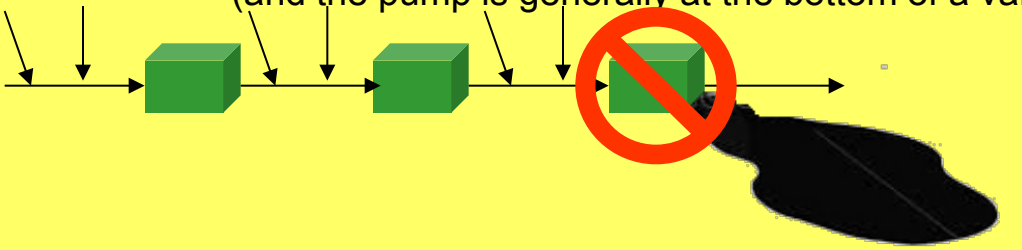
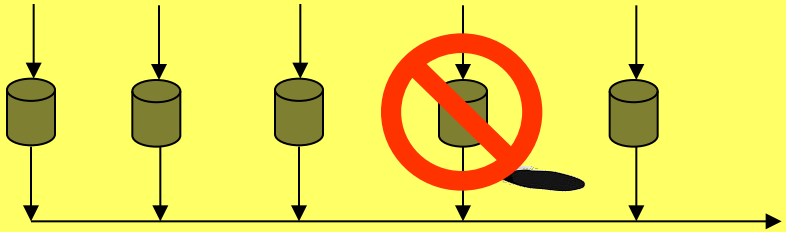
Reliability model for each case

In a SERIAL model, the failure of any one pump results in a system failure
(and the pump is generally at the bottom of a valley)



Spill is proportional to number of houses “upstream.”

In a PARALLEL model, the failure of any one pump does not result in a system failure,
just loss of capability at that one site.



and a much smaller spill since it
is only the output of one house.

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Reliability of Grinder Pumps

In a paper for presentation at NYWEA (New York Water Environment Association, Inc.) Environmental Technical Conference and Exhibition

Elwin Fisher, the superintendent of highways (of West Monroe, NY), has also been in charge of the treatment plant and collection system from the beginning of construction. The town has kept computerized records of every Grinder Pump installed in the system and every service call made on each pump. Chart A is a complete record of all of the service calls by pump by year for the six years of operation. As shown in the calculation at the bottom of Chart A, the average mean time between service calls ***(MTBSC) on the Grinder Pumps is 8.77 years.***

Wetsel, David A., "The O&M History of the Low Pressure Sewer Systems for the Towns of Parish, West Monroe, and Cleveland, New York", at NYWEA Environmental Technical Conference, Saratoga Springs, NY, 11p, June 12-14, 1995 available at:

https://www.google.com/search?q=%22The%20O%26M%20History%20of%20the%20Low%20Pressure%20Sewer%20Systems%20for%20the%20Towns%20of%20Parish%2C%20West%20Monroe%2C%20and%20Cleveland%2C%20New%20York%22&oq=%22The%20O%26M%20History%20of%20the%20Low%20Pressure%20Sewer%20Systems%20for%20the%20Towns%20of%20Parish%2C%20West%20Monroe%2C%20and%20Cleveland%2C%20New%20York%22&rlz=1C1ASUM_enUS530US530&ie=UTF-8&aqs=chrome..69i57.5815j0j7&sourceid=chrome-instant&ion=1&espv=2&biw=1118&bih=859&dpr=1.1&cad=cbv&sei=rMU5VbiIA8mNsQSS8YCgDA

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Reliability of Large Industrial Pumps

Even very expensive pumps like used by the petroleum and chemical industries have MTBFs of ≤ ~10 years

Table I. Pump MTBFs	
ANSI pumps, average, USA:	2.5 years
ANSI/ISO pumps average, Scandinavian P&P plants:	3.5 years
API pumps, average, USA:	5.5 years
API pumps, average, Western Europe:	6.1 years
API pumps, repair-focused refinery, developing country:	1.6 years
API pumps, Caribbean region:	3.9 years
API pumps, best-of-class, U.S. Refinery, California:	9.2 years
All pumps, best-of-class petrochemical plant, USA (Texas):	10.1 years
All pumps, major petrochemical company, USA (Texas):	7.5 years

Bloch, Heinz P., **Pump Statistics Should Shape Strategies,** published on-line in ***Maintenance Technology*** at http://www.maintenancetechnology.com/2008/10/pump-statistics-should-shape-strategies/

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Reliability of Grinder Pumps

Further, WSSC's web site states, under "Homeowner Questions:"

https://www.wsscwater.com/files/live/sites/wssc/files/takomaparkproject/E-One%20Grinder%20Pump%20-%20Homeowner%20FAQ.PDF

Homeowner:

Do E/One pumps require much maintenance?

No. Unlike other appliances or equipment in your home, no periodic maintenance is required. The E/One system is designed to be virtually maintenance-free for long periods. The grinder pump core is an electro-mechanical device that will eventually require service. You can expect some sort of repair to ***a properly installed unit after 8 to 10 years*** (italics are mine)

Homeowner:

How long will my pump last before I need to repair or replace it?

E/One currently has systems in place that have been in operation for over 25 years. **Typically there is an 8- to 10-year period before service is required to replace wearing pump parts.** Some of the very first pumps were installed in 1974 at Weatherby Lake, Missouri. Today, after more than 25 years of successful operation, the E/One Sewer system at Weatherby Lake has grown to more than 600 pumps; more than 300 of these pumps are more than 20 years old.

The Friends of Ten Mile Creek and Little Seneca Reservoir

Construction Cost

Construction costs are less for PG systems

- Less excavation costs; narrower trench;
- Less materials costs; much less mass to handle;
- Less operational costs because less ground water infiltration.

Construction of a gravity sewer system

Construction of a grinder pump sewer system

The Friends of Ten Mile Creek and Little Seneca Reservoir

From Resolution 18-66 of the Montgomery County Council

Action

The County Council for Montgomery County, Maryland approves an amendment to the Ten-Year Comprehensive Water Supply and Sewerage Systems Plan for the Ten Mile Creek Limited Master Plan Area as shown in the attachments to this resolution.

The County Council expects the Washington Suburban Sanitary Commission's comprehensive sewer study of the Ten Mile Creek Limited Master Plan Area to review all feasible alternatives for the maximum environmental protection of the area. Sewer infrastructure should avoid Ten Mile Creek, its tributaries, and other water resources unless it is technologically infeasible to do so. Disturbance to all environmentally sensitive areas should be minimized. Only capital projects that satisfy the Master Plan's recommendation for service and minimize environmental impacts to Ten Mile Creek will be approved by the Council.

This is a correct copy of Council action.

Linda M. Lauer

Linda M. Lauer, Clerk of the Council

For Our Next Meeting…

- Presentation of alternatives' cost estimates
- Presentation of evaluation of alternatives 3 through 7 by Montgomery County Department of Environmental Protection (MCDEP)
- Presentation and review of new and/or modified alternatives
  - Elimination of 'middle' pump station between Egan and Miles-Coppola properties;
  - Incorporation of comments and feedback from tonight
- WSSC sewer study alternative recommendation and wrap-up of draft report (Tentative)

WSSC
Where Water Matters

Open Comments/Discussion from Public

WSSC
Where Water Matters

Ten Mile Creek Sewer Study Web Page at WSSC Web Site

https://www.wsscwater.com/business--construction/major-projects/ten-mile-creek--clarksburg-sewer.html

WSSC
Where Water Matters

Thank you for attendance. Have a safe and great evening.

We appreciate your support, participation and cooperation.

WSSC
Where Water Matters