

## **“Coastal GEMS: A Tool for Coordinated Coastal Planning & Education”**

Laura McKay, Program Manager, Virginia Coastal Zone Management Program

Ms. McKay cited the Coastal Zone Management Act, which was created in 1972, and noted that in Virginia, ten agencies have purview over aspects of the coastal zone (tidal waters out to 3 miles offshore). Virginia’s Coastal Program focuses on: coastal resource protection, sustainable uses of the coastal zone, and coastal management coordination – and maximizing the availability of data while doing so.

She noted that two-thirds of the population now lives within a quarter of the land area in Virginia. Population density is rising fast in tandem with global warming (and, sea level rise). Fifty to eighty percent of our tidal wetlands will be lost if we experience 1.5 to 2 ft. rise in sea level. That means more submerged lands to manage.

She also pointed out time and project “realities” of the modern workforce, where people jump around between jobs, yet projects often span a long time period (20+ yrs). Other challenges: the Office of Governor – and administration – changes every four years and there continues to be a lack of public support for environmental initiatives. For example, in Virginia less than 1% of the state budget goes to natural resource protection.

Recent Coastal Program focal areas include the Seaside Heritage Program and emphasis on coastal zone management through new, enforceable policies enable by better maps. A recent summit resulted in a “vision” for Virginia’s coastal zone that included both green and blue infrastructure. The goal: to better link local land use policy and state water use policy, and help the public understand.

The result is the Coastal GEMS Mapping Project, which serves as a repository of map layers, which are attributed to their source (such as VIMS, etc.) The map brought together 100 coastal projects, and was launched in February 2007. It is comprehensive in scope, giving the use the ability to query water features, shoreline, land, wildlife, recreational, conservation planning tools, reference layers (county boundaries, for example).

Other cool features: it includes links to fact sheets for every data layer, including who owns the data, how to get it, why we should care, management entities, and more. You can search by various mechanisms – by locality, for instance, and various themes. A news and events menu provides related links; another tool helps you identify a specific natural feature.

Version 2 is about to be released – with the capability to download into PDFs to create general reports!

How might you use this new application? Examples given: reviewing a pipeline proposal from an offshore facility; designating a seaside water trail to keep it away from sensitive resources; prioritizing lands for acquisition (using multiple agency data layers); establishing shellfish aquaculture zones; and more.