

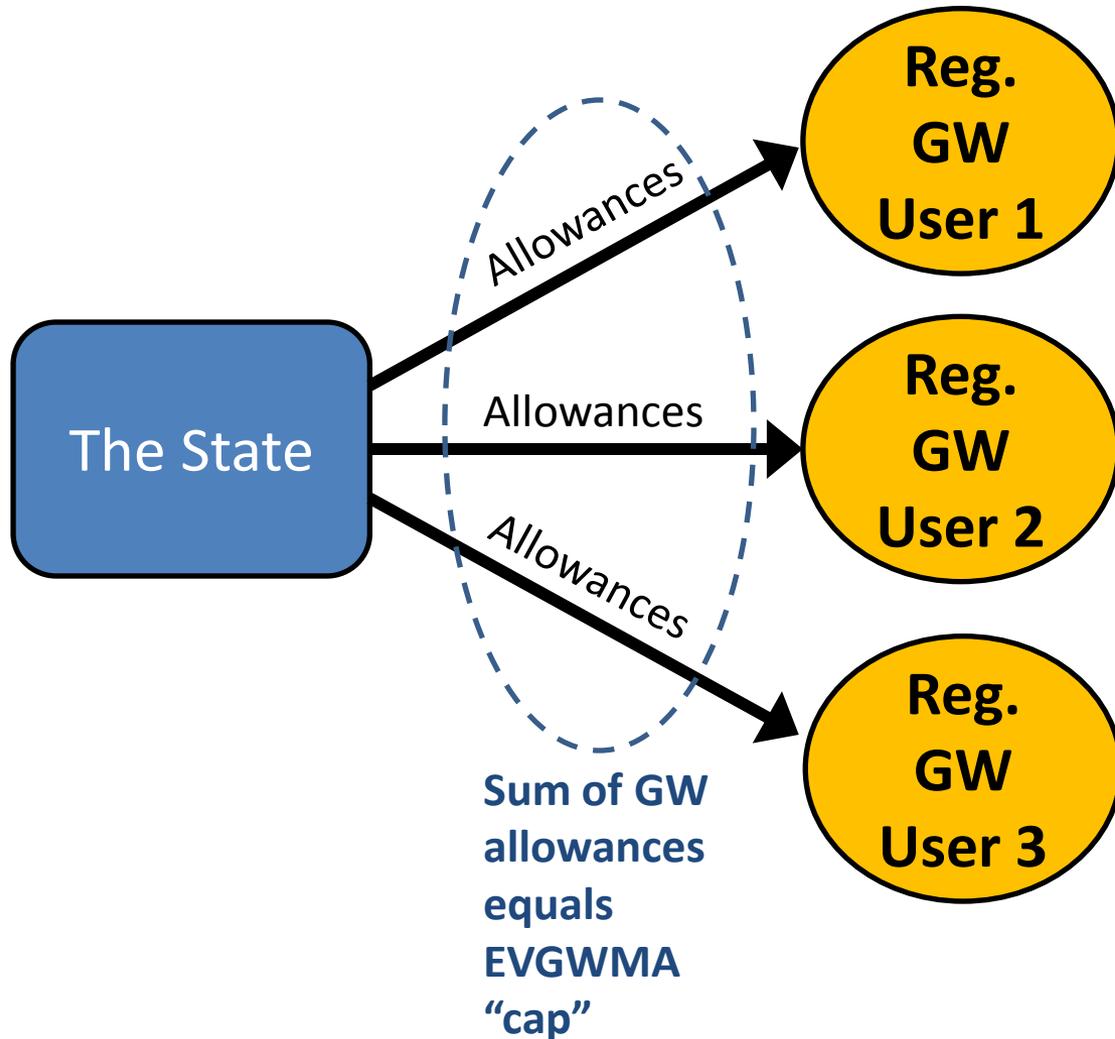
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# Groundwater Trading Program Strawman

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Eastern Virginia Groundwater Management Advisory Committee  
Subgroup 2B  
December 14, 2015

# Groundwater Allowance Trading: Strawman for Discussion



**Allowance** = permission to withdraw 1 million gallons of groundwater from confined aquifer (Potomac)

Allowances are “retired” after water is withdrawn

Allowances issued every X years by state (allocation period)

Max limits set in permits

# Major Issues to Discuss/Decide

1. Spatial extent of GW allowance trades
2. Banking (extent of allowance banking and banking of injected water)
3. Initial assignment of GW allowances
4. Groundwater allocation time period and allocation across time periods.

# Spatial Extent of Trading

## ***Issue:***

Under what conditions can users trade allowances with each other.

## ***Interests:***

Provide users trading options (provide flexibility and create incentives)

Minimize third-party impacts (availability, diminished quality, etc)

Keep trade approval costs low (for state & users)

# Spatial Extent of Trading

## *Possible Options:*

- No spatial limits: Individual case-by-case review & approval based on meeting specified regulatory criteria
- Differential levels of review/approval based on distance or zones
- Trade Zones (trade allowed only within specific zones)
- Combinations
- Others?

# **Spatial Extent of Trading: Discussion**

**Banking:**  
**Allowance Banking & GW Storage**

# Allowance Banking

## ***Issue:***

Under what conditions can users bank allowances in one allocation (permit) period for use in another?

## ***Interests:***

Provide users water management flexibility & incentives to reduce consumption early

Minimize third-party impacts

Reduction state's future management flexibility

# Allowance Banking

Currently, users can informally bank within their 10 year permit.

## ***Possible Options:***

- Allow banking across “allocation periods” (ex. permit periods)?
- Impose maximum limits on banking?

# Banking: GW Storage (via Injection)

## ***Issue:***

Under what conditions can local users receive allowances (“credit”) for temporarily storing treated drinking water in aquifer?

## ***Interests:***

- Provide users with management options (new storage options and create recharge incentives)
- Minimize third-party impacts (including adverse impacts on local GW quality)

# Banking: GW Storage (via Injection)

Currently, the City of Chesapeake has a local ASR project but credit & recovery policy unclear.

## ***Possible Options:***

- Assign additional allowances for stored (injected) water?
- Apply uncertainty or recharge ratio on recoverable water?
- Are credited allowances time limited?

**Allowance Allocation**  
**(to be discussed at future meeting)**