June 10th
2024

Ford City Stormwater
Initiatives & Fee Discussion

By Ford City Borough Stormwater Authority
10th Street Station

What is stormwater?

- Stormwater runoff is generated when precipitation from rainfall and snowmelt flows over top of the land because it is not able to infiltrate into the ground. Runoff increases in areas with impervious surfaces that do not allow for infiltration, such as paved streets, parking lots, rooftops, driveways, etc. The precipitation that runs off can flow into storm drains that often lead straight into streams, rivers, and lakes. Stormwater runoff can pick up pollutants such as car oil, trash, sediment, fertilizer, dog waste, etc., which degrades water quality

Three Phase Approach

- 1. Phase 1- Needs Analysis
- 2. Phase 2- Program Development
- 3. Phase 3- Billing System Development

Phase I- Needs Analysis

- Municipal Staff
- Engineering and Public Works Dept
- Elected Officials
- Public Members (Ad Hoc Committee)

- Data Evaluation
  - Tax Assessor/Collector
  - GIS and Parcel Information
  - Existing Water and sewer billing system database
  - Financial & Budget Information
  - Database to used for billing the new stormwater fee

Phase I- Needs Analysis

- Identify and estimate the “current” stormwater level of service/cost of services
- Estimate the best stormwater fee collection method
- Estimate a range of potential rates and revenues

Phase 2- Program Development

- Phase 2 public education program
  - Establish Website
  - Develop FAQ's
  - Develop stormwater brochure
  - Develop stormwater program billing letter
- Rate Structure Analysis
  - Fee based on "contribution to runoff" that is best determine & calculated by measuring impervious area from each parcel

Benefits to Pursuing A Stormwater Fee

- Share burden by how much a property contributes to problem
- Provides incentive to reduce impervious surfaces
- Provides a steady revenue stream solely for stormwater management
- Under an authority, stormwater debt does not contribute to municipal debt
- Service area of an authority can extend beyond municipal boundaries (regional planning)

Stormwater Fee Determination

- ERU= Equivalent Residential Unit
- One ERU is equivalent to the average area of impervious service on a single residential property
  - Impervious surface includes roofing, pavement, concrete, brick, decks, porches, or any surface wherein stormwater will runoff
- 10% of all properties in the borough were randomly sampled
- In total 158 of the 1,564 properties were identified using aerial imagery
- The randomly selected properties varying impervious areas were averaged together creating the ERU of 2,190 square feet
- All commercial properties were identified- example given

Stormwater Fee Determination-Cont'd

- All 1,563 properties in the borough designed as
- Residential, Commercial, Non Profit, Undeveloped
  - Duplexes and apartments were considered residential during analysis
- 132 Commercial Properties identified
- 83 Non Profit Properties were identified
  - Churches, Municipalities, Authorities, Schools, Clubs, and Family Centers were primary bases of non-profit base
- State law currently does not allow stormwater fees to be assessed to these entities. This ruling is being challenged in PA Supreme Court
- 39 Undeveloped Properties identified- contained no development or impervious areas

Community	Monthly Rate Per ERU
City of Meadville	$7.50
Ebensburg Borough	$8.00
Derry Borough	$6.50
Plum Borough	$5.00
Coraopolis Borough	$7.00
Whitehall Borough	$8.00
Clarion Borough	$3.00 Starting Rate(Tier Model)

Stormwater Authority Fee Locally

Information was provided by SPC Water Recource Center:

As of May 2020 (13) Municipalities in Southwestern PA have implemented stormwater fees with most using ERU model.

Annual Stormwater Maintenance Budget

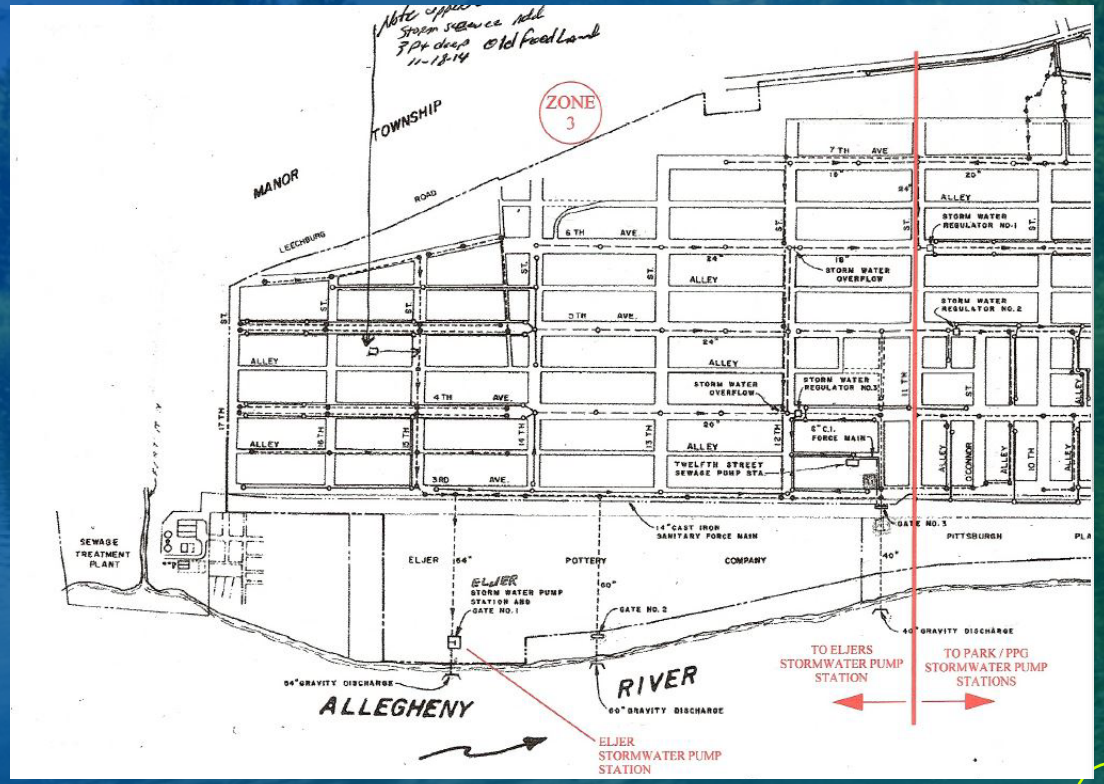
- Electric and Heating Costs for Pump Stations
- Annual Pump Maintenance and Repair Budget
- Annual Generator Maintenance, Repair, Fuel
- Annual Vacuum/Trash Removal of Pump Stations
- Stormwater System Repairs: Piping and Inlets/Outlets
- Part Time Borough Staff Allocation
- Street Sweeping

Phase 3- Billing System Development

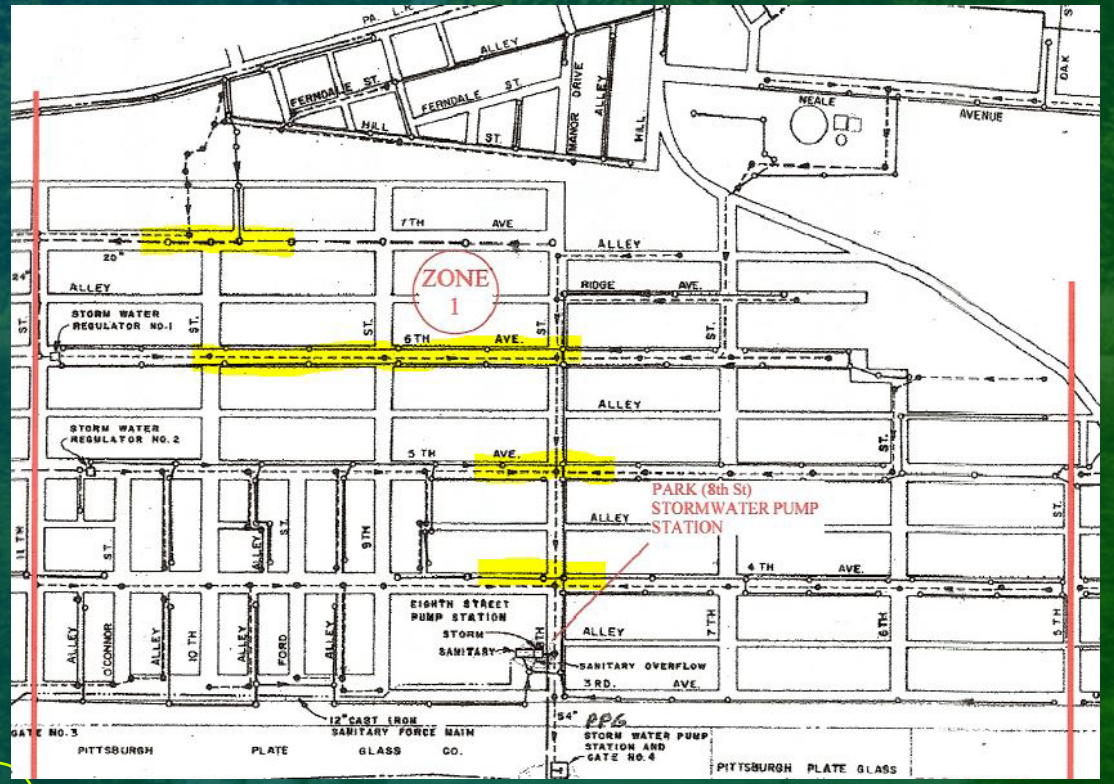
- Develop database for billing stormwater fee through GIS data, Ford City Borough Utility Bills and Tax Collector
- Continue to update GIS Maps of impervious areas for all commercial and residential parcels
- Continue public outreach via public meetings and online updates
- Meet with top property owners impacted by high ERU's

Ford City Stormwater System Map

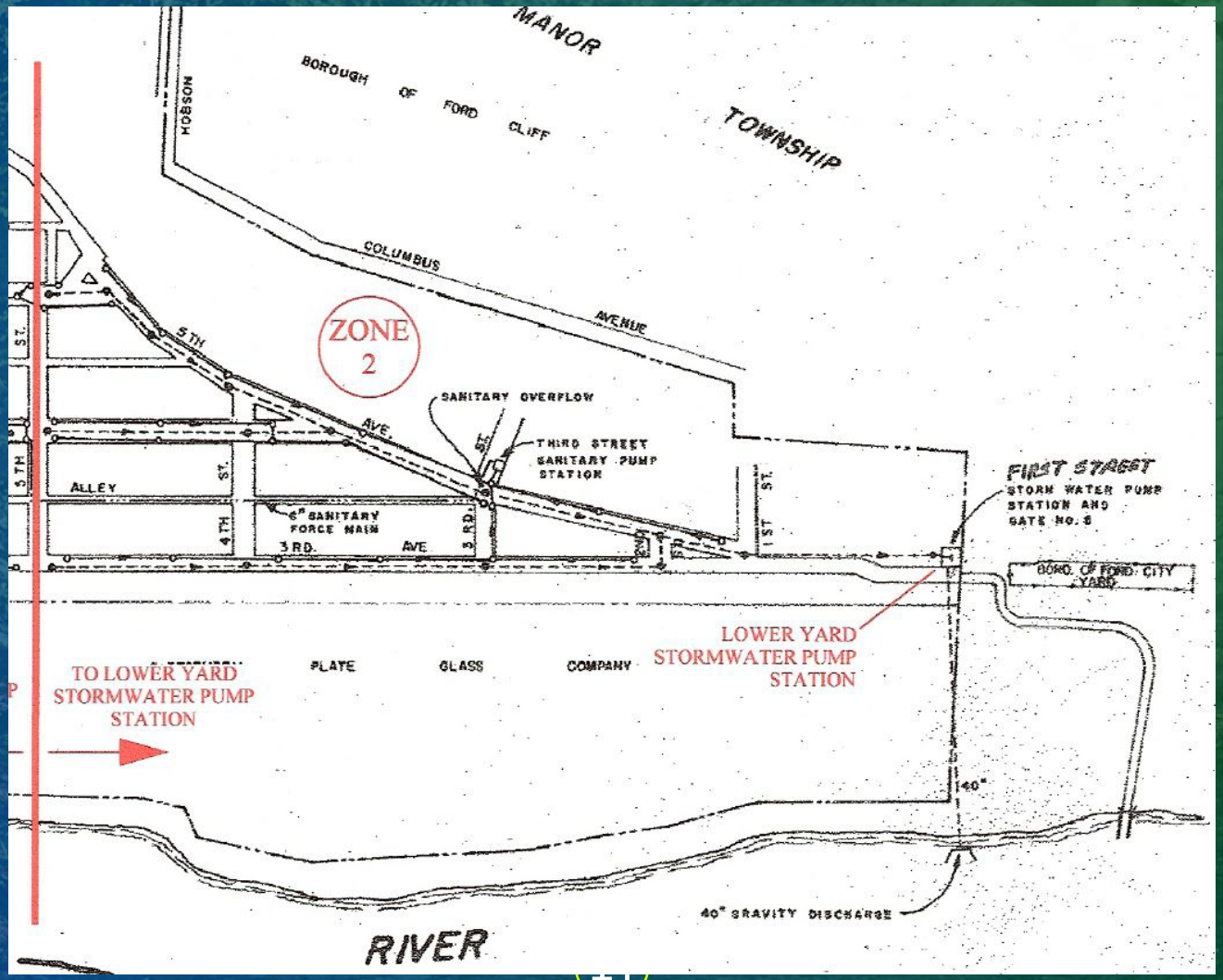
Zone 3- 1977 Map Info



Zone 1- 1977 Map Info



Zone 3- 1977 Map Info



Lower Yard Pump Station

Lower Yard Storm Water Pump Station

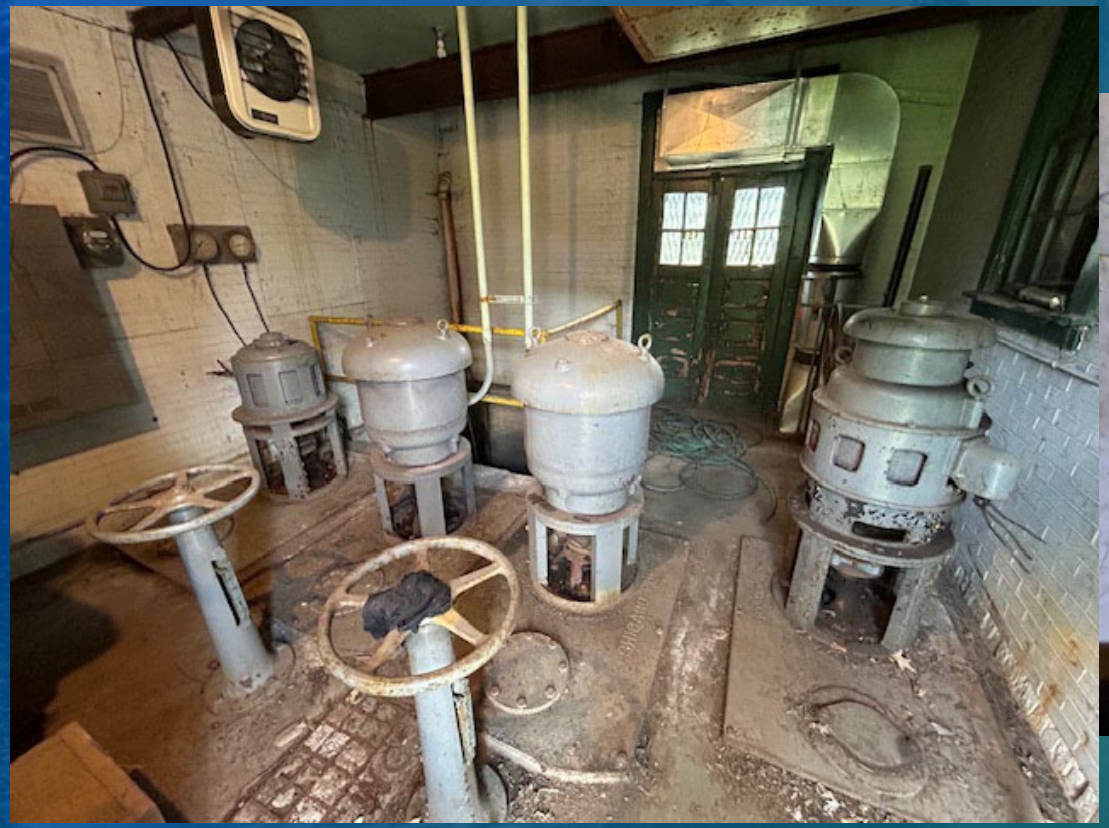
Lower Yard Pump Station consists of 4 pumps, 2 of these are in use on a bubbler system while the other two are somewhat dismantled and appear to have been controlled via floats on rods. These operate on a 250 amp service through a MCC distribution center.

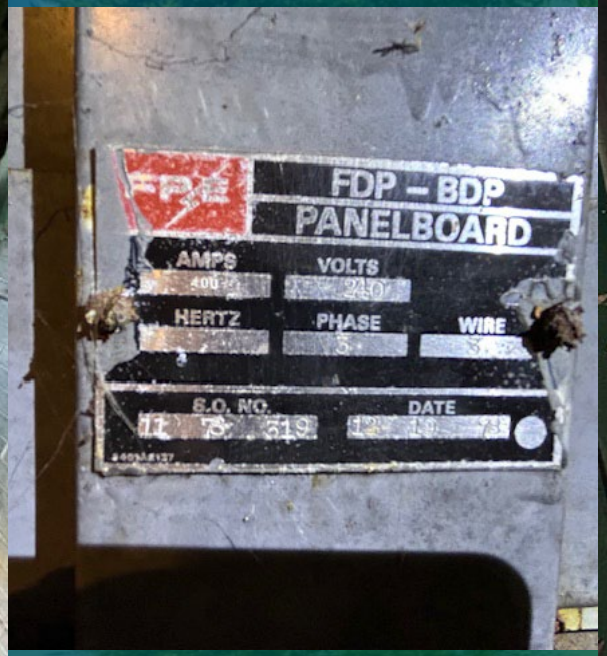
A diesel generator is housed exterior with an interior transfer switch.

The two in service pumps (#2 &#3) are 4800 gpm 26 tdh-ft pumps. These pumps are driven by 40hp motors listed as 230/460 volts 3 phase. Controls are comparable to PPG with an antiquated bubbler, mercury diaphragm switches.

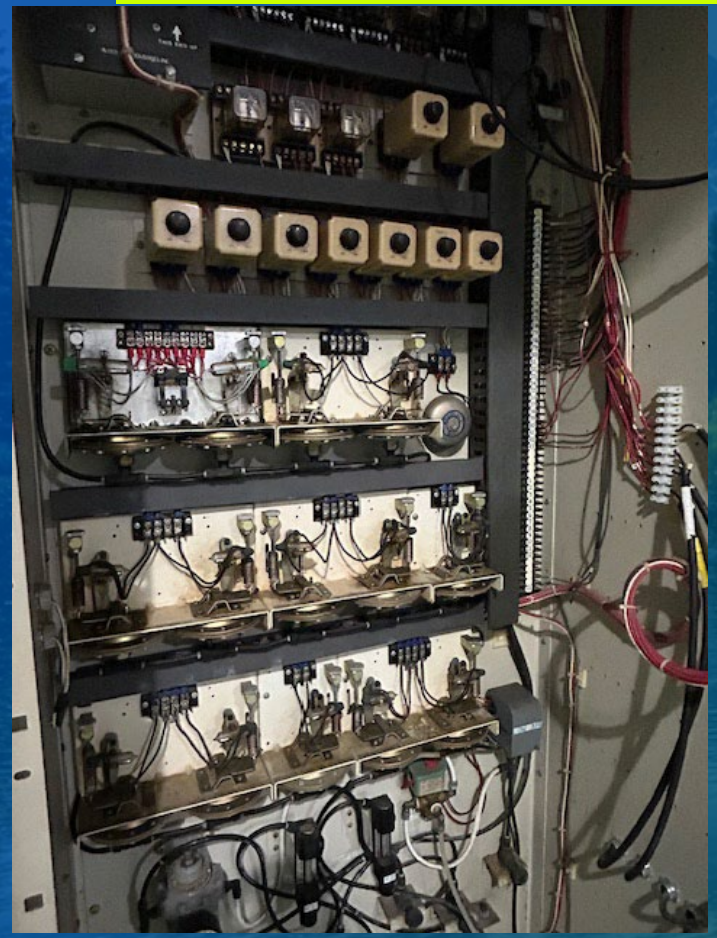
- Two Submersible Pumps installed in 2018/2019 timeframe

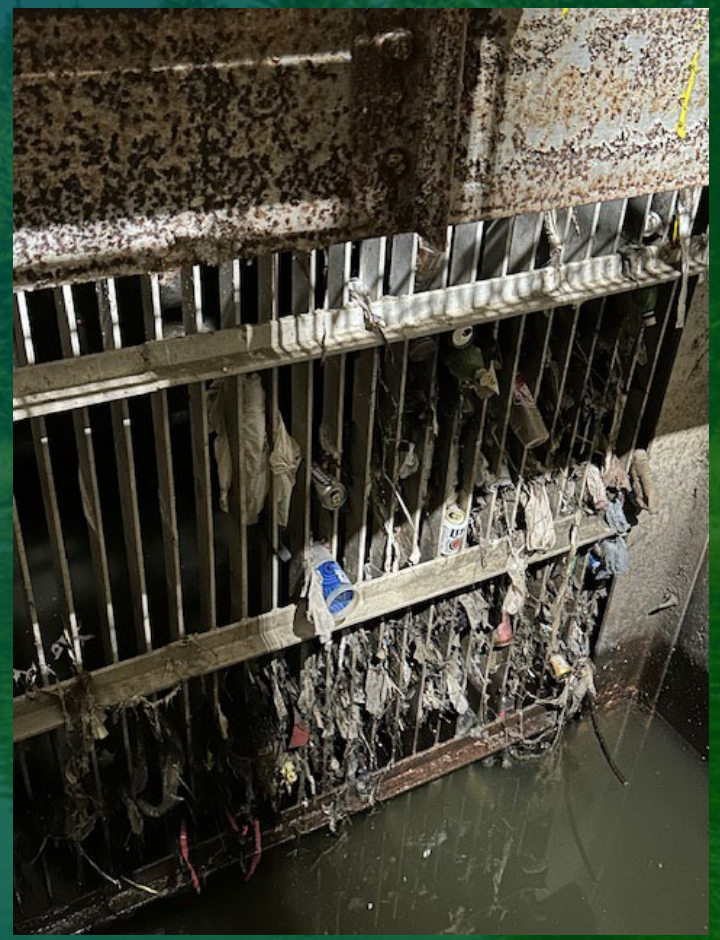
8th St Pump Station





PPG Pump House





Stormwater Future Projects

Stormwater System Rehabilitation- spot line replacement, rebuilding inlets/outlets, new catch basins

Lower Yard Pump Station Rehabilitation/Replacement

Heavy Cleaning of stormwater system (Est 440 tons of sediment, mud and garbage in system)

PPG Pump Station Rehabilitation/Replacement

Powerhouse Alley Stormwater Line, Realignment- if Eljer is abandoned (Concept)

HC53

HC54

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HC56

THANK YOU!

Ford City Stormwater Authority

Phone

724-763-3081

Email

fcborostormwater@gmail.com