



Regional Environmental Managers Technical Committee

FY22 Watershed Implementation Plan (WIP) Phase III

FY21 CZM Resilience (R) Grant

March 15, 2022

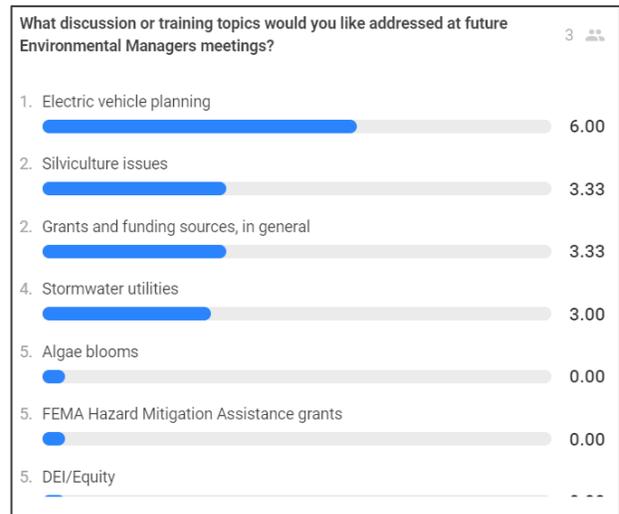
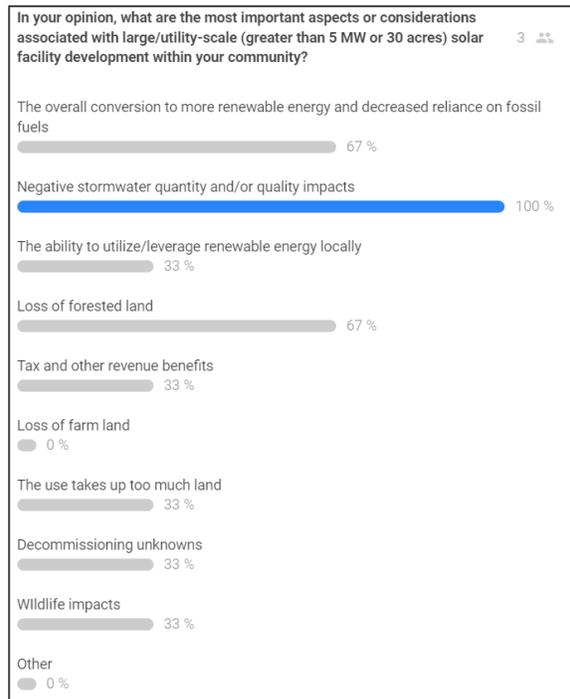
1:00 p.m. – 3:00 p.m.

Digital Meeting and Conference Call

NOTES

Attendees: David Nunnally and Craig Pennington (Caroline County); Ben Frith (King George County); Scott Rae (City of Fredericksburg); John Saunders and Chris Stevens (Stafford County); Kate Gibson (GWRC); Adam Lynch (FOR); Bryant Bays (VDOF); Emily Torrey; Michael Zehner, Luke Peters, Lindsay Edwards, and Nadya Syzsa (Berkley Group)

Outcome 1: Icebreaker Survey



Outcome 2: CZM Resilience Topic – Solar Land Use, Policy, and Stormwater

Discussion of Solar Zoning Ordinance and Permitting – Craig Pennington and David Nunnally (Caroline County)

- Decommissioning was an important consideration – bond to be reestimated every 3 years by an engineering firm.
- Keeping industrial zoning free for industrial uses and focusing on agricultural.
- Pushback from citizens on protecting rural character and viewsheds.
- Require extensive buffering to mitigate this issue – 100' to streets, 150' to property lines, vegetative screening needs to be 10' tall in 3 years and constructed first. Performance bond required.
- 100 acre at one time limitation on land disturbance to mitigate stormwater.
 - Common in logging industry, another large land-disturbance industry. However forestry does not encounter the same runoff problems.
- Wildlife corridors required, but no guidance in ordinance.
 - DWR now has published recommendations: <https://dwr.virginia.gov/wp-content/uploads/media/Solar-Energy-Facility-Guidance.pdf>
- Caroline County is an “opt-out” community, meaning applicants submit directly to DEQ.
 - Limitations include not having ground truthing during plan review; no way to observe downstream effects on ponds and other waterways.
 - DEQ does not treat area covered by panels as impervious – just the pilings and concrete used to mount them.
- Water quantity can be a bigger issue than quality.
- Caroline has not approved any solar facilities through the CUP process so far.
- DEQ may be releasing stormwater management guidelines within the year.
- Developers should be required to install more on-site water diversion rather than assuming sheet flow to the periphery of the site.

Outcome 3: Discussion on Solar Policies Important to the Localities

The Rappahannock River Basin Commission is interested in hearing from stakeholders on what issues in solar facility development impact them.

- Imperviousness calculation
 - Concern for unintended consequences – if everything is marked impervious, the developer has no incentive to install mitigation measures (managed turf) and instead would just pave or gravel the entire site.
- Compacted soil
 - Dr. Lee Daniels has papers coming out about restoring farmland that are less than optimistic.
- How best to use brownfields and industrial land
- \$10MM DOE grant for deploying solar with wildlife and ecosystem services benefits (SOLWEB)
- Using native forbs and agrivoltaics

Outcome 4: Discussion of “Soft Audit” for Water Quality

As part of the WIP FY22 scope of work, the PDC will be looking into localities’ ordinances, comprehensive plans, and other guides and detailing best practices.

- One issue is that no matter the regulations, enforcement requires capacity and systems in place.
 - A more sophisticated reporting app that becomes the responsibility of the developer could be used.
 - Construction general permits are the de facto tool, but still need a system of checks and balances and the manpower to inspect.
 - DEQ is overwhelmed with plan reviews.
- Requiring conceptual stormwater plans in initial plan reviews could keep staff and stakeholders better informed.
 - Making anything too specific could be construed as proffering conditions.
- There may not be a gold standard – conditions between counties in resources, staffing, governance make each situation unique.
- Getting definitions in line with state’s language could be beneficial.
- City of Norfolk has a “resilience quotient” program to incentivize resilient development.
- BMPs on croplands are managed by Soil and Water Conservation Districts, but programs are voluntary.

Follow-up and Future Meetings:

- Want to find evidence of solar sites with native vegetation groundcover.
- Contact localities in Virginia to inquire about agrivoltaics.

- **April 19th**: CZM TA and WIP – Flood Risk and BMPs
- **May 17th**: Roundtable
- **June 21st**: Roundtable
- **July 19th**: CZM TA and WIP – VDH and Septic
- **August 31st**: WIP – Joint Meeting with Crater PDC
- **September 20th**: Roundtable