USING GEOSPATIAL DATA TO INFORM FUTURE SHORELINE PLANNING ON THE OREGON COAST

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Shoreline erosion is a widespread coastal challenge, especially along the high energy wind and wave environment of the Oregon coast. One common tactic used to protect private property and manage erosion is to build shoreline protection structures (e.g. riprap and seawalls). However, the impacts of these structures are not well known and information about existing structures and their locations are not well maintained or easy to use, making decision-making challenging. With coastal development likely to increase over the coming decades and erosion hazards expected to intensify, the Oregon Coastal Management Program and the Oregon Parks and Recreation Department are motivated to modernize outdated geospatial data related to coastal erosion and armoring and to re-visit current land-use policies and strategies for oceanfront development. The modernized data, completed over the past year, show locations of existing shoreline protection structures and areas of eligibility for future armoring permits (based on current laws). The data are now being used to address frequently asked management questions (e.g. amount of coastline already armored) and providing the basis for an analysis of current policies and strategies. Anticipated outcomes of this analysis include an understanding of the most vulnerable coastal areas, a review of armoring options and alternatives, and policy recommendations regarding new and existing coastal development with the goal of increasing resiliency. Additionally, spatial information about shoreline armoring, erosion, flooding, sea level rise, and other coastal hazards have been combined through an online viewer and data service to provide an accessible decision-support tool for local planners, beachfront homeowners, and coastal managers. Next steps will include working with end-users to refine this online data tool and collaborating on potential policy options. This presentation will focus on how new and updated spatial data will help inform local decision-making, policy analysis and discussion around coastal erosion and armoring.