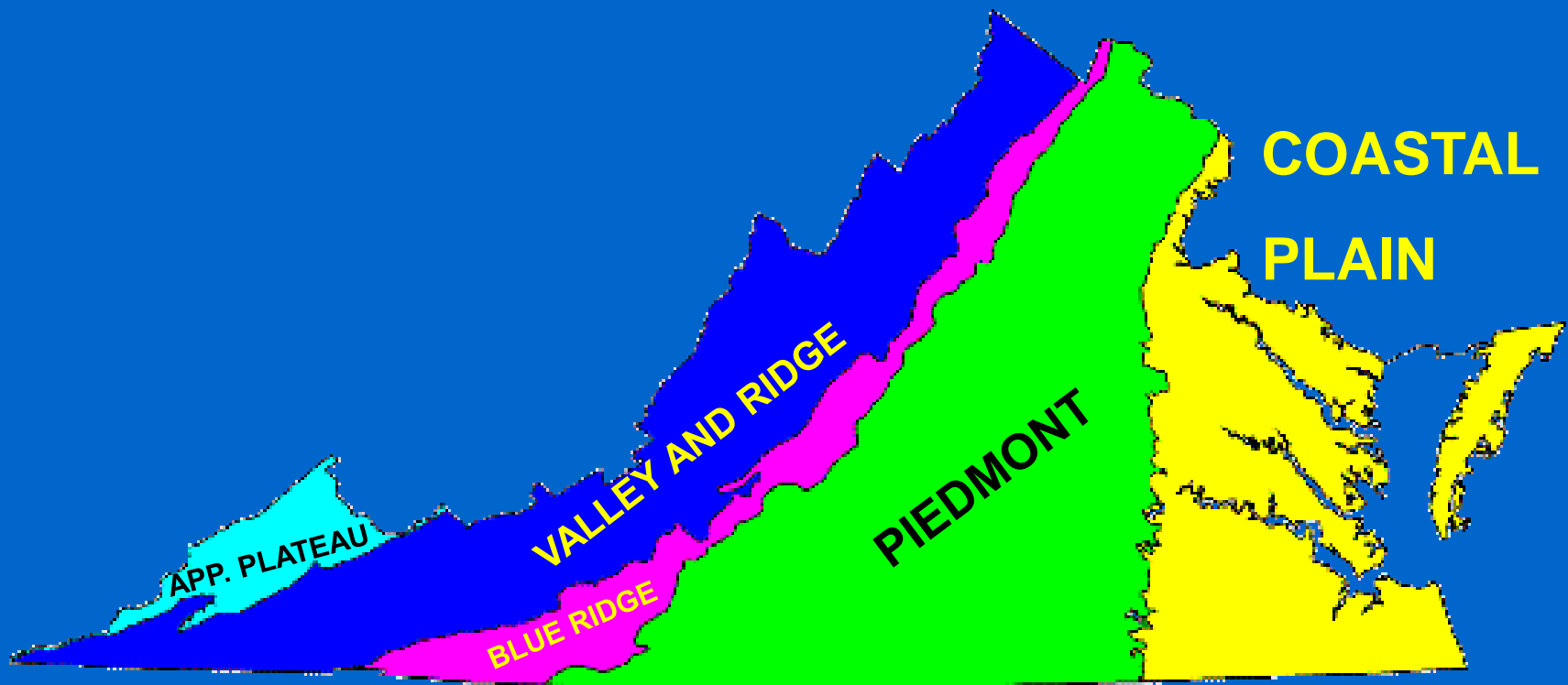


Overview: DEQ's Role in Enhanced Gas Recovery

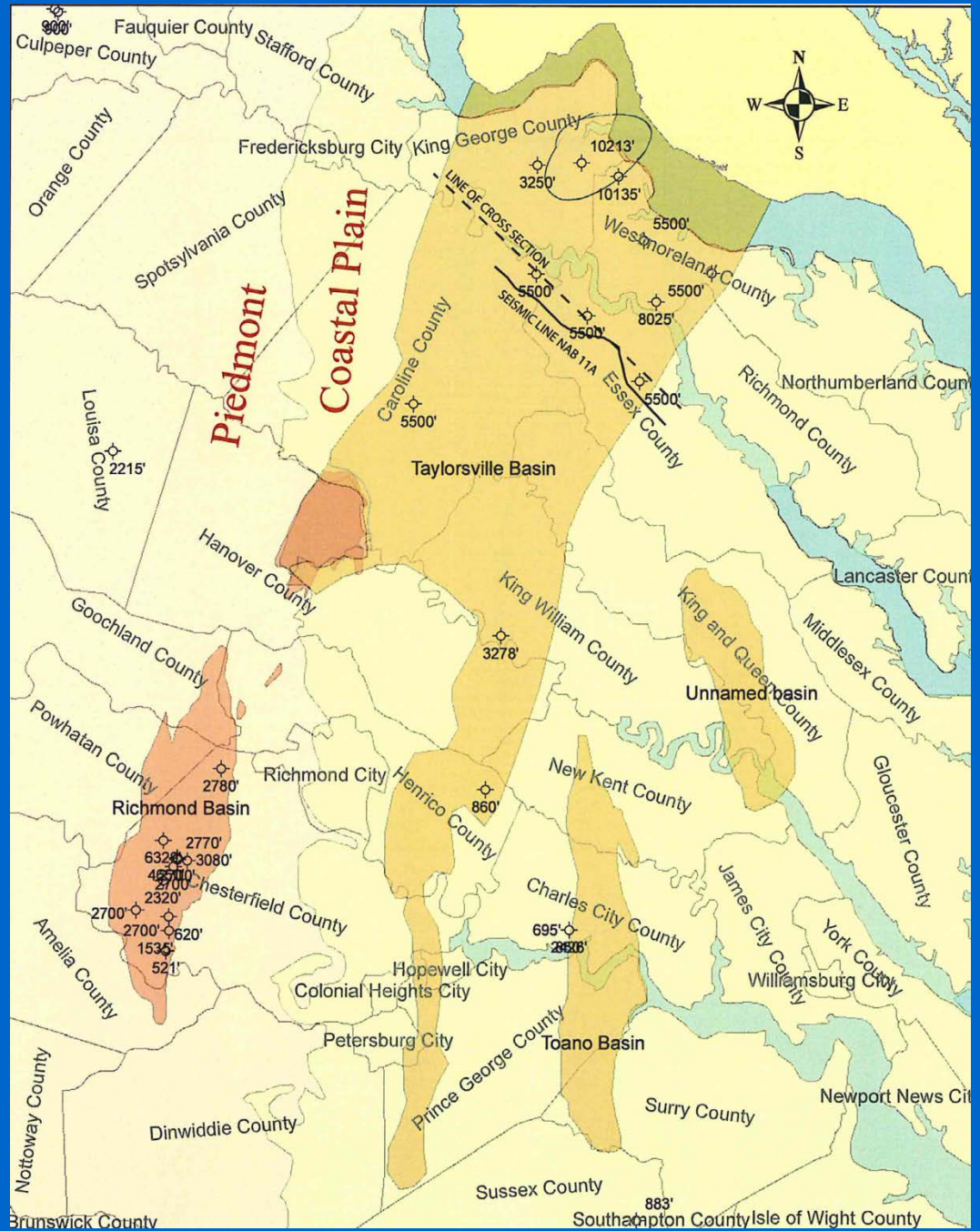
Local Government Fracking
Workshop
May 1, 2014



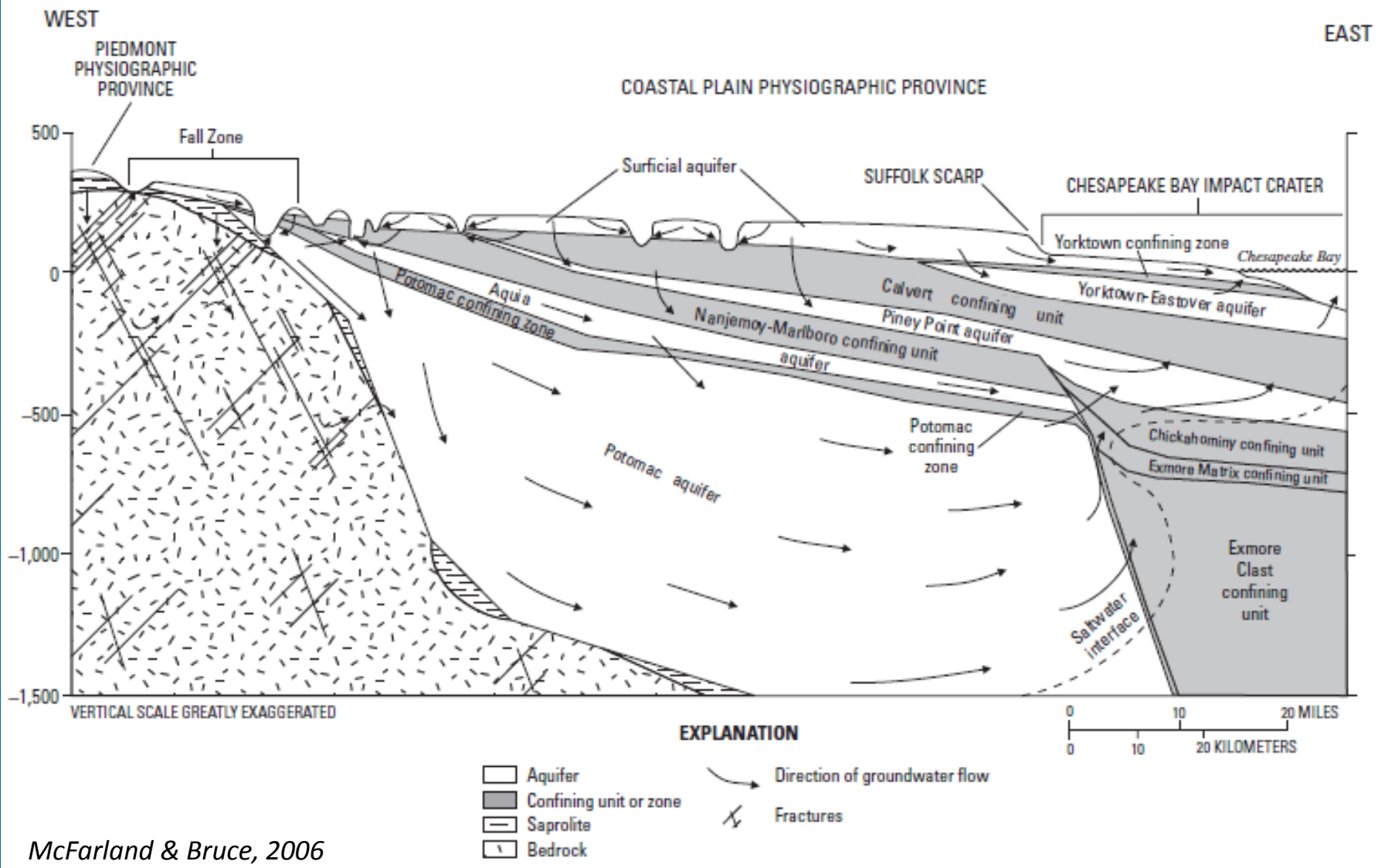
Virginia Physiographic Provinces



Oil and Gas Bearing Basins in Tidewater

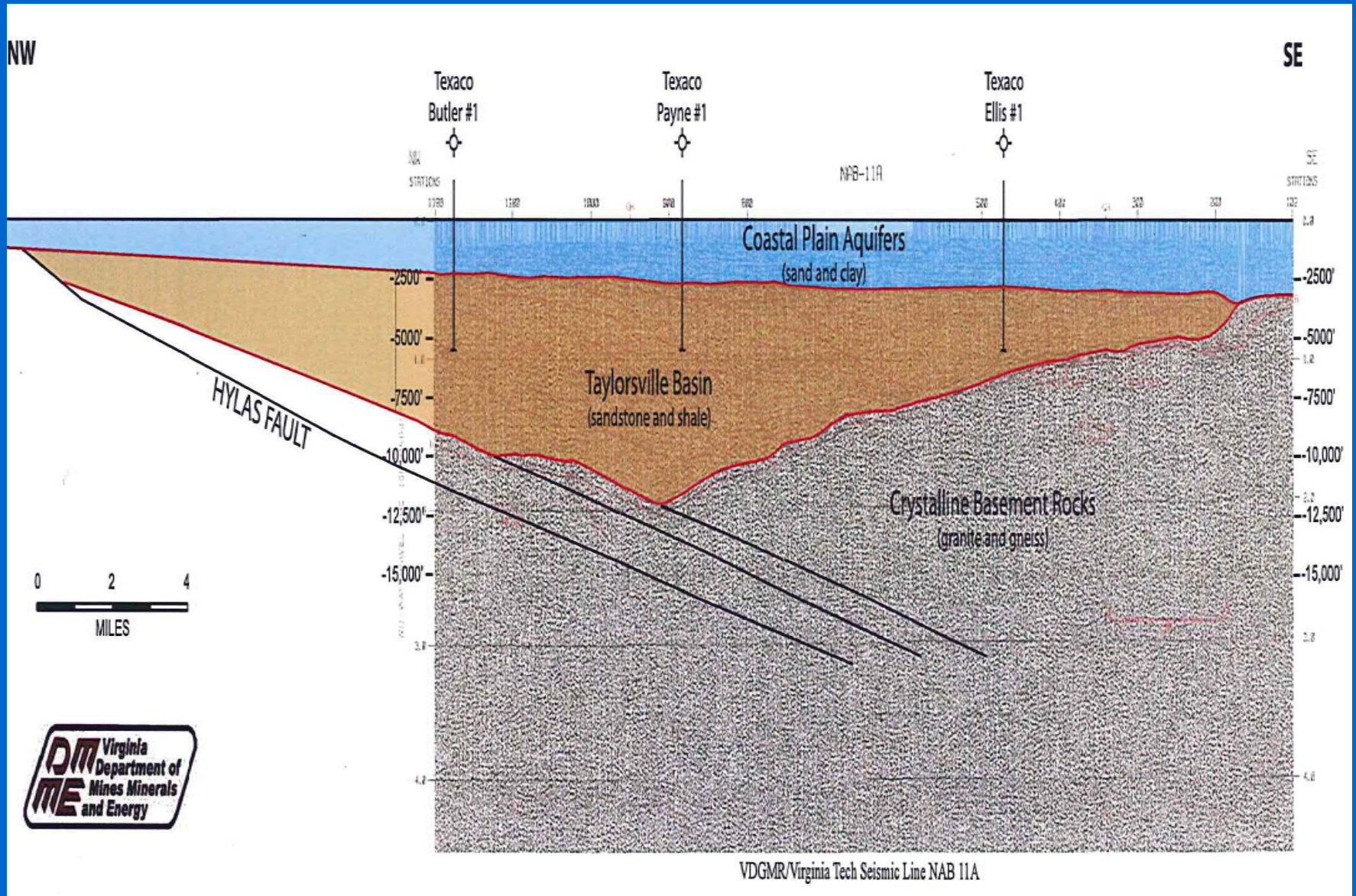


VA Coastal Plain Aquifer Cross-Section



McFarland & Bruce, 2006

VA Coastal Plain Aquifer Cross-Section



DEQ's Role

- Environmental Impact Assessment
- Air Permitting
- Land Permitting
- Water Permitting

Oil and Gas Drilling in Tidewater (62.1-195.1)

- Environmental Impact Assessment required prior to permit to explore or produce gas
- Process coordinated by DEQ
- Purpose is to provide advice to DMME on minimizing any adverse economic, fiscal, or environmental impacts in their drilling permit

Oil and Gas Drilling in Tidewater

(62.1-195.1)

- Environmental Impact Assessment submitted to DMME
- DMME notifies DEQ of receipt
- Upon notice, 90 day clock starts for DEQ to complete EIA process
- Minimum 30 day public comment and public information hearing
- “Guidelines” for EIA preparation and review process found in 9VAC15-20.

EIA Process Milestones

(9VAC15-20)

- Within 3 days of receipt of EIA, submit notice in the VA Register and in a newspaper of general circulation of opportunity for public comment
- State agencies, affected localities and PDCs must provide DEQ with comments within 50 days
- DEQ Director reviews all comments and prepares a report with findings and recommendations and communicates to DMME within 90 days
- DMME must consider these findings and recommendations before issuing their permit

Proposal Details Will Impact Water Permitting

Wastewater

- Recycle
- Haul away to treat
- Treat onsite
- Discharge
- Deep Injection

Water Withdrawal

- Hydraulic fracturing using water
- Recycling fracturing water
- Nitrogen gas
- Liquid propane

Permitting*

Air

- Permit may not be required

Land

- May be exempt under solid waste
- Plan for disposal of fluids, drill cuttings and solids pursuant to 4VAC25-150-420 and 430

Water

- VWP or GWP permit required for SW or GW withdrawals pursuant to 9VAC25-210 or 9VAC25-610
- VPDES required if discharging pursuant to 9VAC25-31
- VPA Permit

*There is some uncertainty until proposal(s) are made by an applicant regarding enhanced recovery method and treatment processes.

Questions?

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