WESTMINSTER
COLORADO

Big Dry Creek Sewer Basin City Council Update March 4, 2019

Kent Brugler, Senior Engineer, PWU
Dave Loseman, City Engineer, CD
John Burke, Downtown Westminster Development and Construction Manager, ED

Agenda

I. Pre-design Project Team
II. Recommendation
III. Why was the Moratorium Necessary?
IV. Overview of the Basins and BDC Interceptor System
V. Accomplishments
VI. Early Actions
VII. Current Actions and Next Steps
VIII. Q & A

I. Key Project Team Members

Public Works and Utilities
Max Kirschbaum
Kent Brugler
Stephen Gay
Ceila Rethamel
Sarah Borgers

City Attorney's Office
David Frankel
Kristin Decker
Mathew Munch

HDR Engineering, Inc.

Economic Development
John Hall
John Burke
Chase Evans
Jenni Grafton

Community Development
Dave Downing
Dave Loseman
Sean McCartney
Andrew Spurgin
Juan Sabogal

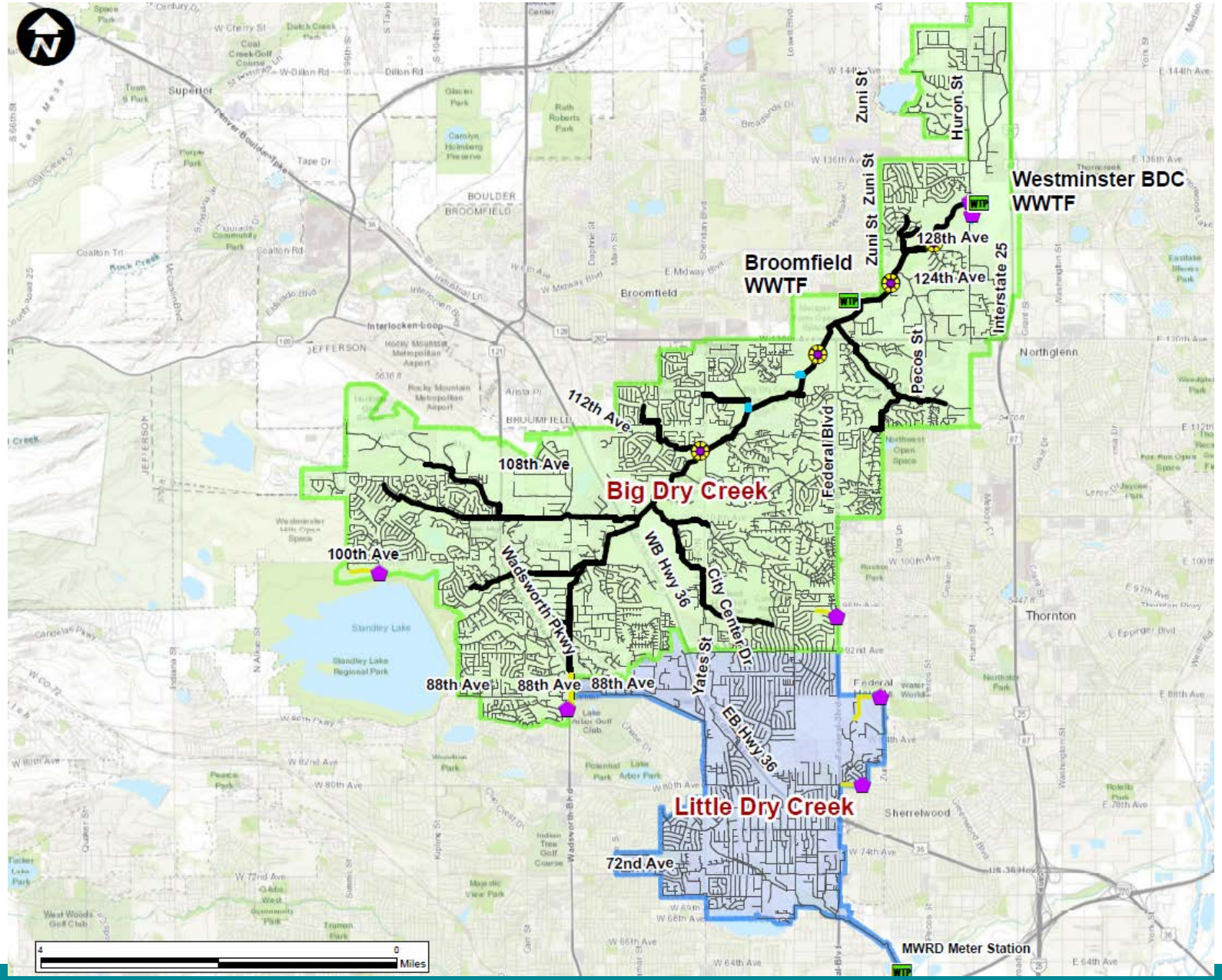
II. Recommendation

Remove the Development Application moratorium on April 29, 2019 at which time certain improvements to the interceptor system and the Pre-design Study will be completed

III. Why Was The Moratorium Necessary?

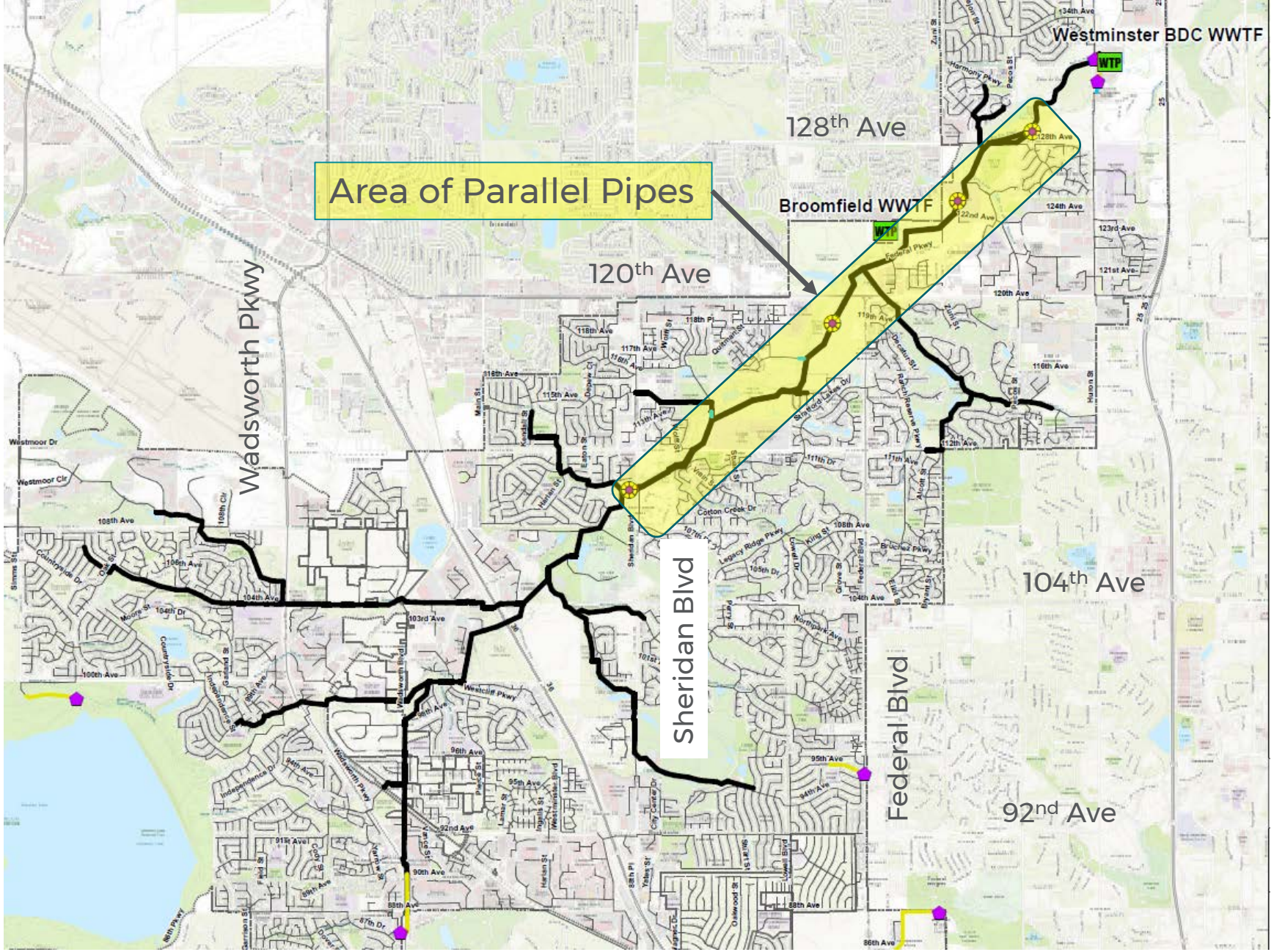
- Preliminary modeling indicated high risk of manhole overflows
- Observed full pipe flows and evidence of manhole surcharging
- Public Works needed time to more accurately assess interceptor capacity, the risks of a sanitary sewer overflow and potential solutions

IV. Overview of the Basins



IV. Overview of the BDCIS

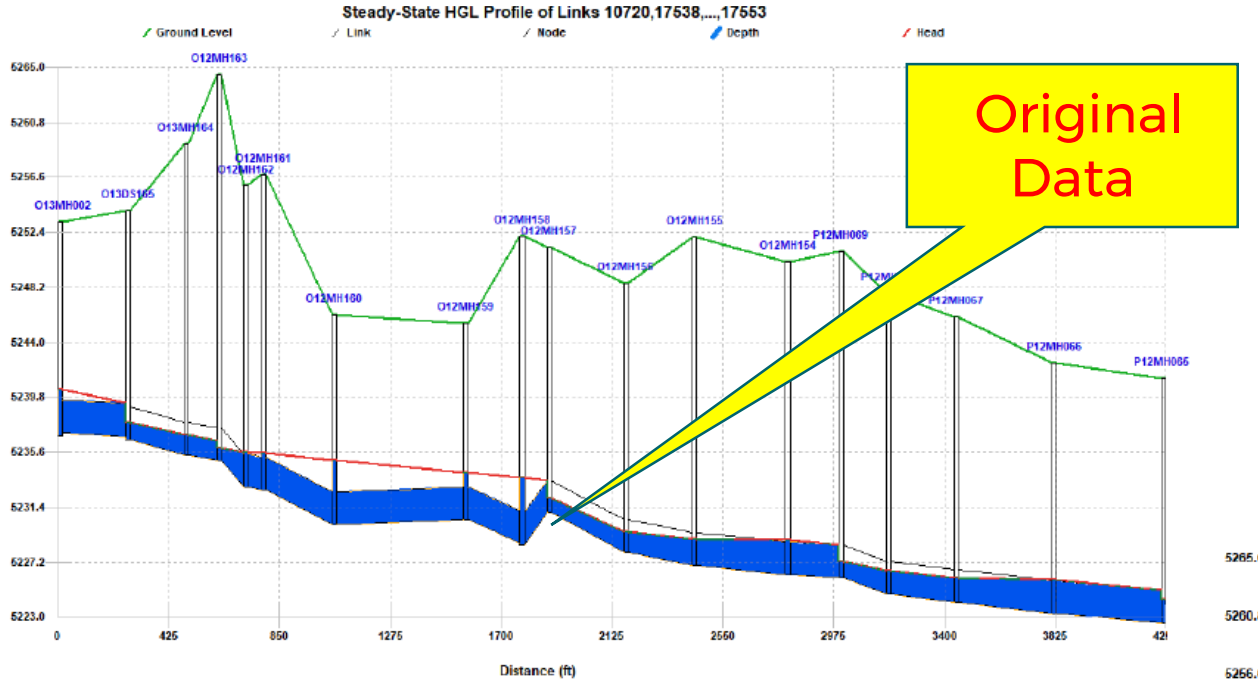
- 22 Miles of Pipe 15”-54’
- 530 Manholes



V. Accomplishments (1 of 3)

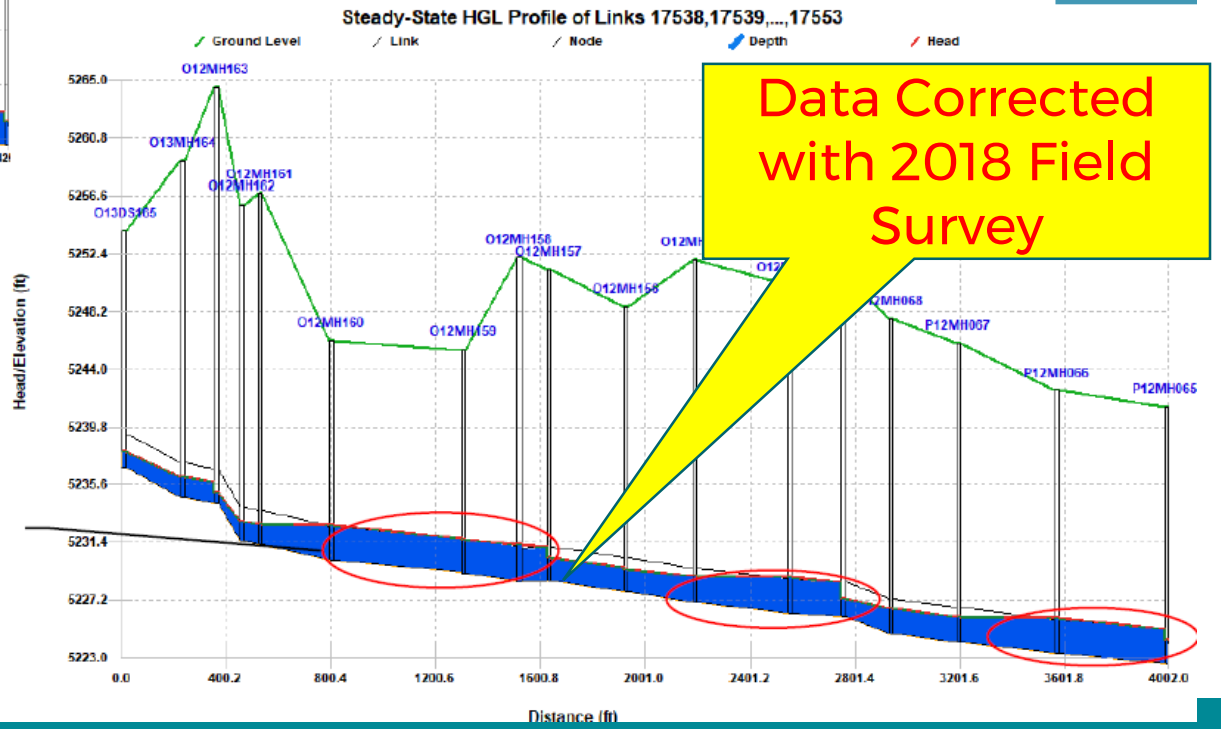
- Scoped & negotiated $1.2M Engineering Services contract
- Completed a detailed field survey of 22 miles of pipeline and 515 manholes and structures

Better Data = Better Hydraulic Model



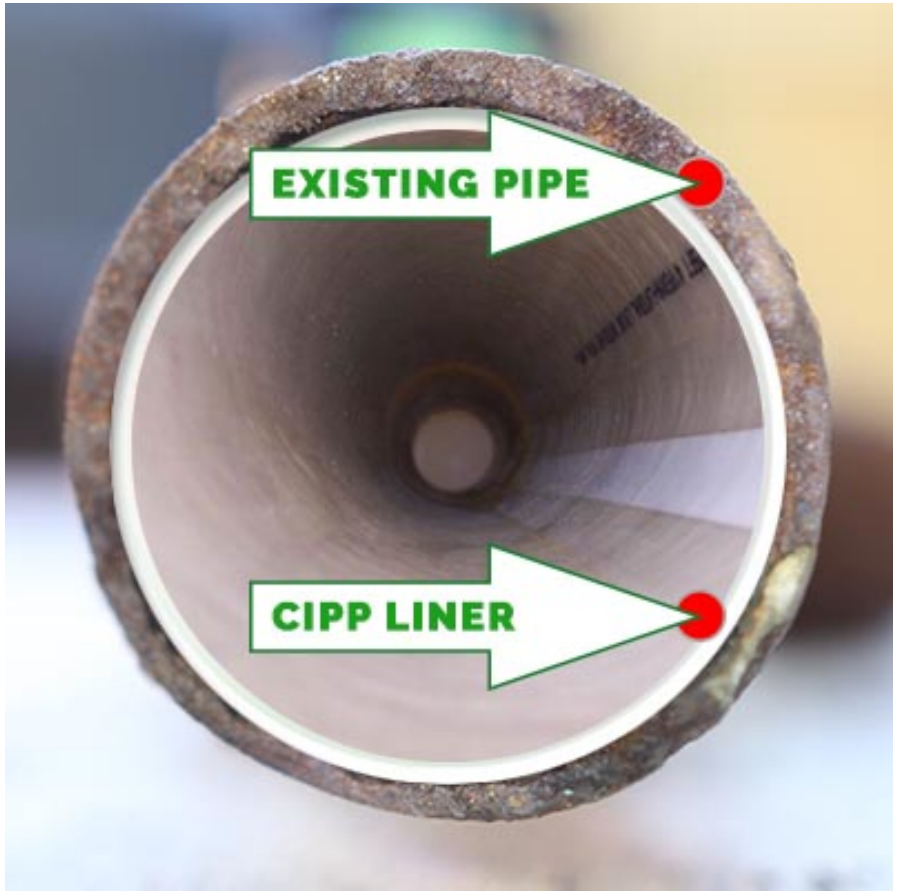
Original Survey

Updated Survey



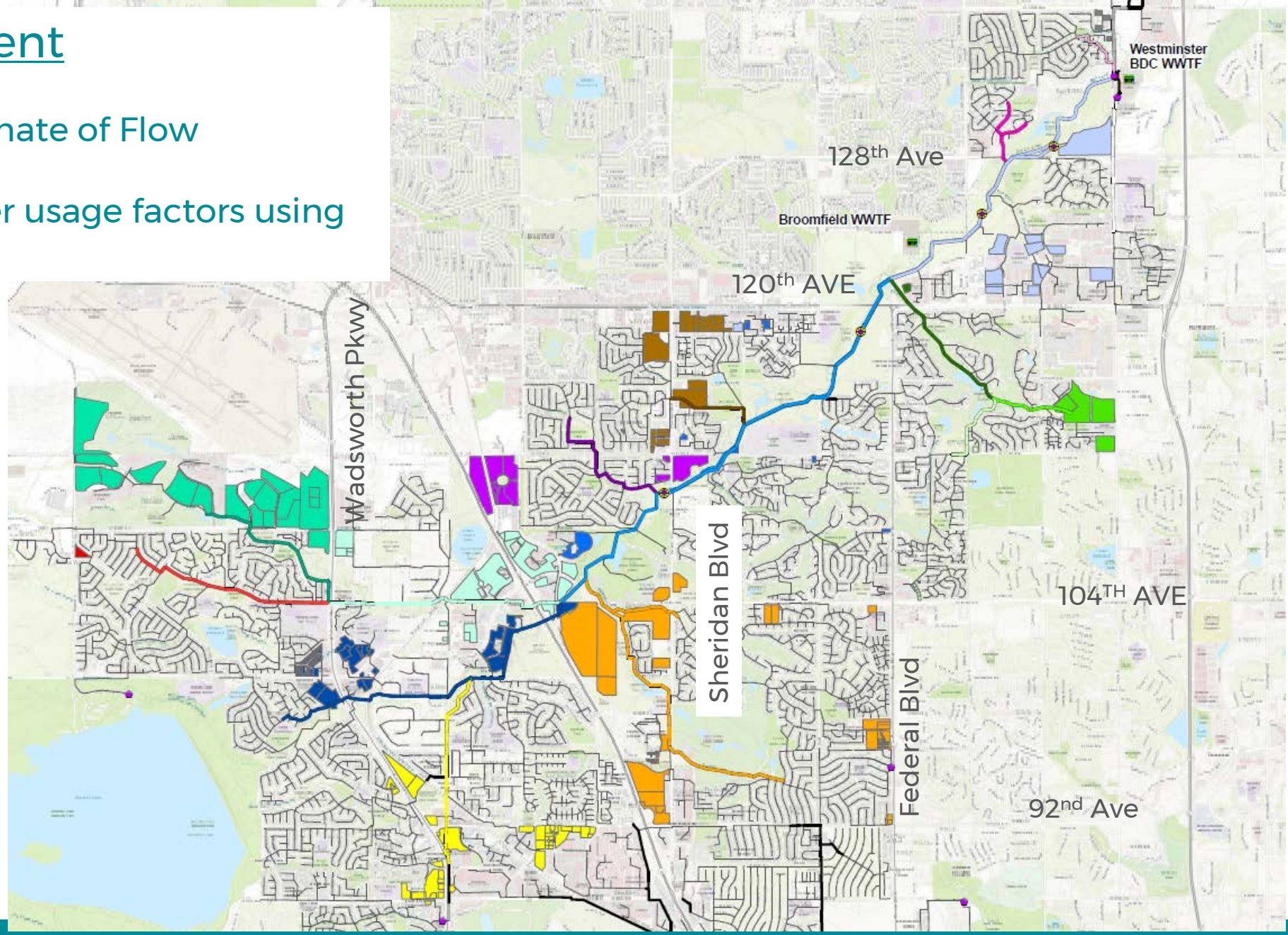
V. Accomplishments (2 of 3)

- Identified short-term improvements to the existing pipeline
- Tracked added flows from development applications
- Defined future development scenarios



Future Development

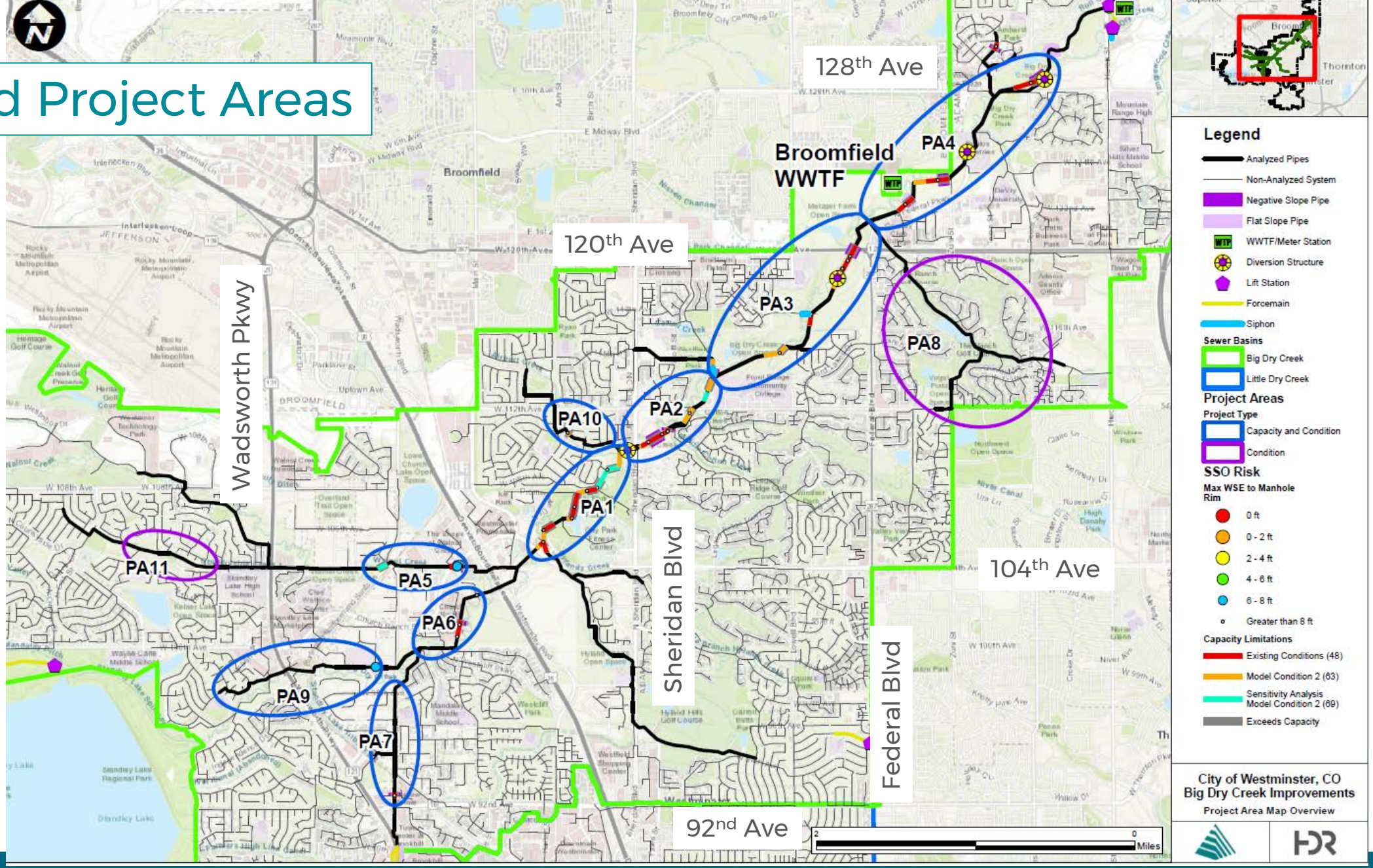
- Parcel by Parcel Estimate of Flow
- Updated indoor water usage factors using historical meter data



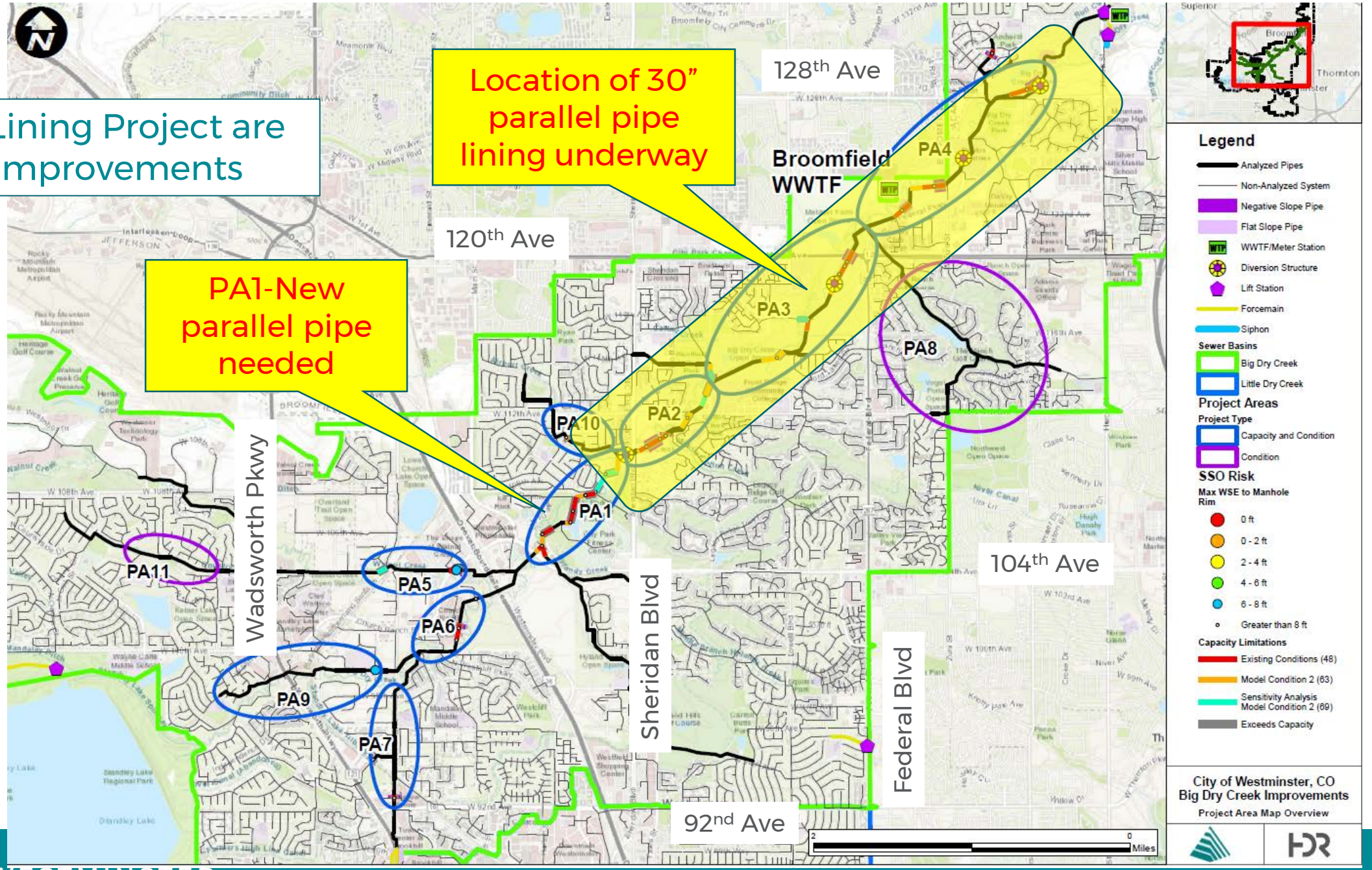
V. Accomplishments (3 of 3)

- Determined peak flows and corresponding pipeline capacities using a computerized hydraulic model
- Evaluated condition of all pipes
- Identified project areas and budget costs for needed improvements
- Evaluated growth impacts on entire Utility

Identified Project Areas



PA1 & Lining Project are Major Improvements



VI. Early Actions

- Implemented $3.4M contract to line ~20,000 feet of pipe to enable its full use
- Determined that development projects in-process could proceed
- Recommended modifying the moratorium to allow 4 developments to proceed with their development applications

VII. Current Actions and Next Steps

- Lining 30” pipeline and manholes
- Complete Pre-design Study
- Recommend removing the development application Moratorium on April 29, 2019
- Return to City Council with final engineering design contract in May/June

VIII. Questions & Answers