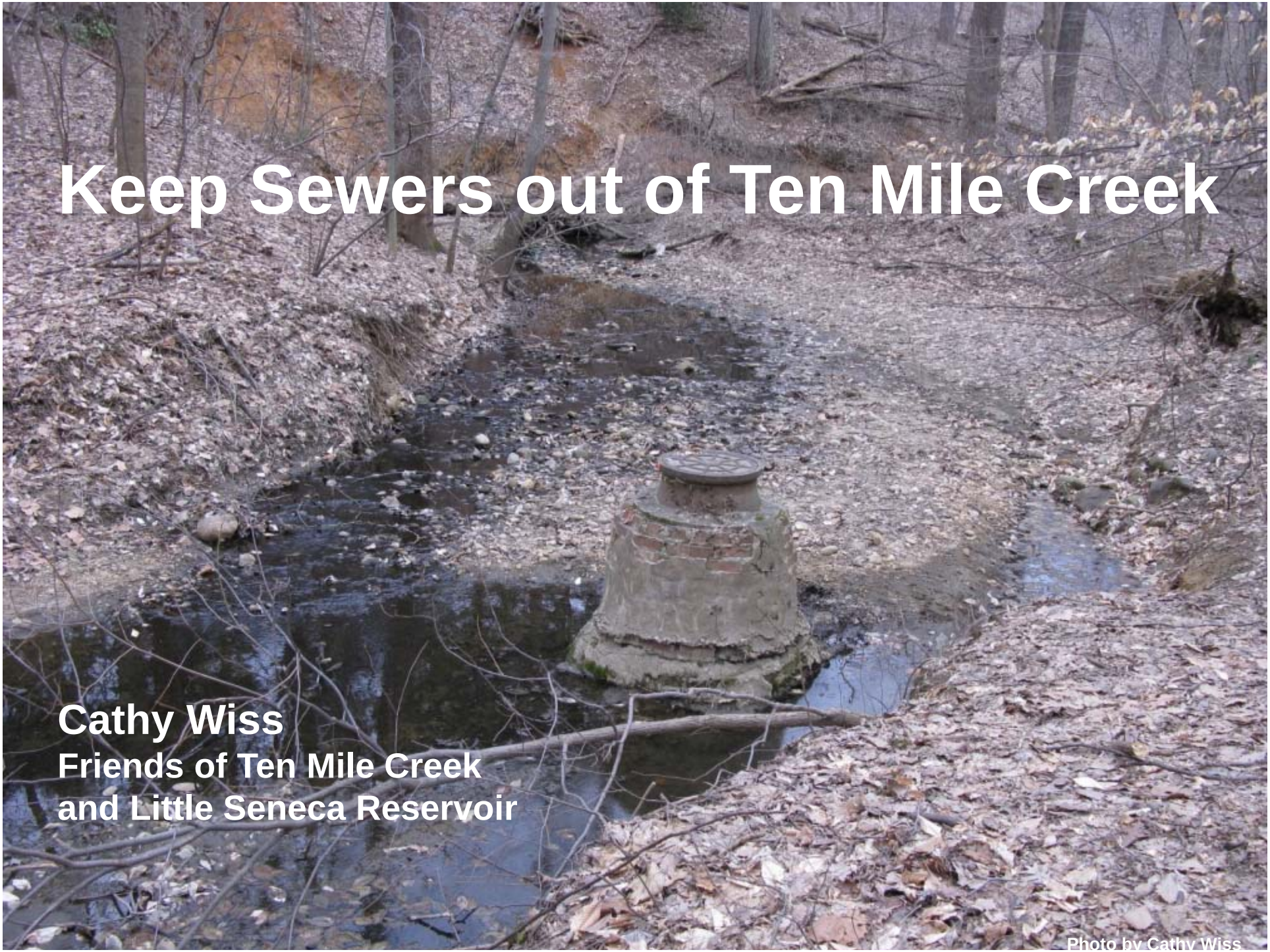

Keep Sewers out of Ten Mile Creek
Cathy Wiss
Friends of Ten Mile Creek
and Little Seneca Reservoir
Photo by Cathy Wiss

On December 17, 2014, WSSC announced five concept plans to sewer the Ten Mile Creek watershed

All of WSSC's designs call for "gravity sewers," large diameter pipes that convey sewage by gravity steadily downslope to a low point in the landscape. The low point is usually a stream, and Ten Mile Creek is no exception. WSSC plans to put sewers in the banks of Ten Mile Creek and, in many places, to install sewers under the creek and its tributaries.

At the lowest points next to the creek, WSSC plans to construct pump stations, which will send the sewage back uphill through "force mains." The force mains will connect to sewer lines serving the Cabin Branch watershed. The sewage from both watersheds will then go to the Seneca Wastewater Treatment Plant in Germantown, Maryland.

Gravity sewers are an ancient technology, developed by the Romans for their aqueducts. WSSC failed to consider newer and less destructive technologies, like pressure sewer systems.

A pump station

The Ten Mile Creek Limited Master Plan Amendment specifies:

"As a result of its unique characteristics, Ten Mile Creek warrants extraordinary protection."

To protect the creek and sensitive natural resources, the Master Plan established environmental buffers, where construction is not to occur:

"On both sides of perennial and intermittent streams and adjacent to springs and seeps, buffers must be a minimum of 200 feet, and must be expanded to include:

- **All erodible soils . . .**
- **Wetlands that extend beyond the buffer must have a minimum 50 foot wetland buffer**
- **All ephemeral streams, not including roadside drainage ditches, plus a 50 foot buffer**
- **All slopes 15 percent or greater that begin within the buffers described above."**

Tenley Wurglitz

None of WSSC's alternatives is consistent with the Ten Mile Creek Limited Master Plan Amendment (LMPA)

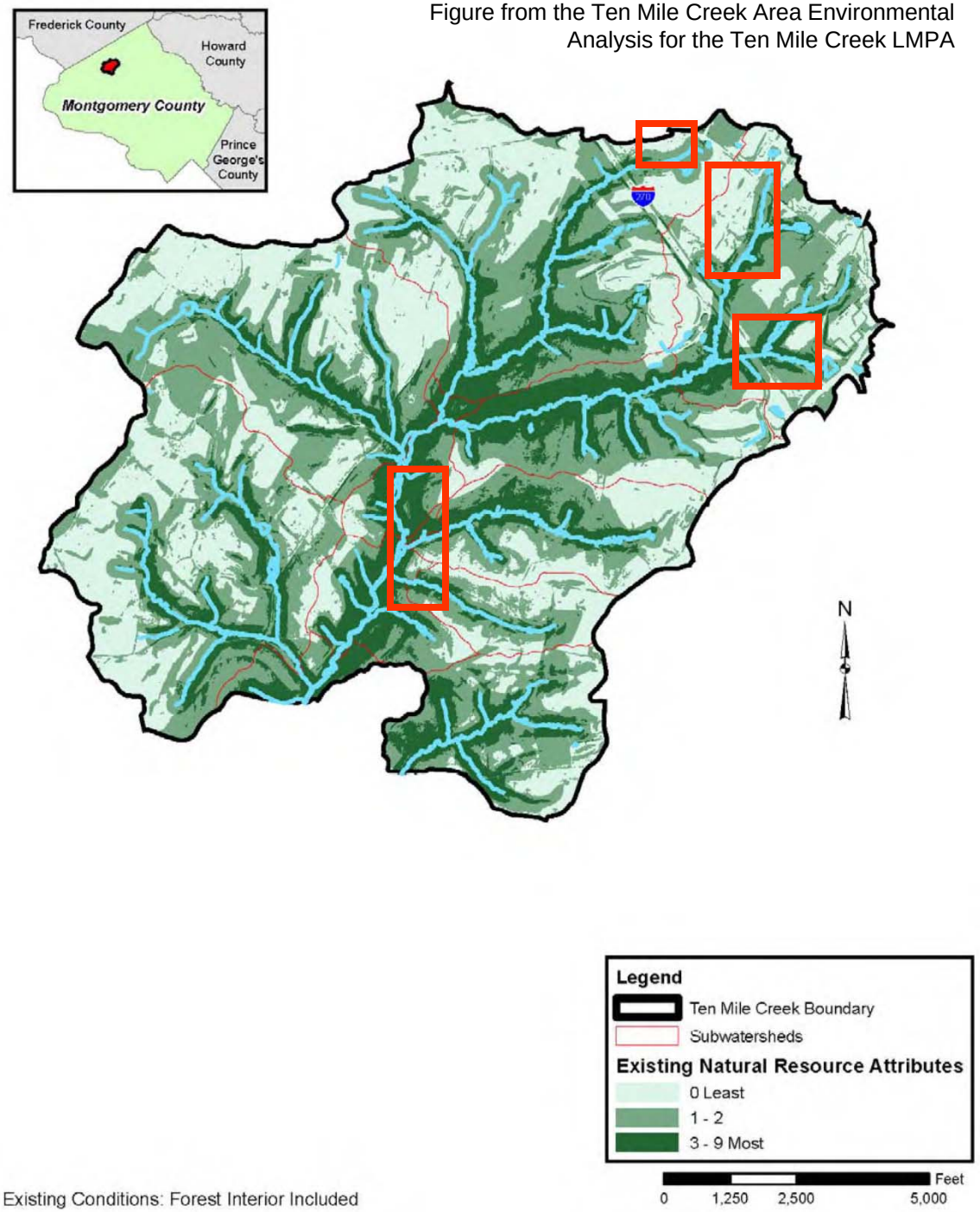
WSSC Alternatives	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
No. of Pumping Stations	1	2	3	4	5
Pumping station locations	Pulte (eliminate existing pump station at jail)	Pulte, Egan (eliminate existing pump station at jail)	Pulte; Egan; new PS at jail	Pulte; Egan; new PS at jail; Clarksburg Rd	Pulte, Egan, existing PS at jail; C'burg Rd; Miles-Coppola
Gravity trunk sewer length	27,470'	20,320'	14,030'	13,160'	10,530'
Gravity trunk sewer locations	In tribs & mainstem from Rt. 355 to Pulte PS	In tribs & mainstem from Rt. 355 to Pulte PS	Along LSTM 206, forest, slopes, seeps, springs	Forest, slopes, stream crossings, seeps, springs	Forest, slopes, stream crossings, seeps, springs
Forcemain length	5,180'	7,010'	8,810'	10,500'	10,860'
Forcemain locations	From Pulte PS to Cabin Branch	Pulte to Cabin Br; Egan to 355	Pulte & jail to Cabin Br; Egan to 355	Pulte & jail to Cabin Br; Egan to 355	Pulte to Cabin Br; Egan & Miles-C to 355; jail to Cab Br
Impact on Buffers					
Extent of gravity sewer in buffer	20,400' (almost 4 miles)	13,150' (2.5 miles)	5,370' (1.2 mile)	4,220' (0.8 mile)	1,590' (0.3 mile)
Extent of forcemain in buffer	0	340' (0.06 mile)	1,140' (0.2 mile)	1,140' (0.2 mile)	1,040' (0.2 mile)
Total impact on buffers	4 miles	2.56 miles	1.4 miles	1.0 mile	0.5 mile
# of stream crossings	14	11	6	5	4
Location of stream crossings	Mainstem-7; Egan-3; 355-1; Pulte-2; other-1	Mainstem-7; 355-1; Pulte-2; other-1	Mainstem-2; 355-1; Pulte -2; other-1	Mainstem-1; 355-1; Pulte-2; other-1	Mainstem-1; 355-1; Pulte-2
New Impervious Area (for pump stations)	3,200 sf	6,400 sf	9,600 sf	12,800 sf	12,800 sf

Compiled from https://www.wsscwater.com/files/live/sites/wssc/files/Ten%20Mile%20Creek%20-%20Clarksburg%20Project/Clarksburg%20-%20Ten%20Mile%20Creek%20Area%20draft%20report%2011%207%202014%20-%201%20of%202.pdf

All of WSSC's Alternatives for Ten Mile Creek call for gravity sewers, force mains, and pump stations to be built in stream banks, under the creek, and through other natural resources that are protected from encroachment by the Limited Master Plan Amendment

(Areas within the red boxes would be affected under all of WSSC's alternatives)

Figure from the Ten Mile Creek Area Environmental Analysis for the Ten Mile Creek LMPA



WSSC's alternatives would obliterate seeps, springs, ephemeral streams, and wetlands required to be saved. Although the two most destructive alternatives are no longer being considered, all of the other alternatives call for sewers to be constructed under Ten Mile Creek and in its banks and stream valleys.

These would be highly damaging to the creek and expensive to build.

Existing Conditions in the Ten Mile Creek Study Area

Figure from the Ten Mile Creek Area Environmental Analysis for the Ten Mile Creek LMPA

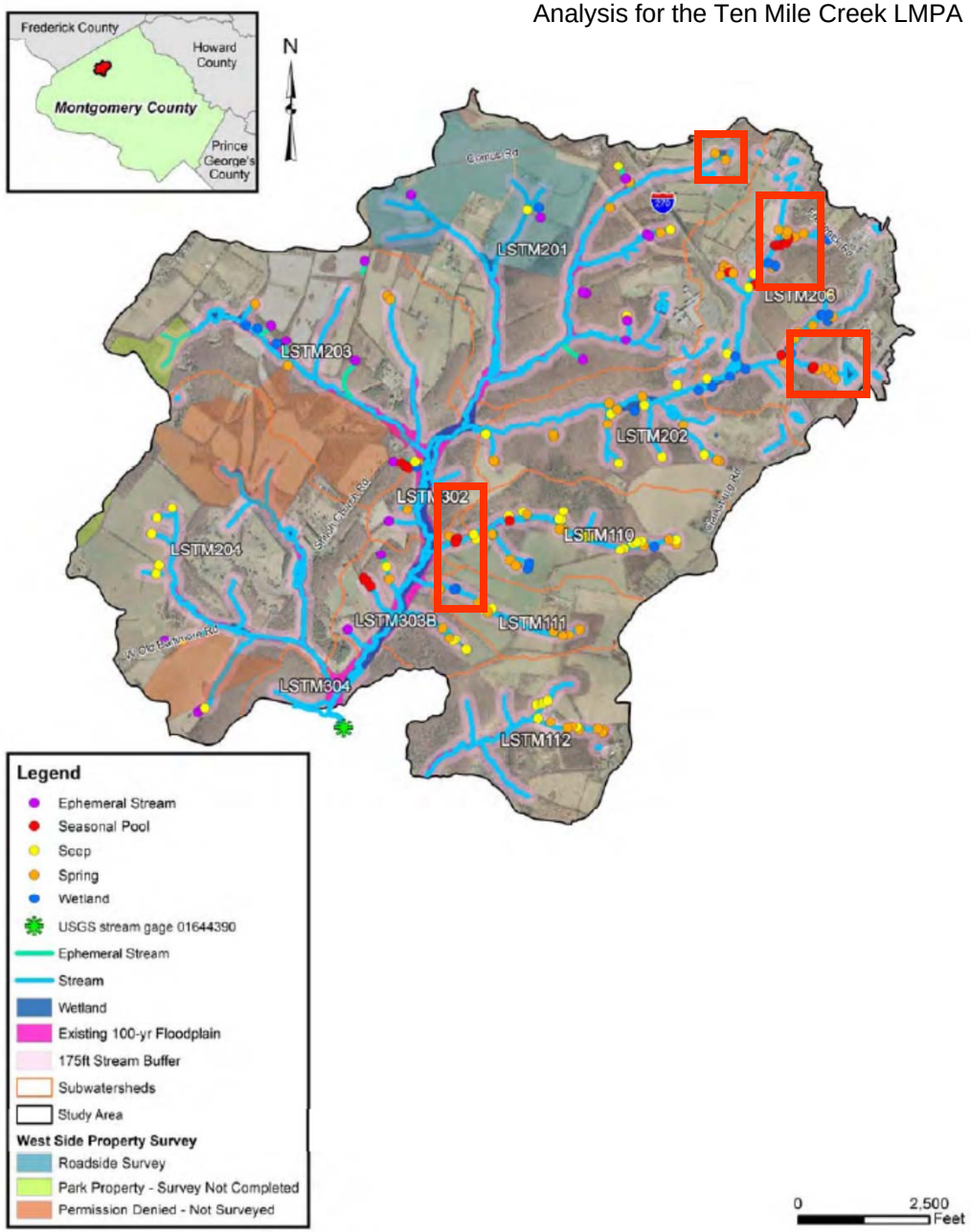


Figure 3.4. Key Hydrologic Features in the Ten Mile Creek Study Area

The Ten Mile Creek watershed is steeply sloped, with high quality forests critical to wildlife. The LMPA calls for dedicating the steeply-sloped and forested areas to Legacy Open Space, greenways, trails, and recreation. Forest cover in the watershed is planned to be maintained and expanded.

If gravity sewers are installed, steep slopes would be leveled, forests cut, prime wildlife habitat destroyed, and the visitor experience diminished.

Figure from the Ten Mile Creek Area Environmental Analysis for the Ten Mile Creek LMPA

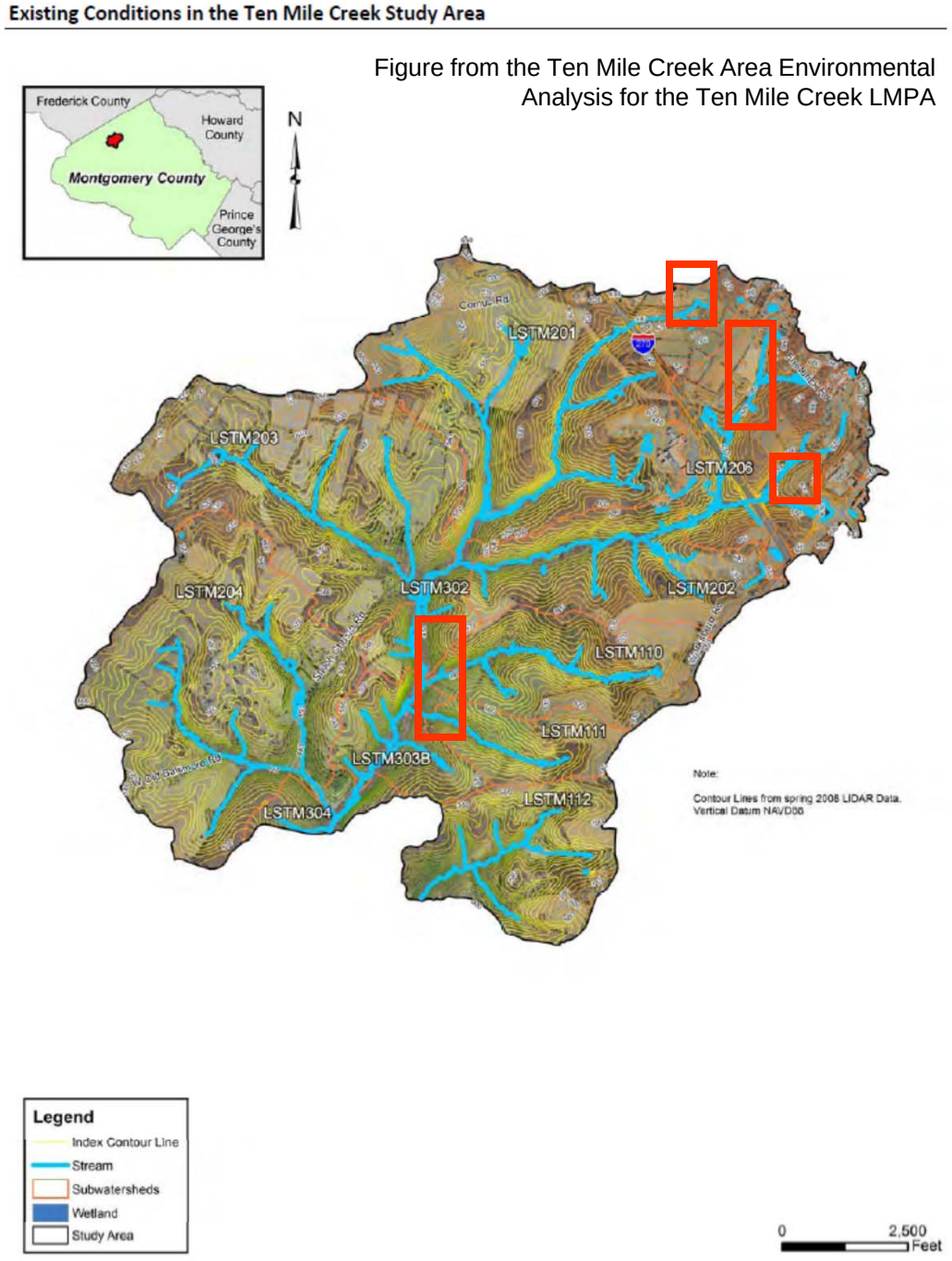


Figure 3.1. Ten Mile Creek Study Area Topography

Soils in the area have shallow depth to hard bedrock, in some places as little as 21”. Destructive blasting would be needed to excavate the bedrock.

The watershed also has several pockets of highly erodible soils, including places where sewer lines are planned. Placement of sewers in these soils would cause extensive erosion.

Some of the pump stations are planned to be located on soils with a high water table, as close to the surface as 6”. These soils are unsuitable for buildings.

Existing Conditions in the Ten Mile Creek Study Area

Figure from the Ten Mile Creek Area Environmental Analysis for the Ten Mile Creek LMPA

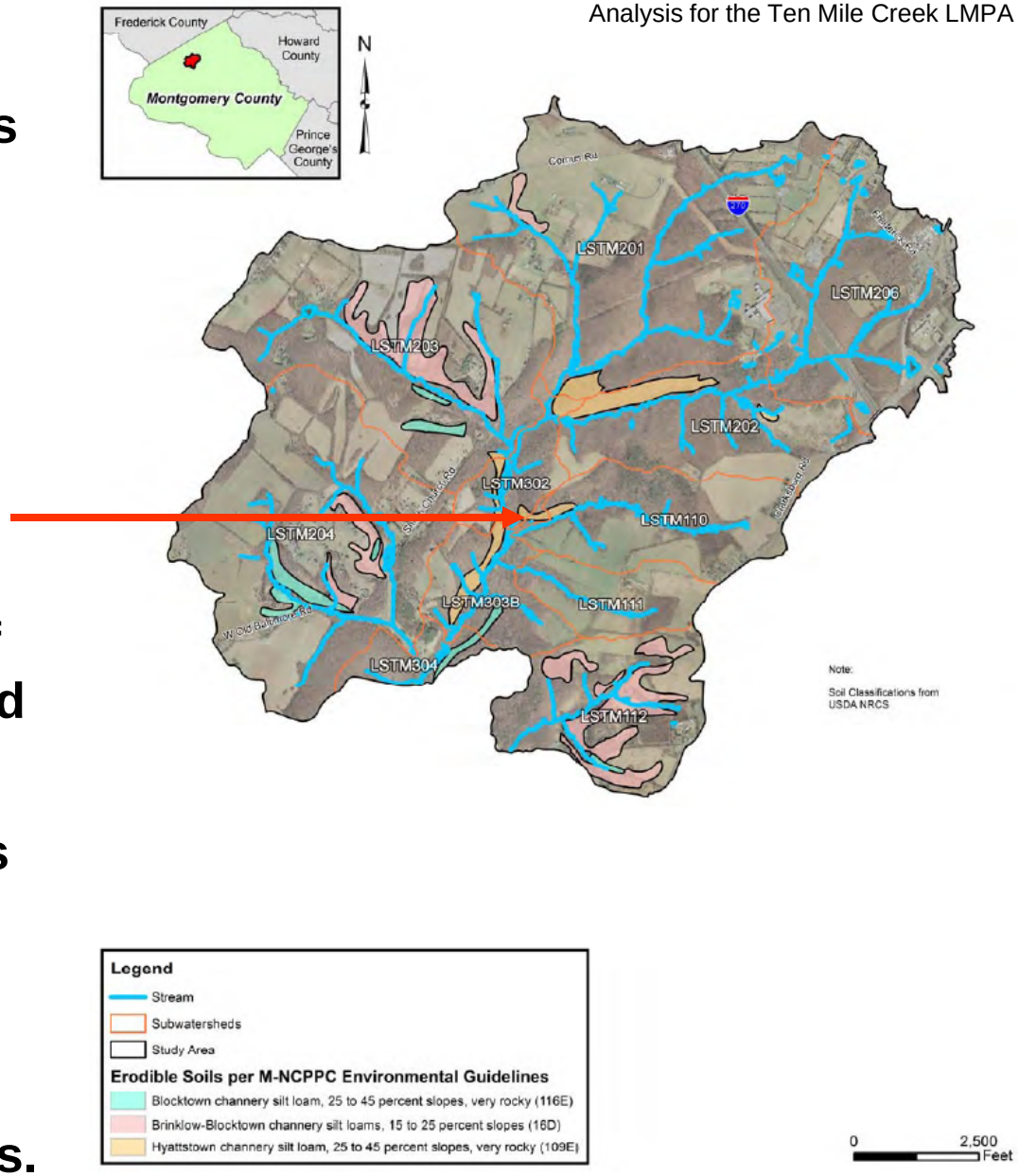
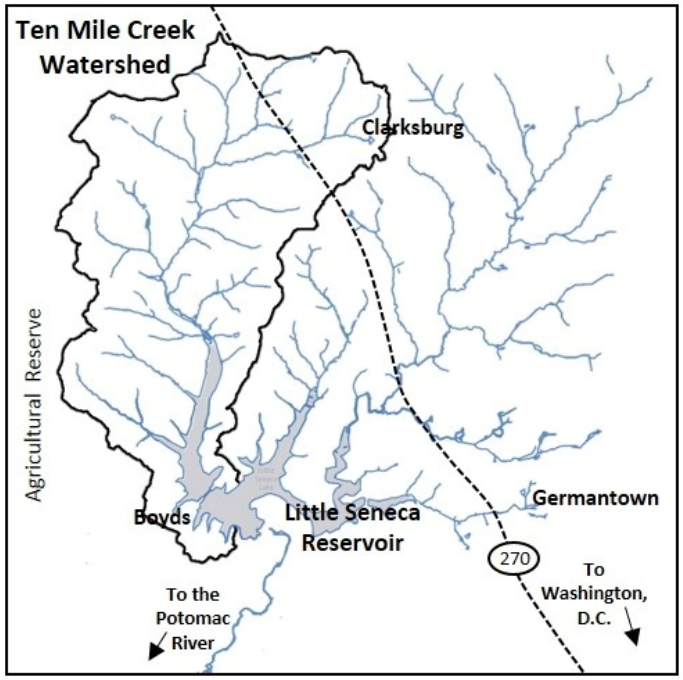


Figure 3.3. Ten Mile Creek Study Area Erodible Soils

One of the pump stations is planned for this flood-prone area, between the two most sensitive tributaries on the Pulte/King property. One of the tributaries, the King Spring, is used as a reference stream by DEP against which other county streams are measured.

Would flooding damage the pump station? Would it wash sewage overflows and leaks into the creek and Little Seneca Reservoir? Could DEP ever use the King Spring as a reference stream again?

Ten Mile Creek flows into Little Seneca Reservoir, the backup drinking water supply for 4.3 million people in the Washington, DC, region.



Katelin Shugart-Schmidt

Tenley Wurglitz

If sewage and other pollutants wash into the reservoir, our drinking water will be affected. In times of drought, with less dilution from precipitation, these pollutants will be more highly concentrated in the water released from the reservoir for us to drink.

Water quality and stream health suffer when:

- Protective riparian buffers are breached, cleared, and graded for construction equipment and sewers
- Deep trenches are dug to install sewers under streams and along their banks
- Sewer pipes crack and shift as they age, leaking raw sewage into streams and groundwater
- Pumping stations fail or overflow and leak raw sewage into streams and reservoirs
- Buildings and pavement adjacent to streams -- like pump stations and access roads -- channel runoff tainted with oils, salt, and sediment into the streams
- Sewer pipes and pump stations are reconstructed or repaired, starting the process all over again