Water Withdrawal Reporting & Permitting for Irrigators
Tidewater Agricultural Research and Extension Center Workshop

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Presentation Outline

• DEQ - Office of Water Supply
• Annual Water Withdrawal Reporting
• Groundwater Withdrawal Permitting
• Surface Water Withdrawal Permitting
• Question & Answers
Office of Water Supply

• Created in response to the 2001-2002 drought
• Water Supply Planning  
  o Annual Water Withdrawal Reporting (statewide)
• Water Withdrawal Permitting & Compliance  
  o Groundwater Withdrawal Permitting (within designated Groundwater Management Areas)  
  o Surface Water Withdrawal Permitting (statewide)
• Groundwater Characterization
• Environmental Data & Analysis Group
Annual Water Withdrawal Reporting

Reporting is required statewide for Agriculture when:

- Crop irrigation withdrawals ≥ one million gallons in a single month

- Average daily withdrawals ≥ 10,000 gallons per day during any single month (about 300,000 gallons per month) for all other agricultural uses
  
  Examples: approximately 335 milking cows, 650 feeder calves, 150,000 broilers
Annual Water Withdrawal Reporting

- Measure withdrawals with a meter or by estimation method
- Maintain records for 3 years
- Report amounts for each month, due on January 31st for the previous year
- Online reporting through the VA Hydro database is available to all producers
2016 Reported Irrigation Withdrawals

Irrigation Withdrawals

Water Withdrawals (MGD)

- < 0.05 MGD
- 0.05 MGD - 0.1 MGD
- 0.1 MGD - 0.25 MGD
- 0.25 MGD - 0.5 MGD
- > 0.5 MGD

Major Rivers

Data Source: VA Hydro

www.deq.virginia.gov
2016 Reported Agriculture Withdrawals (Non-Irrigation)
Future Water Needs

**Deficit**
- No Project Deficit
- Projected Deficit

*Projected deficits range from current to 2050*

Source: Local and Regional Water Supply Plans submitted to DEQ
Water Withdrawal Permitting for Agriculture

**Surface Water**
- Applies statewide
- Any agricultural activity
- 15 year permit
- No permit fee

**Groundwater**
- Applies to designated Groundwater Management Areas Only
- Any agricultural activity
- 10 year permit
- No permit fee
Groundwater Permitting Background

• 1975/1976 – Designated GWMAs
  o Declining groundwater levels
  o Groundwater withdrawal interference
  o Salt water intrusion
  o Agriculture added as a “beneficial use”
• 1993 – Groundwater Withdrawal Regulations
• 2014 – Expanded Eastern Virginia GWMA
Groundwater Permitting

• Who needs a permit?
  o Anyone using $\geq 300,000$ gallons in any one month in a designated GWMA
  o Applies to entire “withdrawal system”
  o Evaluated on a case-by-case basis

• Exclusions from permitting
  o Withdrawals $<300,000$ gallons per month
  o Temporary construction dewatering ($<24$ months)
  o Groundwater remediation ($<60$ months)
  o Geophysical investigations (inc. pump tests)
Surface Water Permitting Background

• Virginia Water Resources and Wetland Protection Program
  o Article 2.2 of SWCL (§ 62.1-44.15:20 et seq.)

• Virginia Water Protection (VWP) Permit Program Regulation (9VAC25-210-10 et seq.)
  o Impacts to wetlands, streams, as well as dredging and construction in state waters
  o Surface water withdrawals, preservation of instream flows
  o Clean Water Act § 401 certification

• Implemented statewide
Surface Water Permitting

- Surface water withdrawal – “removal or diversion of surface water... thereby altering the instream flow or hydrologic regime of the surface water”
- Withdrawals can come from streams, rivers, lakes or impoundments (e.g., ponds, reservoirs) constructed in a natural watercourse or wetland
Surface Water Permitting

- Who needs a permit?
  - Agricultural withdrawals ≥1,000,000 gallons in any one month in nontidal waters
  - Agricultural withdrawals ≥60,000,000 gallons in any one month in tidal waters
  - Applies to entire “withdrawal system”
  - Evaluated on a case-by-case basis

- Non-agricultural withdrawals ≥10,000 gallons per day from nontidal waters require permitting

- Non-agricultural withdrawals ≥2,000,000 gallons per day from tidal waters require permitting
Surface Water Permitting

• What is not a surface water withdrawal?
  o Withdrawal from a pond not constructed in a perennial or intermittent watercourse or wetland
  o May require a groundwater permit if pond is recharged (i.e., refilled) by groundwater well
Questions & Answers

Fact-sheets, contact maps, and other helpful documents are available in the back.

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