REGIONAL GROUNDWATER POLICY

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Hampton Roads Planning District Commission
Retreat
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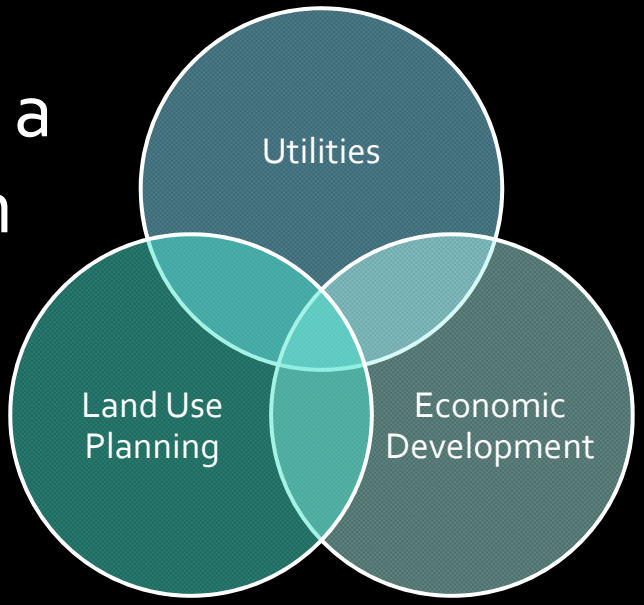
Regional Groundwater Policy

- Region should consider developing a policy that prioritizes types of groundwater use.

- HRPDC staff could facilitate a regional workgroup to reach consensus on the best method to allocate groundwater resources.



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Groundwater Over Allocated

- DEQ permits large groundwater withdrawals and has determined that the resource has been over allocated.
- Existing regulations do not provide a clear process for reducing allocations or prioritizing needs.
- DEQ has been scrutinizing all permits and negotiating for reductions especially if current use is significantly less than the requested withdrawal.

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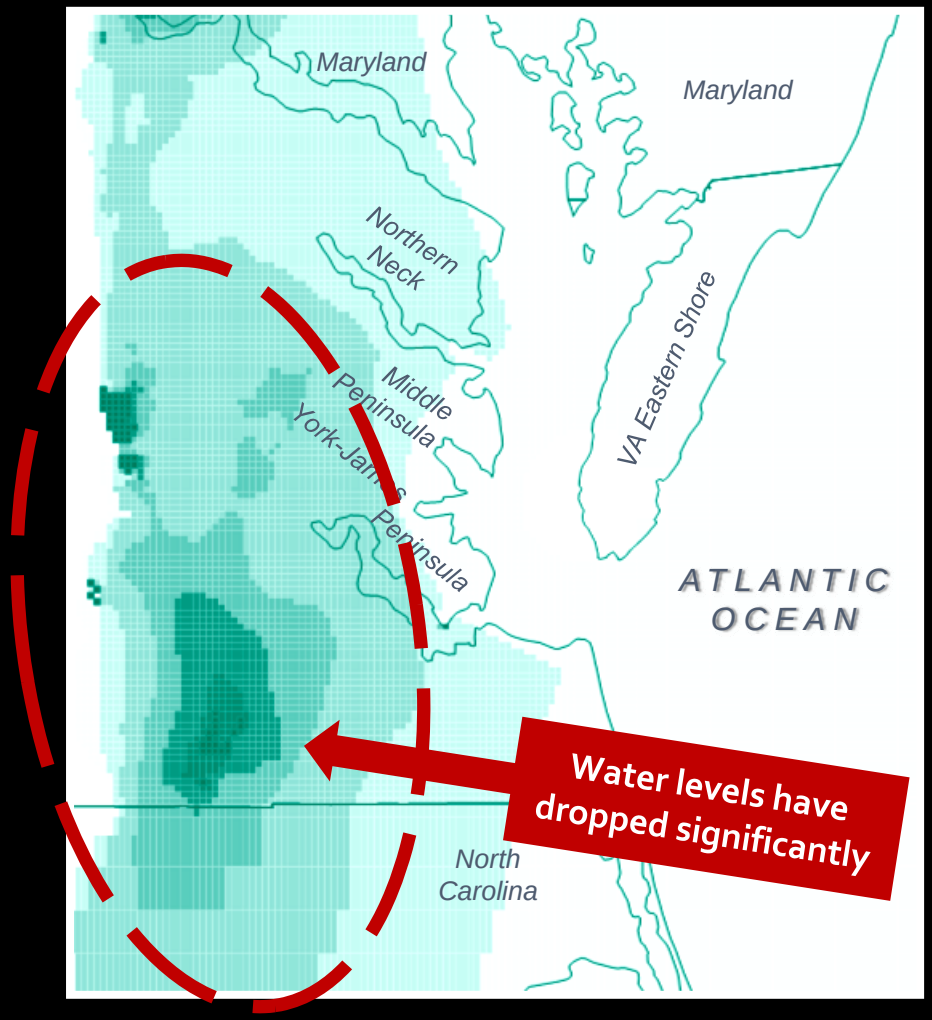
Estimated Change in Storage of Water in the Potomac Aquifer from Pre-development to 2008



AREAS OF LOW IMPACTS

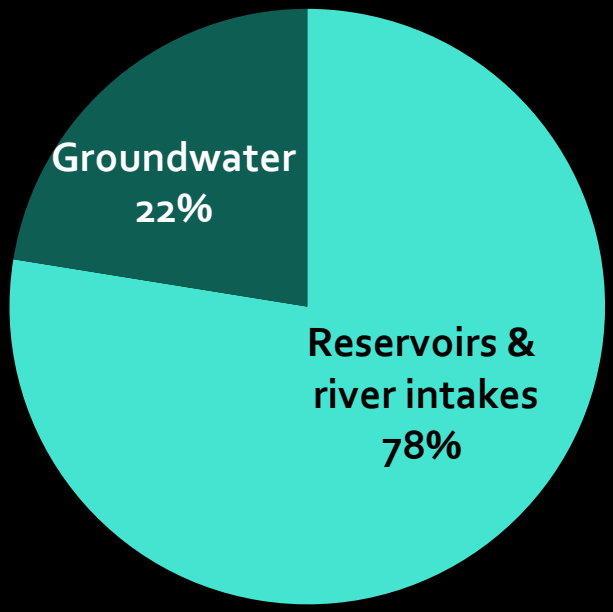
DECREASING GROUNDWATER STORAGE CAPACITY

AREAS OF PERMANENT STORAGE LOSS

New groundwater model indicates that current use is not sustainable.

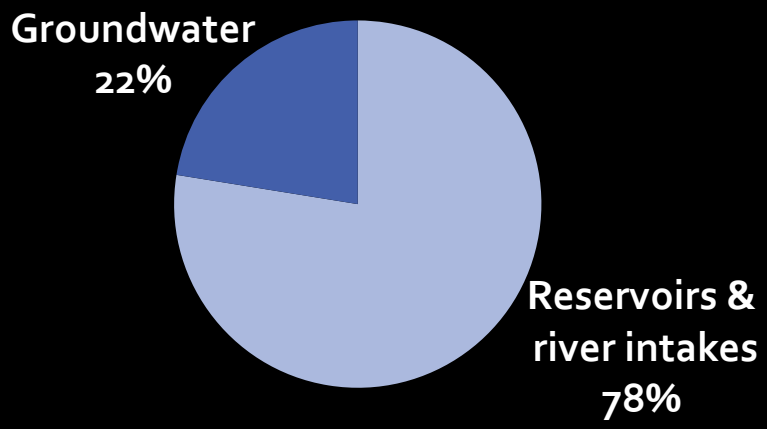
Public Water Supply

Southside & Western Tidewater



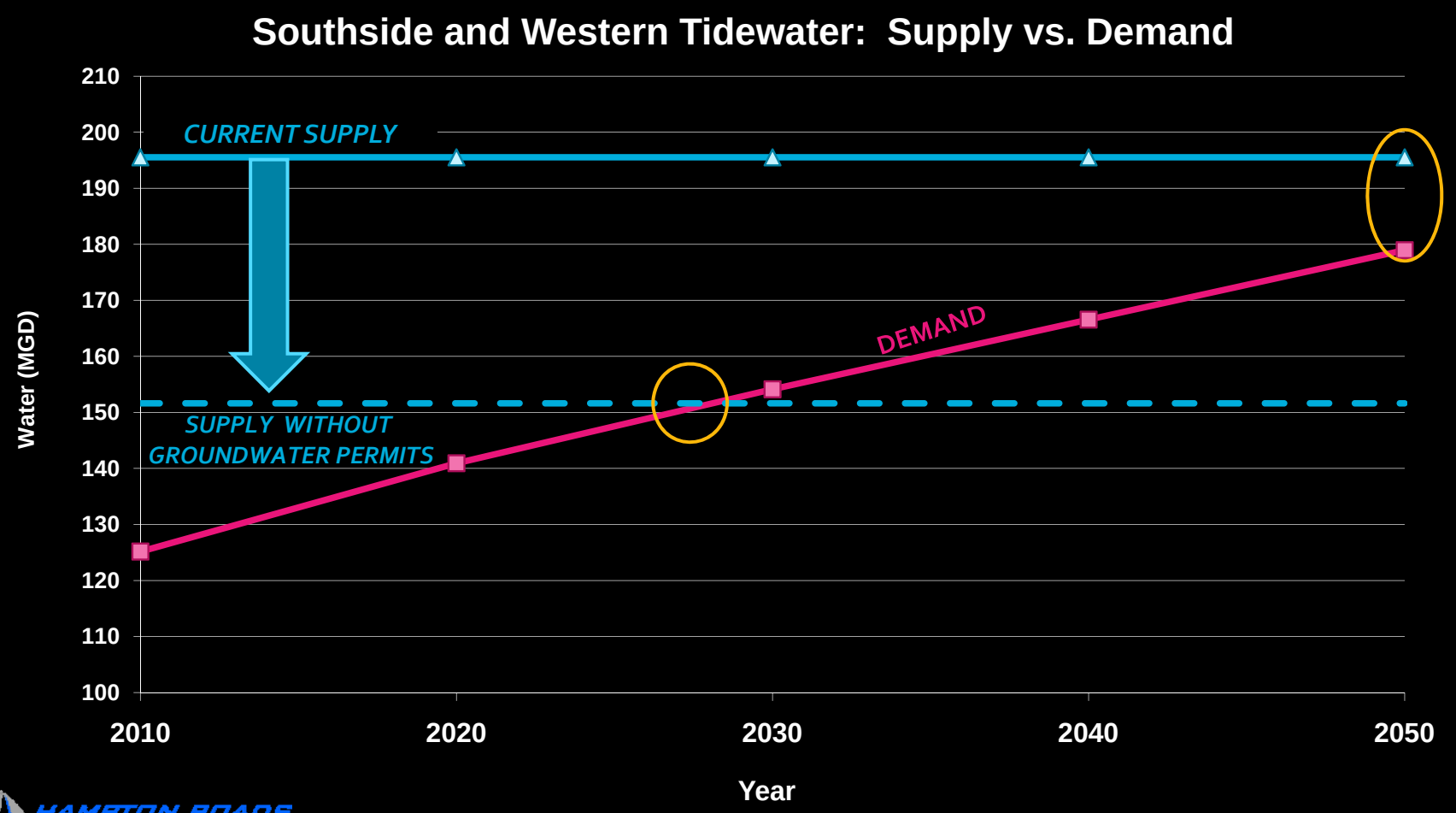
Total Supply = 196 mgd

Peninsula



Total Supply = 75 mgd

Impact of potential permit cuts on Public Water Supply



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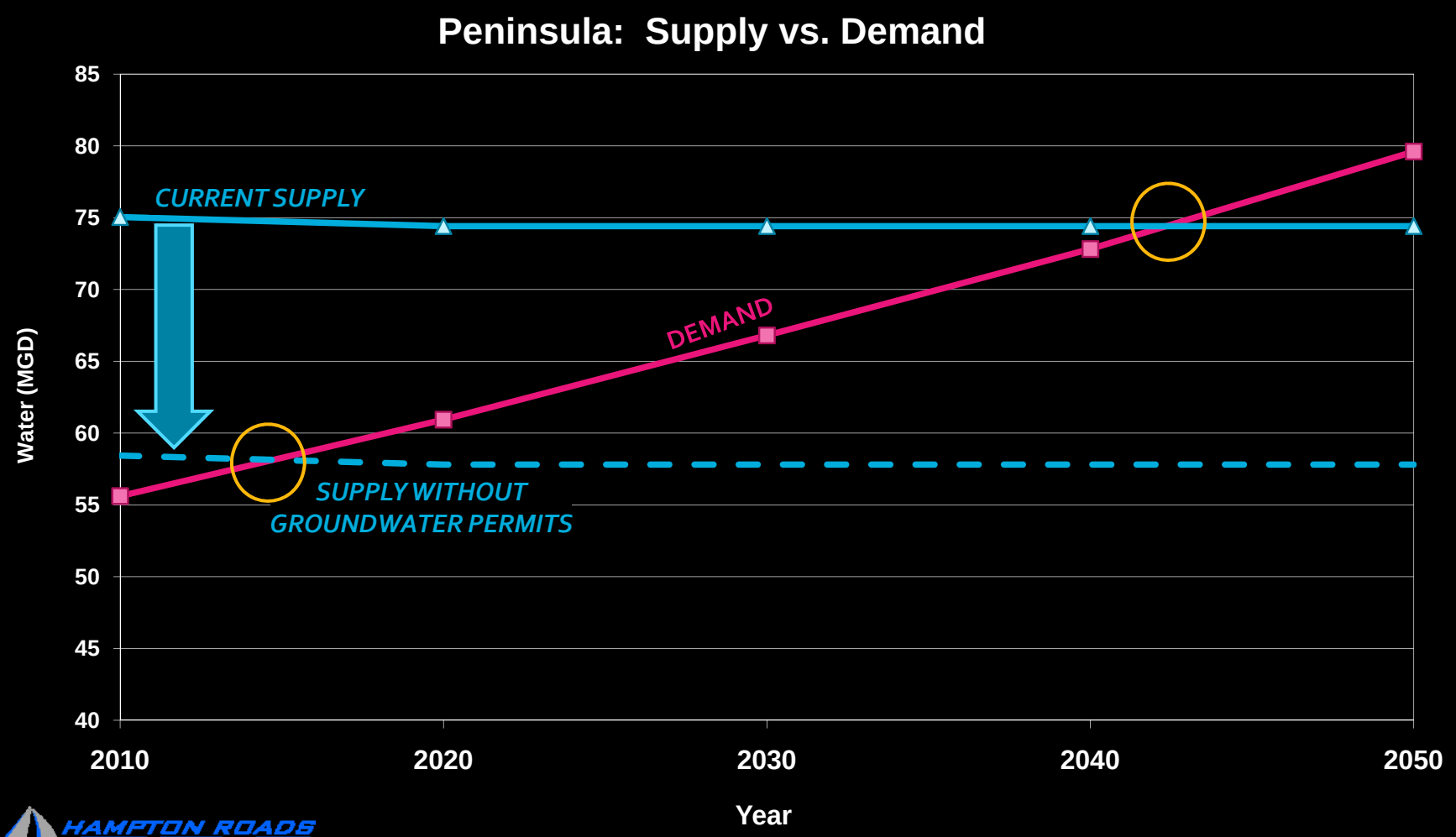
Impact of potential permit cuts on Public Water Supply



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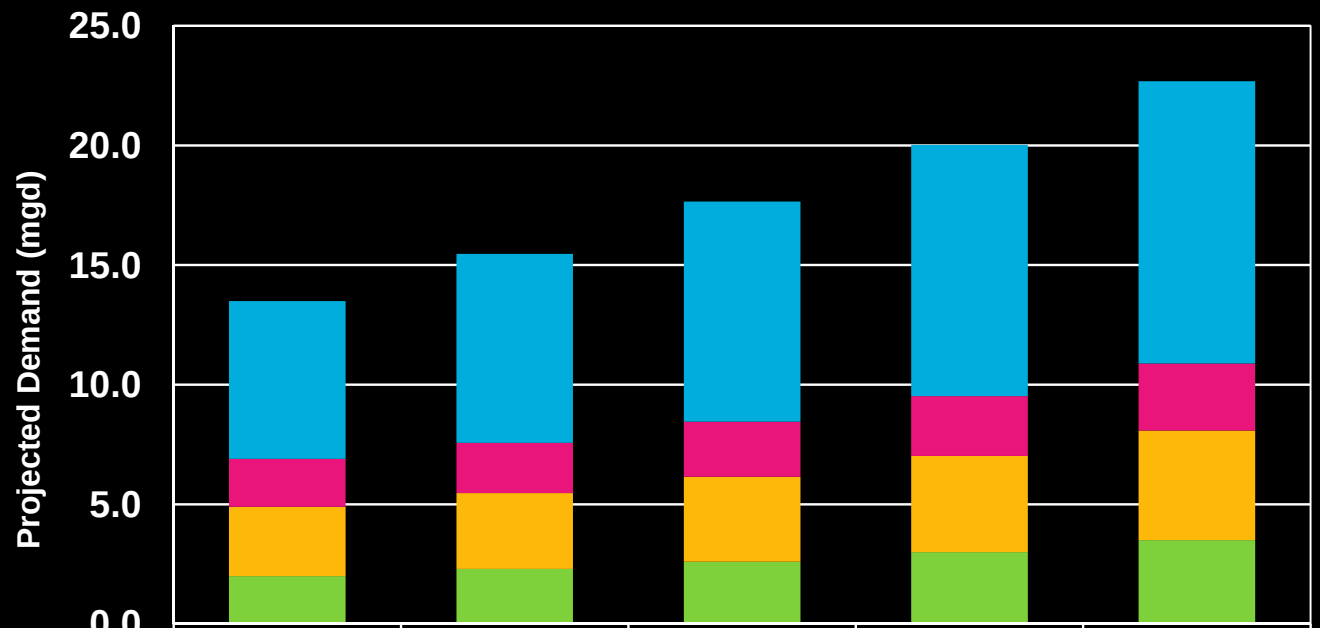
Future Residential Demands

(irrigation wells not included)



	2010	2020	2030	2040	2050
Southside	6.6	7.9	9.2	10.5	11.8
Middle Peninsula	2.0	2.1	2.3	2.5	2.8
Western Tidewater	2.9	3.2	3.6	4.0	4.6
Peninsula	2.0	2.3	2.6	3.0	3.5

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Why develop a regional policy?

- Groundwater is a very inexpensive source of water. DEQ is allocating a valuable, limited resource.
- Current regulations do not allow groundwater to be reserved for future uses so long term planning is not part of the allocation process.
- Localities do not have a role in prioritizing types of use such as public water systems, residential wells, or private businesses.
- DEQ only considers if new permit request or renewal is a beneficial use.
  - "Beneficial use" includes, but is not limited to, domestic (including public water supply), agricultural, commercial, and industrial uses.

Definition from Code of Virginia

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Why develop a policy now?

- **New Tools:** USGS completed new groundwater model that simulate the impacts of proposed policies over next 50+ years.
- **Better information:** Regional Water Supply Plan assembled water use data.
- **State engagement:** DEQ already briefed State Water Commission on concerns about groundwater management and began review of groundwater withdrawal regulations.
- **Not in crisis yet:** Changes in water use could be slowly phased in over many years.

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Recommended Future Direction

- **Establish Regional Workgroup**
- **Determine best method to allocate groundwater resources.**
- **Develop policy recommendation and submit to the State.**