Presenter

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Hazard Vulnerability Assessment (HVA) Tool

The South Carolina Department of Health and Environment Control (SCDHEC) - Ocean and Coastal Resource Management (OCRM) Office is presenting coast-wide results from the Hazard Vulnerability Assessment (HVA) tool.

The HVA tool evaluates coastal hazard vulnerability from four components: 1.) Storm surge, 2.) Shoreline change rate (erosion or accretion), 3.) Flooding, and 4.) Social/economic vulnerability (SoVI®). The final product is a vulnerability index on a scale of 1 to 5, with 1 being the least risk, and 5 being the most risk. In addition to this composite product, HVA also provides products for Inundation (surge + flooding), Inundation + SoVI®, and Shoreline Change (rate, plus temporal and spatial variations). Users can examine each hazard component to see which has the most impact in any given area.

The HVA tool is an open source geospatial tool that can be used by coastal managers, planners, and researchers to improve hazard mitigation planning, emergency management, post-disaster redevelopment, and to determine areas best suited for restoration and mitigation. As an example, the HVA tool could potentially be utilized to support the Community Rating System (CRS) program by earning CRS credit under map information services, outreach projects, hazard disclosures, floodplain mapping, higher regulatory standards, additional map data, and floodplain management planning. The CRS, a voluntary National Flood Insurance Program (NFIP) incentive program, recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS: 1) Reduce flood damage to insurable property; 2) Strengthen and support the insurance aspects of the NFIP, and 3) Encourage a comprehensive approach to floodplain management.

The SCDHEC – OCRM ran the HVA tool statewide in the coastal critical area and has released the results through a new public web application.