

Sustainable Coastal Communities: *Balancing Needs Along Our Valuable Coastlines*



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Maryland Coastal Program

11/01/05

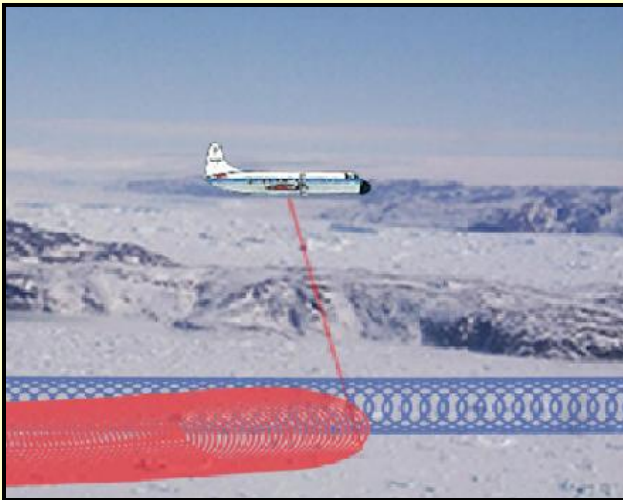
Local Government Capacity

- Many communities are struggling to keep up with the increase in technological advances like GIS
- Limited in their resources to utilize mapping technology
- Tools often not effective as local government can not keep the information current, its not accessible, or in the appropriate format

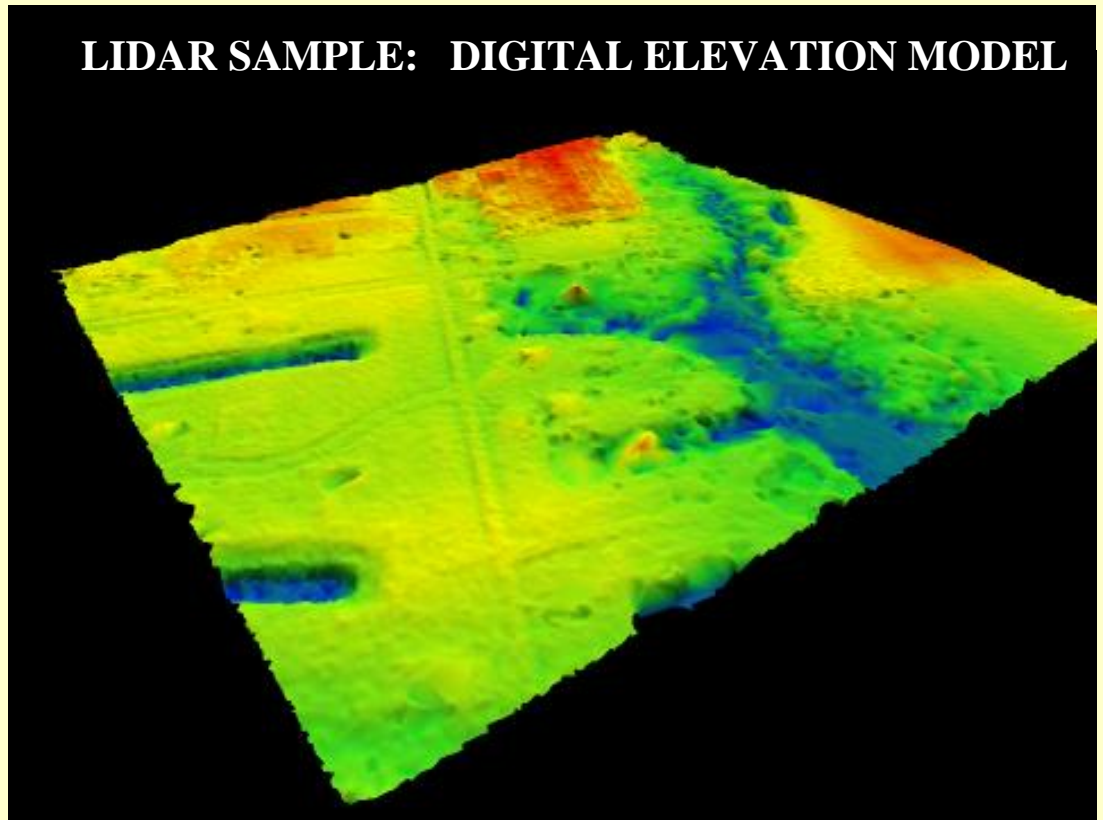
Advancements in Coastal Hazard Mapping Technology

LIDAR:

**LIGHT DETECTION
AND RANGING**



LIDAR SAMPLE: DIGITAL ELEVATION MODEL



Floodplain Mapping - Present



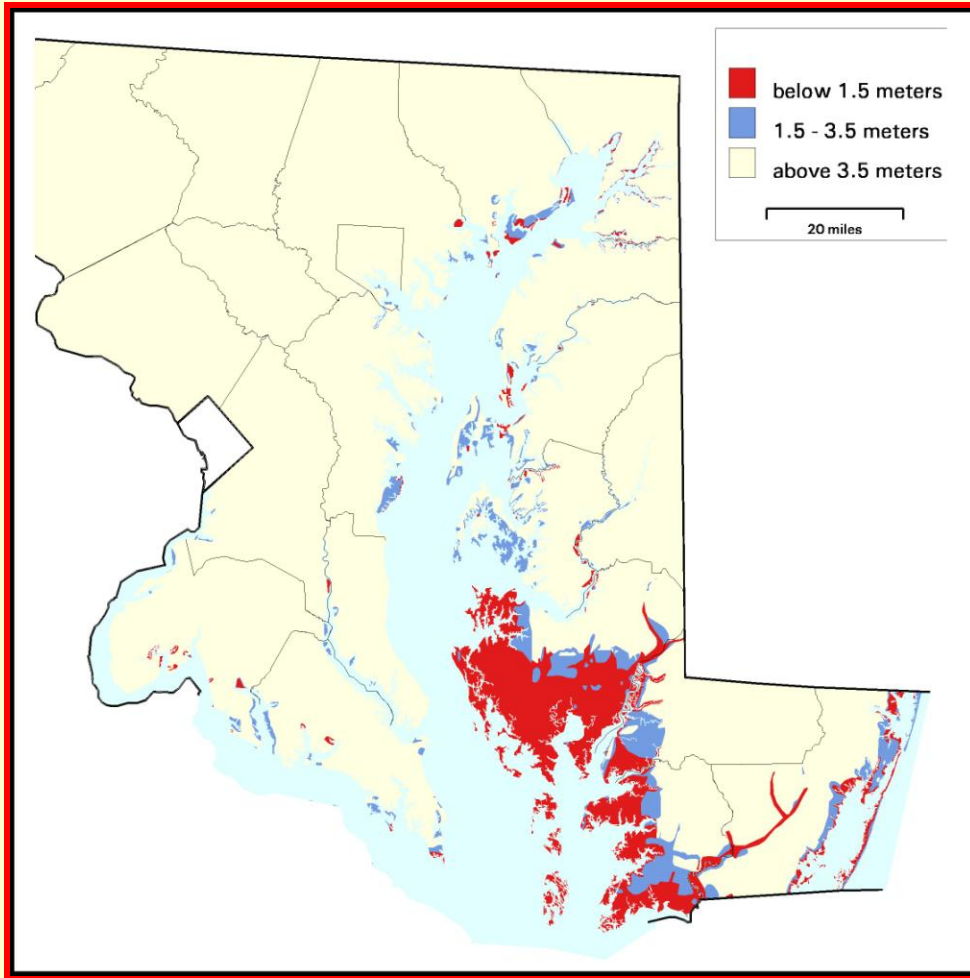
**Digitized
FIRMS
with
Flood
overlay**

Floodplain Mapping - Future



**3-D Ortho
Imagery
with
Floodplain
overlay**

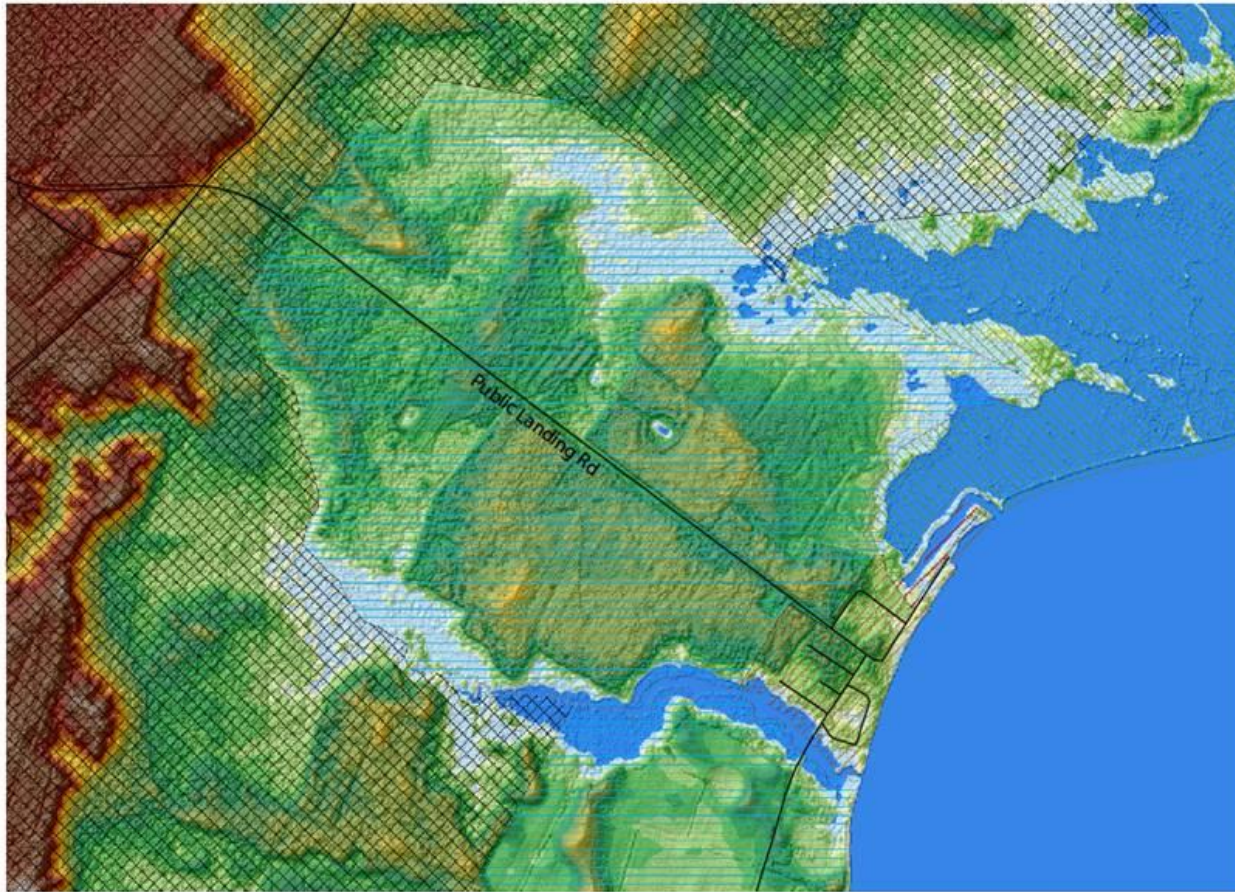
Sea Level Rise Mapping - Present



**General guidance maps
on land vulnerable to
SEA LEVEL RISE**

EPA 2001

Sea Level Rise Mapping - Future



**Public Landing,
MD**

2100

**Current Rate of
SLR 1ft per 100yr**

Building Community Capacity to Incorporate New Technologies

OPPORTUNITY 1:

Support initiatives that take advantage of economies of scale when acquiring large and expensive imagery.



NSGIC Proposal: *Imagery for the Nation*



Photos Courtesy of
**National States Geographic Information
Council**

Building Community Capacity to Incorporate New Technologies

OPPORTUNITY 2:

Ensure mapping products and information derived from hazard mitigation planning is incorporated into decisions about land use and where to direct future growth and development.

Building Community Capacity to Incorporate New Technologies

OPPORTUNITY 3:

Provide direct assistance to build local capacity to utilize information and data such as providing training to staff and raising the awareness of local elected officials on coastal hazard issues.

CZMA Reauthorization: Coastal Communities Program

- Establishes a ready-made framework for addressing many of these community issues.
- Provides funds to minimize the loss of life and property from coastal hazards by managing development in hazardous areas, providing education, and supporting local and state planning.