





Regulatory Issues: Impacts of Utility Scale Solar (USS) Farms on Landscape Hydrology and Water Quality in Virginia

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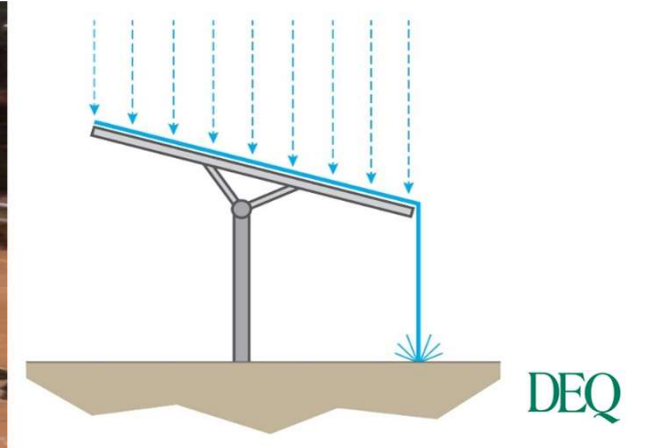
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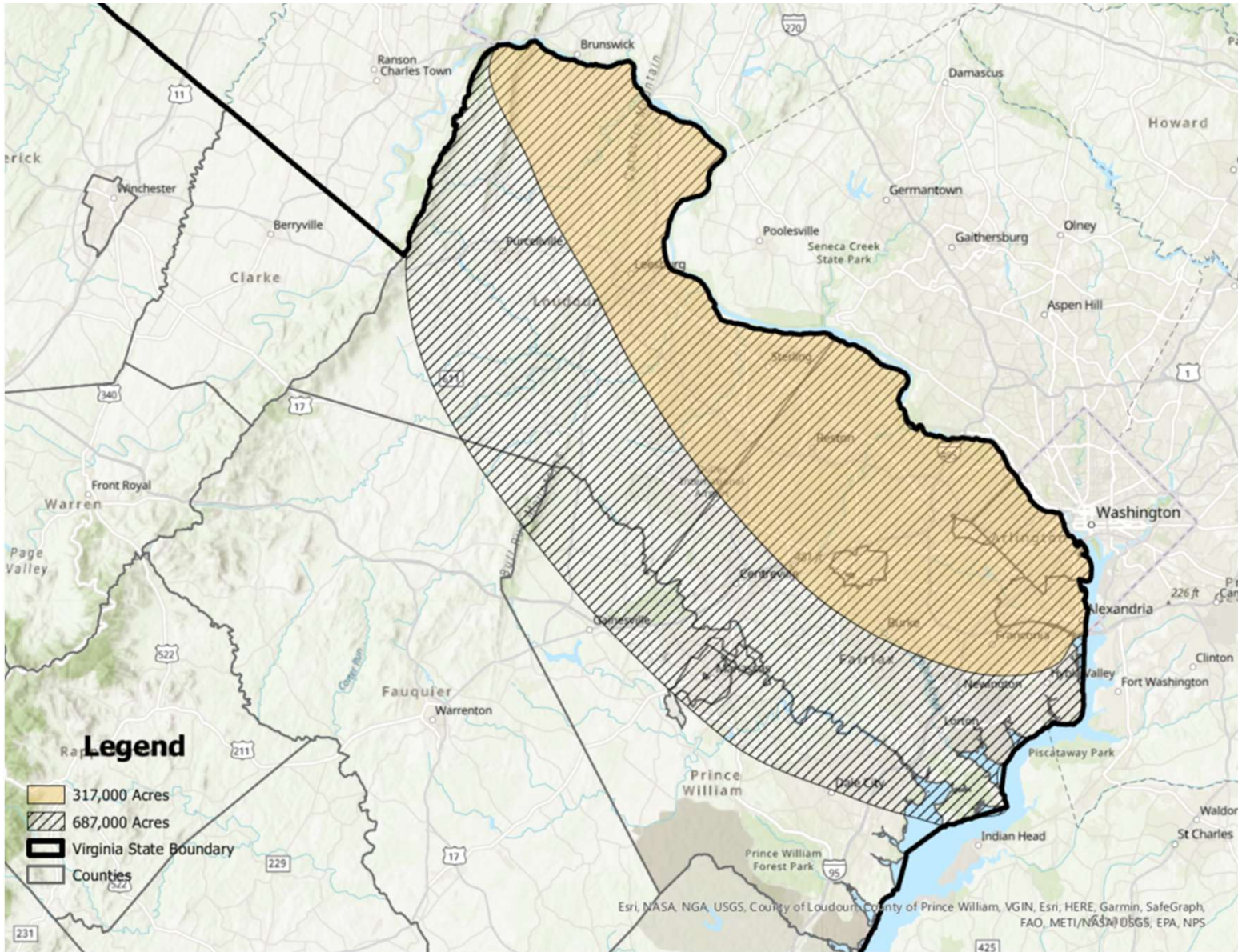
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Scale Perspective – Land Use Change Expected in Virginia by 2045

Power (GW)	30	65
Land Area (acres)	317,000	687,000
Panel Area (acres)	57,000	123,000

Land Area (acres):

Washington, D.C.	39,000
Arlington County	16,640
Prince William County	215,040
Fairfax County	250,240
Loudoun County	332,800



Key Solar-Specific Management Considerations in Virginia

1. Cut/Fill/Topsoil Burying with Compaction
2. Lack of Vegetative Cover

Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site. (9VAC25-840-40.1)

3. Curve Numbers
 - a. Compaction
 - b. Panel Imperviousness
4. Maintenance of Controls
5. Improper Installation of Controls
6. Disregard for Natural Drainage Divides

Compliance Snapshot

Permitted USS	124	
DEQ is VSMP	77	
Final Consent Orders	12	16%
Pending Consent Order	11	14%
March Inspections:		
• Notices of Violation	1	3%
• Warning Letters	8	20%
• Corrective Action Needed	21	54%
• No Issues	9	23%
• Total Sites	39	100%

$\frac{53}{77} = \text{At least 69\% have "Issues"}$