

Morwood & Indian Creek Act 537 Plan

What is a 537 Plan?

PA Sewage Facilities Act (Act 537) requires all municipalities develop and implement plans that provide for the resolution of existing sewage problems and provide for future sewage needs.



History of Morwood Sewerage Planning

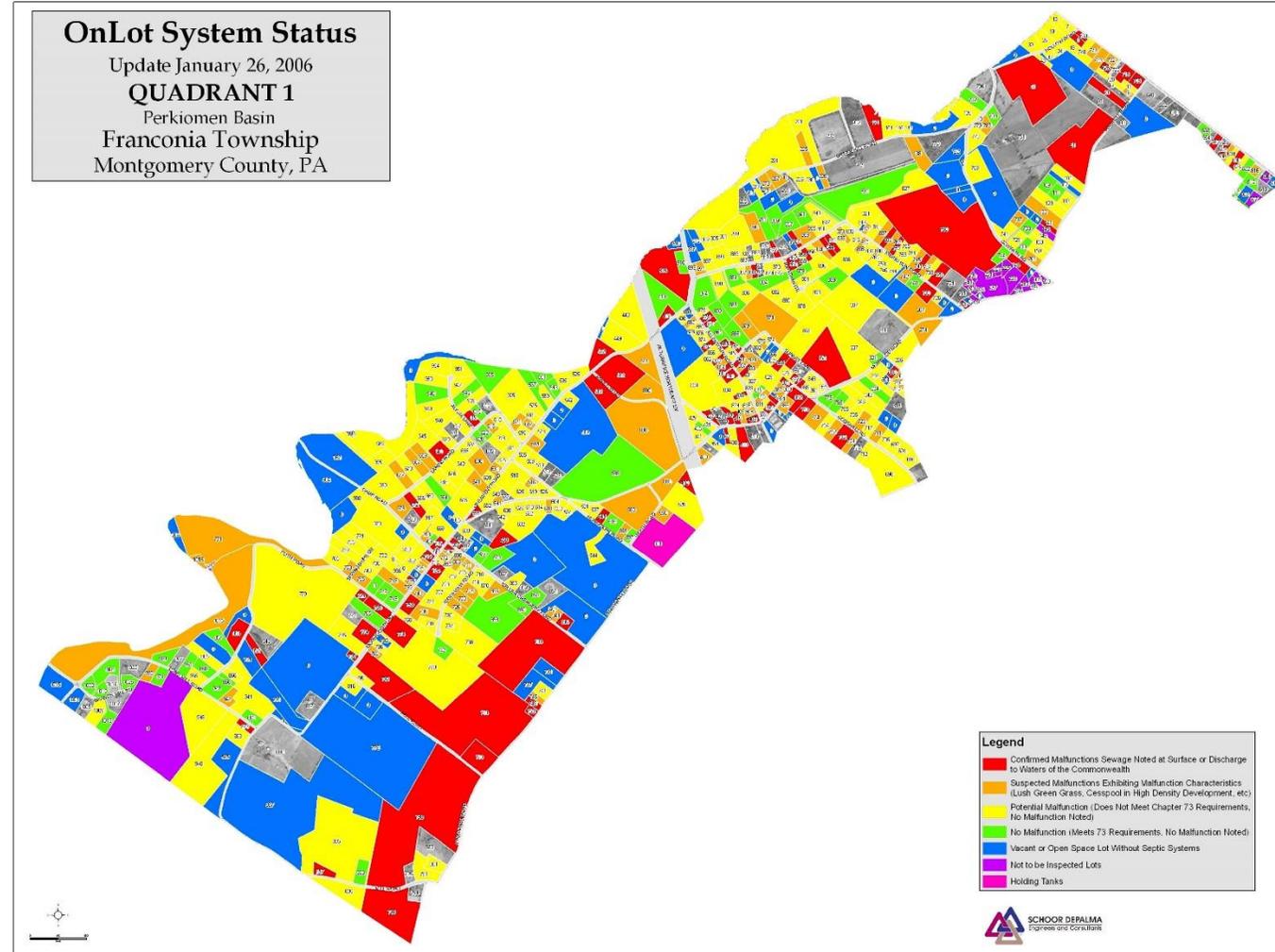
- 1974 – Design plans completed for four villages
- 1976 – Franconia sewers installed
- 1985 – Elroy sewers installed
- 1998 – Preliminary sewerage plan
- 2004 – Township 537 Plan
- 2008 – OLDS evaluation
- 2011 – Earlington sewers installed
- 2012 – Convene 537 Committee to consider Morwood

Why Now?

- Note that concerns regarding the need for public sewer in the Morwood area are not new
- Numerous resident requests for public sewer
- Public health concerns from failed OLDS
- Ongoing regulatory scrutiny of the Indian Creek (TMDL)
- More aggressive enforcement of storm water (MS4) requirements

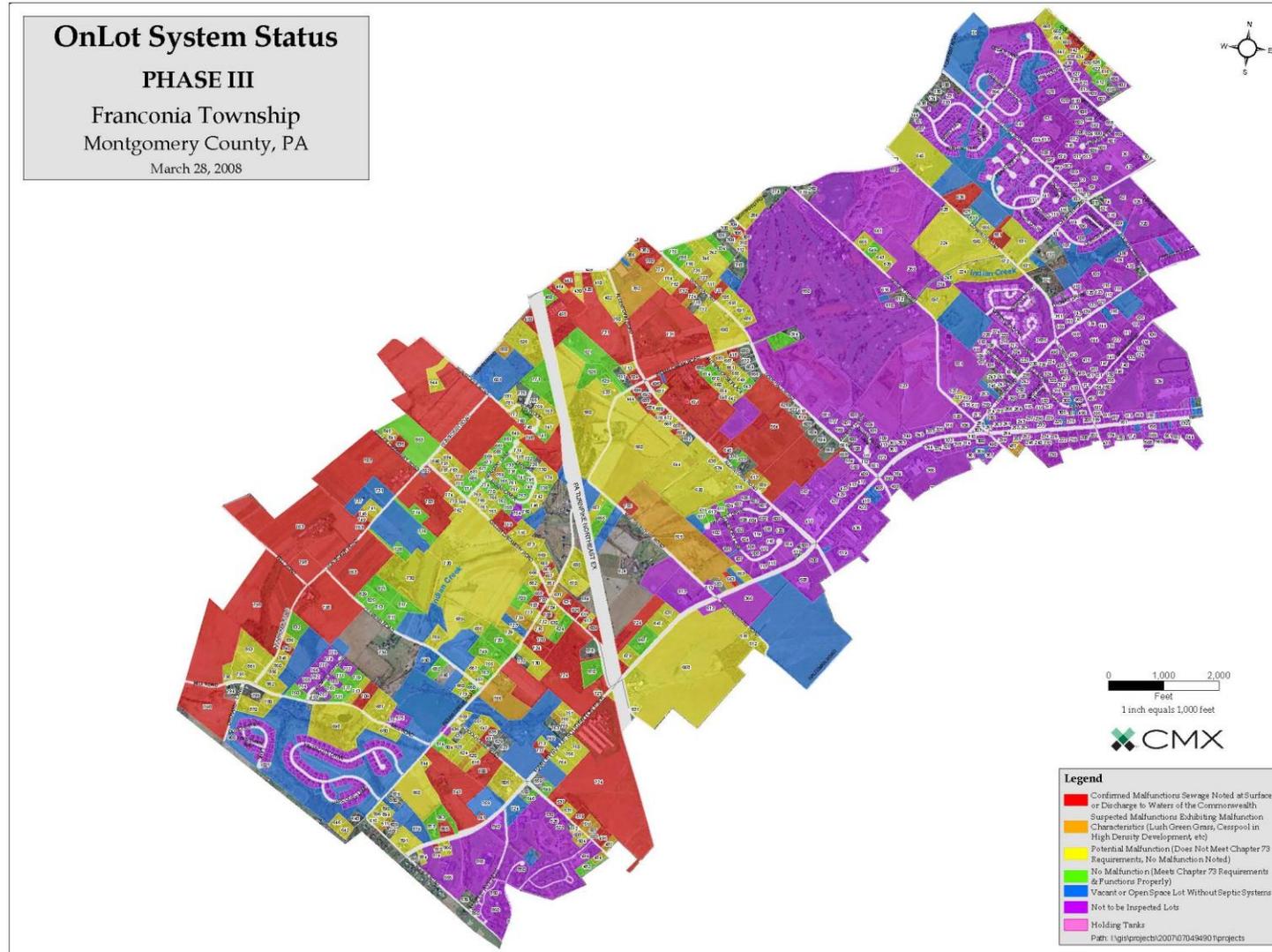
Health of On-Lot Disposal Systems

- Cycle 1 Map



Health of On-Lot Disposal Systems

- Cycle 3 Map



What are the issues

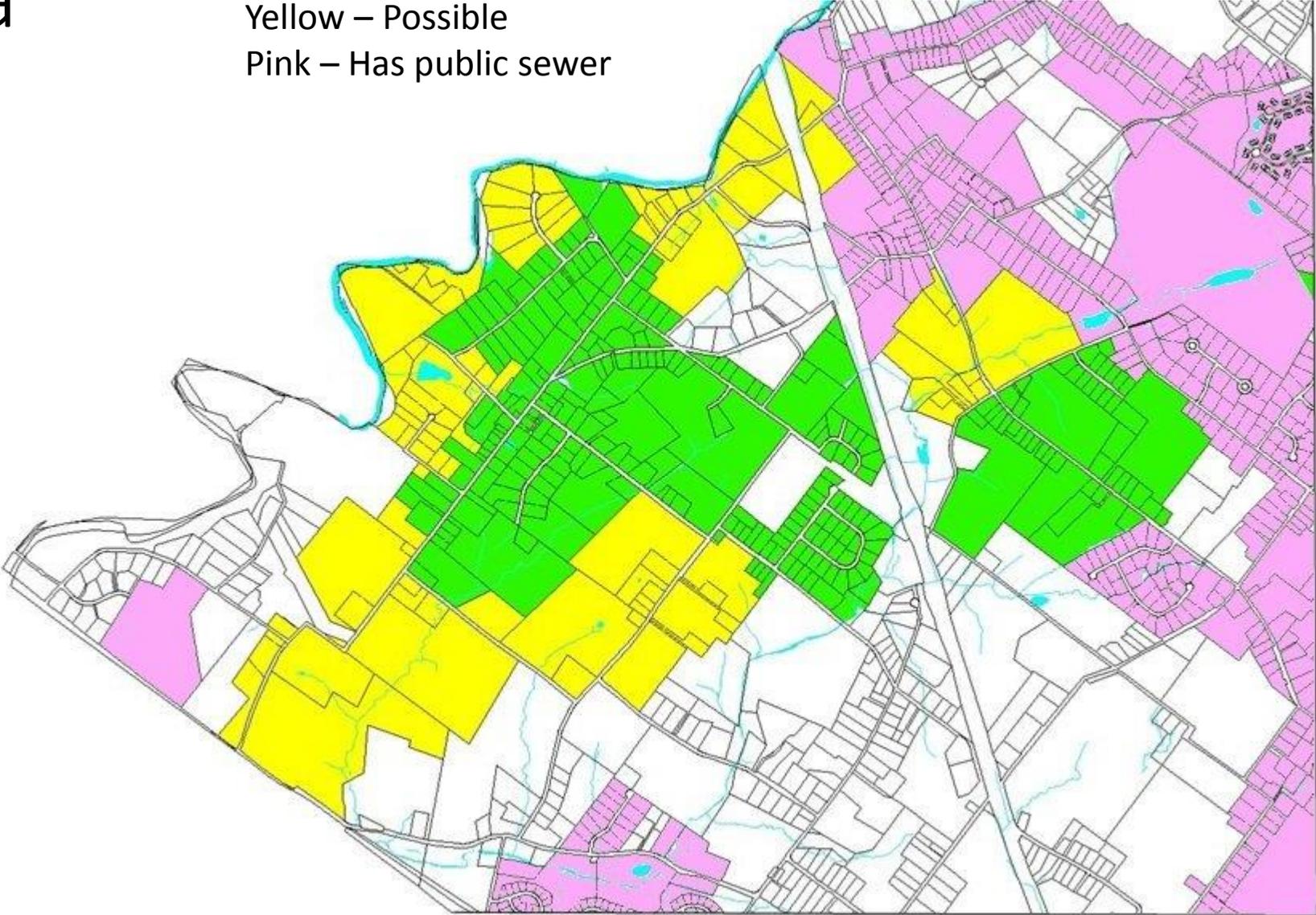
- Many residents are finding it difficult to sell their homes because their on-lot isn't functioning well (won't pass the hydraulic test) – even though the inspection from the SMP didn't find water on the surface
- Many properties are either too small or don't have adequate soils even for an alternate type of on-lot system
- The cost of a new on-lot system seems to range between \$25,000 to \$44,000
- Regulatory agencies are ramping up efforts to reduce pollutants without providing funding placing financial burdens on the community and its residents

A Difficult Balance

- Residents – Cost of public sewer vs. health, home value, environmental issues
- Sewer Authority – Financing the infrastructure vs. stepping back and allowing individual homeowners to deal with the problem, if they can
- Township – Making a decision that undoubtedly will leave a group of residents unhappy – whatever the decision

Study Area

Green – Focus Area
Yellow – Possible
Pink – Has public sewer



Public Sewer – Two Primary Parts

- Infrastructure – Unless wastewater is treated on each individual property, piping must be installed to collect and transport wastewater from each property to a central location. Infrastructure also includes any pump stations that may be needed to move the wastewater.
- Treatment – Ultimately, collected wastewater has to be treated in some way and discharged into the environment.

Infrastructure – Gravity vs. Low-Pressure

There are basically two ways to collect and transport wastewater:

Gravity system

- Larger pipe
- Can't follow grade
- Increased pipe depth
- Numerous manholes
- Need for pump stations
- Generally higher cost

Low-pressure system

- Small pipe
- Can follow grade
- Shallow pipe depth
- Few manholes
- Few to no pump stations
- Generally lower cost

Treatment – Where Will The Water Go?

- Pump and Haul (to a treatment plant)
- Community On-Lot system
- Wastewater treatment plant with discharge to land
- Wastewater treatment plant with discharge to a stream

If treatment is to be done in a wastewater plant, do we:

- Go to an existing facility
- Build a new plant

Analysis

The 537 Committee has looked at ways to provide sewer to the Morwood area on numerous occasions from many different angles:

- Do nothing – let individual homeowners install new on-lot systems, if they can
- Infrastructure (piping and pump stations)
 - Gravity System ~ \$34,000
 - Low-pressure system ~ \$22,000
- Treatment
 - Community sand mound or alternate on-lot system
 - A new treatment plant with discharge using drip irrigation
 - A large pump-and-haul operation
 - A new treatment plant with stream discharge ~ \$19,000
 - Use an existing treatment plant ~ \$10,000

Focus

The primary focus should be the installation of infrastructure (piping); once that is in place those who need to connect to public sewer can do so.

Financial Assistance

- At this time (as has been the case for many years), there are no grant programs available to the Township or Authority to offset these costs
- Generally, the Authority has offered discounts to residents who pay early as that minimizes the Authority's debt carrying cost; but cannot offer financing
- Home equity loans through your own bank
- There is a program available through PennVEST to provide loans up to \$25,000 for 15 years at 1.75% to individual homeowners for connecting to public sewer.

Unable to Pay

For those unable to pay some or all of the infrastructure cost, the Authority will carry the balance at an interest rate of 6%. A note will be attached to the property deed to secure ultimate payment. Note that the interest accrues over time. The following chart is an example based on the rough estimate for the infrastructure cost.

An example using \$20,000 at 6% interest over 10 years

	End of			End of		
	Year 1	\$21,200		Year 6	\$28,370	
	Year 2	\$22,472		Year 7	\$30,073	
	Year 3	\$23,820		Year 8	\$31,877	
	Year 4	\$25,250		Year 9	\$33,790	
	Year 5	\$26,765		Year 10	\$35,817	

Timing

- Act 537 Committee analyzes options
- Act 537 Committee presentation to affected homeowners
- Resident review of Plan
- Written comments
- Township action
- PADEP review and approval
- Turn over to Franconia Sewer Authority for implementation