

Recurrent Flooding Adaptation for Onsite Sewage Systems

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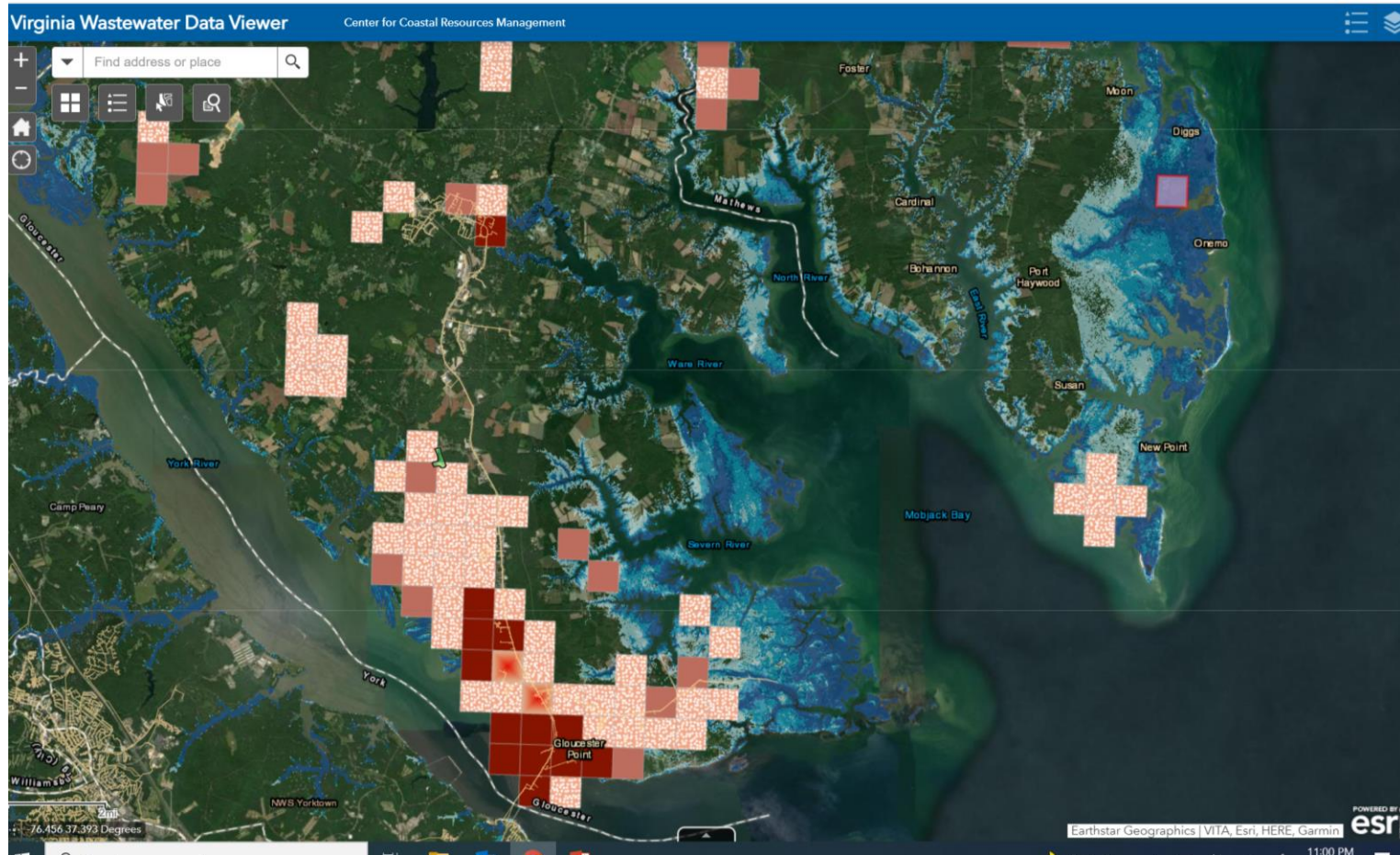
Why does recurrent flooding matter to the onsite program?



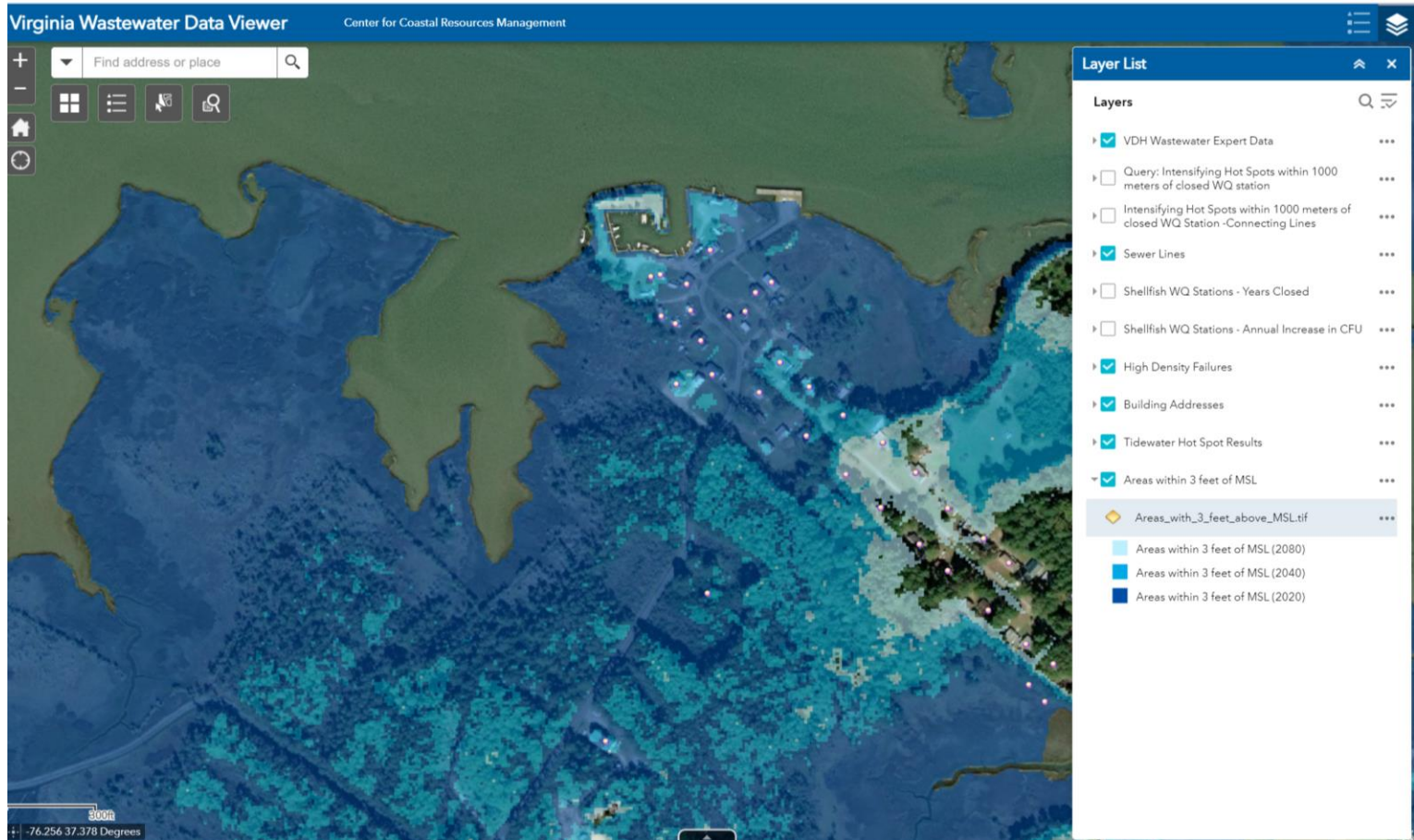
Change Outpacing Design Considerations



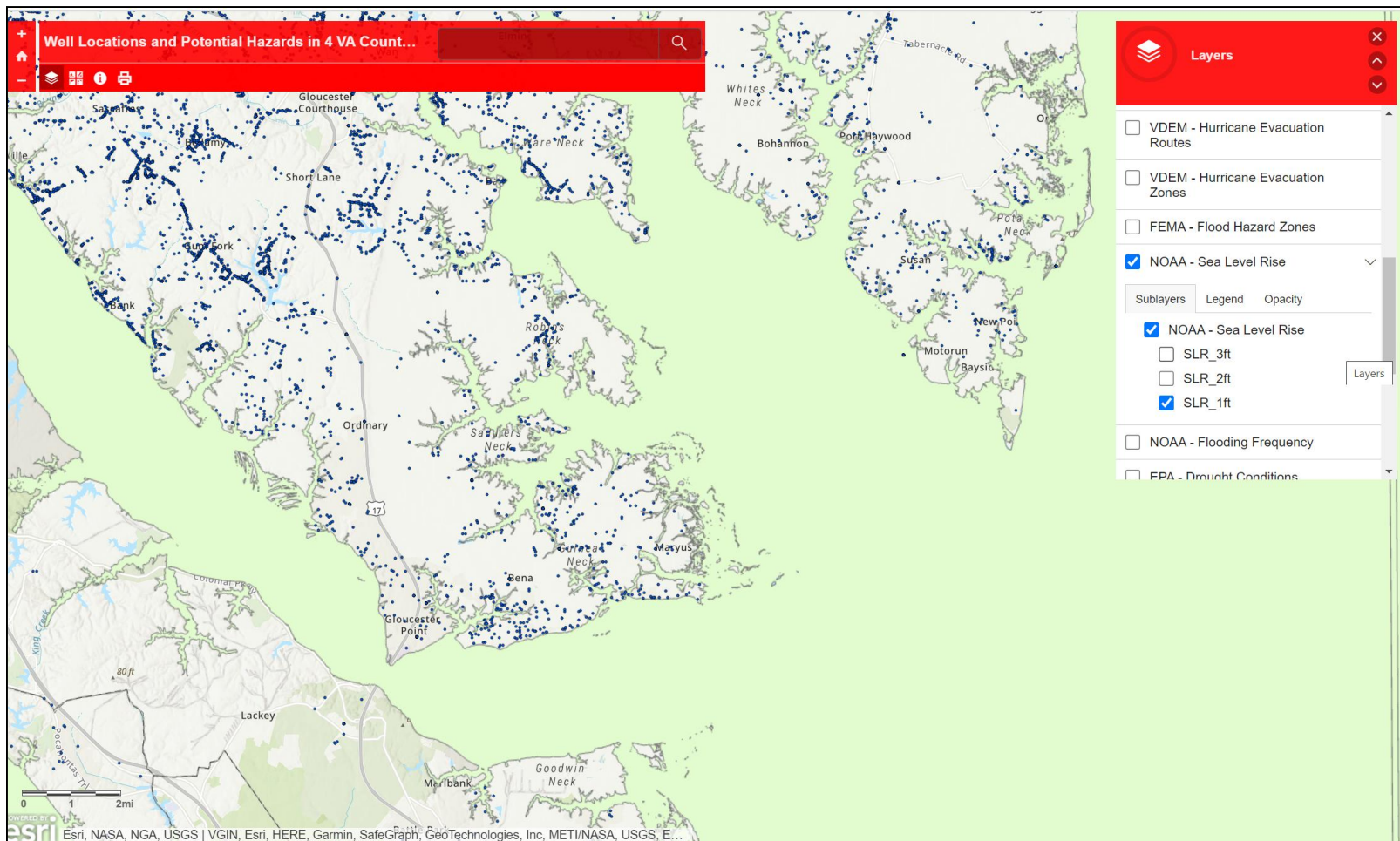
Assessing At Risk Septic Systems



Current Risk



Assessing Risk of Private Wells



SB 1396 (2021)

- § 32.1-164 of the Code of Virginia, regarding regulations for onsite sewage systems:

Consideration of the impacts of climate change on proposed treatment works based on research and analysis from the Center for Coastal Resources Management at the Virginia Institute of Marine Science at The College of William and Mary in Virginia.

- Current regulations focus on assessment at time of design.
 - e.g. 70 foot setback from shellfish waters today.
- Stakeholder group formed to assist in development of proposed changes to regulations.

Regulatory Revisions – HAACP Model

1. Conduct a hazard analysis.
2. Determine critical control points.
3. Establish critical limits.
4. Establish monitoring procedures.
5. Establish corrective actions.
6. Establish verification procedures.
7. Establish record-keeping and documentation procedures.

Stakeholder Group Assessment

- Potential to address within current framework with proper setbacks.
 - Conventional systems.
 - Treatment Level 2 & 3 systems.
 - Systems with added disinfection.
 - Direct dispersal to groundwater standards.
 - Pump and haul.
- Further analysis required for:
 - Identification of at risk properties.
 - Potential to reduce setbacks for treated effluent systems.
 - Appropriate mechanism for monitoring.

Next Steps

- Notice of Intended Regulatory Action.
- Draft outline of potential revisions.
 - Stakeholder feedback.
- Continued assessment of items requiring further analysis.