

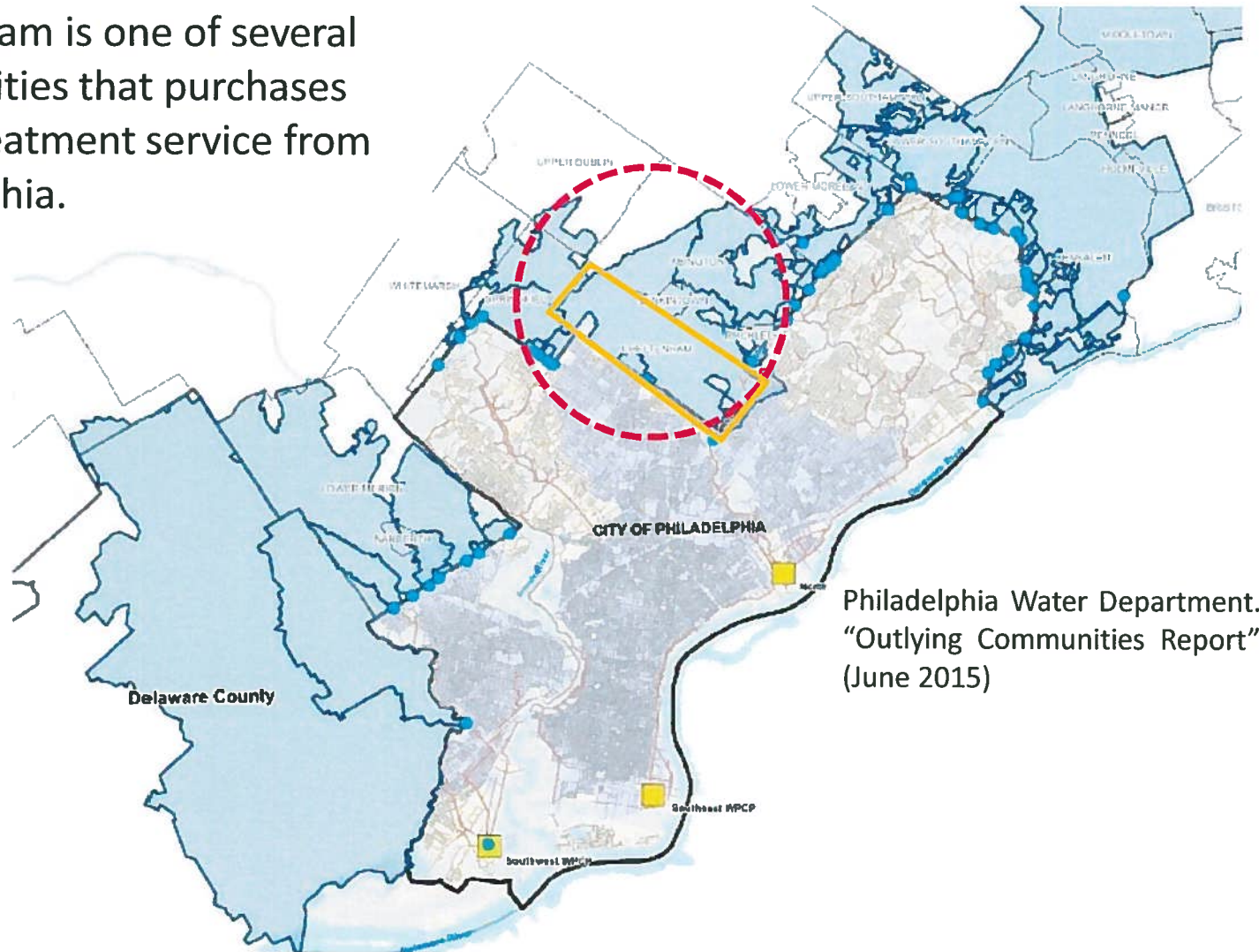
Cheltenham Township Sanitary Sewer History for Public Meeting April 19, 2018



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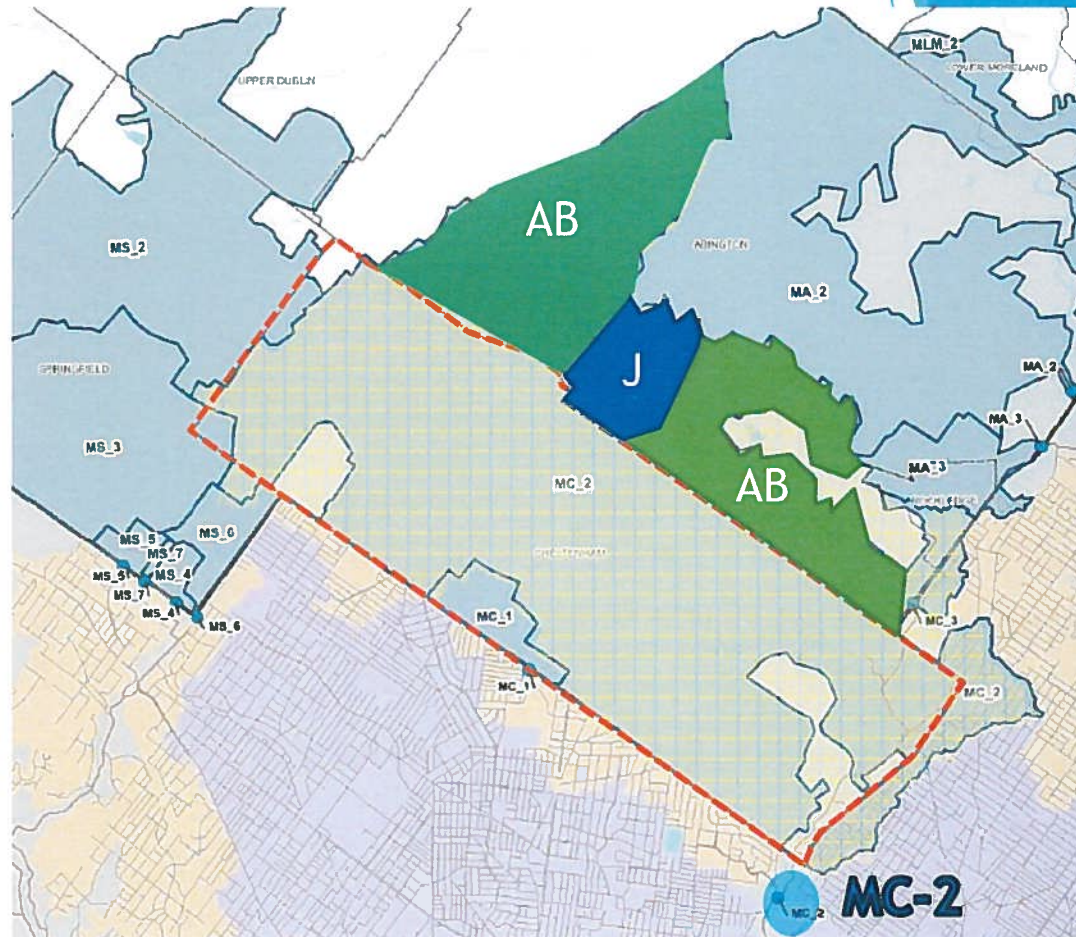
Cheltenham Township

Cheltenham is one of several communities that purchases sewer treatment service from Philadelphia.



Philadelphia Water Department.
"Outlying Communities Report"
(June 2015)





Cheltenham Township

- Cheltenham's intercepting sewer parallels Tookany Creek
- Population served: about 65,000
- Intermunicipal connections are metered (including the main connection to Phila at "MC-2").
- Includes flow from Jenkintown, Abington and portions of Philadelphia



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Cheltenham Township

Sanitary Sewer System overloading – too much water flow ...In 1990's, systems experienced SSO's

- Cheltenham was one of several communities that got PADEP's attention in the early 2000s.
- Cheltenham experienced SSOs and sewer backups in various locations.
- Cheltenham and PADEP agreed on Corrective Action Plan (CAP) in May 2005.



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SANITARY SEWER OVERFLOW



(This is an EXAMPLE. This photo was not taken in Cheltenham Township.)



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Cheltenham Township

2005 Corrective Action Plan included:

- Evaluation of flow restrictions in the Township's largest sewers
- Cleaning, TV, and grouting of sewer mains
- Inspection of manholes; and installation of manhole inserts to reduce inflow
- Identification of private laterals with significant flow, *for further evaluation*



Cheltenham Township

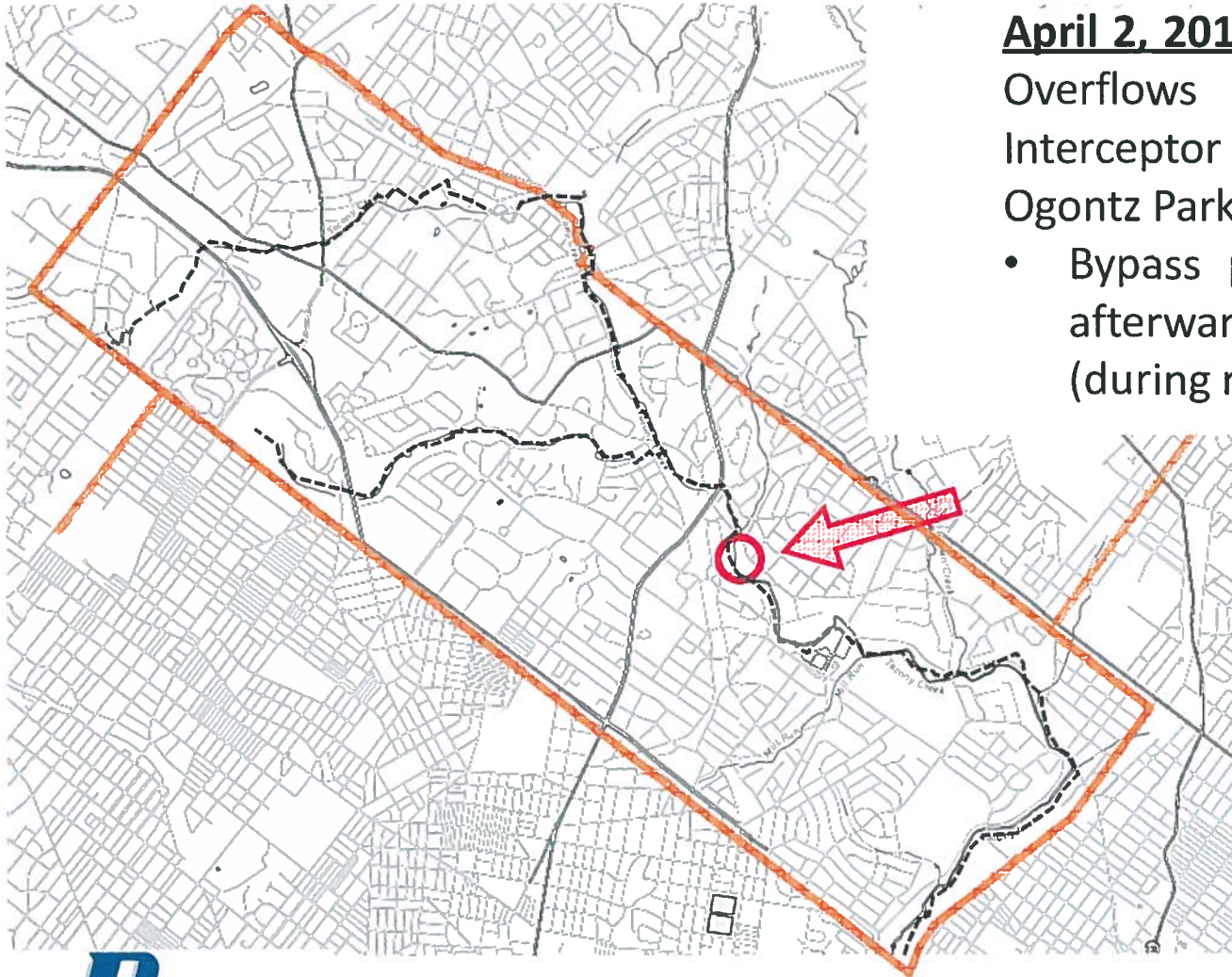
Since 2005, new connections to the sanitary sewer system have been limited, with PADEP oversight. This is to prevent the hydraulic overload from being aggravated by the addition of new flow.

- Due to budgeting of Sanitary Sewer Expenditures it has hampered other Township projects such as Economic Redevelopment Initiatives.
- Investors and Developers have been discouraged from projects in Cheltenham because they are concerned they will not get Sewage Capacity.
- Prohibiting new connections limits Sanitary Sewer revenue from additional tapping fees and monthly sewer bills



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Cheltenham Township



April 2, 2010: Major Sanitary Sewer Overflows from the Tookany Interceptor at Shoemaker Road and Ogontz Park

- Bypass pumping began shortly afterwards, and continues today (during rain events)



Cheltenham Township

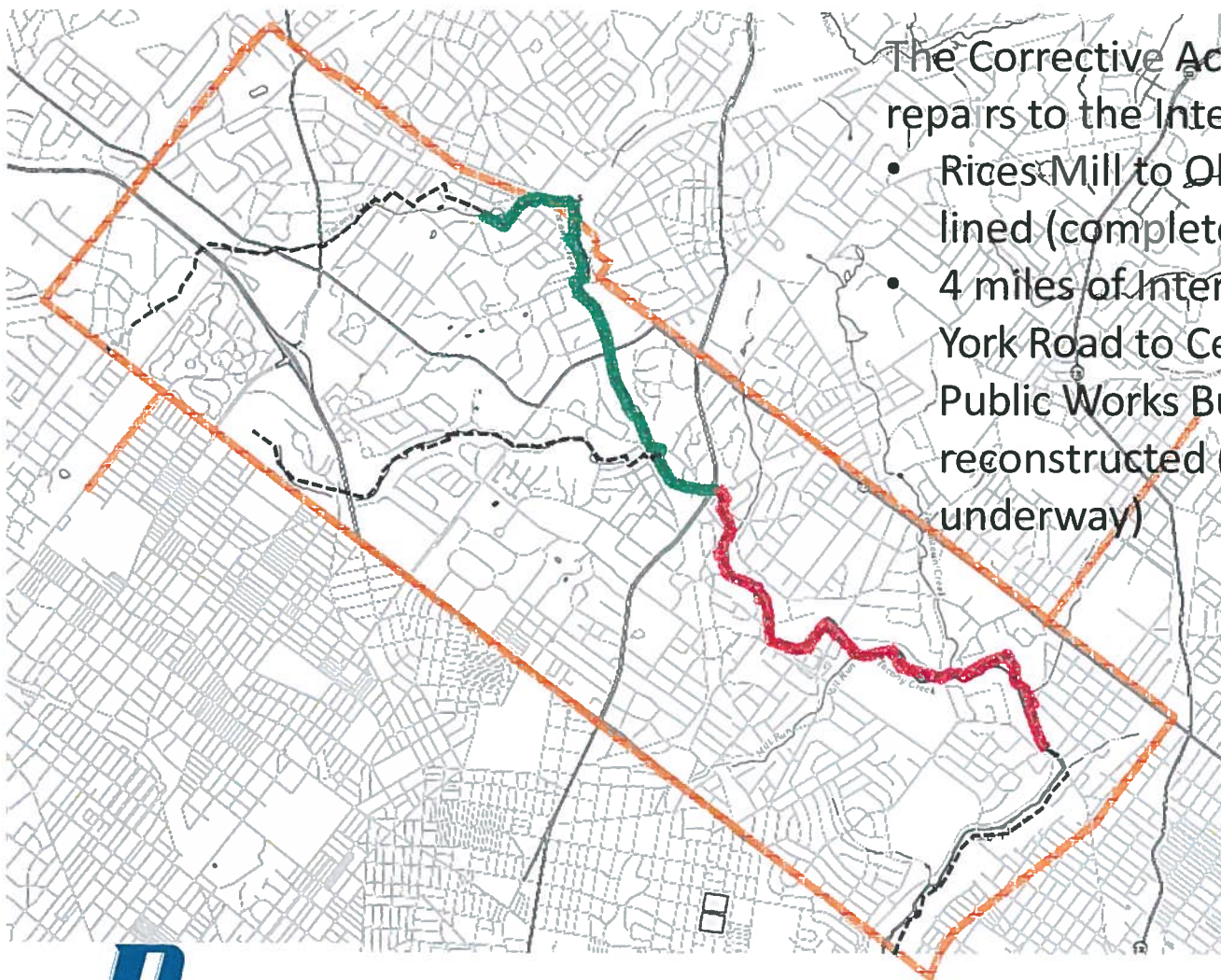
A new Corrective Action Plan was prepared 2010-2012, including:

- Major repairs to Tookany Interceptor
- Pilot project to repair mains and lateral connections in portions of Elkins Park
- Lateral rehabilitation *in priority areas, in the public right-of-way*
- Develop and adopt a new Ordinance for private lateral inspection and rehabilitation
- New Intermunicipal Agreements were established
- As an interim measure, the bypass (temporary black pipe) was installed to avoid more sewer overflows. (2010)
- ACT 537 Planning required by PADEP as a result of the CAP



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Cheltenham Township



The Corrective Action Plan includes repairs to the Intercepting Sewer.

- Rices Mill to Old York Rd – interior re-lined (completed 2013)
- 4 miles of Interceptor “A” from Old York Road to Central Avenue (behind Public Works Building) was reconstructed (construction is underway)



Cheltenham Township

Why Revise the CAP?

- 2014 Treatment agreement with PWD required evaluation of 2 options:
- Option 1 – Construction of new Interceptor sewer line through Philadelphia to convey additional flow up to a 29 cfs peak (\$21.5 M)
- Option 2 – Construction of an equalization tank to control peak flows to 18 cfs. \$37,100,000 (37.1M)
- Neither Option evaluated was ultimately acceptable to PADEP, PWD or the Township and these were both determined to be expensive short-term fixes. The Act 537 Plan could not be finalized as a result.
- Therefore Cheltenham Township required to meet a maximum flow limit of 18 cfs. Which lead to current 8 year plan to reduce I/I. (\$50+ M over 8 years)



Cheltenham Township

Why Revise the CAP?

- PADEP and the Board of Commissioners requested the Option 3 evaluation of a substantial and concentrated reduction of Inflow/Infiltration (I/I) and flow diversion to other Municipalities or other PWD sewer lines.
- Option 3 was evaluated. Diversion was not found to be beneficial for the associated cost. I/I removal modeling did show a potential for significant flow reduction.



Cheltenham Township

Why Revise the CAP?

- With PADEP's guidance, PWD agreed to evaluate a new agreement with Cheltenham with an 8-year time line for the I/I removal work (Option 3).
- Technical meetings have taken place since early 2016 with all involved parties to work on the detailed I/I reduction plan and milestones (the CAP) which will then be incorporated into the Act 537 Plan and the new agreement with PWD.
- There is concern that we will not reach 18 cfs which may trigger Option 1 or 2



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Cheltenham Township

What is in the Draft CAP?

Detailed I/I Reduction Plan Includes:

- Inspection, Testing and Repair of Sewer Mains and Interceptors
- Manhole Inspection and Repair
- Roof Drain Inspection and Disconnection
- Private Lateral Inspection, Rehabilitation/Replacement
- Sump Pump Inspection and Disconnection
- Ongoing Flow Monitoring, Metering, Assessment and Data Evaluation
- Project Schedule and Yearly Work Plan (for 8 years)



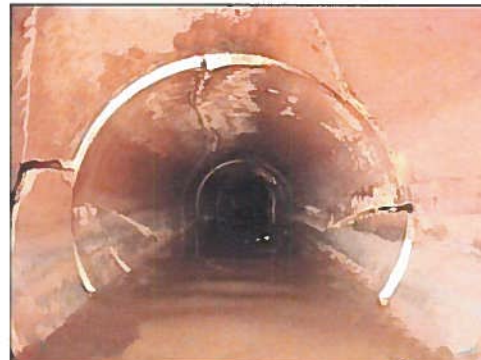
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Cheltenham Township

If Cheltenham does not sell Sewer System

What does the CAP work mean to property owners?

- For the next 8 years, the Township will be undertaking intensive sanitary sewer repair projects.
- Part of these projects will involve using a small camera (CCTV) to look into both the Township's collection system and as far as we can into the residential, commercial, and institutional laterals.
- Using the camera, we will be able to see cracks, joint separation, roots, broken pipes, illegal connections, etc. that are causing I/I to enter into the Township's sewer system.



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