

Regional Environmental Managers Technical Committee

FY22 CZM & FY22 WIP Phase III

July 19th, 2022

1:00 p.m. – 3:00 p.m.

Digital Meeting and Conference Call

NOTES

Attendees (15):

Scott Rae	City of Fredericksburg	Environmental Programs Manager
Tyler Gelles	City of Fredericksburg	Sr. Stormwater Manager
Mark Killgore	DCR Dam Safety	Dam Safety Engineer
Adam Lynch	FOR	River Steward - Fredericksburg, Spotsylvania, Stafford
Sarah Kerner	FOR	GIS Technician
Alexis Butchers	King George County	Environmental Inspector
Chris Clarke	King George County	Parks and Rec
Valerie Tyler	Spotsylvania County	Interim Deputy Program Administrator
Chris Stevens	Stafford County	Superintendent of Parks and Facilities
Emily Torrey	Stafford County	Deputy Environmental Programs Administrator
John Saunders	Stafford County	Environmental Programs Administrator
Bryant Bays	VDOF	Regional Forester
Luke Peters	Berkley Group	Environmental Planner
Lindsay Edwards	Berkley Group	Renewable and Clean Energy Specialist
Nadya Syazsa	Berkley Group	Environmental Intern

Today's Agenda & Updates – Luke Peters:

- Rappahannock River Basin Commission next meeting next week
- Almost all CZM and WIP goals are completed
- **August 31st** – Joint meeting with Crater PDC
- FEMA Resilience Funding Webinar – send after the meeting (LP)
 - Nature-based solution funding
 - Guides on BRIC, mitigation actions
 - Rappahannock Roundtable

FOR – Sarah Kerner:

Urban Heat Island GIS mapping tool

Background:

- FOR + GWRC partnered to study urban heat island effect
- Storm water runoff within urban heat islands – present thermal pollution into nearby aquatic systems
- Process:
 - Literature Review – completed
 - Remote sensing analysis – completed

- Field data collection – completed (recent)
- Field data integration
- Publication

Field Data Collection Process

Landsat 8 Analysis ready data was used to find the land surface temp – June 2nd

- Sampling:
 - Citizen Science through volunteers
- Field Sampling Days
 - 07/10/22; 3-4pm
 - 37 volunteers
 - 07/12/22; 3-4pm
 - UMW SSI research student
- Sample Collection:
 - Fredericksburg – 6 collection sites
 - Spotsylvania – 5 collection sites
 - Stafford – 5 collection sites
 - Caroline – 2 collection sites
 - King George – 2 collection sites

Land Cover of Sites – Maps

July 12th Sampling

- Extreme Heat Day (95 to 111.6 degree F)
- Impervious surfaces had a higher temp recorded
- Air temp seems to be hotter in urban areas

Potential applications of findings:

- Deeper study of water quality impacts of heat islands;
 - Consider potential management strategies
- Inform local building and development regulators on possible projects to mitigate urban heat island effects:
 - Tree canopy
 - Reflective roofing
 - Green roofs
 - Reduction of impervious surfaces

Questions:

- Fredericksburg: tree canopy ordinances?
 - Ordinance require certain amount of landscaping and planting.
 - Planning department – ensures development meet landscaping requirements.
 - 20% for LMI area? Not implemented yet, but FOR wants to work with the City on this topic.
- Bryant Bays (VDOT):
 - VA Trees for Clean Water Grant open until August 25
 - <https://dof.virginia.gov/urban-community-forestry/urban-forestry-community-assistance/urban-and-community-forestry-grant-program/>

WIP Updates – Luke Peters:

- Share localities efforts with DEQ; mapping, defining specific needs, GWRC would be hub for this information
- EJScreen+; takes EPA's EJScreen and DEQ geodatabases and adds community outreach resources and locations (e.g., sport venues, schools, grocery stores). Want to add NGOs + nonprofits and their effective "service areas" and who they help.
 - Collect contacts of people who may be able to provide more information on EJ efforts in localities
- Mark Killgore (DCR):
 - <https://www.nationalacademies.org/news/2022/07/renewing-u-s-infrastructure-for-resilience-and-equity>

CDBG + WQIF Overview – Nadya Syazsa

Powerpoint: https://d.docs.live.net/b79b48eae59ca788/Desktop/BG/7-19-22_CDBG-WQIF_Presentation.pdf

Other WIP Updates – Luke Peters:

- Update environmental language in Comp Plan to adopt WIP language
- Septic pump-out program; brief survey to gather methods utilized for compliance and data tracking – master list of BMPs

CZM Updates – Luke Peters:

- Flood Risk Communication Plan – Luke to send out to localities for review
- 'Toolbox' – summing up all data, grant application templates, tools, funding sources, etc., BMPs that can be utilized to achieve CZM goals and strategies
- CZM Goal – Invasive Species
 - Preventing invasive in localities
 - Speaker at the next meeting
 - Are efforts only done through DEQ or DCR? Are there any community-specific efforts to mitigate effects of invasive species?
 - Alexis (KG): Receives only occasional questions from personal property owners

FOR Updates on WIP Work – Adam Lynch:

- Rappahannock River Roundtable Newsletter:
 - All grant/funding opportunities and other information are posted there
- DEQ contacted FOR to
- Grant writing assistance; Chesapeake funding
- October 19th: Rappahannock River Symposium

Meeting adjourned at 2:00pm

Next meeting: **August 31st, 2022** – Joint with Crater PDC