Citizen Advisory Committee: *Bipartisan Infrastructure Law* (BIL) Funded Project Support

The goal of this document is to facilitate the decision-making for how the CAC may allocate BIL funds. What focus areas, existing projects, or newly proposed work might be ripe for APNEP's support by filling gaps on topics of greatest importance and need that directly impact communities and residents in the region. Here we outline a series of options to assist the CAC in deciding how to allocate of BIL funding over the next 2-4 years. Currently, APNEP has \$100k available now, and the remaining \$100k is still awaiting EPA approval and would be awarded in annual increments (\$33k) for the entire BIL workplan. As we have heard from committee members... APNEP needs to make progress on "moving from plans to implementation."

Primary considerations:

- 1. All projects must support CCMP implementation.
- 2. What are the topics and locations of greatest need or interest in the AP?
- 3. Does the committee allocate funds for one or multiple projects/initiatives?
- 4. How does the committee want to decide?

Potential approaches the committee could take:

- 1. Create a new RFP to meet CAC interests/needs for CCMP implementation.
- Provide direct support for ongoing project(s) within focus areas of greatest interest and/or need that align with BIL priority actions (review BIL 5 Year Workplan for projects already identified: see Table 2 (p. 13) for project overview, Appendix 1 (p. 68) for a cross walk of BIL projects to CCMP BIL priority actions, also included below for guick reference.)
- Reevaluate grant proposals received (FY2024 Engagement & Stewardship Grant) that fill gaps that align with BIL priority actions and topics staff and committees are currently engaged in.
- 4. Use funds as match or leverage for funding a new collaborative project(s)

CAC perspectives on the biggest challenges in the AP that need our support:

- 1. Water quality
- 2. Wetland loss
- 3. Land-use, stormwater, flooding, and resilience
- 4. Capacity (local government and community bandwidth more specifically), forest-loss, funding, mitigating climate change impacts, nutrient management, harmful algal blooms, land-use planning, riparian buffers, and water.

More specific take aways from committee member input...

- Local grassroots monitoring, and data generation efforts by/among community, organizations, waterkeepers, and academics
- Education on why topics like algal blooms, nature-based solutions, resiliency and nature-based solutions are so important.
- Infrastructure (green infrastructure) funding and grant management for small, rural, distressed areas (Aurora, COGs)
- Water protection particularly related to public health
- Water quality planning and mitigation (Hyde Co.)
- Funding to identify, upgrade, and communication about homeowner septic tank failure. Bacteria and nutrient pollution growing prevalence from failing septic (data and planning efforts in Havelock and Simpson, Nags Head with NC Sea Grant
- Restoration of wetland/peatland areas through hydrological and planting efforts
- SAV and marsh restoration in Back Bay (APNEP funded work with Back Bay Waterfowl Museum FY2024)
- Land conservation in the North Landing watershed has been successful, but current development pressures.
- Public access to the river and greater awareness in North Landing (VA)
- Large-scale solar development in the VA region
- Identify ways to use GIS products from CCAP land cover (e.g. population mapping, rainfall runoff models in sub-watersheds, better projections of future wetland changes with sea level)
- Support wider community participatory GIS efforts in SE Virginia (King tide mapping, water quality and community asset or challenge mapping.)

Table. Detailed Budget by Project and BIL Focus Area Integration

| Project | Estimated Total Cost (FY22-27) | BIL Focus Area | | | |
|---|--------------------------------------|----------------|-----|------------------|-------------------------|
| | | Wetlands | SAV | Water Quality | Community Resilience |
| CCMP Financial Plan * | \$90,000 | X | X | X | X |
| Spatial Decision Support * | \$300,000 | X | X | X | |
| STAC Focus Area Workshops * | \$200,000 | X | X | X | |
| High Resolution Land Use Mapping (NOAA C-CAP) * | \$425,000 | X | X | X | X |
| Restoration Projects * | \$300,000 | X | X | X | X |
| CAC Community Projects * | \$200,000 | X | | X | X |
| BIL Outreach, Communication and Engagement * | \$50,000 | X | X | X | X |
| Natural and Working Lands Support | \$200,000 | PF | X | X | X |
| Currituck Sound Marsh Conservation Plan Implementation | \$200,000 | PF | X | X | X |
| Wetlands Undesignated | \$108,875 | PF | | | |
| Assessment of SAV Protection Policies | \$50,000 | X | PF | X | X |
| High-Salinity SAV Monitoring/Mapping | \$130,000 | X | PF | X | X |
| Low-Salinity SAV Monitoring Protocols Development | \$188,650 | X | PF | X | X |
| Analysis of Low-Salinity SAV Sentinel Site Data | \$120,000 | X | PF | X | X |
| SAV - Undesignated | \$220,225 | X | PF | | |
| Stormwater Management (RISE) | \$200,000 | X | X | PF | X |
| Algal Bloom Coordination and Nutrient Management in the Chowan/Pasquotank River Basins and Albemarle Sound (RISE) | \$105,000 | X | X | PF | X |
| Virginia Healthy Waters & Watershed Roundtable Coordination | \$85,000 | X | | PF | X |
| Water Quality - Undesignated | \$168,875 | | | PF | |
| Scuppernong Water Management Study** | \$250,000 | X | | X | PF |
| Tribal Coastal Resilience Connections | \$350,000 | X | | X | PF |
| Green Infrastructure, Local Government Assistance (RISE) | \$105,000 | Х | X | X | PF |
| Water Level Monitoring Stations | \$103,875 | X | X | X | PF |
| Downeast Resilience Network | \$150,000 | X | | X | PF |
| Virginia Resilience Planning & Implementation | \$100,000 | X | X | X | PF |

PF= Primary Focus Area project is budgeted out of / categorized under in this workplan and budget

^{* =} Capacity Building or Broad-Based

**=Budgeted out of multiple BIL Focus Areas; discussed in detail in the primary focus area section of workplan.

APPNEDIX I.

2024 Draft CCMP Update Objectives & Actions: BIL Focus Areas & Proposed Projects revised 11 March 2024

UNDERSTAND

A1: Assess the condition and impacts of targeted ecosystems

A1.1 Facilitate mapping the distribution of significant ecological, bathymetric, geologic, demographic, and cultural features. (BIL Priority)

BIL Projects: Spatial Decision Support, High Resolution Land Use Cover (NOAA-CCAP), SAV Mapping, Scuppernong Study, Tribal Coastal Resilience Connections

A1.2 Facilitate improved projections of land and water use, and climate change related impacts on the ecosystem to enhance the coordination of multiscale planning and management. (BIL Priority)

BIL Projects: Spatial Decision Support, High Resolution Land Use Cover (NOAA-CCAP), Scuppernong Study, Tribal Coastal Resilience Connections, RISE Implementation, Assessment of SAV Protection Policies, Water Level Monitoring

A1.3 Develop and refine a regional ecosystem assessment and supporting assessments such as indicator metric reports and syntheses.

PROTECT & RESTORE

- B 1: Protect and restore areas containing significant natural communities and habitats
 - B 1.1 Refine and implement a submerged aquatic vegetation (SAV) protection and restoration strategy. (BIL Priority)

BIL Projects: Spatial Decision Support, High Resolution Land Use Cover (NOAA-CCAP), Assessment of SAV Protection Policies, SAV High & Low Salinity Monitoring, Analysis of Low-Salinity SAV

B 1.2 Refine and implement a regional wetland protection and restoration strategy (BIL Priority)

BIL Projects: Spatial Decision Support, Restoration Projects Grant Opportunity, Natural and Working Lands, Currituck Sound, Wetlands Undesignated

B 1.3 Protect and restore targeted natural communities, habitats, and ecosystem processes. (BIL Priority)

BIL Projects: Spatial Decision Support, Restoration Projects Grant Opportunity, Natural and Working Lands, Currituck Sound, Wetlands Undesignated, SAV all projects, Virginia Healthy Waters and Roundtable Coordination, Tribal Coastal Resilience, RISE Implementation

- B 1.4 Facilitate the development of policies to minimize dredge and fill activities in naturalized areas and sensitive habitats.
- B 1.5 Refine for federal approval and facilitate the implementation of a *North Carolina Integrated Aquatic Invasive Species Management Plan*.
- B 1.6 Facilitate the construction of new oyster habitats.

BIL Projects: Restoration Projects Grant Opportunity, Natural and Working Lands

B2: Protect and restore water quality by minimizing or eliminating targeted sources of water pollution

B2.1 Support the development of water quality standards and any subsequent development of new management strategies for estuarine waters. (BIL Priority)

Proposed BIL Projects: Stormwater Management (RISE), Algal Bloom Coordination and Nutrient Management, Virginia Healthy Waters and Roundtable Coordination, Water quality Undesignated

- B2.2 Facilitate the implementation of existing contaminant management strategies.
- B2.3 Protect, restore, and enhance targeted shorelines and riparian buffers to reduce and treat runoff, and to support ecosystem function/services. (BIL Priority)

Proposed BIL Projects: Stormwater Management (RISE), Algal Bloom Coordination and Nutrient Management, Virginia Healthy Waters and Roundtable Coordination, Restoration Projects

- B2.4 Facilitate voluntary retrofitting of existing development and infrastructure to reduce runoff.
- B2.5 Minimize the introduction of toxics into receiving waters by applying approved best management to marinas, boatyards, stormwater discharges and wastewater facilities.
- B2.6 Minimize contaminant loads to receiving waters through wastewater management and system upgrades. (DWI Match Support)
- B2.7 Apply approved best management practices (BMPs) on targeted agricultural and silvicultural lands to improve water quality for the protection, and restoration of SAV and oyster habitats.

Proposed BIL Projects: Stormwater Management, Algal Bloom Coordination and Nutrient Management, Scuppernong Study

B3: Ensure hydrological processes in rivers and estuaries support significant natural communities and ecosystem functions

B3.1 Facilitate the development and implementation of coordinated landscapescale hydrological restoration strategies.

Proposed BIL Projects: Scuppernong Study, Downeast Resilience Network

- B3.2 Facilitate the hydrologic restoration of floodplains and streams.
- B3.3 Develop and refine ecological flow requirements for each major river for inclusion in basin-wide water management plans.

B4: Restore spawning areas for diadromous fish

- B4.1 Facilitate the installation of fish bypass infrastructure and operations protocols on existing dams and other permanent barriers.
- B4.2 Facilitate the removal of dams, culverts, and other in-stream barriers.
- B4.3 Restore degraded anadromous fish spawning habitats.

ENGAGE

C1: Foster watershed stewardship

BIL Projects: CAC Community Projects, Tribal Coastal Resilience

- C 1.1 Communicate the importance of stewardship and offer opportunities for volunteerism to further APNEP's mission.
- C 1.2 Provide and promote opportunities for outdoor experiences that connect individuals with the Albemarle-Pamlico ecosystem
- C2: Conduct targeted environmental education efforts regarding estuarine habitats, water quality, and ecosystem services
 - C 2.1 Provide environmental education training opportunities for educators.
 - C 2.2 Increase public understanding of the relationship between ecosystem health and human health advisories relating to water, fish, and game.

Proposed BIL Projects: Algal Bloom Regional Coordination, Stormwater Management, Virginia Healthy Waters and Roundtable Coordination

- C 3: Provide tools and training to support ecosystem-based management
 - C 3.1 Develop and implement a strategy to improve decision-makers' understanding of the return on investments in environmental protection, restoration, planning, and monitoring.
 - C 3.2 Enhance the coordination of targeted ecosystem management by federal, state, regional, and local governments, and communities by assisting with the incorporation of resilience, climate change and sea level rise considerations into planning processes. (BIL Priority)

Proposed BIL Projects: Scuppernong Study, Tribal Coastal Resilience Connections, Water Level Monitoring Stations, Downeast Resilience Network, Virginia Resilience Planning, Community Resilience, Stormwater Management, Algal Bloom Coordination, RISE Implementation

MONITOR

- D1: Develop and maintain an integrated monitoring network to collect and disseminate information for assessment of ecosystem outcomes and management actions associated with CCMP implementation
 - D1.1 Facilitate the development and implementation of an integrated monitoring network through the guidance of regional monitoring and assessment teams. (BIL Priority)

Proposed BIL Projects: Spatial Decision Support, SAV Monitoring, STAC Focus Area Workshops, Algal Bloom Regional Coordination and

Nutrient Management, Virginia Healthy Waters and Roundtable Coordination, Water Level Monitoring

- D1.2 Facilitate the expansion of volunteer monitoring into a core element of the integrated monitoring network.
- D1.3 Develop and maintain an online resource that clearly conveys regional information in support of ecosystem-based management.