

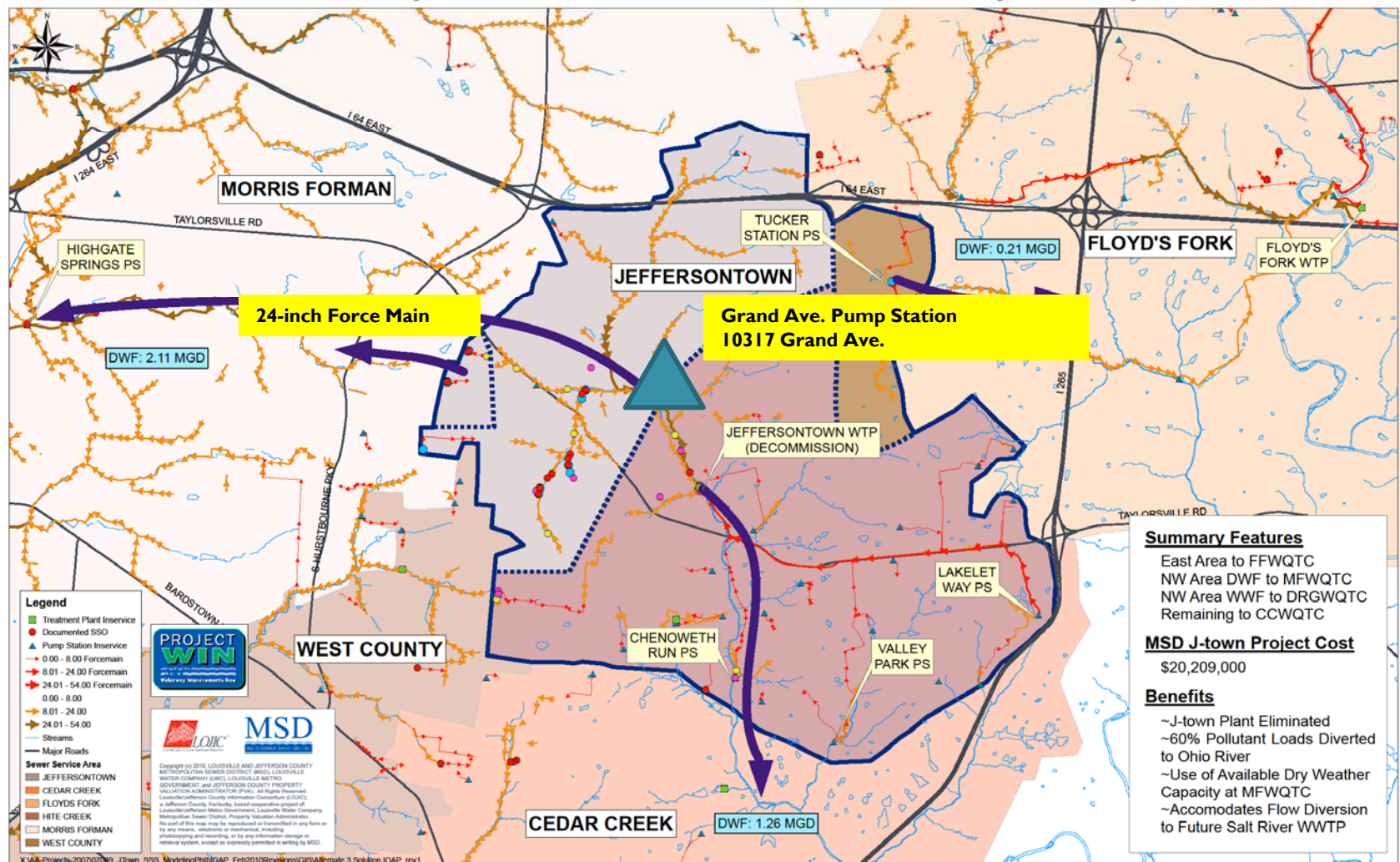
# Jeffersontown Treatment Plant Elimination & Grand Avenue Pump Station

MSD will be eliminating the Jeffersontown Wastewater Treatment plant by the end of 2015.



# MSD's Amended Consent Decree: Required a plan by March 31, 2010 Required completion by December 31, 2015

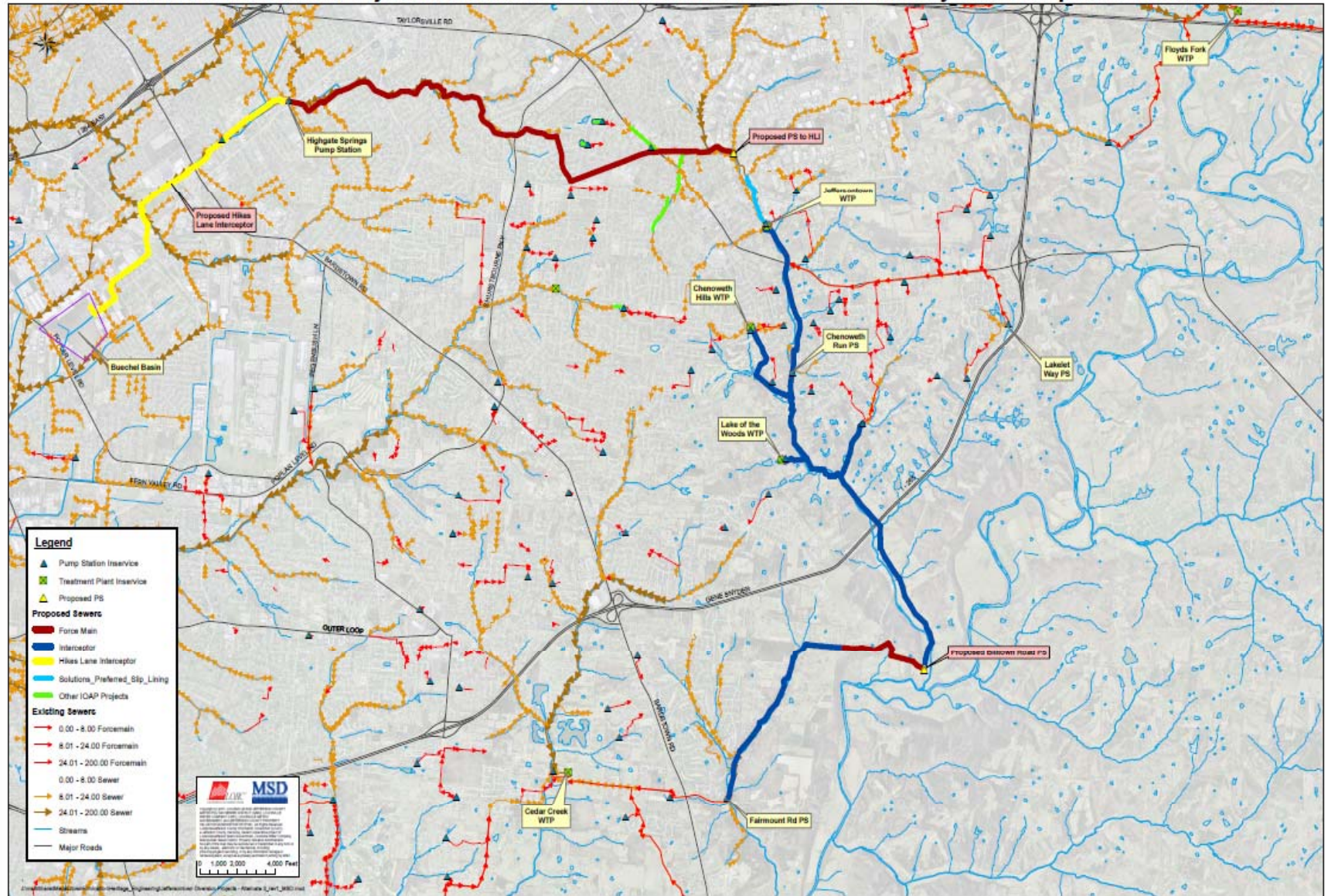
Jeffersontown Diversion Projects: Alternate 3 - Public Works to HLI / Gravity and Pumped to Cedar Creek





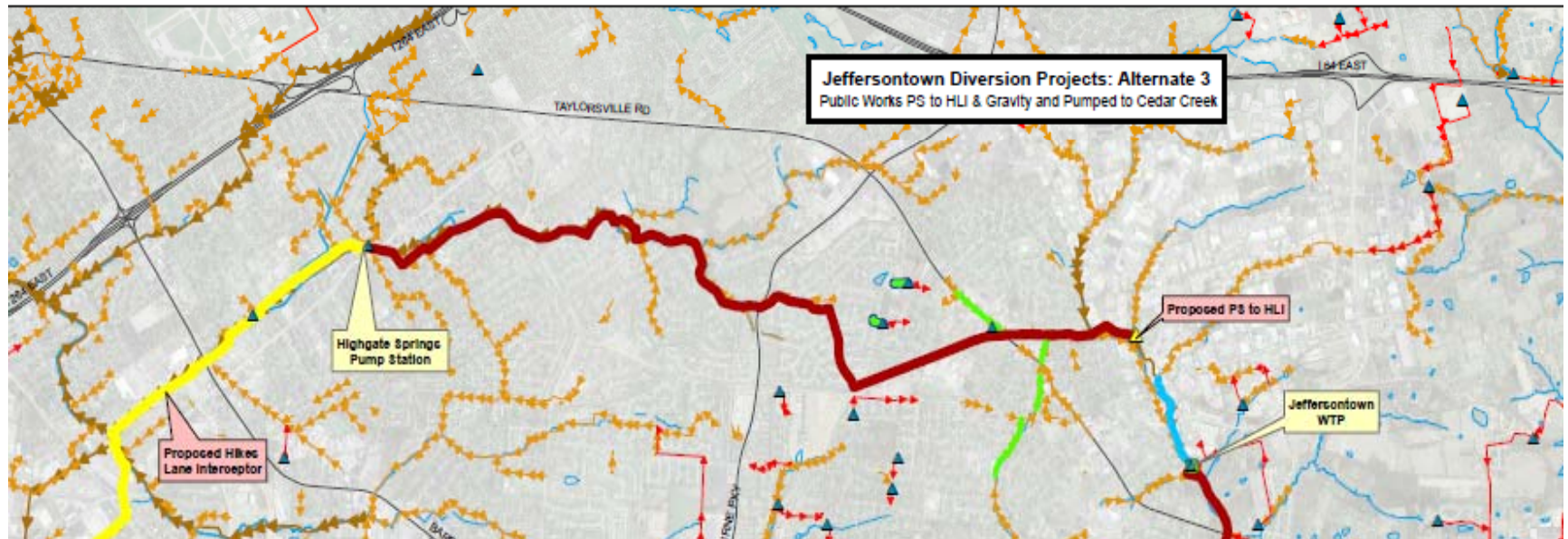
# Jeffersontown Plant Elimination – North and South Series of Projects

Jeffersontown Diversion Projects: Alternate 3 - Public Works PS to HLI & Gravity and Pumped to Cedar Creek





# North Section - Grand Avenue Pump Station Force Main and Klondike Interceptor



**2/3 of the Flow from the Jeffersonsontown WQTC is diverted by the Grand Avenue Pump Station through 5 miles of 24-inch force main to the Morris Forman WQTC service area.**

The pump station & force main are in the early stages of design, 10% – 30%.

The force main route has been selected and will send flow from the Pump Station to the Klondike Interceptor and then to the new Hikes Lane Interceptor, currently under construction. The route will be crossing Taylorville Rd., South Hurstbourne Pky., Breckenridge Lane, Klondike Lane, and Hikes Lane.



# Jeffersontown Plant Elimination





# Grand Avenue Pump Station

The pump station is proposed to be located at 10317 Grand Avenue. The site is currently the home of the Jeffersontown Maintenance Facility.



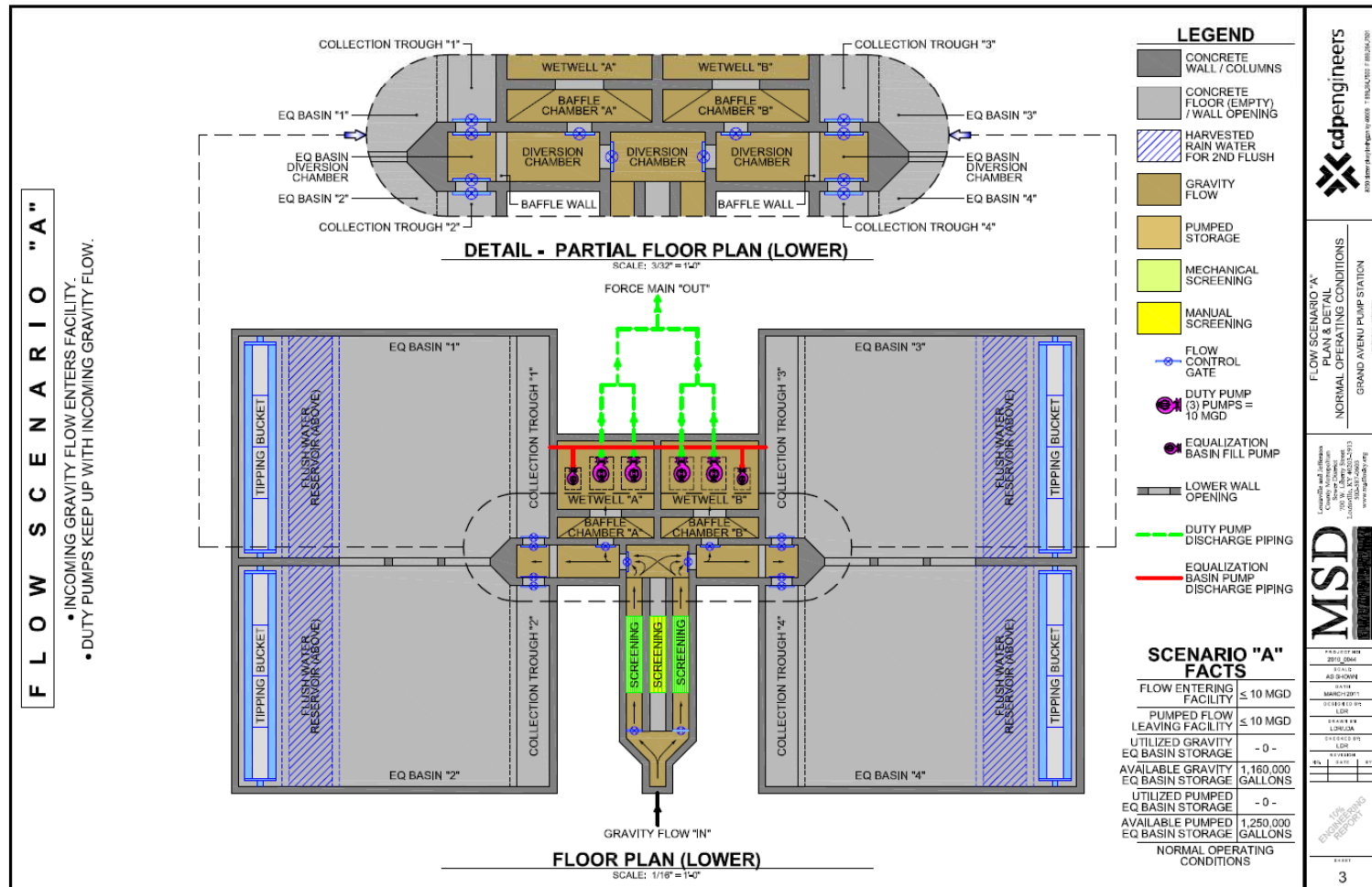


# Grand Avenue Pump Station



**GRAND AVENUE PUMP STATION & HIGH-FLOW DETENTION FACILITY**  
LOUISVILLE-JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT

# Grand Avenue Pump Station



The pump station will be an unique concept in MSD's system because it combines both a dedicated sanitary sewer pump station and a wet weather storage basin. .



# Grand Ave. Force Main Route – east section



NOT TO SCALE

File Name: JtownFM-East.mxd

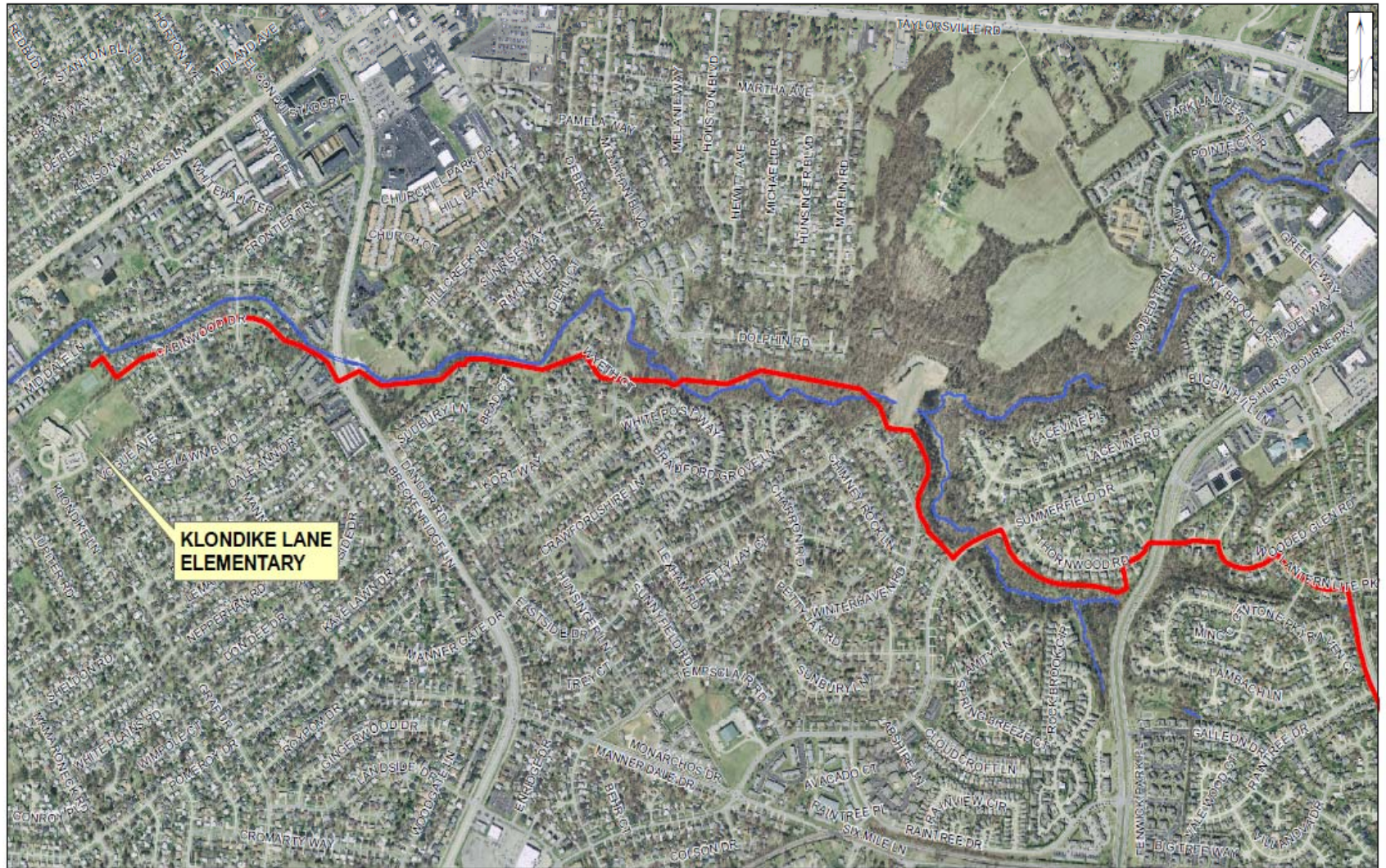
Jeffersontown Force Main  
East



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# Grand Ave. Force Main – west section



NOT TO SCALE

File Name: JtownFM-West.mxd

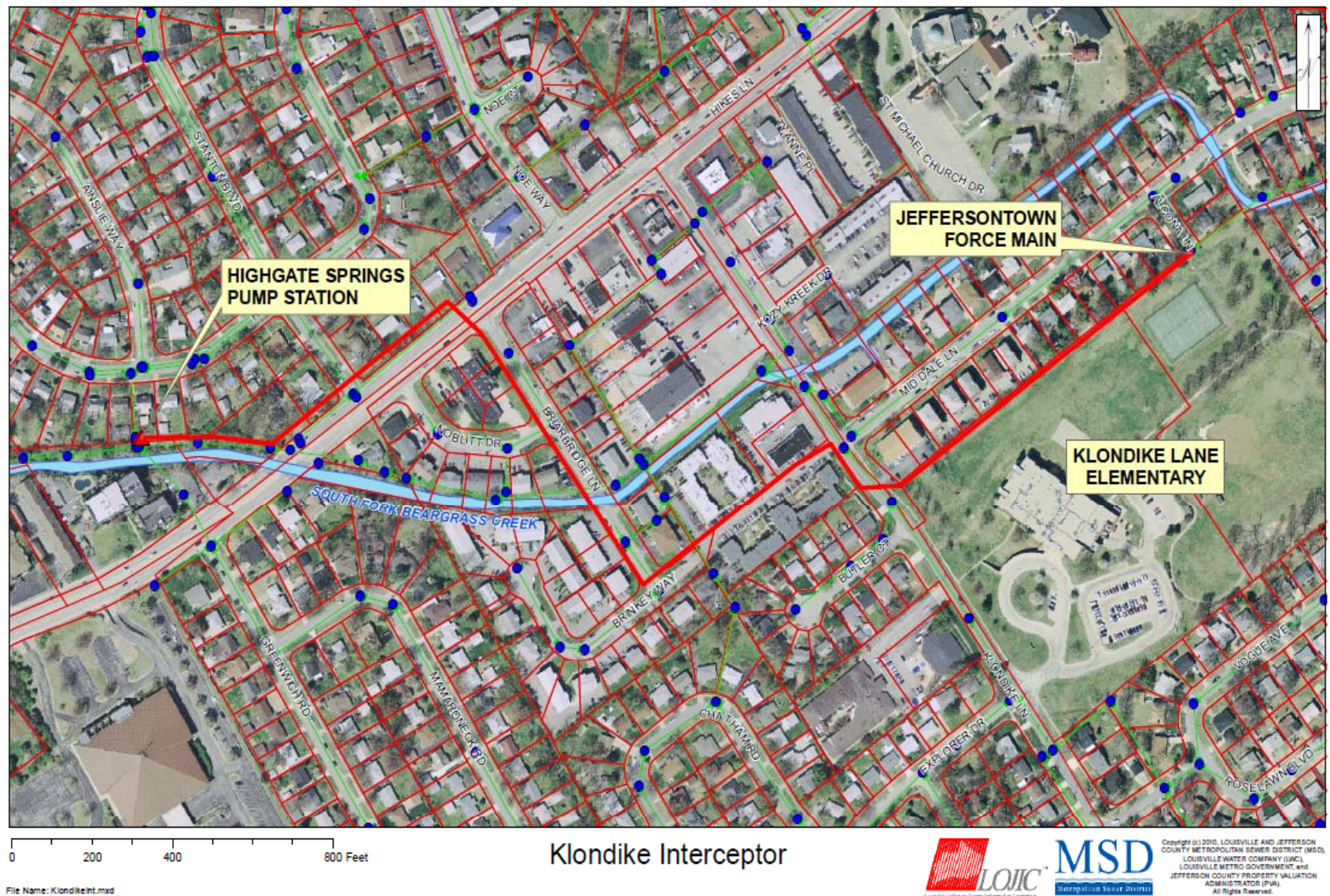
Jeffersontown Force Main  
West



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# Klondike Interceptor – outlet for the Grand Ave. Force Main





# Jeffersontown Elimination North Section Construction Schedule – Completion Dates

1. July 2013 – Klondike Interceptor.
2. December 2014 - Grand Ave. Pump Station & Force Main.
3. July 2015 - Jeffersontown Plant & Siphon  
Elimination and Demolition





# Jeffersontown Plant Elimination -

## Upstream manhole and siphon.

Scheduled for removal by July 2015.





# Jeffersontown Plant Elimination - Construction Schedule is July 2015. Consent Deadline is Dec. 2015.



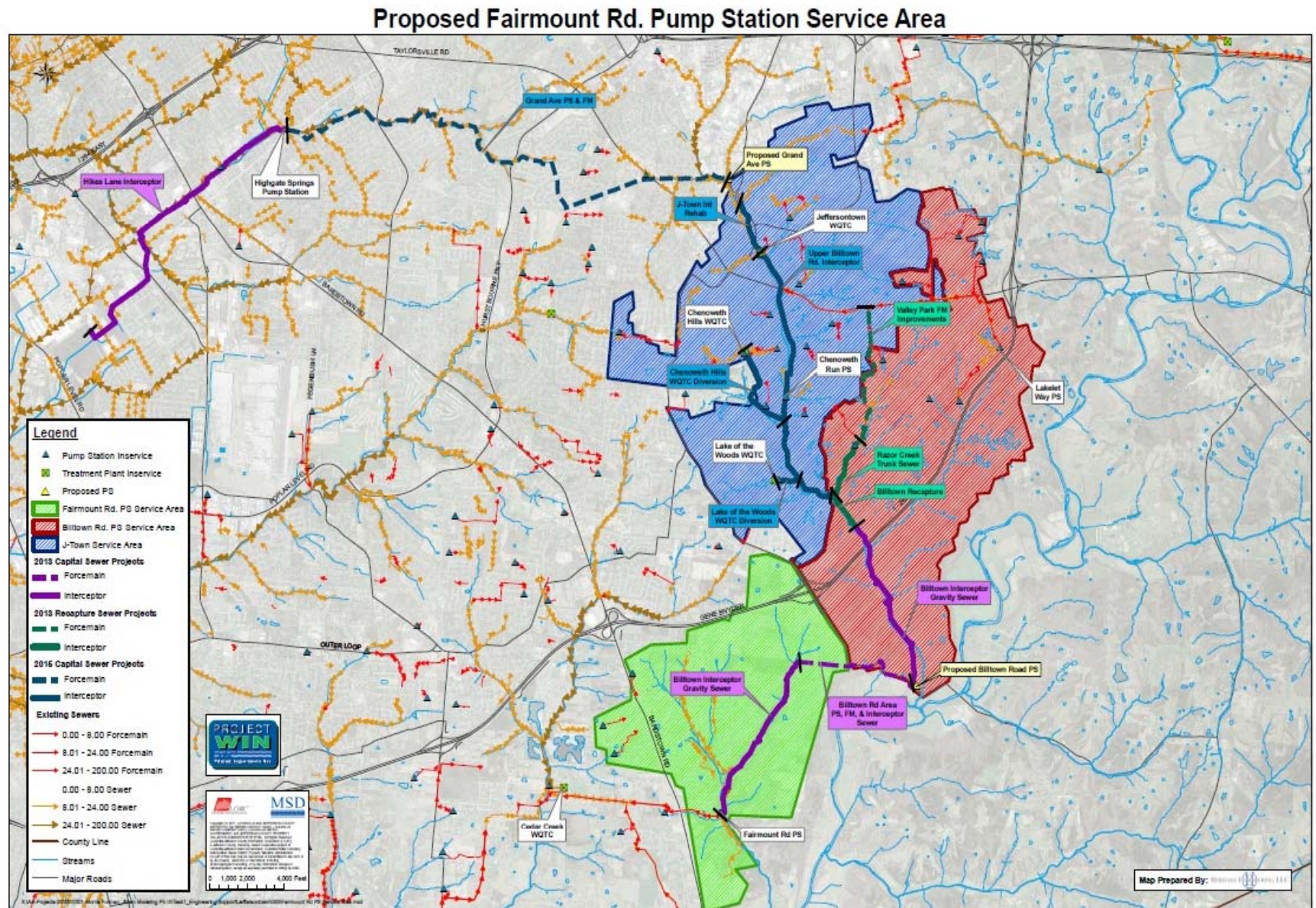


**Jeffersontown Diversion Projects: Alternate 3 - Public Works PS to HLI & Gravity and Pumped to Cedar Creek**





# Jeffersontown Plant Elimination – South of Grand Ave. Pump Station





# Jeffersontown Elimination South Section Construction Schedule – Completion Dates

May 2012 – Billtown Interceptor, Pump Station,  
Broad Run Interceptor, & Fairmont Rd PS Upgrade.





# Jeffersontown Plant Elimination – Billtown Interceptor – May 2012



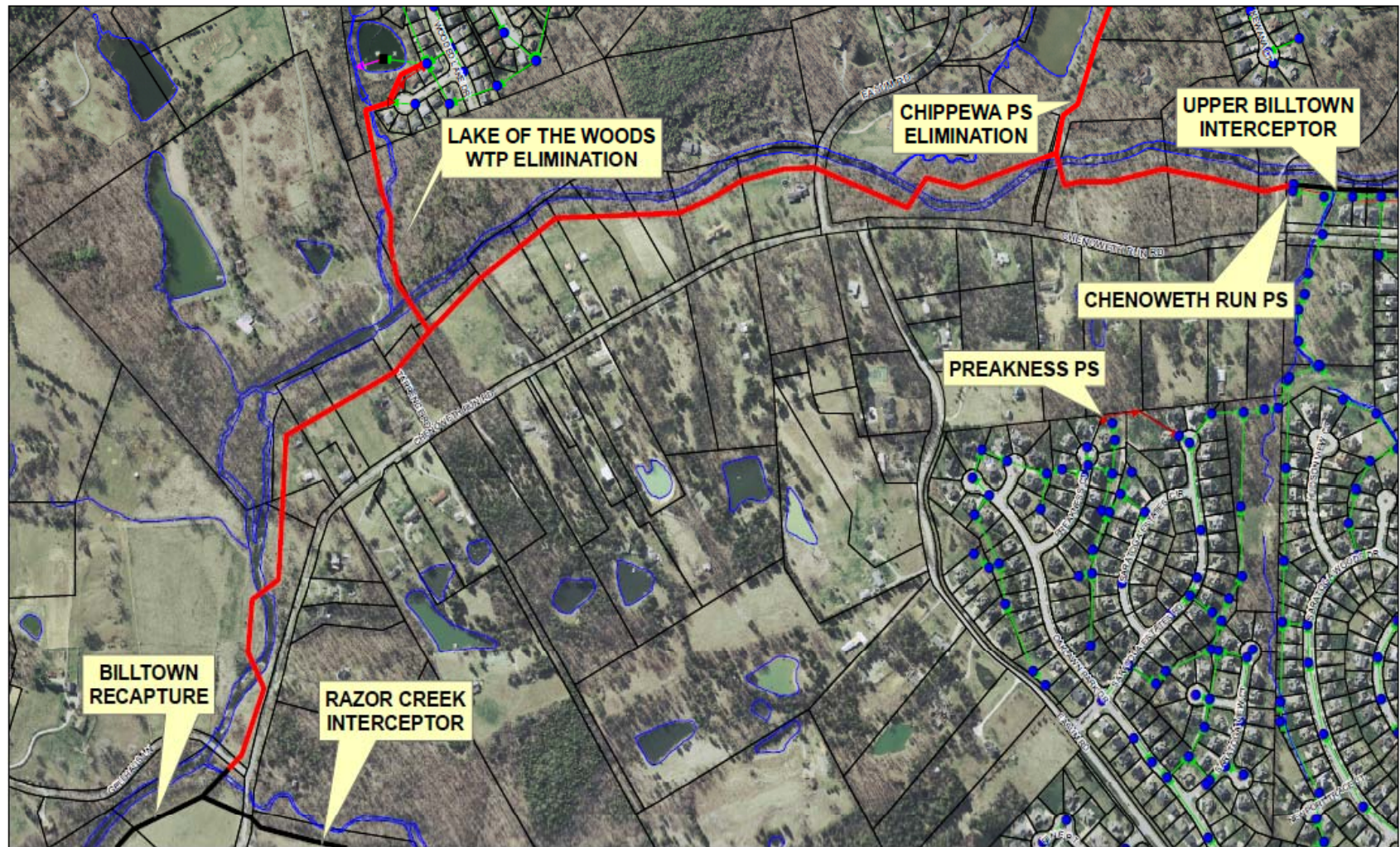


# Jeffersontown Plant Elimination Billtown Recapture Project – May 2012





# Chenoweth Run Int., Pump Station & Lake of the Woods Plant Elimination – December 2013



0 200 400 800 Feet

File Name: ChenRunPSElim.mxd



Chenoweth Run PS Elimination



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# Jeffersontown Plant Elimination – Chenoweth Run PS Elimination. Scheduled for Dec. 2013.





# Jeffersontown Plant Elimination – Lake of the Woods Plant Elimination. Scheduled for Dec. 2013.





# Jeffersontown Plant Elimination – Lake of the Woods Plant Elimination





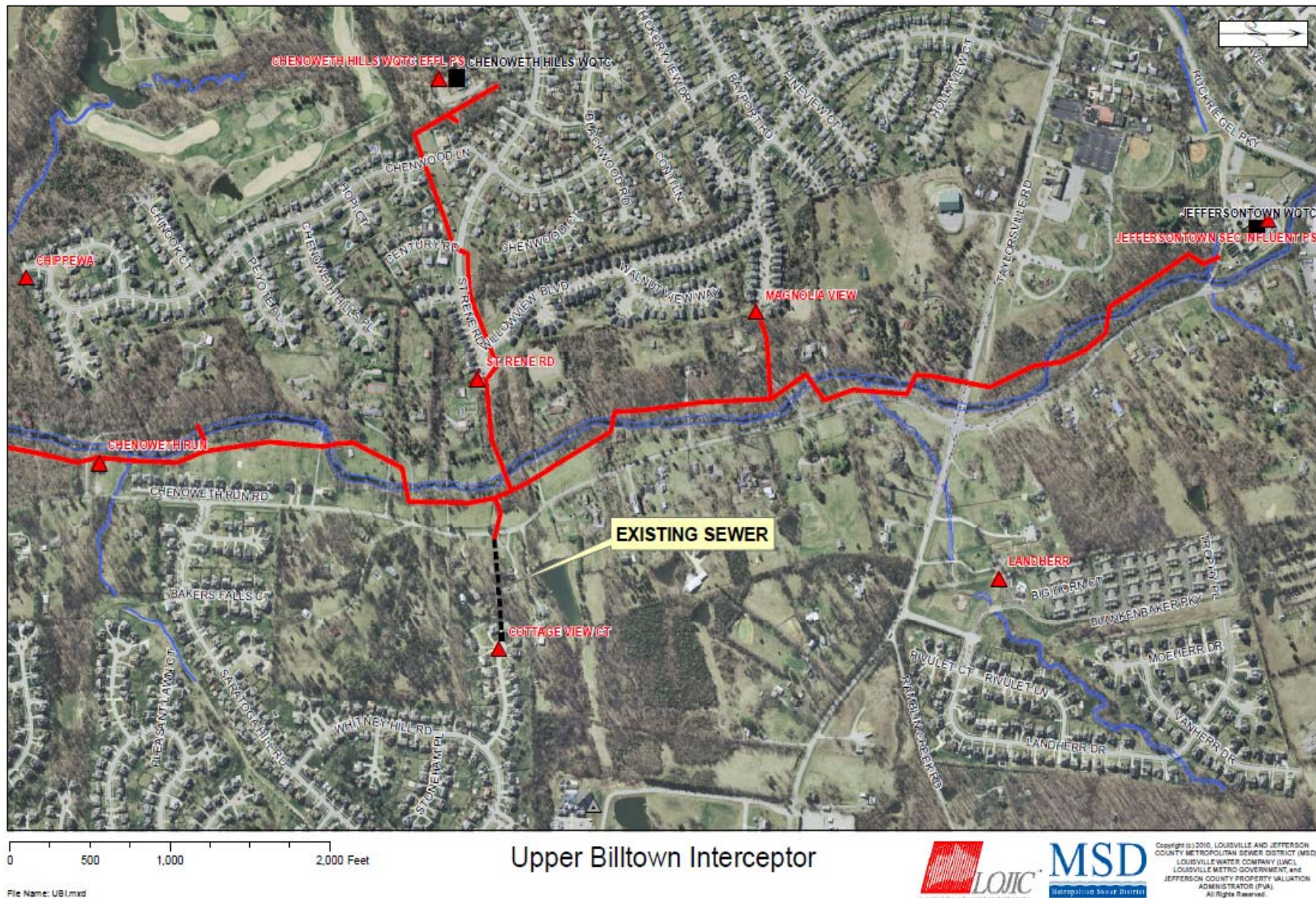
# Jeffersontown Plant Elimination - South Section Chenoweth Run Creek.

Downstream of Lake of the Woods Treatment Plant





# Upper Billtown Interceptor and Chenoweth Hills Plant Elimination – June 2014





# Jeffersontown Plant Elimination – Chenoweth Hills Plant Elimination. Scheduled for June 2014





# Jeffersontown Plant Elimination - Chenoweth Run Creek





# Jeffersontown Plant Elimination- South Section

## Upper Billtown Interceptor will terminate at the Jeffersontown Plant.





# Jeffersontown Plant Elimination - Construction Sequence & Milestones

## Goal: Beat Consent Decree Deadline

- Complete Southern Section – Billtown & Chenoweth Run Interceptors by June 2014.
- Complete Northern Section – Klondike Int. & Grand Ave. PS and FM by December 2014.
- Divert 2/3 flow to MFWQTC.
- Divert 1/3 flow to Cedar Creek WQTC.
- Demolition of Plant & eliminate Siphon by July 2015.



Making Progress;  
Lower Billtown Interceptors and Seatonville Pump  
Station – Under Construction and Complete in 2012  
New Regional Pump Station Example





# Billtown/Seatonville Pump Station Example





# Upgraded features with odor control – Bioxide and Carbon Filters





# Upgraded Features - Generator for power outages to prevent overflows





# Jeffersontown Plant Elimination & Related Projects – North & South Sections

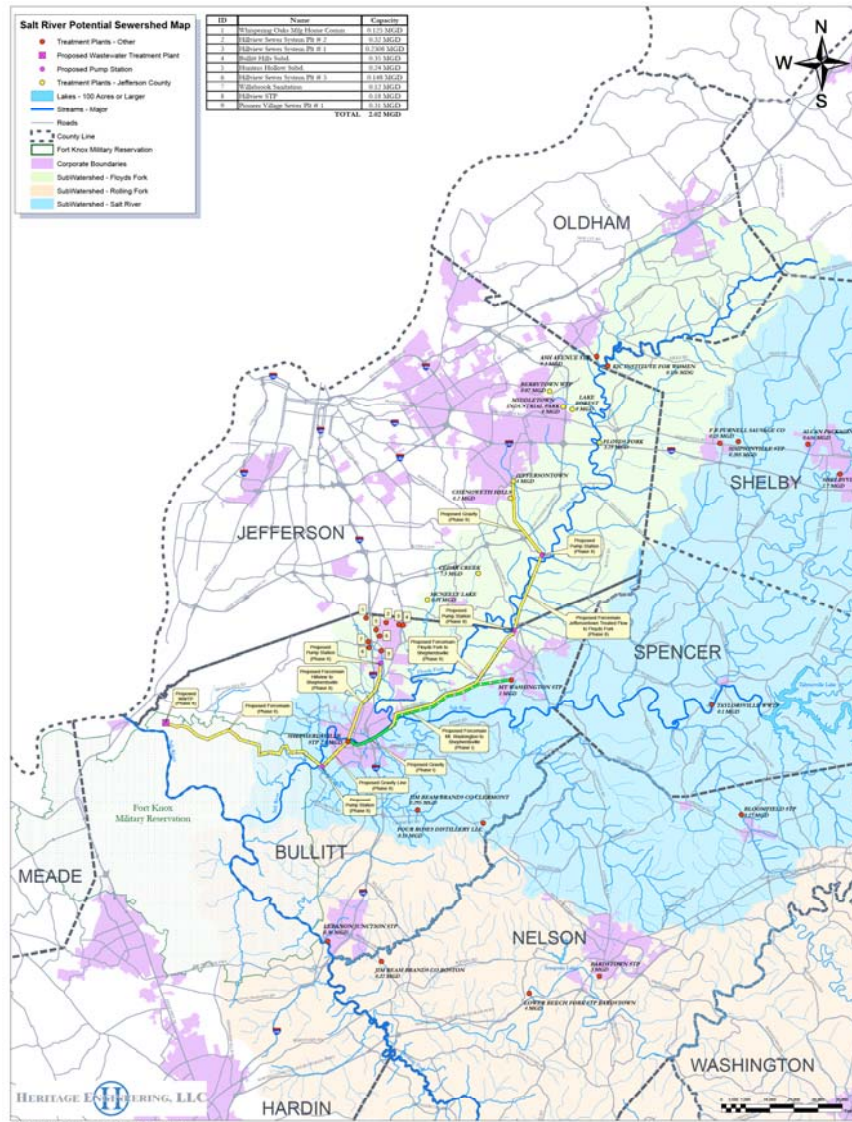
Total Cost Estimate = \$47.5 Million

## Benefits Include:

- Improved water quality in Chenoweth Run Creek and Floyds Fork Creek by elimination of plant effluent (three treatment plants).
- Reduces wet weather discharges by addressing SSO's during heavy rain events.
- Saves annual operating cost from 3 plants and 6 pump stations (\$100,000 per year).
- Prevents future upgrade cost of existing plants.
- Plans for the future growth and potential regional solution.



# Jeffersontown Treatment Plant Elimination



- Future Regional Solution
- HB26 – 2011
- Potential regional plant on the Salt River.
- Serve multiple Counties.
- Plans allow for flows to divert to regional plant.



# Jeffersontown Plant Elimination & Related Projects Summary

Benefits includes elimination of:

- Three treatment plants;
  1. Jeffersontown
  2. Chenoweth Hills
  3. Lake of the Woods
- Six Pump Stations;
  1. Chenoweth Run
  2. Chippewa
  3. Valley Park
  4. Magnolia View
  5. St. Rene Ct.
  6. Cottage View Ct.
- Provides potential gravity outlet for more PS.



# Jeffersontown Plant Elimination

Thank You!

David M. Schaftlein, PE  
Engineering Manager

