FINAL

Cumulative & Secondary Impacts: Strategy
STRATEGY #1: *Intergovernmental Decision-Making*

Summary

Coordinated decision-making between state and local officials during land use planning, permitting, and environmental review processes can improve policies aimed at protecting coastal resources. This strategy aims to identify and minimize coastal resource use conflicts, and create a stronger linkage between local land use plans and state and federal water use policies by securing intergovernmental agreements to proactively consult the Coastal Geospatial and Educational Mapping System (Coastal GEMS), a tool-based Web resource, to view and analyze the state of Virginia's coastal resources in the face of increasing coastal development. Additionally, by providing the most up-to-date data to all stakeholders in the coastal zone, all individuals could help identify additional information (i.e. gaps) needed to better manage our coastal resources which could lead to modifications of the current regulatory structure.

Coastal GEMS, in which the VA CZM Program has invested considerable funding to date, is designed to promote coordination between state and local governments in making informed land use decisions which might have impacts to valuable aquatic resources. Through this Internet mapping application, one will find data and maps of the best remaining blue (water-based) and green (land-based) infrastructure in Virginia's coastal zone, as well as information on the value and current management of these resources. Coastal GEMS pools together the best available and most recently produced geospatial data from across all Virginia state agencies, local governments and conservation organizations, providing users with a one-stop shop for coastal resource information and planning tools. Access to Coastal GEMS will occur via the VA CZM website through an interface that is navigable and understandable to users of all skill levels (agency professionals and the general public) throughout the Commonwealth. Additionally, various open houses and training workshops will be conducted throughout the coastal zone to ensure that all those with an interest in Virginia's coastal resources will understand how to use Coastal GEMS. These events will also provide a mechanism for feedback to improve future versions of the application.

A major goal of Coastal GEMS is to foster stronger understanding of how activities on the land and in the water affect each other. For example, if there are habitat restoration activities in the water, activities conducted or planned on the adjacent land should be compatible. Conversely, when activities are planned or conducted on the land, effects on the adjacent water should be considered. It is the intent of Coastal GEMS to create a stronger linkage between local land use plans and state and federal water use policies.

There are many beneficial outcomes from using this application:

- Local and regional planning agencies can use Coastal GEMS to better manage growth by determining the most suitable areas for conservation and development. They can also analyze the impact of different policy scenarios in their area, allowing them to develop the best actionable policies to prevent or reduce cumulative and secondary impacts.
- State and federal agencies can use Coastal GEMS to better manage projects such as roads, major facilities, habitat restoration plans and public access plans. State and federal agencies may also use Coastal GEMS as a starting point for the environmental review process in order to quickly access agency data.

- Academic institutions can use Coastal GEMS to educate students about coastal resource use and values and to provide a basis of information for classroom projects and/or research.
- The general public can use Coastal GEMS to learn more about Virginia's coastal resources. Coastal GEMS can also be used by private citizens, advocacy groups and businesses to formulate their position on the potential impacts of projects on coastal resources.

Although many data layers have already been digitized or created, continued development of data layers and new analytical tools is crucial to fostering stronger linkages between state water use policy and local land use policy. Agreements from all agencies to continually provide the VA CZM Program with their best available data is also essential in ensuring informed decisions are made with regard to sensitive coastal resources.

CZM Program staff will hold training and outreach sessions on Coastal GEMS targeted at the various end users. During this process, memoranda of agreement (MOAs) will be negotiated with the various users as to how the use of Coastal GEMS will be incorporated into their coastal resource management efforts. Contractual services will be obtained to help CZM staff develop and secure these MOAs between the CZM Program and local/state governments. Coastal GEMS will also be enhanced during next five years with additional data layers, tools and features. Initially, data on coastal embayment flushing characteristics will be developed, along with other data layers that have already been prioritized. The CZM Program and its coastal partners will identify additional data layers and analytical tools that will further enhance the usefulness and usability of Coastal GEMS for more informed coastal resource management decisions.

In addition to the enhancements to Coastal GEMS, this strategy includes a pilot project with the Middle Peninsula Planning District Commission (MPPDC) for applying GEMS as a tool to manage use conflicts. As the Middle Peninsula continues to evolve from less rural to more suburban, conflicts between landside and waterside uses have increased significantly. As a component of this strategy, the MPPDC will initiate a pilot public policy project to gain understanding of what the land and water assets are for an identified study reach and seek a mediated policy dialog related to use conflict. A Waterfront Use Conflict Roundtable will be assembled to gain a better understanding of how nearshore areas are being used now and what constraints exist for existing and new uses, and determine the issues and conflicts that are affecting local governments' ability to make the most of their waterfront. This Roundtable, composed of local elected officials, government administrators, local planners, waterfront property owners and commercial fishing interests, will support coordination between jurisdictions, outreach and training, and transferability to additional impacted localities. The Roundtable will use Coastal GEMS and additional geospatial data as an issue investigation and decision-making tool for local planning and development of policy recommendations concerning addressing waterfront use conflicts.

Enforceable Policies/Outcomes

- Memoranda of Agreement between VA CZM and willing coastal planning district commissions, cities, towns and counties to consult Coastal GEMS and incorporate information into planning procedures, and provide recently updated GIS data to VA CZM for inclusion into Coastal GEMS.
- Memoranda of Agreement between VA CZM and willing state and federal agencies to consult Coastal GEMS during planning, permitting and environmental review procedures, and provide recently updated GIS data to VA CZM for inclusion into Coastal GEMS.
- New data, including tidal embayment flushing rates, and/or updated data for improved coastal resource management decision making.

- Anticipated inclusion and citation of Coastal GEMS information in local plans and ordinances.
- The initiation of policy dialog during the Middle Peninsula Waterfront Use Conflict Roundtable is expected to lead to policy recommendations for additional study regarding the formation of Waterfront Improvement Districts, additional management/enforcement options, and other policies to address use conflict concerns yet to be identified for the identified study area. The Roundtable policy recommendations will be used as a model to advance similar waterfront use conflict policy discussions in adjacent coastal counties.

Tasks	**Time**	**Budget**
Task 1: Establish a Waterfront Use Conflict Roundtable in Middle Peninsula to identify waterside-landside issues and use conflicts along target reach, analyze geospatial data of conflicts, and develop policy recommendations to address local waterfront use conflicts ($10K in Year 1, $30K in Year 2)	Years 1-2	$40,000
Task 2: Contract with VIMS to develop data on embayment flushing rates for tidal areas of Virginia's coastal zone. Data will initially be used for aquaculture management and improved local land use planning.	Year 1	$60,000
Task 3: Additional data layer development and/or assistance for updates and maintenance of Coastal GEMS that improve usability and usefulness for proactive planning. VA CZM and coastal partner advisory group will determine the most important blue/green infrastructure data needs, analytic tools, or composite data layers to be produced. Data needs currently identified include bathymetry, riparian buffer areas, floodplains, invasive species, forest resource assessments, population growth trends, use conflict areas, essential fish habitat, bottom type, sediment type, and many more yet to be determined. Enhancements to the Coastal GEMS application will be contracted to VCU until a better mechanism can be defined. ($45k in Year 1, $55k in Year 2, $40k is Year 3, $85k in Year 4, $83k in Year 5) – one to two data layers or tools developed per year.	Years 1-5	$308,000
Task 4: Develop and conduct training workshops on the use of Coastal GEMS for coastal cities, counties, PDCs, state and federal agencies, non-profit environmental groups, housing developers, energy developers, citizen advocacy groups, etc. Hold 3 open house workshops in Northern Virginia, Richmond, and the Tidewater Region, and 8 PDC and local government training workshops. Sponsor a webcast or create downloadable materials for Coastal GEMS training. Produce promotional materials to encourage use of Coastal GEMS. ($5k in Yr 2, $5k in Yr 3)	Years 2-3	$10,000
Task 5: Develop a contract to draft model MOAs between VA CZM and both state agencies and local governments to consult Coastal GEMS in land use planning, permitting, and environmental review processes. MOA language will also define a process for regularly updating and submitting geospatial data to VA CZM for use in Coastal GEMS (data-sharing agreement). ($10k in Yr 2, $5k in Yr 3)	Years 2-3	$15,000
Total		$433,000

Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total Request**
$115,000	$100,000	$50,000	$85,000	$83,000	$433,000