

# Special Report:

## Groundwater Withdrawals Increase as Public Reviews Proposed Regulations

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HRPDC has completed a summary of permitted withdrawals in the Eastern Virginia Ground Water Management Area (outlined in gold on the map below), which is an important drinking water source for the region. Declining groundwater levels in this area continue to be of concern. All groundwater withdrawals of more than 300,000 gallons per month require a [permit](#) from the Virginia Department of Environmental Quality (DEQ).

The map below ([view PDF](#)) shows changes in permitted withdrawals from 2005 to 2012 (click here for [interactive map viewer](#)). Many permits were renewed during this period. Each point on the map represents the general location of a permitted withdrawal. The blue circles identify permits that have decreased their withdrawals. Red circles identify permits that have increased withdrawals. Green circles identify new permits issued after 2005. Click on each point

on the map to see the name of the permittee and the permitted amount in 2005 and 2012.

From 2005 to 2012, the total permitted withdrawals in the Eastern Virginia GWMA increased by approximately 1.05 million gallons per day. While 47 new permits were issued, 39 permits became inactive. Public water supply and industrial uses account for 47% and 50%, respectively, of the withdrawals permitted during this period.

DEQ has published notice of two proposed regulations impacting the management of groundwater resources. The proposed language for 9VAC20-600, *Eastern Virginia Ground Water Management Area* and 9VAC25-610 *Groundwater Withdrawal Regulations* is available for review in the October 22, 2012 issue of the [Virginia Register of Regulations](#).

### Eastern Virginia GWMA, Groundwater Withdrawal Permit Summary (2005 to 2012)

#### Eastern Virginia (Coastal Plain) Ground Water Management Area

#### GROUNDWATER WITHDRAWAL PERMIT SUMMARY 2005 - 2012

The map (right) shows the general location of systems with groundwater withdrawal permits in the Eastern Virginia Ground Water Management Area from 2005 to 2012. Map symbology describes the changes in permit status or permitted withdrawal. Systems shown as "new permitted withdrawals" include new withdrawals, as well as systems that were withdrawing groundwater in 2005 and received their initial permit between 2005 and 2012.

The tables and charts (below and right) summarize permit activity and permitted withdrawals by water use category.

#### Changes in Permit Status (2005 to 2012)

| Permit Status | Permit Count | Permit Activity (1-1-2005 to 10-1-2012)                                                          |
|---------------|--------------|--------------------------------------------------------------------------------------------------|
| Inactive      | 39           | Total permits that became inactive                                                               |
|               | 18           | Expired                                                                                          |
|               | 20           | Revoked                                                                                          |
|               | 1            | Superseded by active permit                                                                      |
| Active        | 171          | Total permits that became or remain active                                                       |
|               | 4            | Pending permit issuance                                                                          |
|               | 47           | New permitted withdrawal                                                                         |
|               | 22           | Permitted withdrawal increased                                                                   |
|               | 25           | Permitted withdrawal decreased                                                                   |
|               | 73           | No change (39 of 73 permits are administratively continued beyond the expiration of permit term) |

**Legend** "System" refers to wells and distribution lines associated with each groundwater permit. Locations are generalized for map scale.

#### Systems with Groundwater Withdrawal Permits

- ▲ Systems with unrestricted withdrawals (existing or new Navy permits)
- + Inactive Permit
- Active Permit - Pending permit issuance
- Active Permit - New permitted withdrawal
- Active Permit - Permitted withdrawal increased
- Active Permit - Permitted withdrawal decreased
- Active Permit - No change in permitted withdrawal

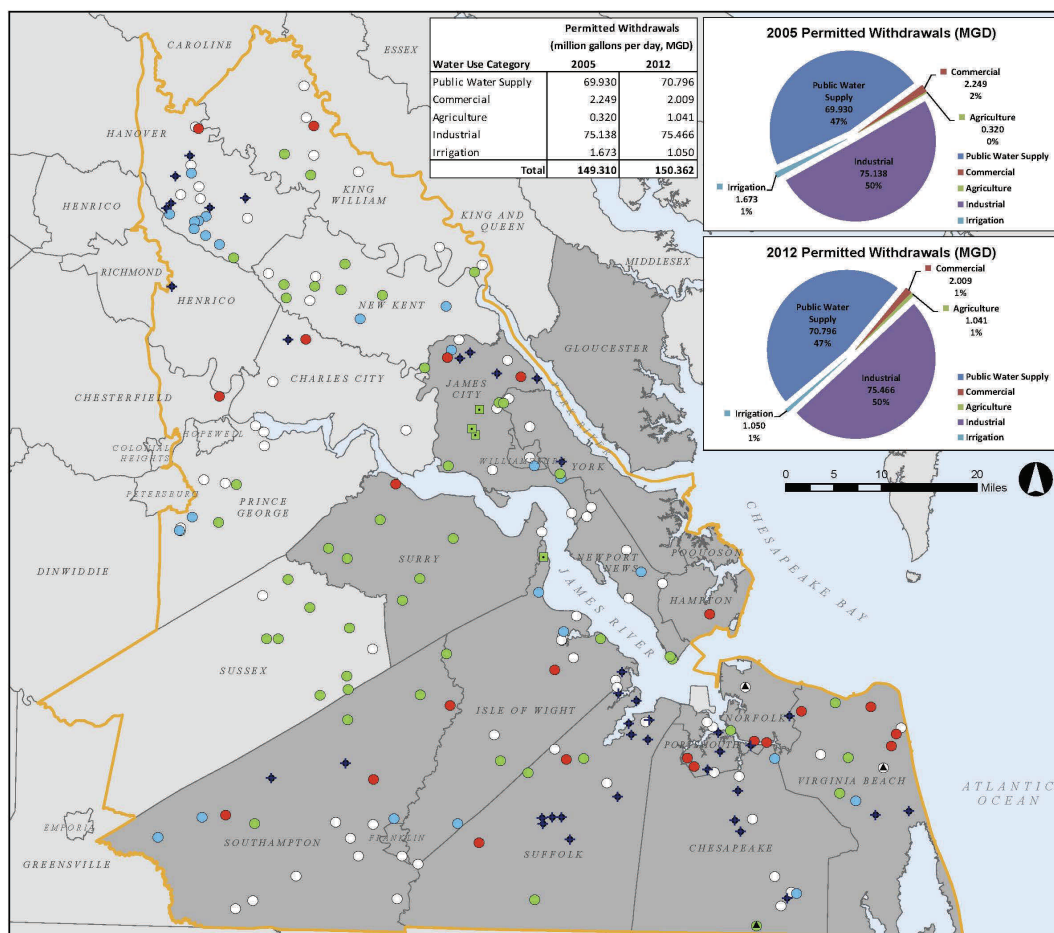
#### Jurisdictional Boundaries

- Eastern Virginia Ground Water Management Area
- Hampton Roads Localities

Note: Proposed expansion of the Eastern Virginia Ground Water Management Area includes Gloucester County (Proposed Regulation 9VAC25-600).

Map created by HRPDC staff (December 2012).

Source: Virginia DEQ Groundwater Permit Database (GWPPermitV3 software, backend copy March 9, 2012). Data was extracted, updated, and classified by HRPDC staff to include permits through issuance of GW0032201 (Holland Water System) and GW0035000 (Sedley Water Company), effective October 1, 2012.



Explore data with the [interactive map viewer](#).

This report is available for download at: [http://hrpdcva.gov/Documents/Phys Planning/2012/SR20\\_GWPermitSummary.pdf](http://hrpdcva.gov/Documents/Phys Planning/2012/SR20_GWPermitSummary.pdf)

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