



Utilities Master Plan Update

Committee of the Whole Meeting
November 30, 2022



Master Planning Approach

Evaluated the needs of the existing potable water system:

- 56 brackish water supply wells and 25 miles of raw water mains
- Two water treatment plants (30 MGD)
- Two storage and pumping facilities with a combined storage capacity of 3 MG
- 944 miles of water transmission mains with 4,288 hydrants and 68,575 meters

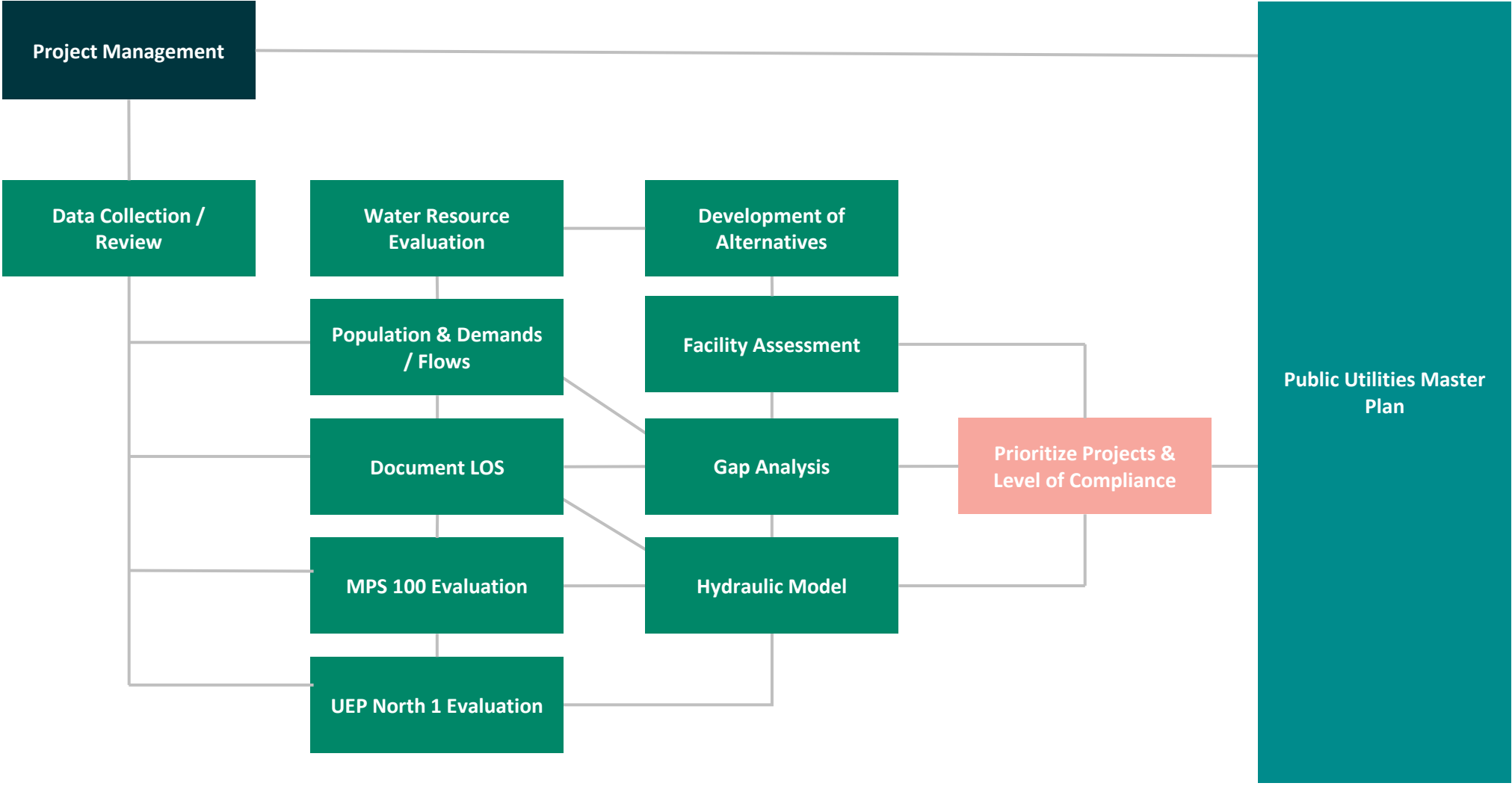
Evaluated the needs of the existing wastewater system:

- Two water reclamation facilities (28.4 MGD)
- 24 master pump stations and 281 duplex pump stations
- 203 miles of force main and 820 miles of gravity sewer

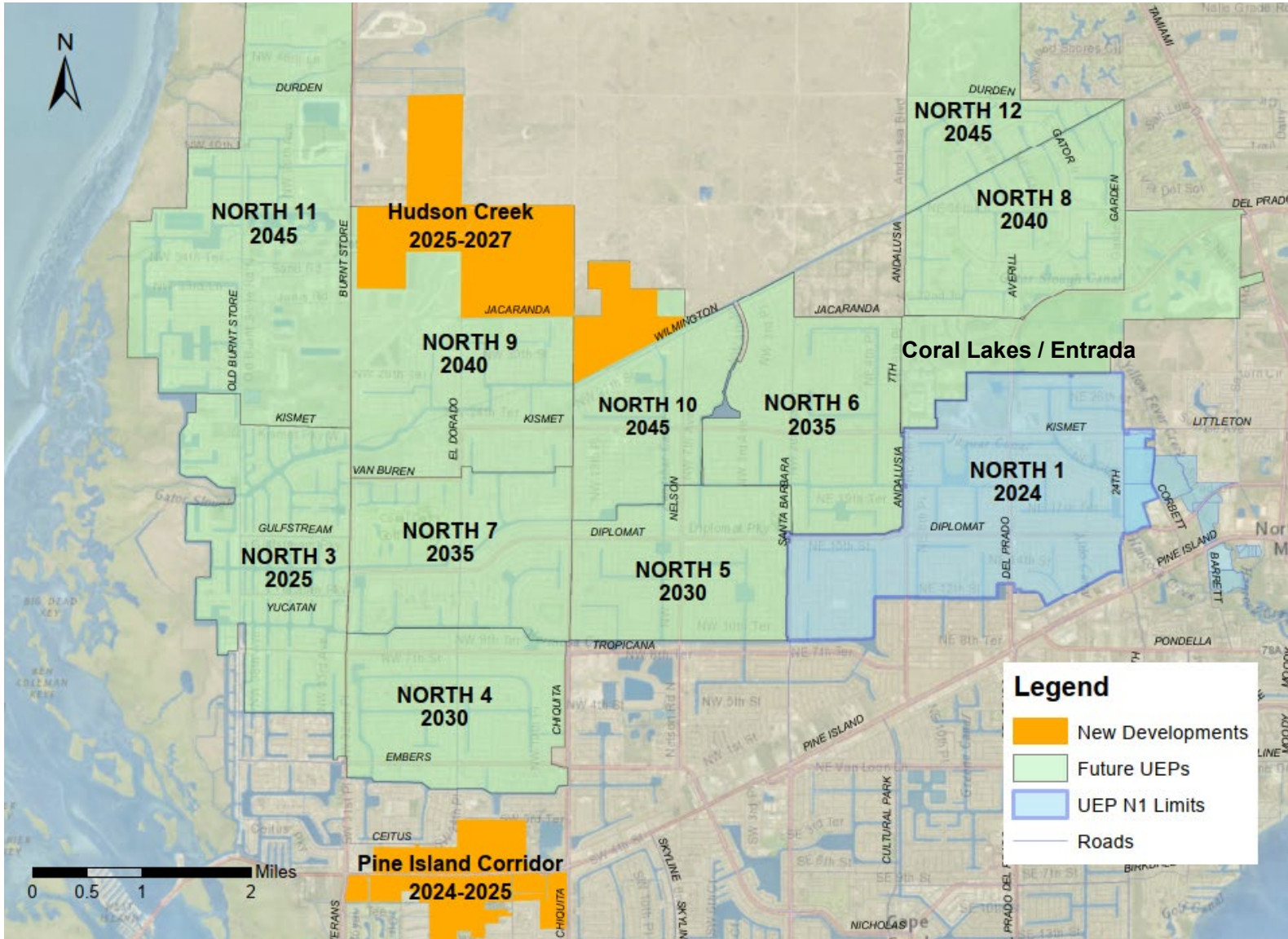
Evaluated the needs of the existing quality (IQ) water system:

- Two reclaimed water production facilities
- Freshwater Canal System
- SW Aggregate Mine Reservoir
- Interlocal agreements for reclaimed water
- 25 MG of combined IQ water storage
- Six canal pump stations
- 870 miles of IQ water distribution mains

Master Plan Approach



UEP Proposed Schedule



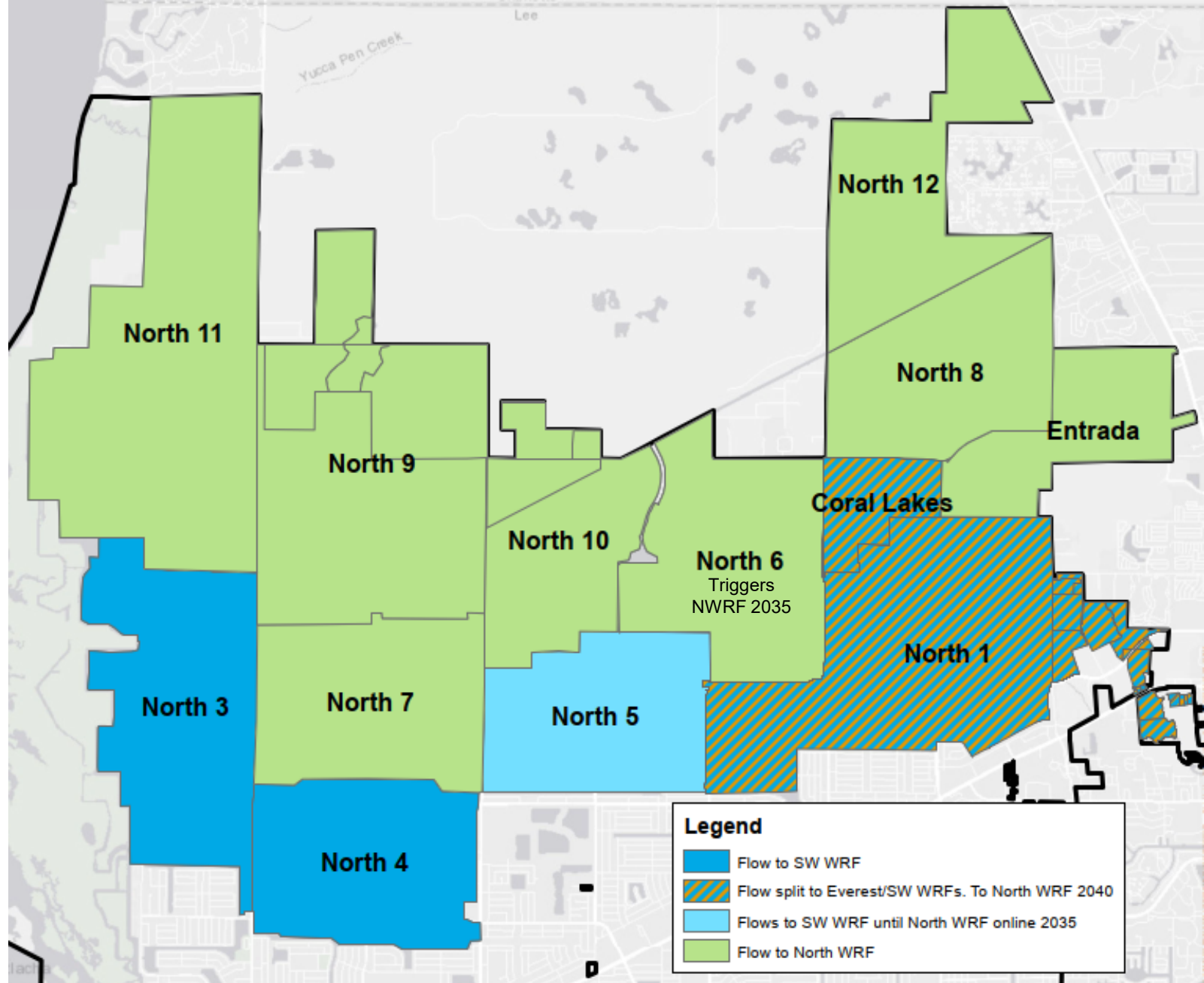
UEP Order	Area (Sq Miles)	2020 # ERU's
North 3	3.62	1561
North 4	2.83	1884
North 5	2.61	1907
Coral Lakes / Entrada	2.53	2067
North 6	3.10	2239
North 7	2.93	1555
North 8	2.76	1370
Hudson Creek	2.70	2036
North 9	3.41	Included in Hudson Creek*
North 10	2.00	Included in Hudson Creek*
North 11	6.13	791
North 12	2.85	470

Please Note

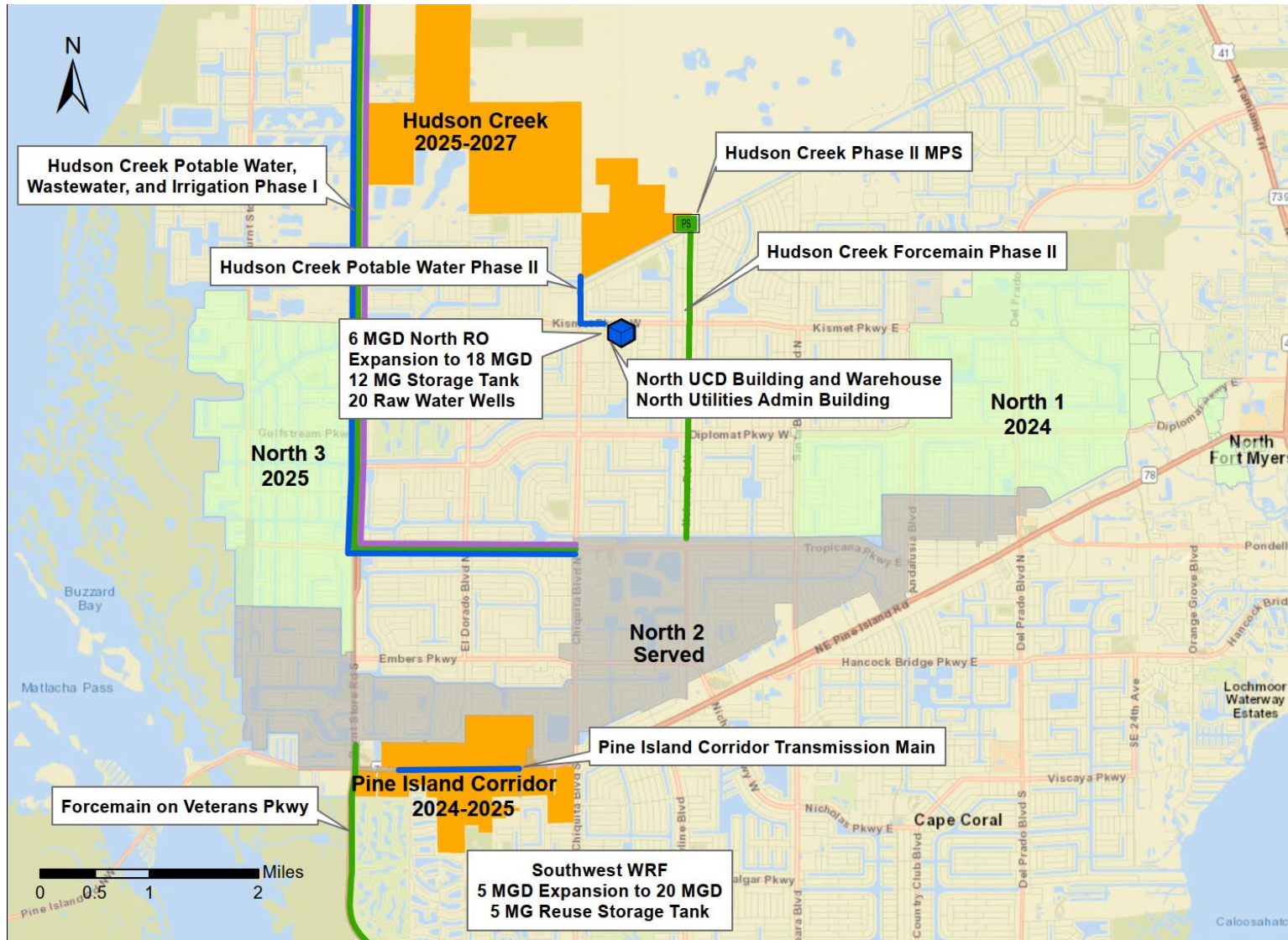
UEP borders shown may be adjusted as needed to address construction and serviceability issues



Wastewater Flow Distribution for UEP Areas

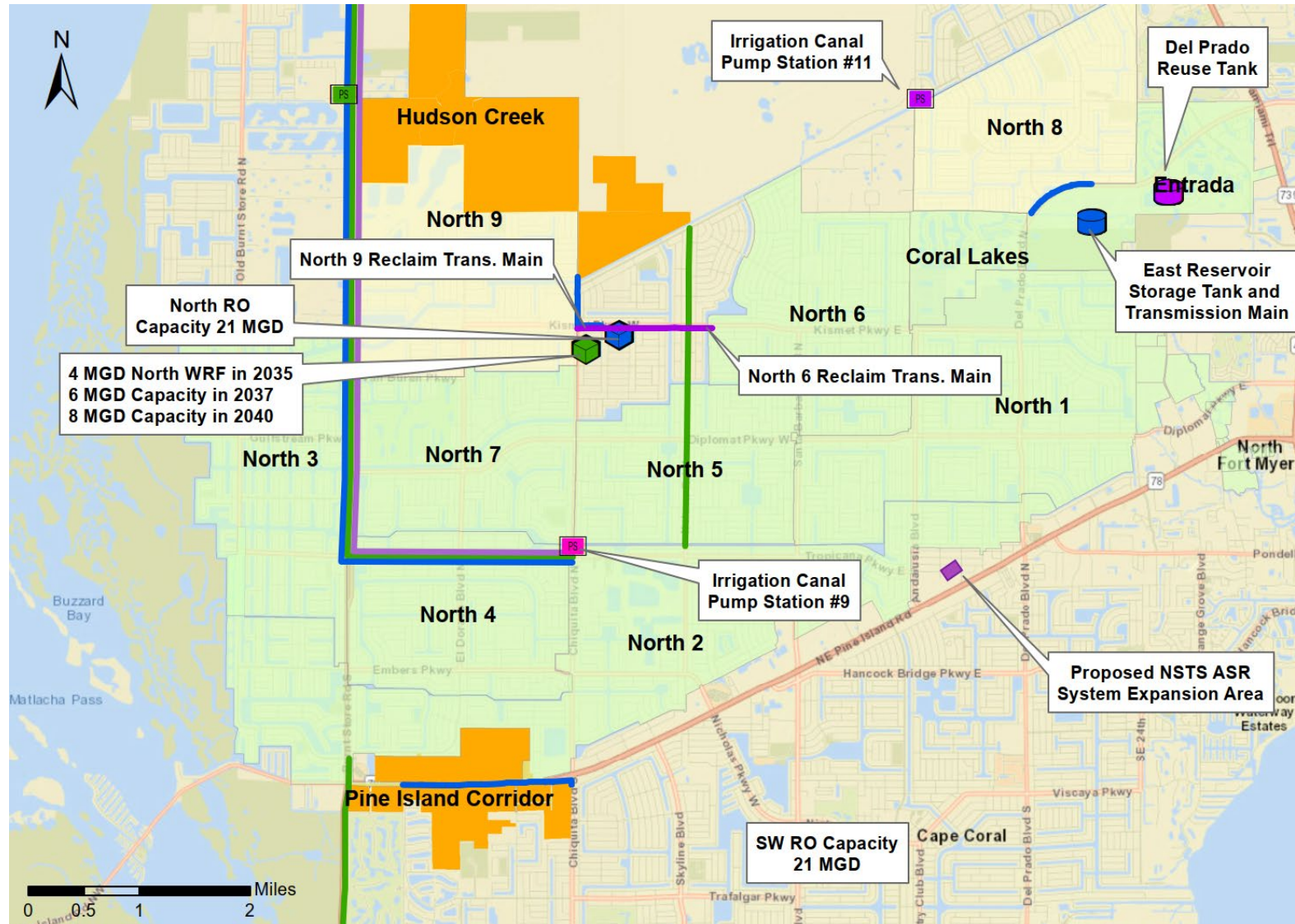


6 Year Budget: Improvements 2022 thru 2027



2022 - 2027 Costs Summary	
Assessed Costs	\$285.0 M
Non-Assessed Costs	\$472.7 M
Funded By Others or TBD	\$79.5 M
Water-Sewer CIP	\$256.6 M
2027 Total	\$1093.8 M

Summary of Improvements thru 2040



Cost Summary

Year	UEP Assessed Cost (\$M)	Non-Assessed Cost (\$M)	Funded By Others or TBD Cost (\$M)	Water-Sewer CIP Requested Budget	Total Cost (\$M)	Cumulative Total Cost (\$M)
2021				\$18.8	\$18.8	\$18.8
2022				\$26.3	\$26.3	\$45.0
2023				\$28.7	\$28.7	\$73.7
2024	\$137.5	\$193.1		\$46.8	\$377.5	\$451.2
2025	\$147.5	\$193.4	\$67.3	\$66.2	\$474.4	\$925.6
2026				\$47.4	\$47.4	\$972.9
2027		\$86.2	\$12.2	\$41.3	\$139.7	\$1,112.6
2028				\$12.1	\$12.1	\$1,124.7
2029				\$17.0	\$17.0	\$1,141.7
2030	\$272.3	\$241.2		\$18.5	\$532.0	\$1,673.6
2031				\$17.0	\$17.0	\$1,690.6
2032				\$17.0	\$17.0	\$1,707.6
2033				\$17.0	\$17.0	\$1,724.6
2035	\$285.2	\$422.3		\$30.0	\$737.5	\$2,462.1
2036		\$198.8		\$15.0	\$213.8	\$2,675.9
2037		\$46.9		\$15.0	\$61.9	\$2,737.8
2039		\$26.9		\$30.0	\$56.9	\$2,794.7
2040	\$249.2	\$298.8		\$15.0	\$563.0	\$3,357.7
2045	\$291.4	\$285.5		\$75.0	\$651.9	\$4,009.7
2046 to Est. Buildout Year 2090		\$154.2		\$675.0	\$829.2	\$4,838.9
Buildout Subtotal	\$1,383 M	\$2,147 M	\$80 M	\$1,229 M	\$4,839 M	

- *Planning level cost estimates provided*
- *Funding for improvements should be 3 to 4 years prior to recommended completion dates*
- *City Utilities CIP Requested Budget per Year is based on CIP projects provided by City through 2028. Assumed \$15 M per year through 2090*



Next Steps

- Formal adoption of Utilities Master Plan via City Council Resolution
- Formal adoption of the City's Utilities Master Plan is required to obtain State Revolving Fund low interest loans for Utilities Department's Capital Improvement Projects

THANK YOU

any questions?

