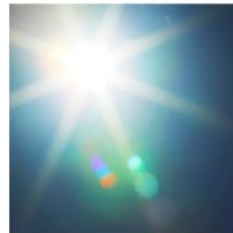


# Response to Eastern Virginia Groundwater Management Advisory Committee Report

State Water Commission  
October 24, 2017



# Introduction

- DEQ Permit Re-evaluation Process
- Response to the EVGMAC Report
- Acknowledgements

# DEQ Permit Re-evaluation Process

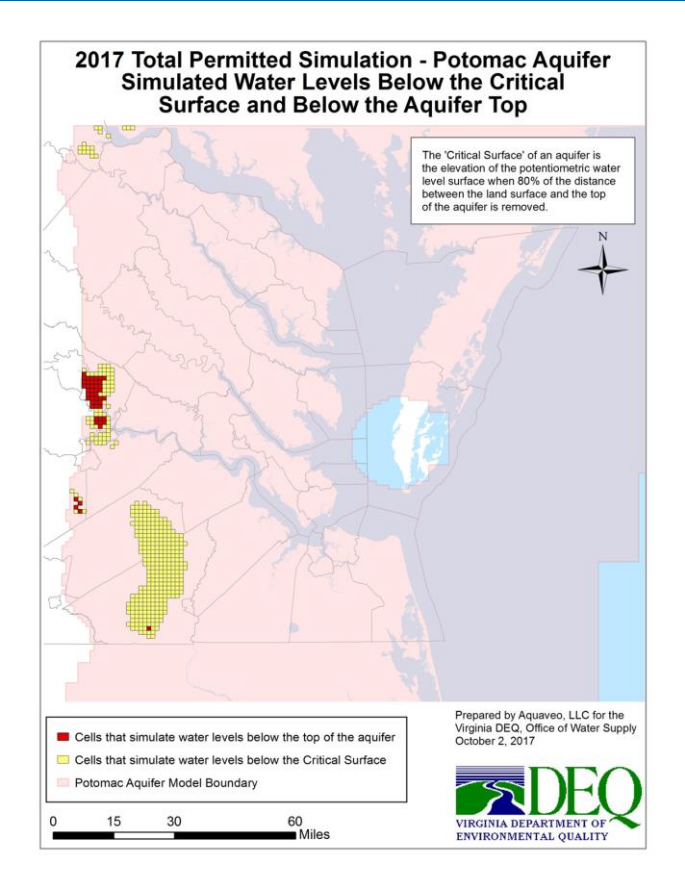
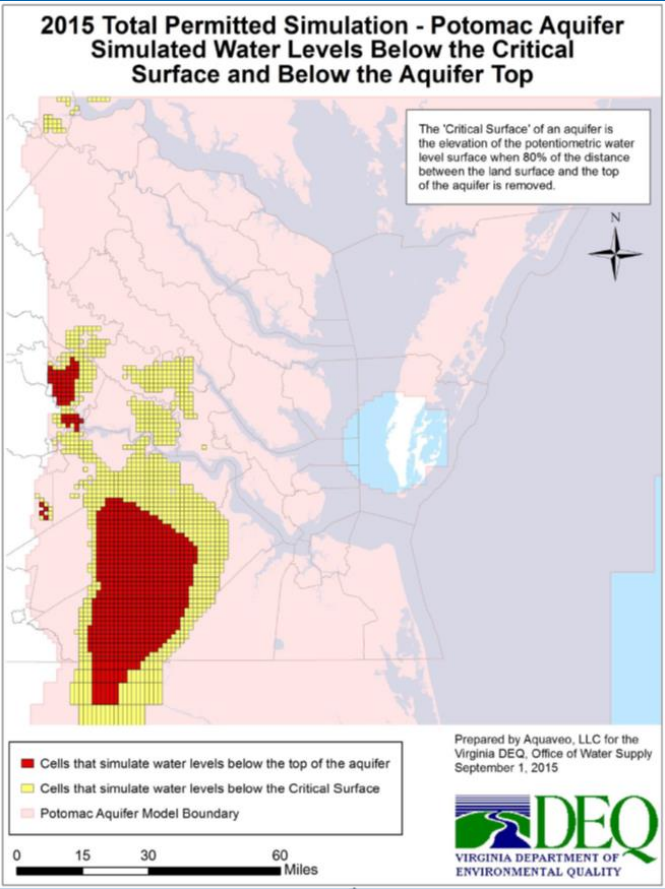
- Prioritized the 14 largest of nearly 250 permits
- Reduced allocated withdrawals from 146 mgd to as low as 69 mgd
- Cooperation of permittees was crucial
- New approach to permitting by DEQ
- Unprecedented progress toward maintaining future aquifer availability

# Significant Incremental Progress

- Permit reductions - a first step toward long term sustainability
  - Water level declines should stabilize or improve by 2030 (without major new withdrawals)
  - Provides time for alternative sources to be developed and come online
- EVGMAC Report recommendations represent additional steps



# Before and After



# EVGMAC – Alternative Sources

- Hampton Roads Sanitation District's (HRSD) Sustainable Water Initiative For Tomorrow (SWIFT) Project
  - appears to offer great potential for long term regional aquifer benefits
  - should not be considered the sole solution
  - modeling results must be validated through empirical data from monitoring in the field

# EVGMAC – Alternative Sources

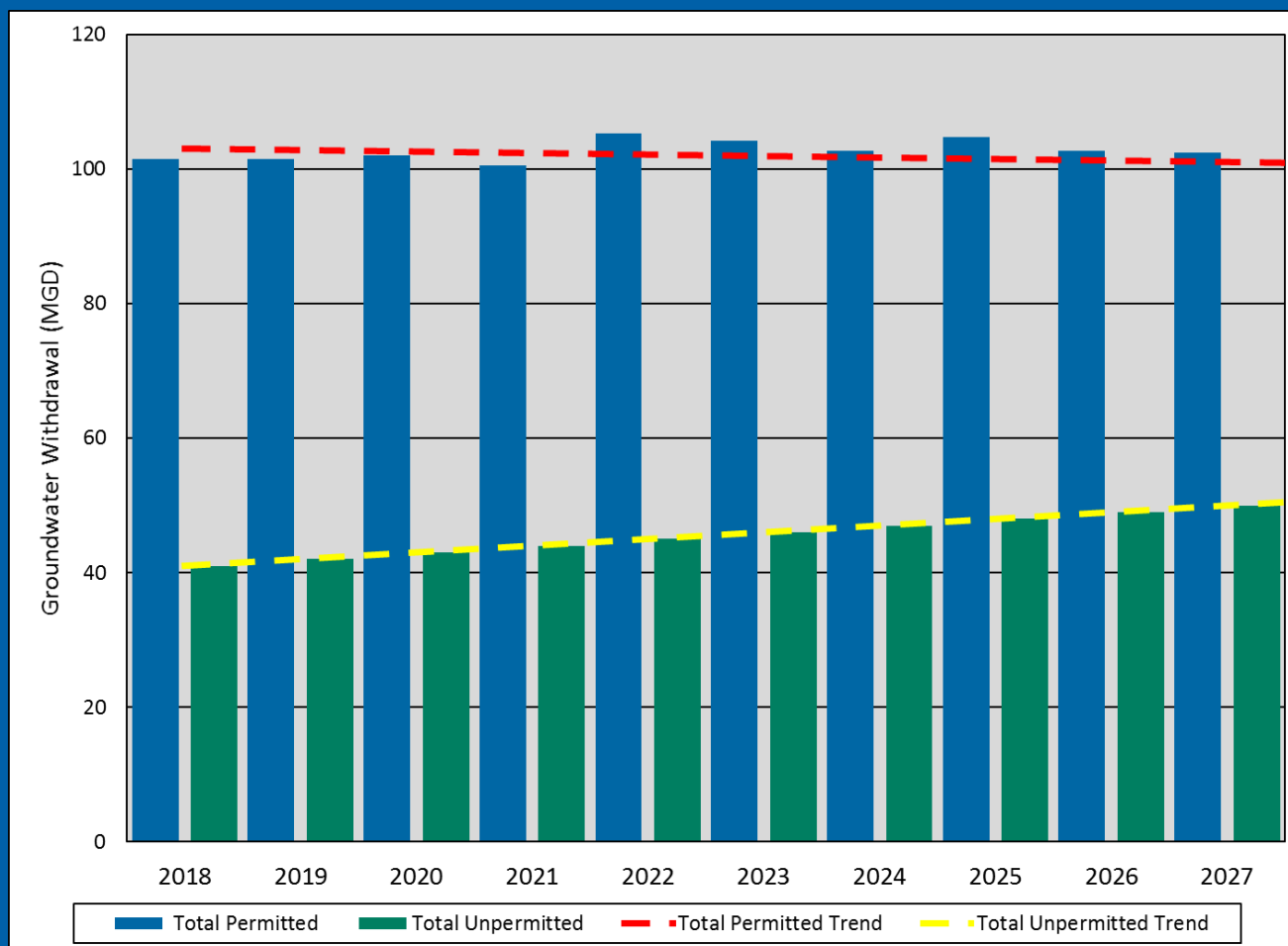
- Deep bedrock drilling proposal
  - It is possible that there are deep freshwater reserves
  - Should be viewed with caution until it can be shown that water supplies are available and that they will not result in unintended impacts on the Potomac aquifer
  - Steps should be taken to monitor the Potomac aquifer in proximity to these wells to assess connectivity

# EVGMAC – Future Permitting Criteria

- Extending the permit term for a groundwater withdrawal from 10 years to 15 years
  - Longer permit term does not guarantee availability of groundwater
  - Permits should be extended upon reissuance when they expire



# EVGMAC – unpermitted withdrawals



# EVGMAC – Banking and Trading

- Should be evaluated with reasonable caution
- There are temporal and spatial limits to the aquifer and economic benefits of credits generated
- Not necessarily one to one

# EVGMAC - Funding

- EVGMAC recognized the need to maintain existing capabilities and improve them where needed
- Useful life span of a monitoring well is 30 years
  - More than half of DEQ's groundwater monitoring network was constructed in the 1970's-80s

# Summary

- Critical to maintain a sustainable coastal aquifer system
- Significant progress toward maintaining the availability and productivity of this valuable resource
- We look forward to continuing to work with all of our stakeholders and the legislature to assure long-term viability of this resource

# Acknowledgements

- Appreciation for the time and effort put into this process by the EVGMAC members and all of the other talented people that gave of their time
- Appreciation for the cooperation and creativity of the affected permittees
- Thoughtful and deliberate review of the issues from the perspective of stakeholders
- Useful recommendations that can assist long term management of the aquifer