

11/15/2022 – Draft/Provisional



GEORGIA WATER PLANNING

BRYAN COUNTY MEGA-SITE REGIONAL WATER & WASTEWATER INFRASTRUCTURE UPDATE

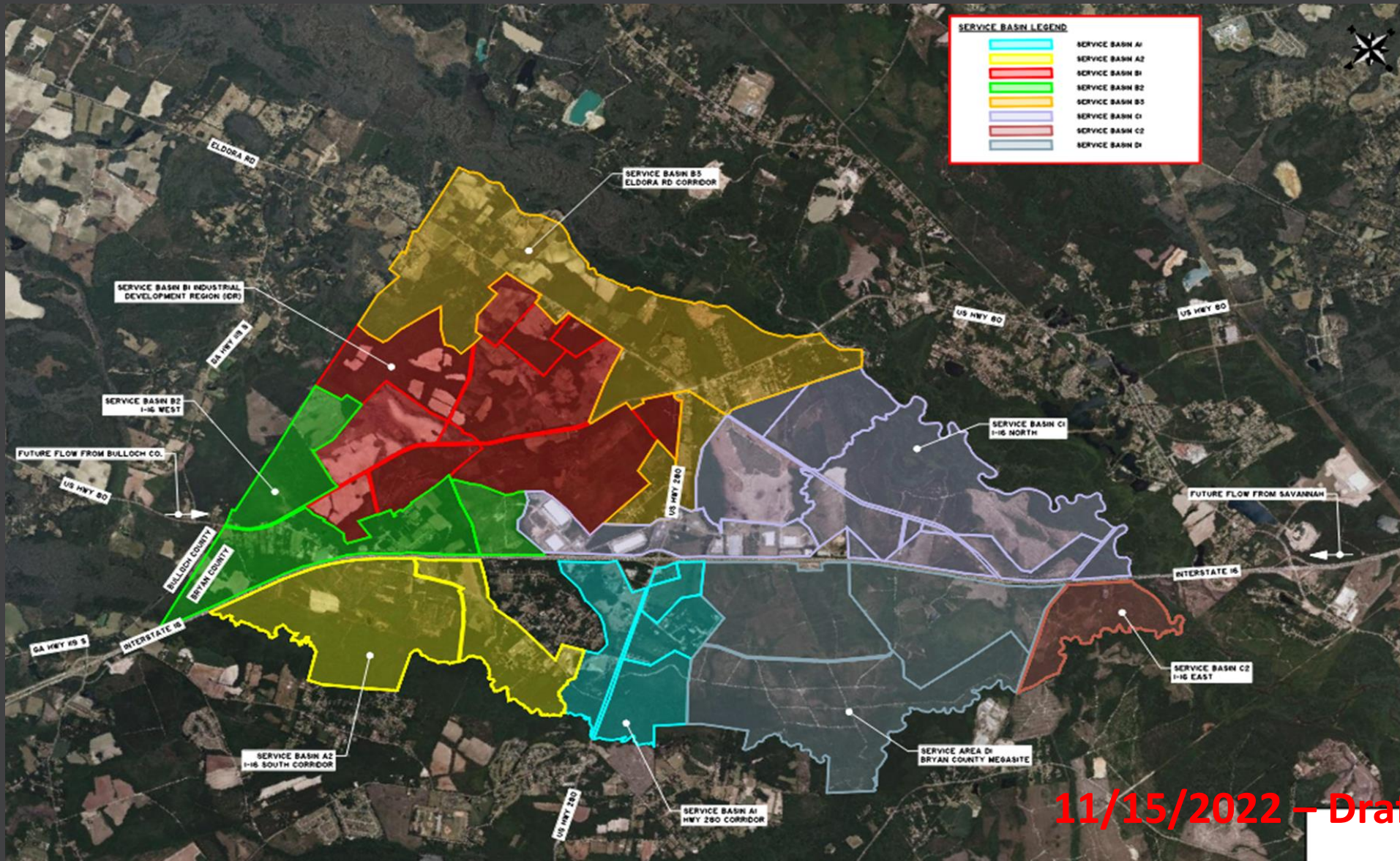
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BRYAN COUNTY MEGA-SITE: BACKGROUND



- May 20, 2022: Governor Brian Kemp announced that Hyundai Motor Company would construct their new electric vehicle plant at the Bryan County Mega-Site
- Estimated 8,000 direct new jobs and 2,000 to 4,000 new jobs in related growth
- Infusing unprecedented economic growth in the County and metro Savannah region
- Large water and sewer infrastructure needs to support this growth

NORTH BRYAN COUNTY: SERVICE AREAS



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HYUNDAI/MEGA-SITE: WATER & SEWER DEMANDS



Phase	Supply Date	Total Water (MGD)	Total Sewer (MGD)
Construction	November 2022	0.65	0.25
Start Up / Commissioning	November 2023	1.55	0.75
Completion	January 1, 2025	6.15	3.00

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NORTH BRYAN COUNTY: ANTICIPATED WATER DEMANDS



Development Name/Type	Average Daily Flow (MGD)
Near-Term Growth (0-10 Years)	
Bryan County Mega-Site	6.15
North Bryan County	0.20
Sub-Total: Near Term	6.35
Long-Term Growth (10-25 Years)	
Industrial Developments	0.90
Commercial and Residential	2.10
Sub-Total: Long Term	3.00
Total:	9.35
Approximately:	9.50

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NORTH BRYAN COUNTY: ANTICIPATED SEWER DEMANDS



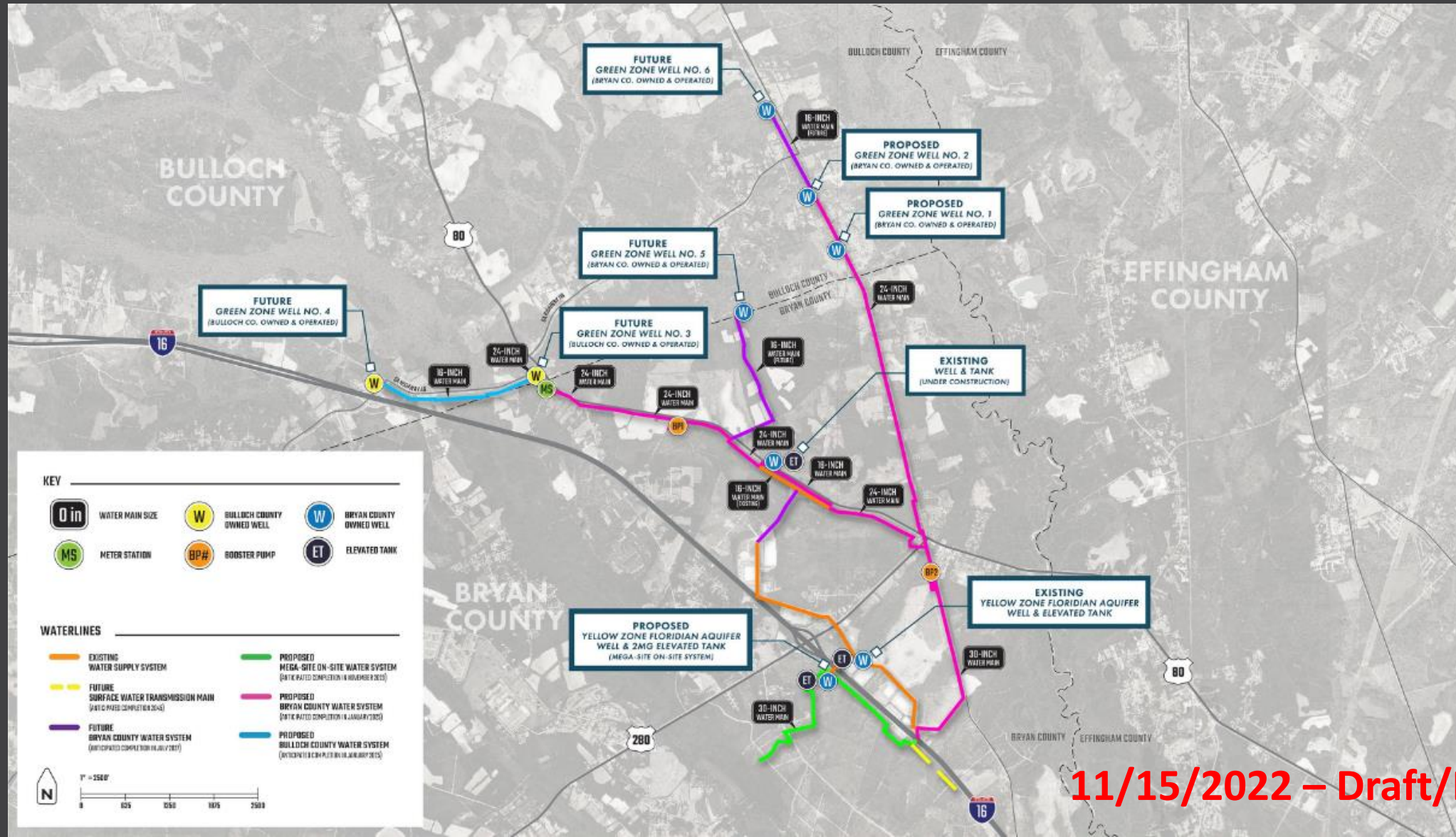
Development Name/Type	Average Daily Flow (MGD)
Near-Term Future Growth (0-10 Years)	
Bryan County Mega-Site	3.00
North Bryan County IDR	0.20
Miscellaneous Near-Term Industrial Developments	0.12
City of Savannah	1.00
Bulloch County	0.20
Sub-Total: Near-Term	4.52
Long-Term Future Growth (10-20 Years)	
Miscellaneous Long-Term Industrial Developments	0.31
Miscellaneous Long-Term Commercial and Residential	1.16
City of Savannah	1.00
Bulloch County	0.50
Effingham County	0.50
Sub-Total: Long-Term	3.47
TOTAL:	7.99
SAY:	8.00

BRYAN COUNTY MEGA-SITE: INFRASTRUCTURE OVERVIEW



- Existing infrastructure cannot support the rapid growth within Bryan County and surrounding region.
- Near-Term Plan:
 - Immediate groundwater withdrawal and associated water infrastructure is needed to fulfill the State and County commitments to serve Hyundai Motor Company & affiliates
- Long-Term Plan:
 - Surface water transmission mains and associated water infrastructure will be extended from Savannah's I&D System

NEAR-TERM: WATER WITHDRAWAL & WATER TRANSMISSION SYSTEM



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NEAR-TERM: WATER WITHDRAWAL & WATER TRANSMISSION SYSTEM



2023

- Green Zone Wells #1 and #2 (Bryan County Owned/Operated) – Approximately 3.25 MGD Total
- Green Zone Wells #3 and #4 (Bulloch County Owned/Operated) – Approximately 3.25 MGD Total
- Two (2) new Yellow Zone Wells – Approximately 0.12 to 0.24 MGD Total
 - North Industrial Development Region (North IDR)
 - Mega-Site

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NEAR-TERM: WATER WITHDRAWAL & WATER TRANSMISSION SYSTEM



2025-2026

- January 1, 2025, Bryan's Yellow Zone capacity will be reduced to 1.578 MGD
- As industrial, commercial, and residential growth increases around the Hyundai development it is anticipated an additional 1.8 to 3.0 MGD of water demand will be generated between 2025 and 2035.
- To meet future demands, proposed Well #5 and Well #6 would be constructed, and withdrawal additional 3.0 MGD groundwater from the Green Zone.

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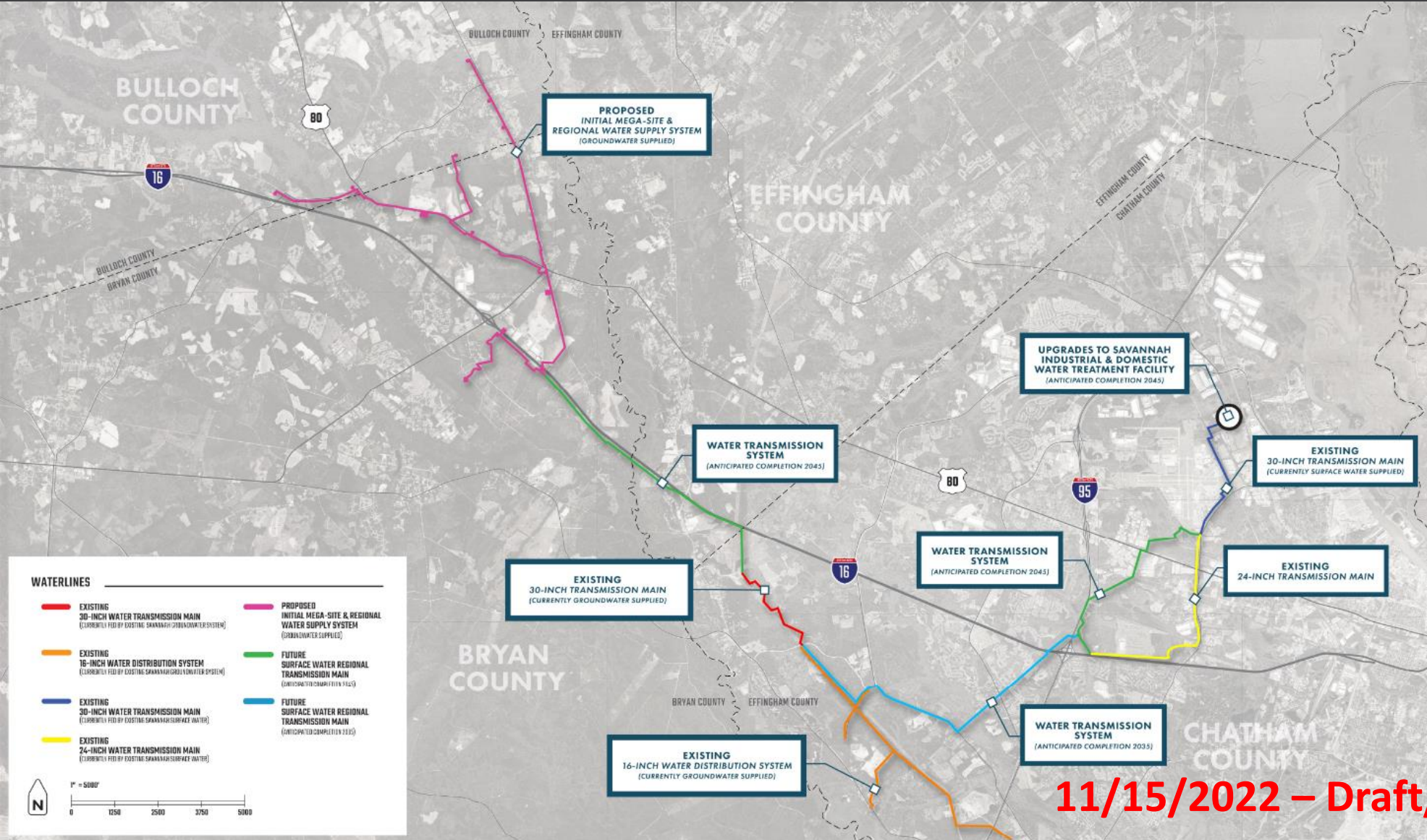
NEAR-TERM: WATER WITHDRAWAL & WATER TRANSMISSION SYSTEM



Water Conservation and Reuse

- Bryan County will develop water conservation and reuse policies to help reduce impact to groundwater resources.
- Promote use of reclaimed water from the proposed Water Reclamation Facility.
- Development of water reclamation ordinance

LONG-TERM: WATER WITHDRAWAL & WATER TRANSMISSION SYSTEM



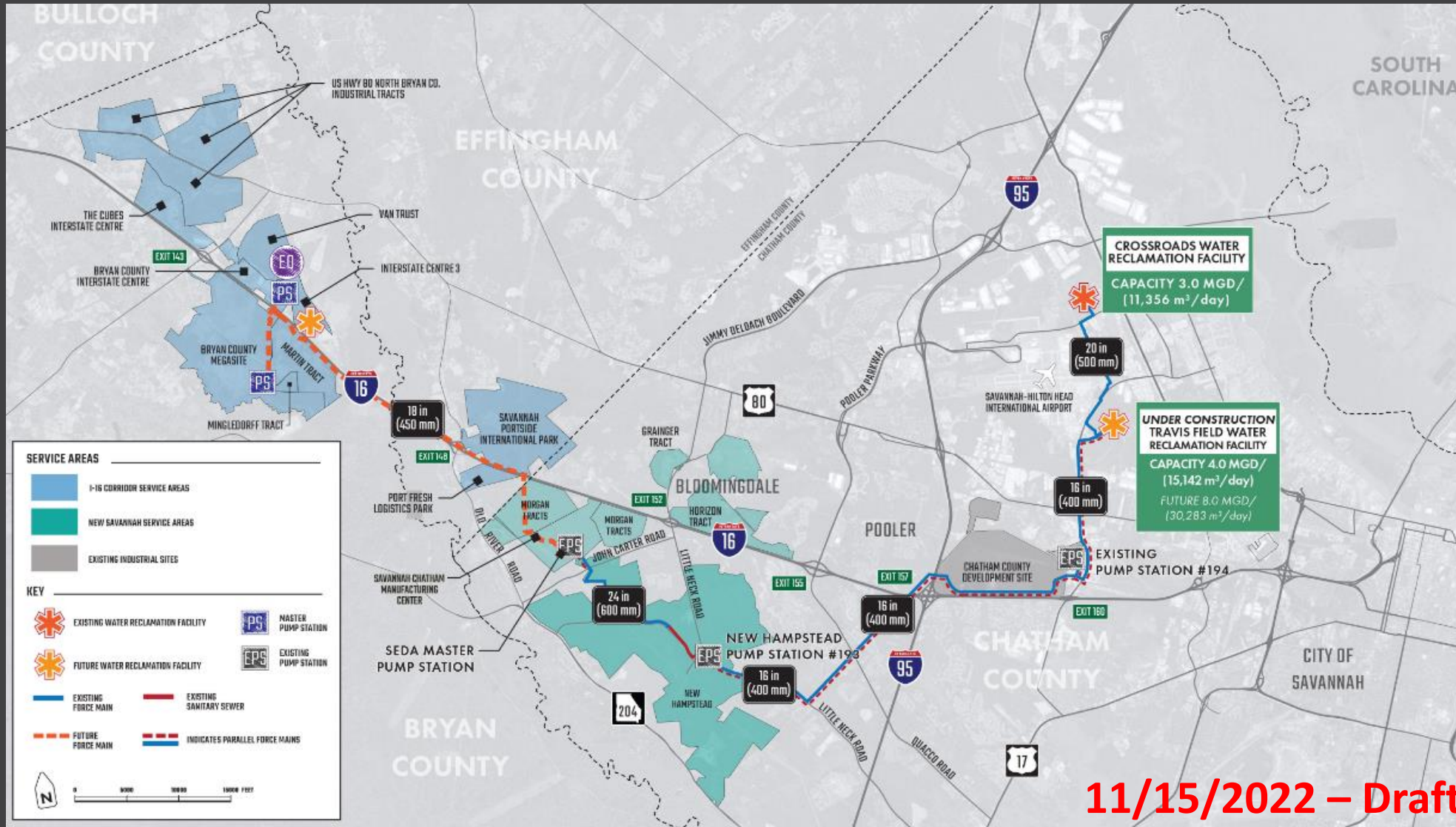
LONG-TERM: WATER WITHDRAWAL & WATER TRANSMISSION SYSTEM



- Bryan County, Savannah, and other surrounding governmental entities have been coordinating for over 2 years to identify and pursue the extension of a surface water transmission main along the I-16 development corridor.
- Planning and even portions of design have been completed with strategy to complete system within the next 25 years to reduce the dependency on groundwater withdrawal.
- City of Savannah - In the process of selected consultant to plan/design updates to I&D surface water treatment facility.
- Massive financial implications to bring a regional water supply project of this magnitude to fruition.

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SEWER SERVICE PLAN



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BRYAN COUNTY: SEWER SERVICE PLAN



- Transfer pump station and 18-inch force main from Bryan County to City of Savannah (currently under construction).
- New membrane bioreactor (MBR) Water Reclamation Facility (WRF) with 4 MGD expandable to 8 MGD capacity.
- New Regional Pump Station and Collection System on the Mega-Site.
- Once WRF is in service, flow from 18-inch force main will be redirected to Bryan County for treatment.
- Ultimately, WRF would serve the Counties of Bryan, Bulloch, Chatham, and Effingham as well as the City of Savannah.

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QUESTIONS?

