

Presentation and Update on the 2026 Water & Wastewater Master Plan

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2026 W&WW Master Plan Update

- Provides a roadmap for assessing current system performance, identifying infrastructure needs, and prioritizing capital improvements
- Data-driven planning document that guides NBU in managing and expanding its water and wastewater infrastructure

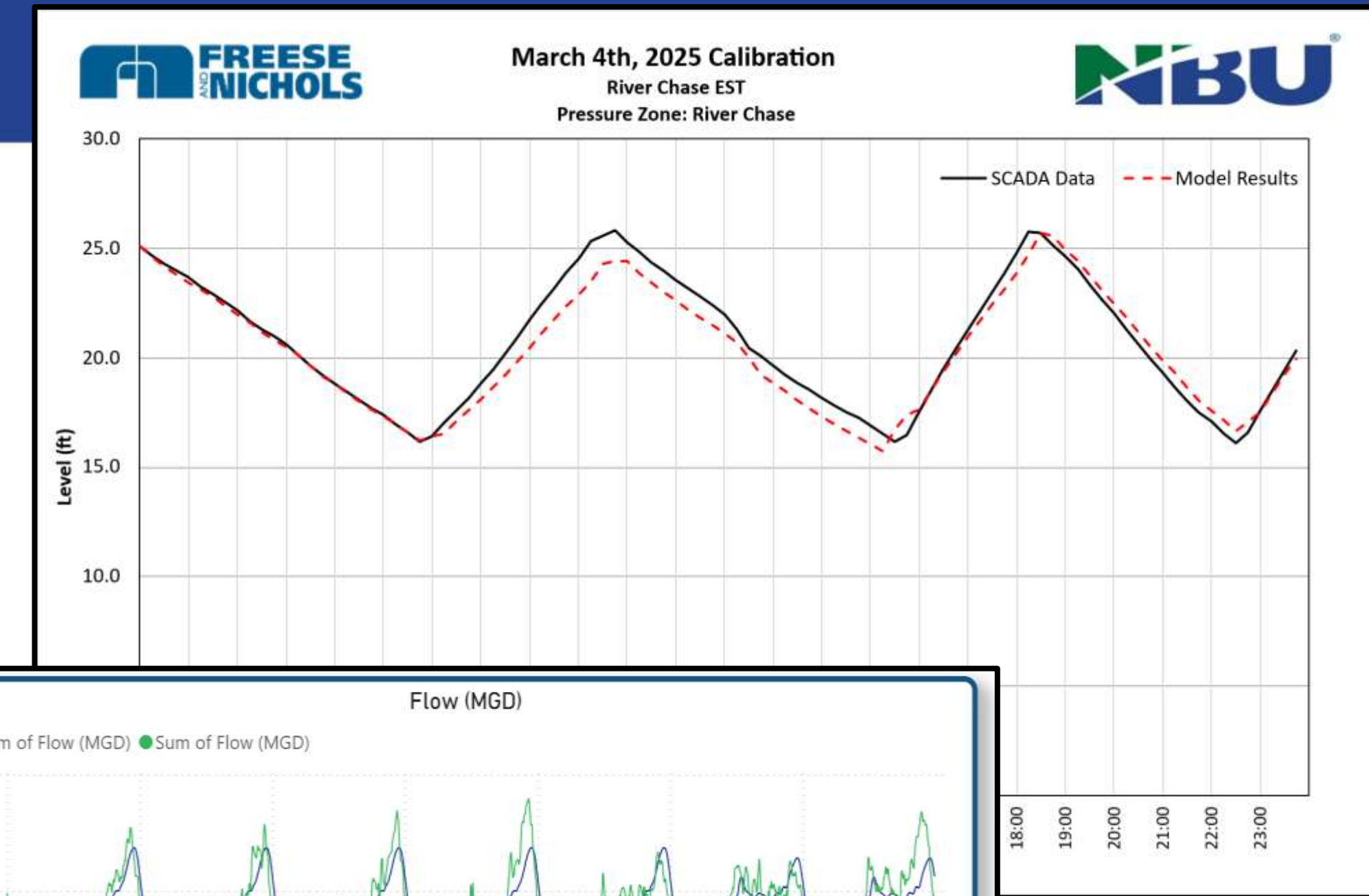


NBU Project Team

- Project Manager
 - George Perkins, PE
- Water Engineering
 - Adam Willard, PE
 - Lee Perry, PE
 - Ashley Zimmermann
 - Nick Puckett, PE
 - Herb Shadrock
- Water Operations and Compliance
 - Jason Theurer
 - Brent Lundmark
 - Doug Clifton
 - John Krause
- Data Analytics
 - Peter Vanderstoep
 - Skylar Smetzer
- Mike Short, PE
- Mark Steelman

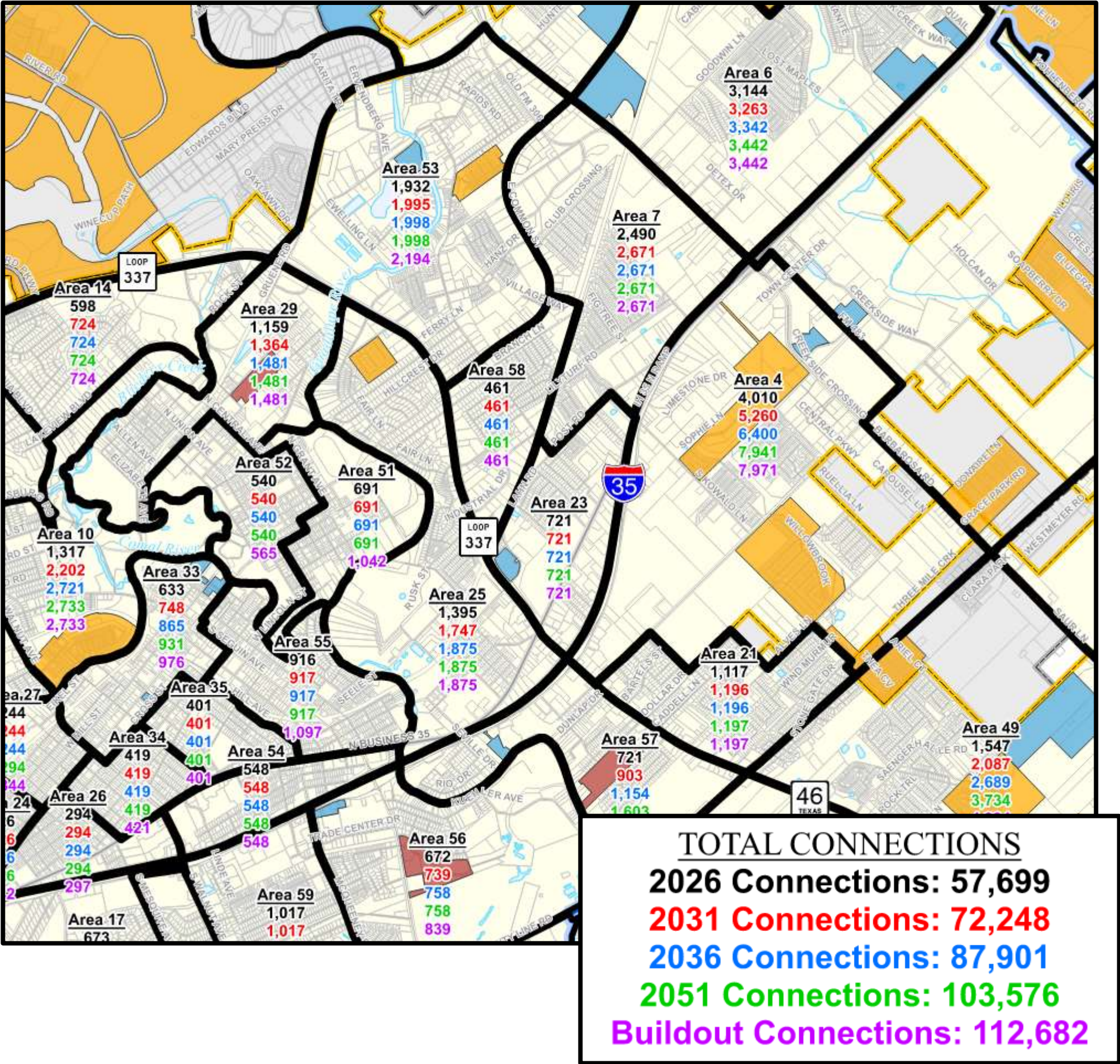
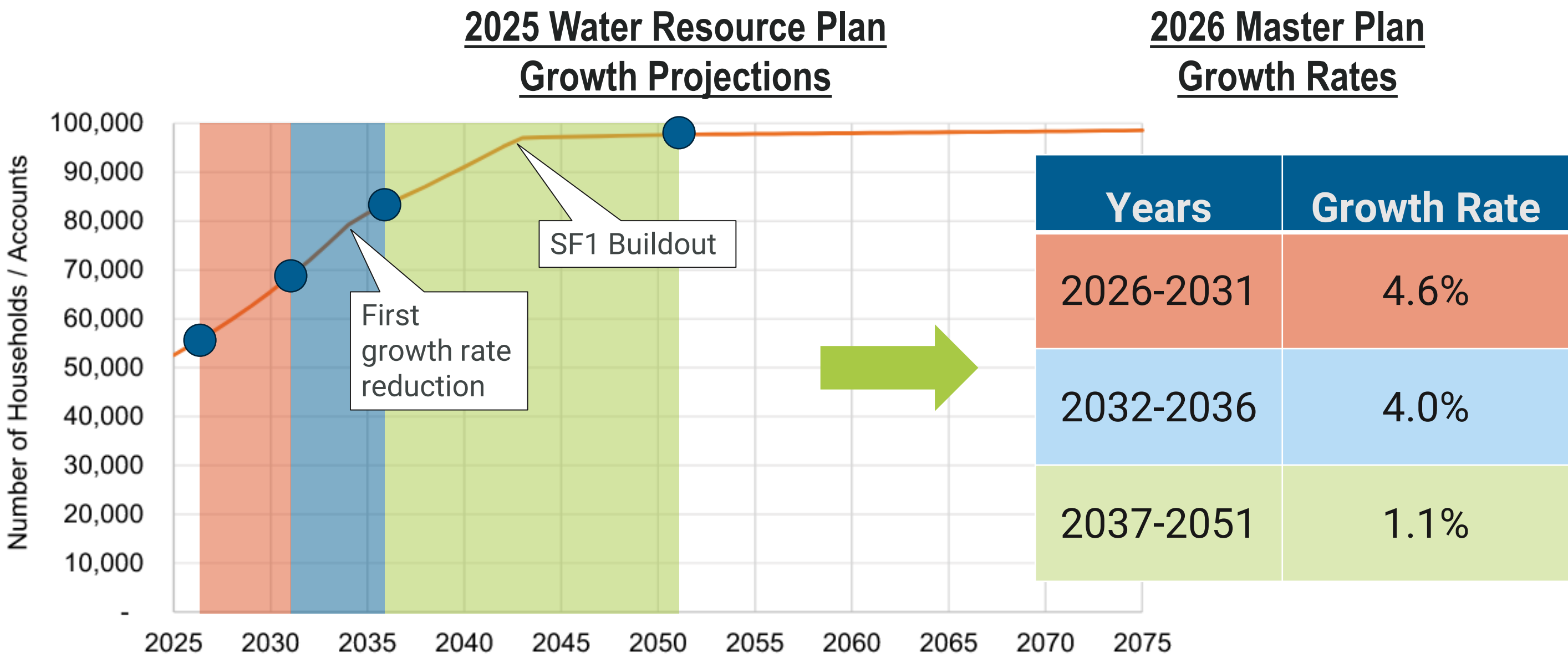
Project Highlights

- Updated and calibrated both hydraulic models
 - Water System Model
 - Three rounds of temporary pressure recording at 20 locations
 - Wastewater System Model
 - Temporary flow monitoring at 11 locations
 - Captured 3 major rain events to assess impacts of wet weather on collection system



Project Highlights

- Developed updated growth projections for the service areas that align with 2025 Water Resource Plan Update
- Collaborated with NBU staff to allocate growth throughout updated service areas



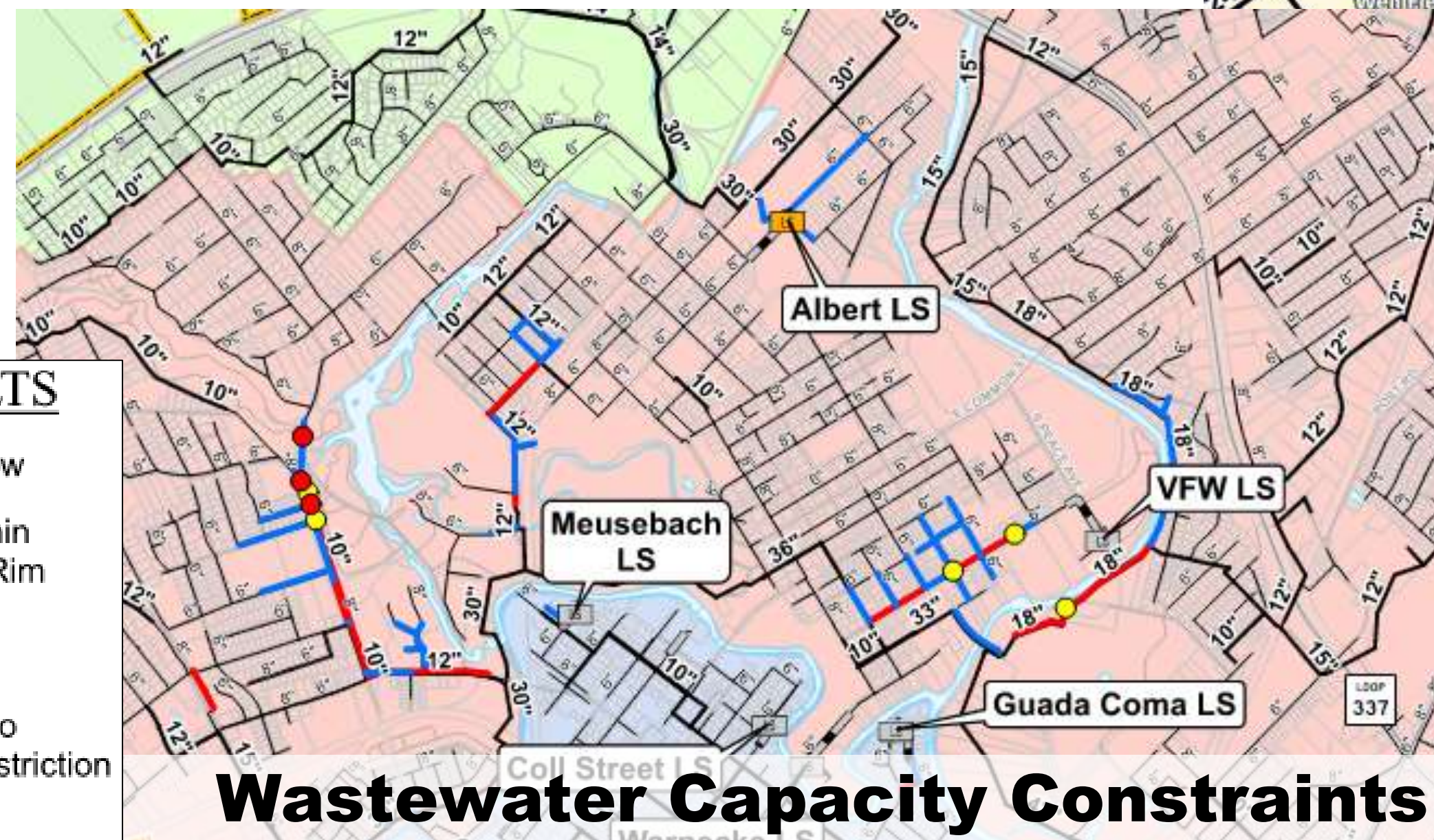
Project Highlights

- Conducted hydraulic analysis and evaluated system capacities
- Identified improvements to accommodate growth and operational needs



MINIMUM PRESSURE

- Less than 35 PSI
- 35 - 50 PSI
- 50 - 70 PSI
- 70 - 90 PSI
- Greater than 90 PSI



MODEL RESULTS

- Manhole Overflow
- Surcharged Within 3 ft of Manhole Rim
- Pipe Exceeding Capacity
- Surge Due to Downstream Restriction
- No Surge

Water System Capital Improvements

Ongoing Project

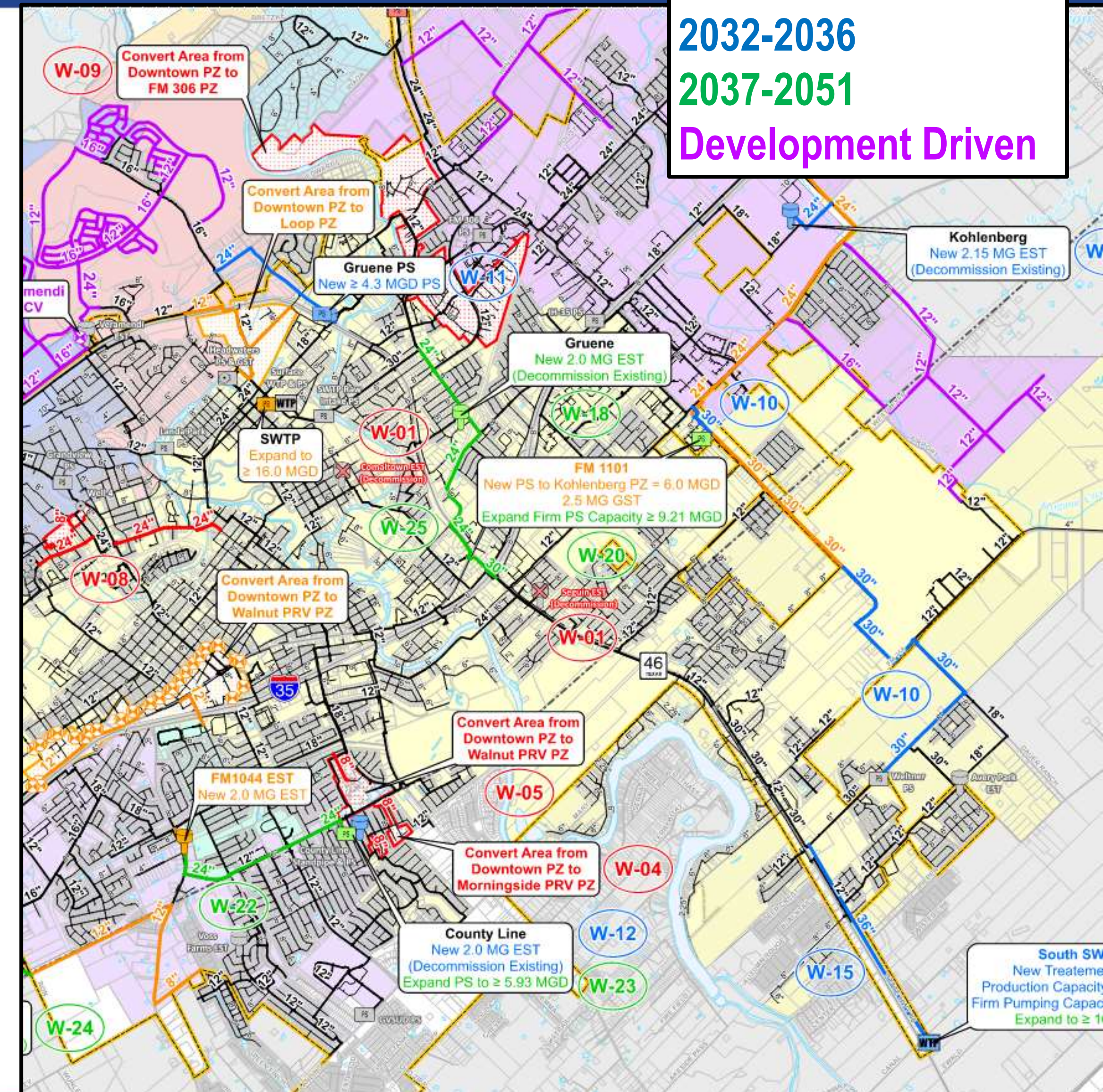
2026-2031

2032-2036

2037-2051

Development Driven

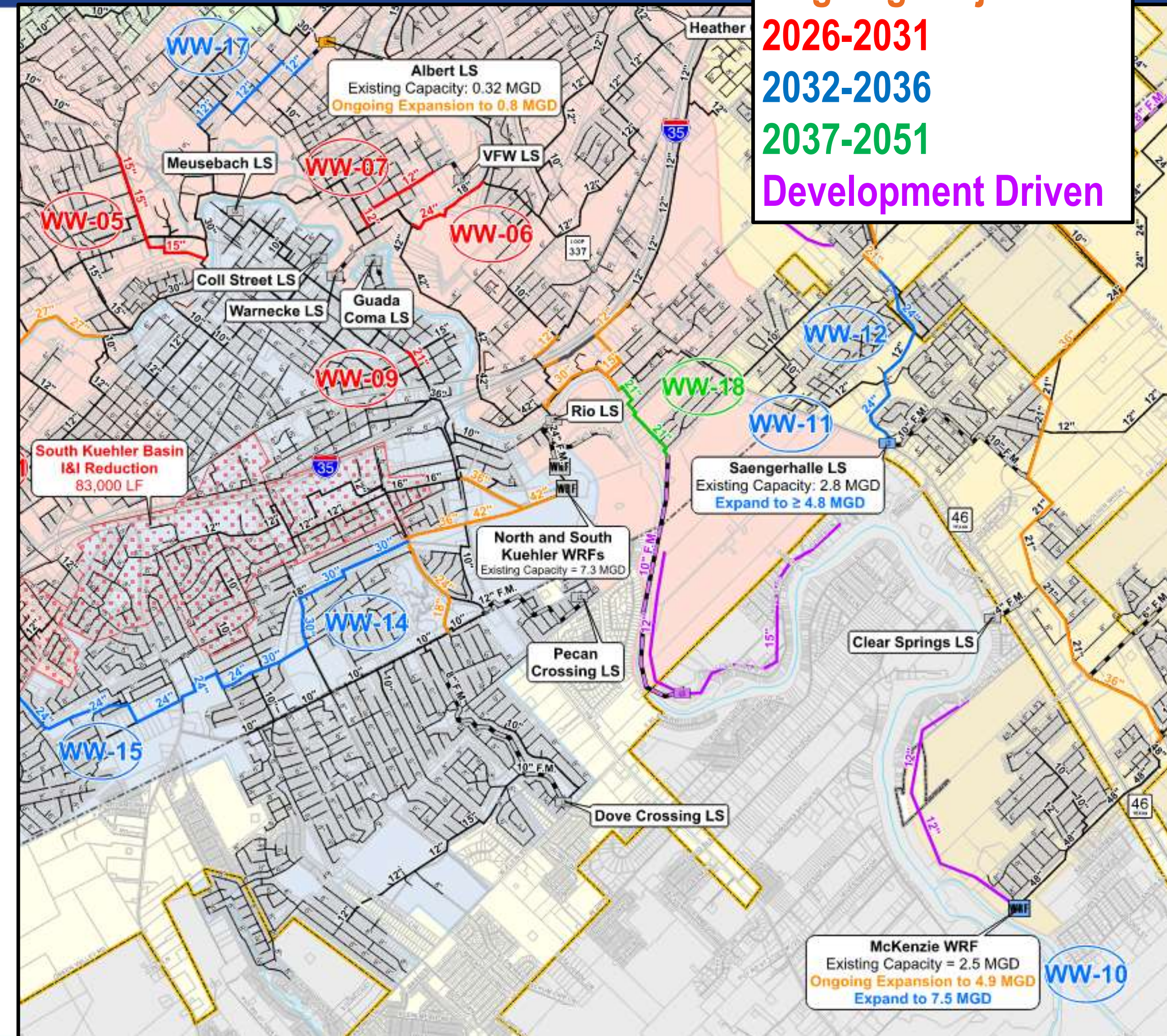
- **2026-2031 Water System CIP – \$63,263,700**
 - New elevated storage tanks (EST) in Downtown and River Chase pressure zones (PZ)
 - Pressure zone conversions to better utilize existing EST capacity in Downtown PZ
 - New pump station (PS) to enhance redundancy to Hoffmann and River Chase PZs
 - New water lines to improve transmission capacity from east to west in the Downtown PZ
- **2032-2036 Water System CIP – \$261,835,700**
 - New pump station to serve continued growth in Veramendi development
 - New ESTs in the Downtown and Kohlenberg PZs
 - New South Surface Water Treatment Plant (SWTP) and raw water pump station
- **2037-2051 Water System CIP – \$194,738,000**
 - New EST in the Downtown PZ
 - South SWTP Expansion
 - Hoffmann Lane PS and EST improvements
 - PS and EST improvements in the Morningside PZ
 - New water lines to improve transmission capacity from north to south in the Downtown PZ



Wastewater System Capital Improvements

- **2026-2031 Wastewater System CIP – \$32,573,300**
 - Inflow and infiltration reduction effort
 - Solms Lift Station (LS) and Force Main (FM) improvements
 - Various interceptor improvements
- **2032-2036 Wastewater System CIP – \$224,020,100**
 - McKenzie Water Reclamation Facility (WRF) Expansion to 7.5 MGD
 - McKenzie WRF Basin lift station improvements
 - South Kuehler Interceptor Phase 2 and 3 improvements
- **2037-2051 Wastewater System CIP – \$2,822,600**
 - Various interceptor improvements to serve projected growth

Ongoing Project
2026-2031
2032-2036
2037-2051
Development Driven





Mission

Strengthening our community by providing resilient essential services

+

Vision

Be a trusted community partner dedicated to excellence in service

+

Core Values

Safety, Team, Integrity, Culture, and Stewardship