



Metropolitan Washington
Council of Governments

COG's Round 8.2 Cooperative Forecast & Regional Wastewater Flow Projections

Presentation to CBPC

September 20, 2013

Overview

- COG's Wastewater Treatment Plants & Service Areas
 - 'Major' Plants (20 - defined as \Rightarrow 2 mgd)
 - Maps & 'Others' - minor plants/septic & non-sewered being refined
- COG's Regional Cooperative Forecast Process – Round 8.2
- COG's Regional Wastewater Flow Forecast Model (RWFFM)
 - Basic assumptions / Trends
 - Flow projections – Unadjusted & Adjusted

COG Region: Wastewater Treatment Plant Service Areas

-Major WWTPs (=> 2 MGD) -

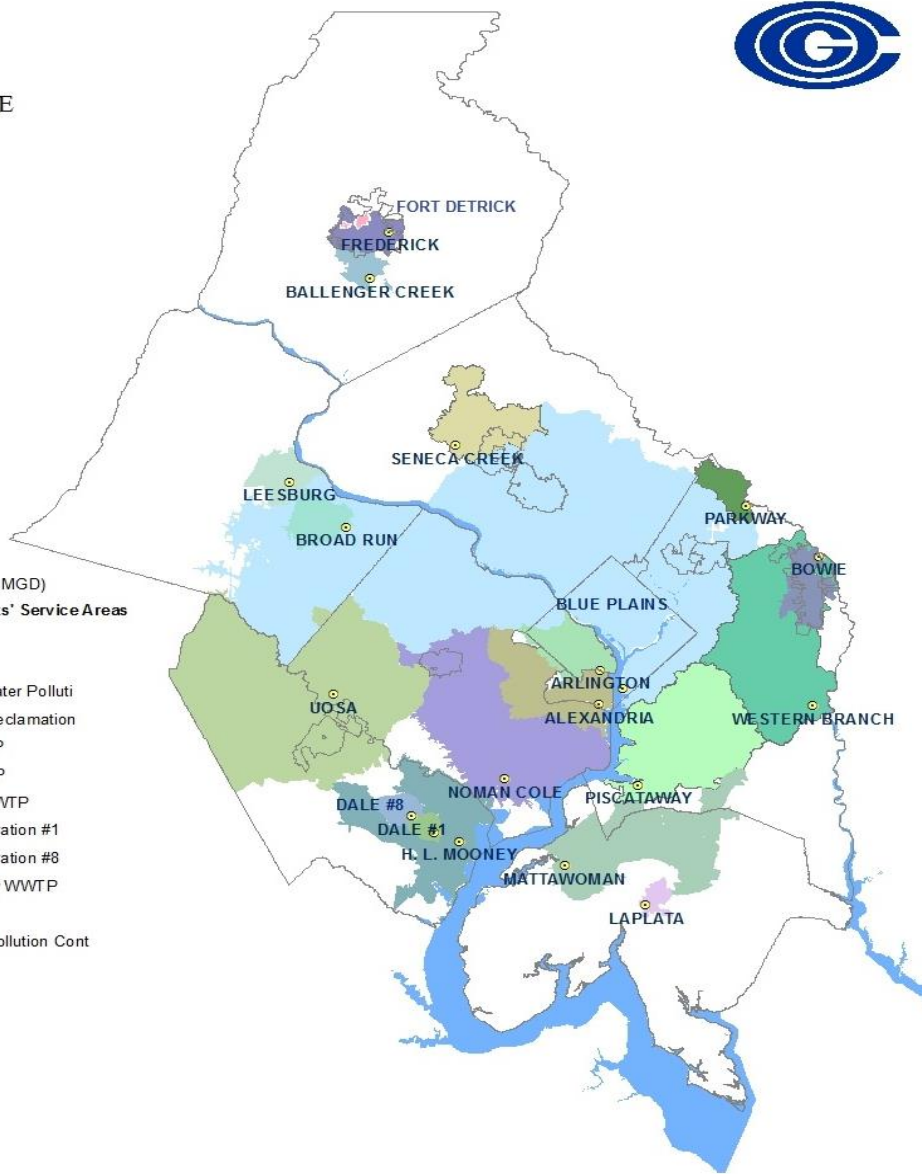
(DRAFT as of 8/7/13)



Legend

Major WWTPs (=>2 MGD)
Wastewater Treatment Plants' Service Areas

- Alexandria Renew
- Arlington County Water Polluti
- Broad Run Water Reclamation
- Mattawoman WWTP
- City of Bowie WWTP
- City of Frederick WWTP
- Dale Service Corporation #1
- Dale Service Corporation #8
- Ballenger-McKinney WWTP
- H. L. Mooney WRF
- Norman M Cole Jr Pollution Cont
- Town of Leesburg
- UOSA
- Town of La Plata
- Fort Detrick
- Blue Plains
- Parkway
- Piscataway
- Seneca Creek
- Western Branch
- Other Sewered OR Minor WWTP (<= 2MGD) OR Septic/Distributed Systems OR Non-sewered



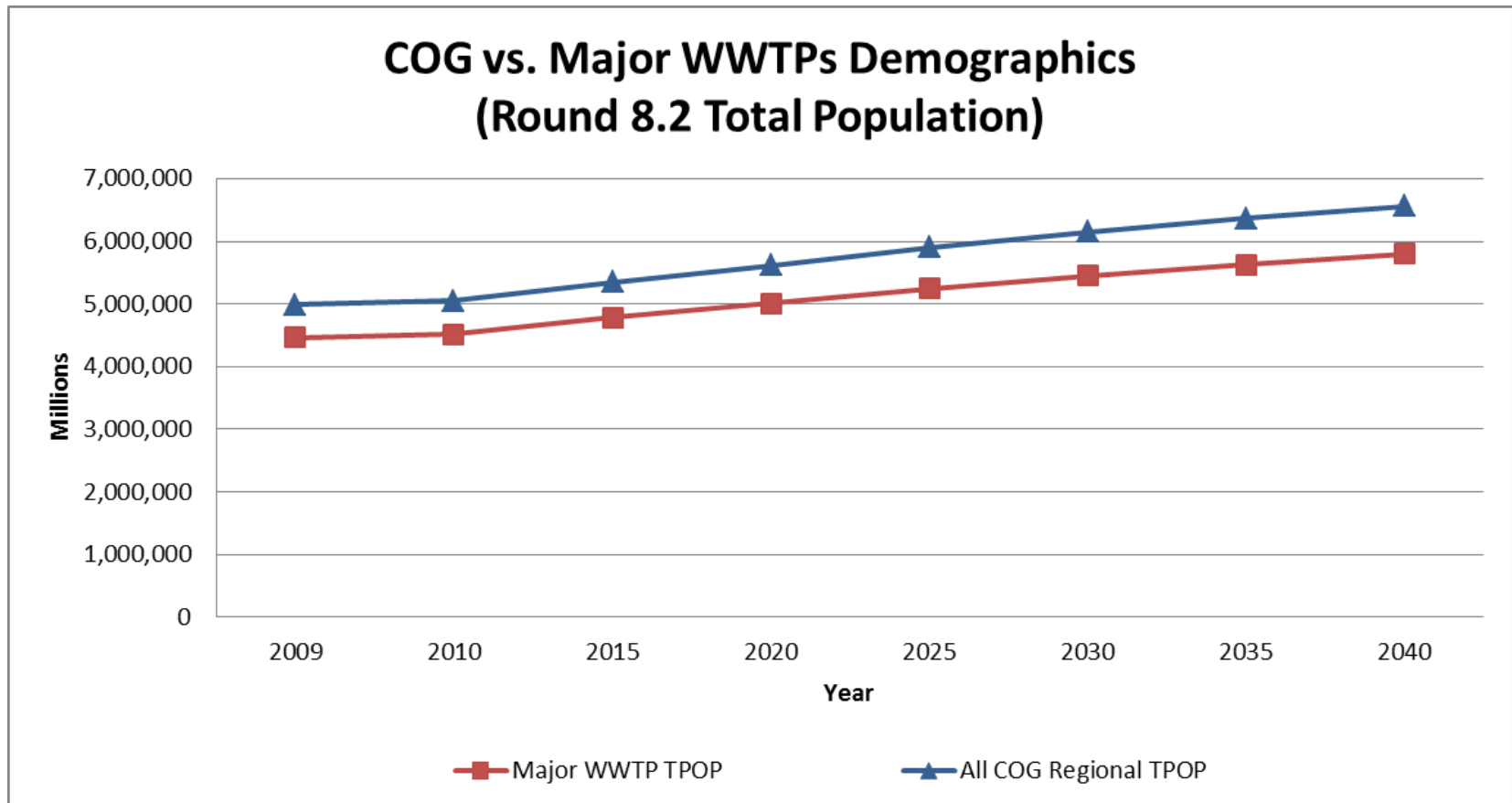
Data Source: MWCOCG



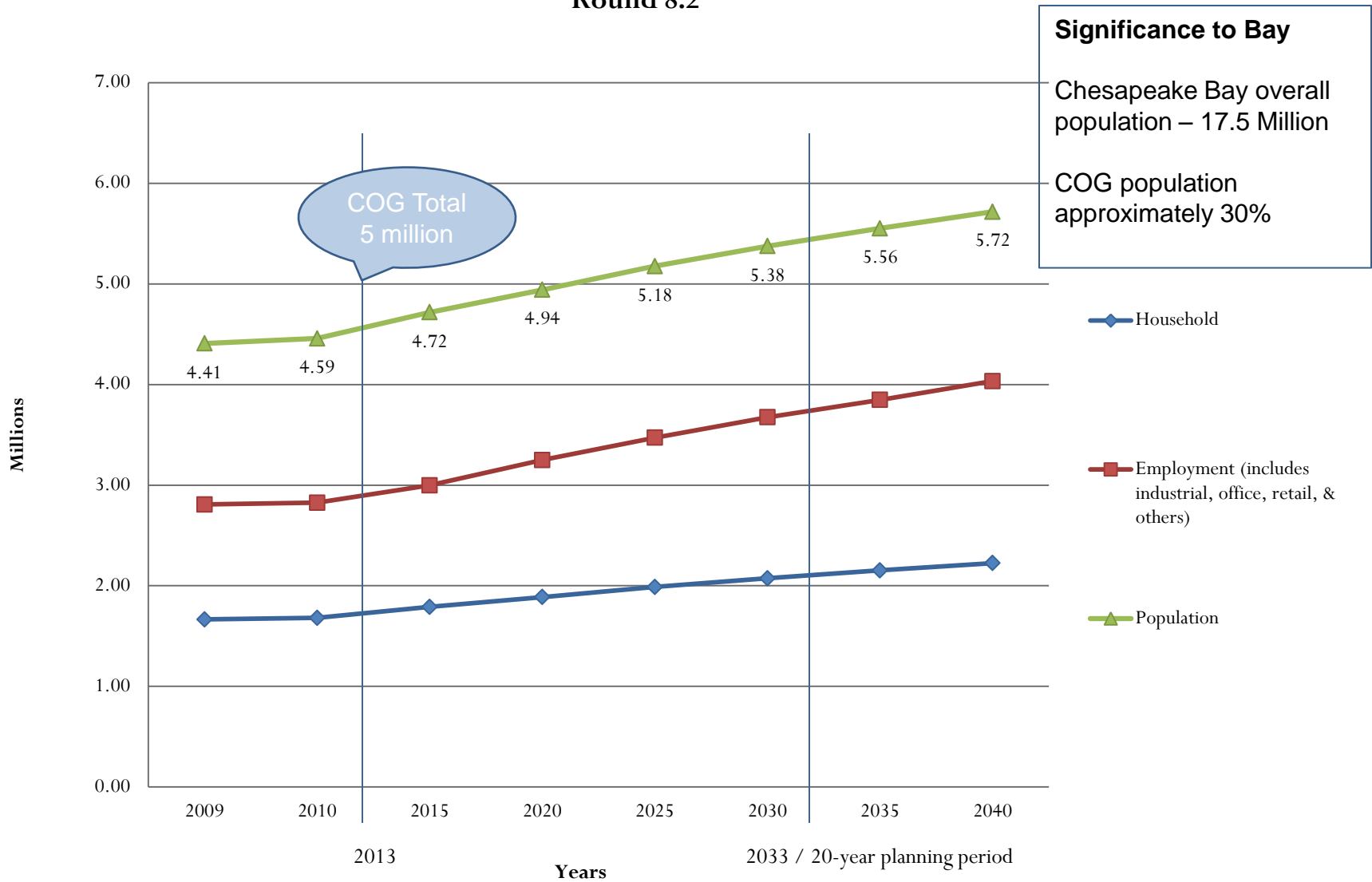
COG Cooperative Forecast

- Round 8.2
 - Adopted by COG Board on July 10, 2013
 - Reflects Census 2010
 - Demographic projections
 - Based on Jurisdictions' forecasts
 - Population, employment & households
 - Within 3% of region-wide econometric model

COG Region Population Trends



Demographic Projections for COG Region Served by Major WWTPs (\Rightarrow 2 mgd) Round 8.2

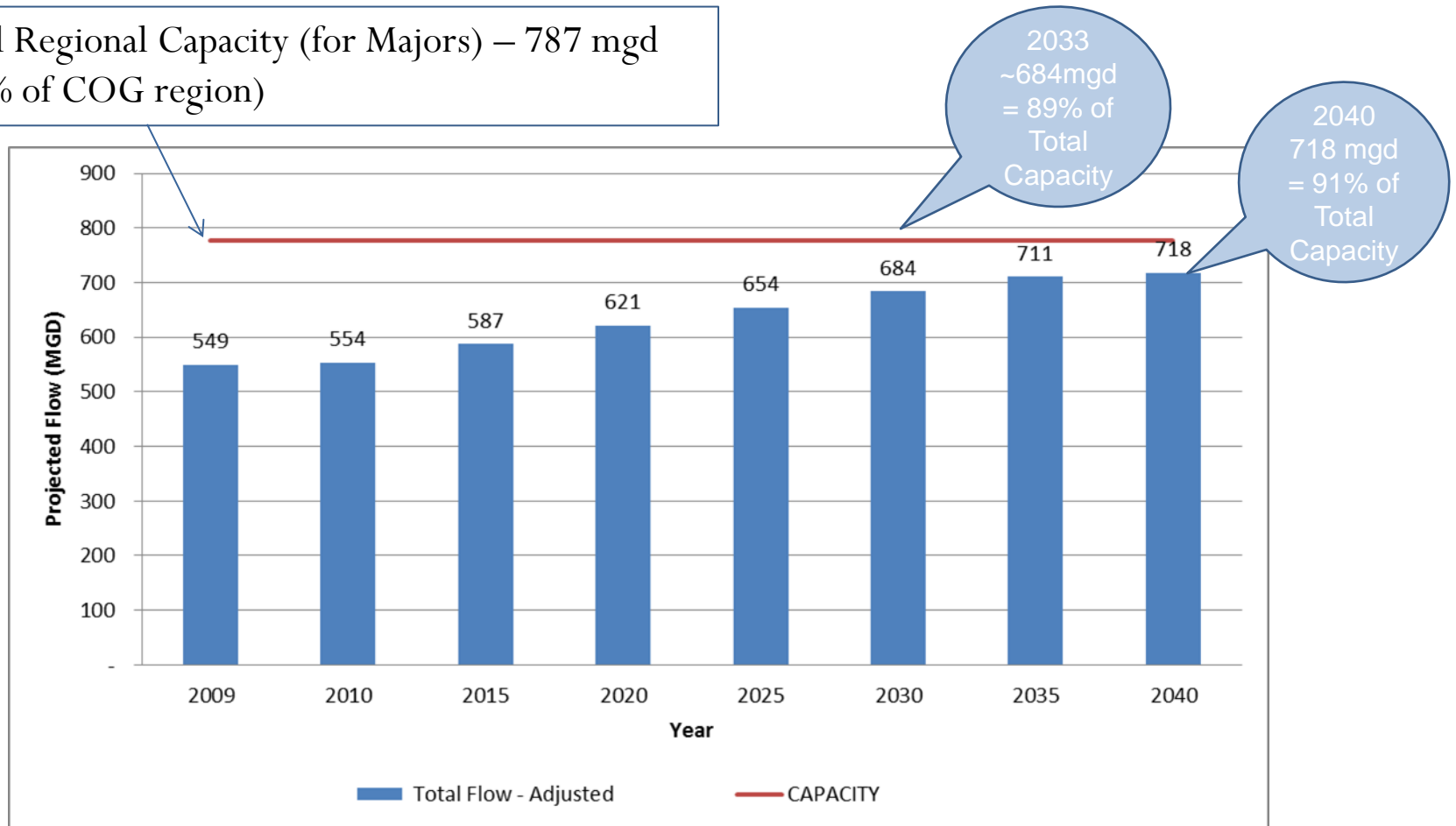


Regional Wastewater Flow Forecast Model (RWFFM)

- Allocates demographics from Transportation Analysis Zones (TAZs) to appropriate wastewater service areas
- Uses employment & households data
- Reflect some flow diversion / changes in capacity
- Results inform Region Forward metric re: regional wastewater capacity

COG Major WWTPs & 'Adjusted' Flow Projections (Draft)

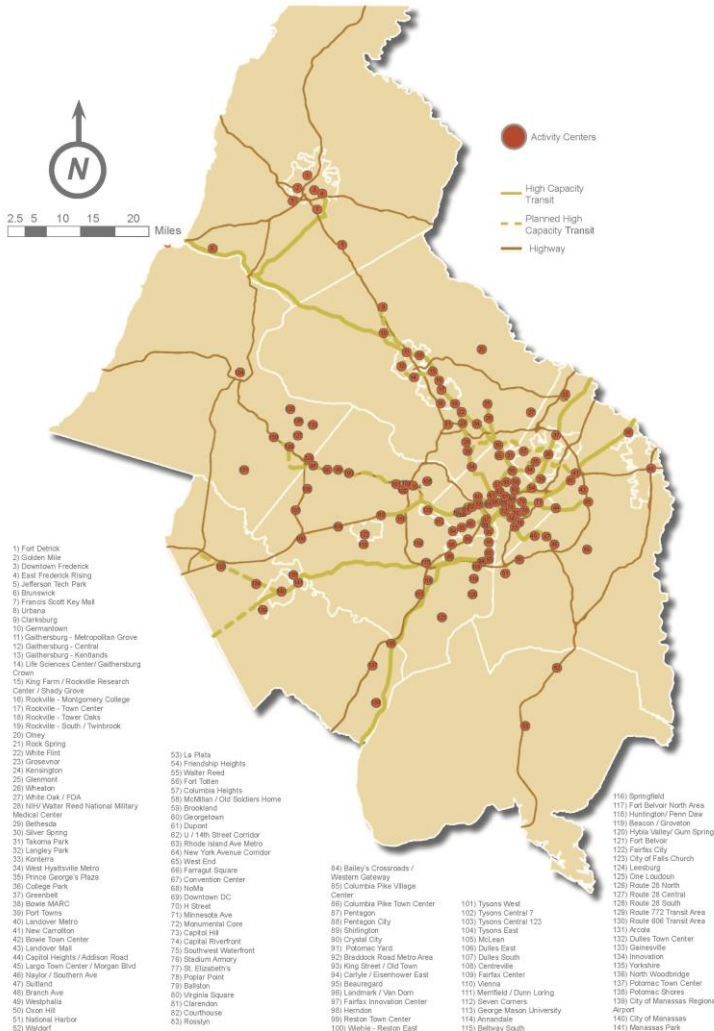
Total Regional Capacity (for Majors) – 787 mgd
(89% of COG region)



Adjusted flows reflect impact of (significant) flow reductions & flow diversions

Regional Activity Centers Map

Submitted to COG Board for Approval January 13, 2013



COG's Region
Forward and Economy
Forward initiatives

Next Steps

- Continue to verify with WWTP operators:
 - WWTP service area maps
 - Flow projections/assumptions
 - Refine maps re: septic/distributed systems vs. non-sewered areas
- Region Forward
 - Report on 'percent wastewater capacity' findings
 - Note link between RAC's & WWTP Service Areas
- Input to Water Resources Infrastructure event
- Flow vs. Load Capacity Analysis
 - Outgrowth of work being done for Blue Plains Users

Wrap-up

- Questions?
- Ideas?
- Many thanks for teamed effort – Mukhtar Ibrahim, Nasser Ameen, & Lana Sindler (DEP staff), as well as Ryan Hand (Community Planning & Services staff)
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