CoastSmart Communities Program

*Adaptive * Ready * Resilient*

Chesapeake and Coastal Service
Maryland Department of Natural Resources

MAFSM

October 15, 2015

MARYLAND
Smart, Green & Growing

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

For Love of the Water

Photo Credit: Lee Goodwin

Current Nuisance Flooding

Photo Credit: Amy McGovern

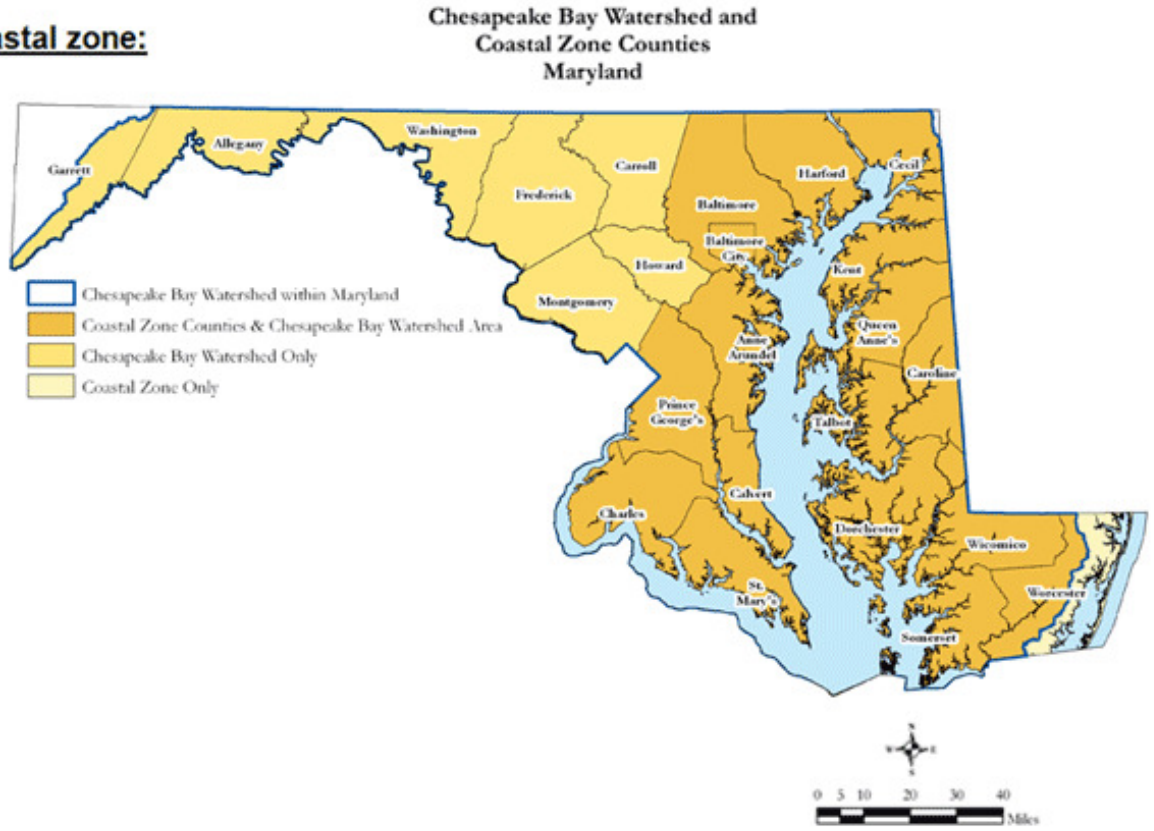
Maryland's Coastal Zone

Maryland's Coastal Zone

The Maryland coastal zone is comprised of the land, water and subaqueous land between the territorial limits of Maryland in the Chesapeake Bay, Atlantic Coastal Bays and the Atlantic Ocean, as well as the towns, cities and counties that contain and help govern the thousands of miles of Maryland shoreline. The Maryland coastal zone extends from three miles out in the Atlantic Ocean to the inland boundaries of the 16 counties and Baltimore City that border the Atlantic Ocean, Chesapeake Bay and the Potomac River up to the District of Columbia. This area encompasses two-thirds of the State's land area and is home to almost 70% of Maryland's residents.

Counties in Maryland's coastal zone:

Anne Arundel
Baltimore
Calvert
Caroline
Charles
Cecil
Dorchester
Harford
Kent
Prince George's
Queen Anne's
Somerset
St. Mary's
Talbot
Wicomico
Worcester
and Baltimore City



Maryland's Coastal Zone

- Maryland's CZMP is a networked program through partnered State agencies to address:

- Blue Infrastructure
- **Coastal Hazards Resiliency**
- Public Access and Water Trails
- Working Waterfronts
- Ocean Planning and Renewable Offshore Energy
- Climate Change and Coastal Conservation
- Water Quality and Climate Change Impacts

In other words…

- One floodplain, *many* languages:
  - Emergency Management
  - Floodplain Management
  - Land Use Planning
  - Public Works
  - Economic Development
  - Tourism and Recreation

CoastSmart Communities Program

- Translator of floodplain languages
- Dedicated to assisting Maryland's coastal communities address coastal hazards, such as coastal flooding, storm surge, and sea level rise.
- *CoastSmart* connects local planners to essential information, tools, people, and trainings.

CoastSmart Communities Program

- Help utilize existing mapping tools

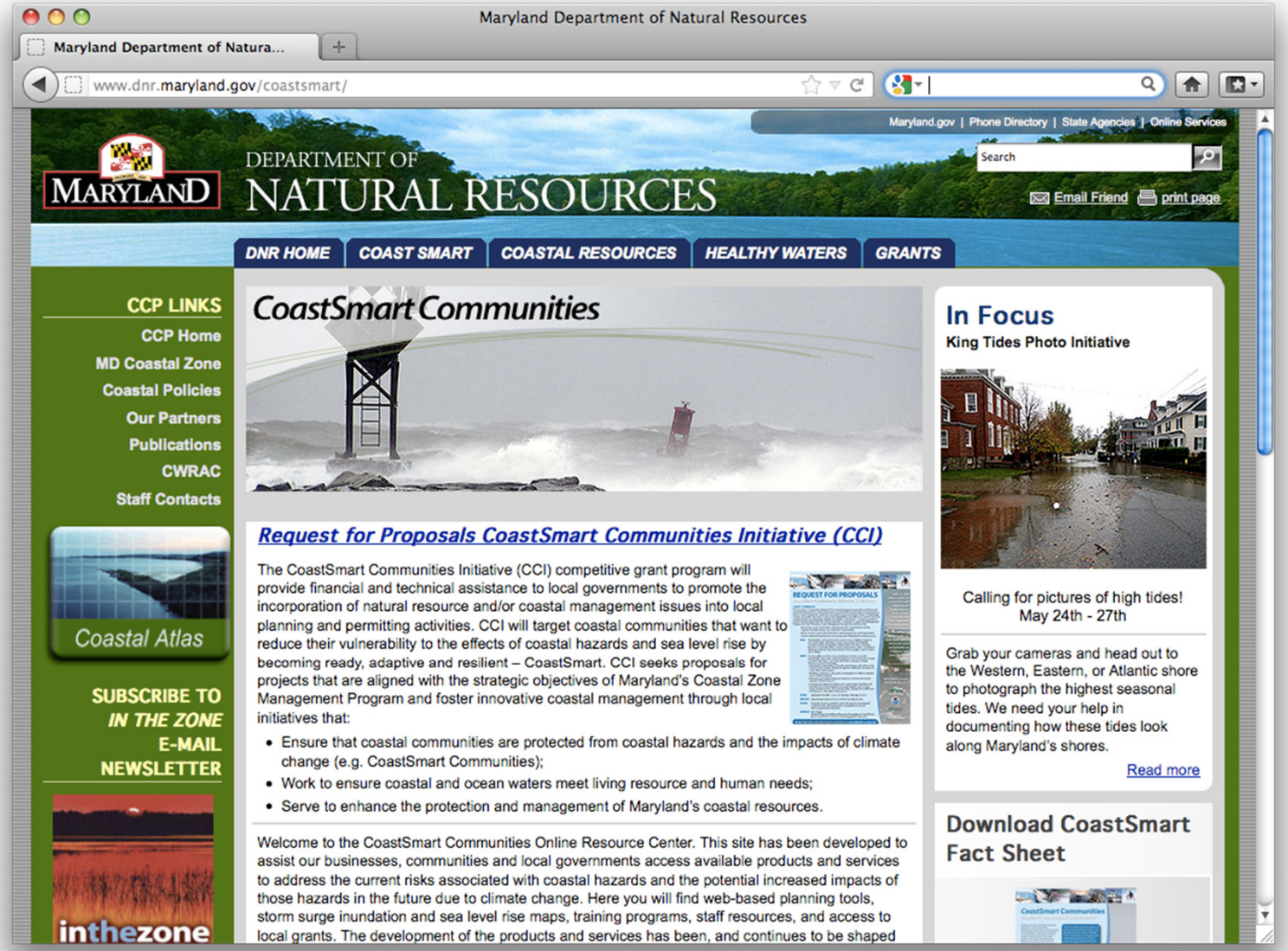
- Connect to information, training and resources

- Grants to Local Governments

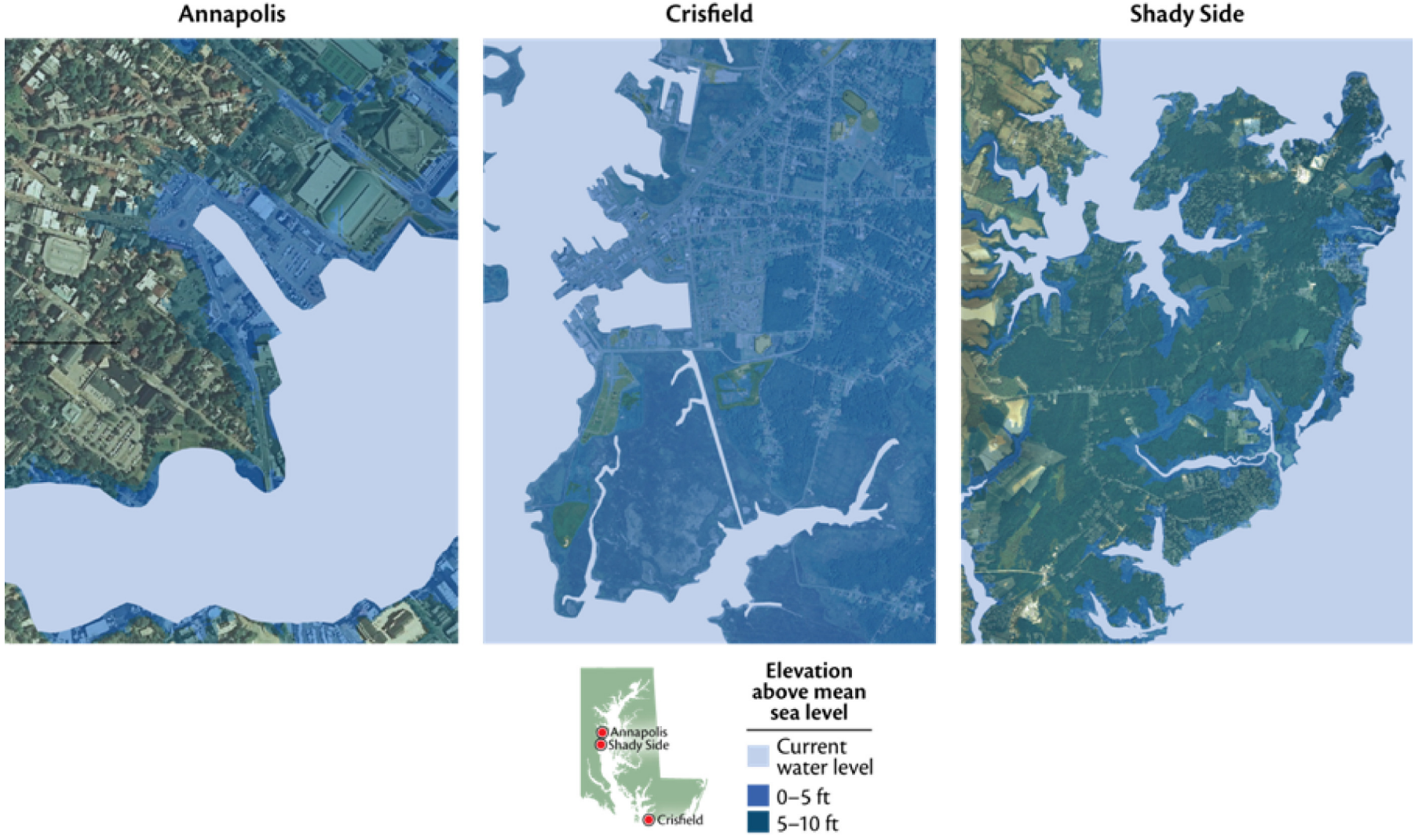
CoastSmart Program Resources

- Maryland's Coastal Atlas
- Informational factsheets
- Online Resource Center
- Partnered Trainings
- *CoastSmart* Scorecard
- Community Grants

Online Resource Center



Identifying Coastal Hazards



Maryland's CoastSmart Communities Scorecard

A community self-assessment tool

This tool has been prepared by the Chesapeake & Coastal Service to provide Maryland's coastal communities with a practical method to assess their preparedness for the impacts of coastal hazards and increased future impacts due to a changing climate.

http://dnrweb.dnr.state.md.us/CoastSmart/pdfs/scorecard.pdf

Coastal hazards in Maryland

Extending over 3,000 miles along the diverse landscapes of the Chesapeake Bay, the Coastal Bays, and the Atlantic Ocean, Maryland's shoreline is highly susceptible to coastal hazards. In Maryland, these hazards are both episodic and chronic in nature, resulting from weather events (hurricanes, nor'easters, floods, and storm surge) and long-term processes (sea-level rise, land subsidence, and erosion). Almost 70% of Maryland's shoreline experiences chronic erosion and up to 60% of some counties lie within the 100-year floodplain. The damages and impacts resulting from coastal hazards present a substantial threat to communities, infrastructure, and natural resources throughout Maryland and will only be exacerbated by climate change.

The effects of sea-level rise and the risks associated with coastal hazards are often observed at the local level, and therefore require local action. Through programs such as *CoastSmart* Communities, the State of Maryland is helping build the capacity to develop plans within communities that not only reduce future threats to our communities' safety, health, and welfare, but are typically more effective and less costly than responding reactively to coastal hazard impacts as they happen.

How vulnerable is your community to coastal hazards?

Vulnerability refers to how susceptible a natural or human system is to coastal hazards, such as shoreline change, sea-level rise, flooding, and storm surge. Vulnerability is a function of a system's ***sensitivity*** and its capacity to ***adapt*** to impacts and changes. Systems that are ***sensitive*** to coastal hazards are easily affected or have a disproportionately large area affected by a small change. ***Adaptation*** consists of actions taken to reduce the vulnerability of natural and human systems to the effects of climate change in the coastal zone.

Why a Scorecard?

With varying technical capacity and the demands placed on local planning staff, providing resources to identify and implement adaptation strategies is essential. Our goal is to help local governments determine how well they are currently positioned to plan for coastal hazard impacts through a simple, practical self-assessment. The Scorecard also provides a mechanism for planners, natural resource managers, emergency management professionals and other local officials to identify specific, realistic ways that they can prepare for these impacts by integrating coastal hazards into existing planning, management, and regulatory programs. Because each Maryland community is unique, the Scorecard is intended to identify areas that need improvement, not serve as a basis for ranking or comparing among communities.

How to use the Scorecard

The scorecard is organized into five major sections: 1) Risk and Vulnerability Assessment, 2) People and Property, 3) Infrastructure and Critical Facilities, 4) Natural Resources, and 5) Societal and Economic Impacts. Go through each section and answer the questions to the best of your ability. After each section, total up your 'yes' responses and check the *CoastSmart* ratings to see how well existing planning efforts are addressing current and future weather and climate hazards To help determine your responses, each section has a "Where to Start" box with a list of relevant planning documents, resources, and other tools to help assess your preparedness.

What your scores can tell you

When assessing your community, it is important to look at the individual section scores to see which areas need the most improvement and where you are doing the best things. As a general guide, we've included a three-tiered scoring system for each section:

- ***CoastSmart:*** Scores in this rating indicate that your community is positioned to be ready, adaptive, and resilient to coastal hazards and climate change. There is, however, always room for improvement. Examine the recommendations and helpful resources provided at the end of each section to see where you may be able to do more work to make your community even more resilient.
- ***On The Right Track:*** To continue moving in the *CoastSmart* direction, look at your lower section scores. Study your results to identify strategies that have been successful and determine how they can be adapted to generate more "yes" answers and make your community better prepared to face coastal hazards and climate change.
- ***Getting Started:*** While you may only be in the beginning steps of making your community *CoastSmart*, it is important to analyze your results carefully. Focus on identifying some key actions that you can feasibly take to protect your community in the short term, while continuing to work on long-term planning and positive changes that will reduce vulnerability, minimize the cost of implementation, and make your community *CoastSmart*.

After determining your individual section scores, try to identify any strategies that have allowed your community to be more prepared in your higher scoring sections and think about how these strategies could be adapted and applied to sections with lower scores to move your community closer to *CoastSmart*.

What next? Where to go for help

For any "no" answers you provided, explore the resources listed at the end of the section for additional information and ideas. The tools, publications, and trainings described here can help your community continue moving toward being *CoastSmart*. Also, look at the ***Other Resources*** section at the end of the Scorecard for a list of services that the Chesapeake & Coastal Service can provide.

If you had a lot of ***Getting Started*** or ***On the Right Track*** section scores, you may want to consult with the ***Chesapeake & Coastal Service (410-260-8743)*** to discuss financial and technical assistance that might be available from various state and federal agencies to help your community become *CoastSmart*.

Connection with FEMA's Community Rating System (CRS)

The National Flood Insurance Program's (NFIP) Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements.

Participating communities receive points based on 19 creditable activities, organized under four categories: Public Information, Flood Preparedness, Mapping and Regulations, and Flood Damage Reduction. Flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the goals of the CRS.

The Chesapeake & Coastal Service has developed the *CoastSmart* Communities Scorecard with CRS in mind - making connections between the elements of the Scorecard and creditable CRS activities.

The "CRS Points" boxes in each section offer a few samples of the creditable activities and point values that correspond with our Scorecard elements. The activity number and title correspond directly to those found in the 2013 CRS Coordinator's Manual. *crsresources.org/manual*

Results

Look at how your different section scores compare to each other and recognize specific sections that get a high score and ones that may need more work. Try to identify any strategies that have allowed your community to be more prepared in your better sections and think about how those strategies could be adapted and applied to sections with weaker scores to move your community closer to becoming *CoastSmart*.

ASSESSING RISK AND VULNERABILITY

CoastSmart rating: _____ of 36

Number of Yes answers:

CoastSmart	>25
On The Right Track	12–25
Getting Started	<12

INFRASTRUCTURE & CRITICAL FACILITIES

CoastSmart rating: _____ of 30

Number of Yes answers:

CoastSmart	>21
On The Right Track	10–21
Getting Started	<10

PEOPLE & PROPERTY: LAND USE PLANNING

CoastSmart rating: _____ of 28

Number of Yes answers:

CoastSmart	>20
On The Right Track	10–20
Getting Started	<10

NATURAL RESOURCES

CoastSmart rating: _____ of 17

Number of Yes answers:

CoastSmart	>12
On The Right Track	6–12
Getting Started	<6

PEOPLE & PROPERTY: ALL-HAZARD MITIGATION PLANNING

CoastSmart rating: _____ of 12

Number of Yes answers:

CoastSmart	>8
On The Right Track	4–8
Getting Started	<4

ECONOMY & SOCIETY

CoastSmart rating: _____ of 10

Number of Yes answers:

CoastSmart	>7
On The Right Track	4–7
Getting Started	<4

PEOPLE & PROPERTY: EMERGENCY RESPONSE AND DISASTER PREPAREDNESS

CoastSmart rating: _____ of 15

Number of Yes answers:

CoastSmart	>11
On The Right Track	5–11
Getting Started	<5

Count the number of sections with each rating to determine your overall preparedness:

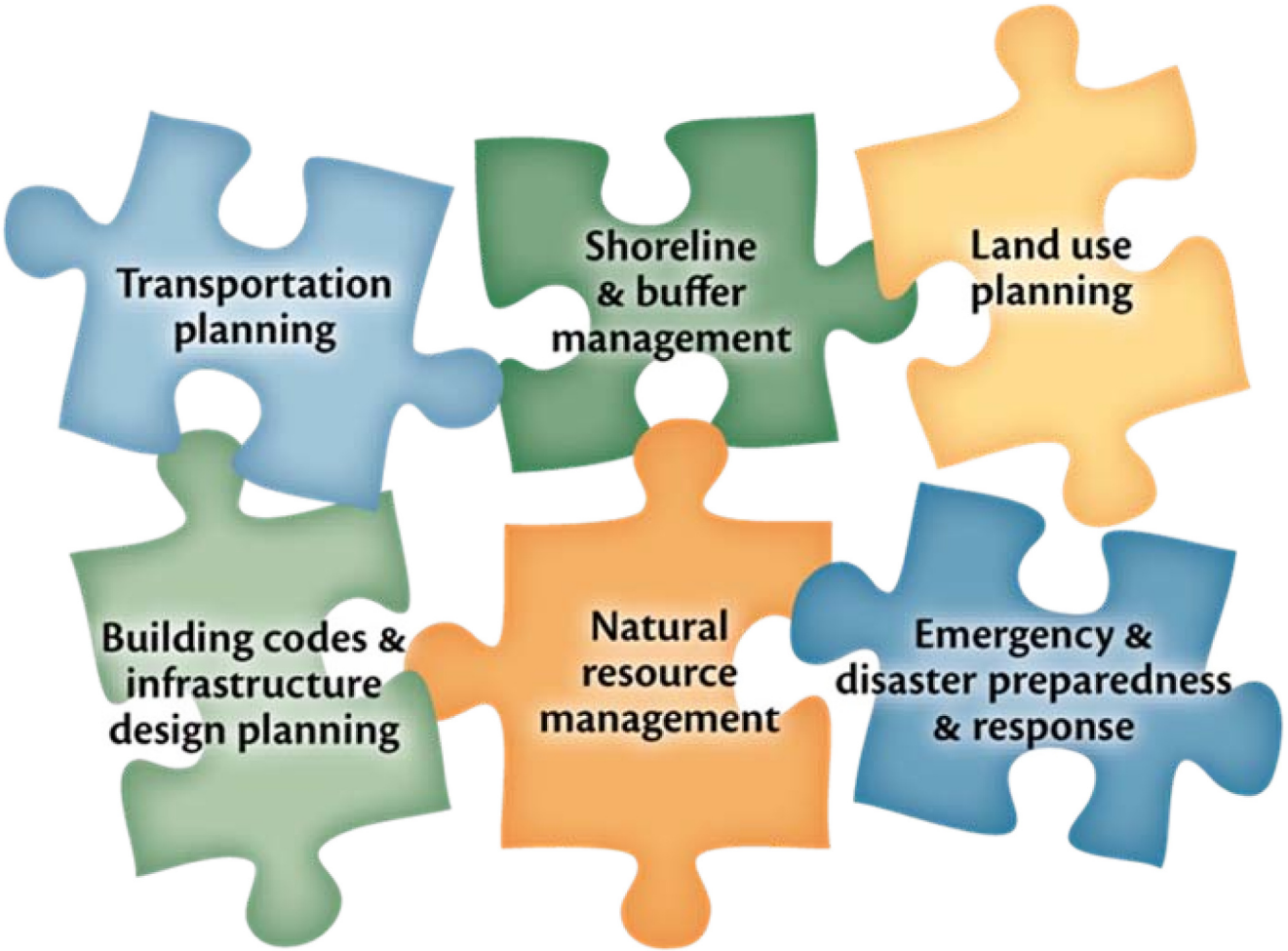
CoastSmart _____

On The Right Track _____

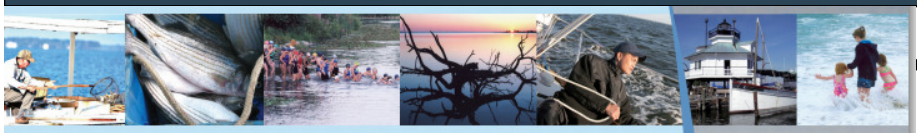
Getting Started _____

So now what?

Planning for Coastal Hazards



CoastSmart Communities Grant



CoastSmart Communities Grant

2015 REQUEST FOR PROPOSALS

GRANT SUMMARY

The Chesapeake and Coastal Service (CCS) is soliciting project proposals from coastal communities in Maryland to address the effects of coastal hazards and sea level rise by becoming ready, adaptive and resilient – CoastSmart. Made possible by a partnership between the Maryland Department of Natural Resources and NOAA, the CoastSmart Communities Grant (CCG) provides financial assistance to local governments to reduce coastal hazard risk and vulnerability through local planning processes. Funding assistance is available to coastal communities regardless of how much previous hazard planning has been completed locally. Projects proposals may address gathering risk and vulnerability information; developing strategies for integrating hazard planning into existing planning processes; or moving forward with implementation of adopted planning strategies.

CCS recognizes that the impacts of coastal hazards are most dramatically experienced at the local level; therefore, local action is required to prepare for these hazards and plan for increases of intensity and frequency due to rising sea levels and a changing climate. This grant is intended to support local governments in this effort.

WHO: Municipalities and counties in the coastal zone are eligible to apply for and receive funds. Maryland's coastal zone includes the following counties and the municipalities located within: Worcester, Somerset, Wicomico, Dorchester, Talbot, Caroline, Queen Anne's, Kent, Cecil, Harford, Baltimore, Baltimore City, Anne Arundel, Prince George's, Calvert, Charles and St. Mary's.

WHAT: Funding for a one year project to further understand, plan for, or implement measures to address coastal hazards within existing local planning processes. Proposals may be submitted for one of three phases:

- **Phase 1: UNDERSTAND** - Conduct a vulnerability assessment to coastal hazards
- **Phase 2: PLAN** - Develop adaptation responses using vulnerability assessment information
- **Phase 3: IMPLEMENT** - Prioritize and integrate top strategies for risk reduction measures

WHEN: Application Deadline: Friday, March 13, 2015

AMOUNT: Expected grant awards of up to $75,000 annually per year.

WHERE: Proposals should be submitted online through the Chesapeake and Coastal Service's web-based grants management service, at: **http://dnr.maryland.gov/ccs/grantsonline.asp.**

CONTACT: Kate Skaggs
Maryland Department of Natural Resources
Chesapeake and Coastal Service
(p) 410.260.8743 (f) 410.260.8739
(e) kate.skaggs@maryland.gov

Go to http://dnr.maryland.gov/ccs/grantsonline.asp to submit a proposal

- **Financial support to local government:**
  - Encourages communities to incorporate climate change and coastal hazard impacts within required planning activities
  - Awarded over $600,000 by the MD Coastal Zone Management Program to support projects in over 20 of its 114 coastal communities since CoastSmart's launch in 2008
  - Helps increase the resilience of a community and reduce the long-term vulnerability to coastal hazards
- **RFP Closed March 13, 2015, 11:59pm**
  - Currently in Review for starting October 1, 2015

CoastSmart Communities Grant

- Potential projects:
  - Update floodplain and zoning ordinances
  - Update hazard mitigation, comprehensive plans & Critical Areas
  - Update Capital Improvement Project plans
  - Apply to Community Rating System
  - Adopt a Sea Level Rise Overlay District
  - Develop a public outreach campaign on hazard risk

Current Grant Projects

- **City of Annapolis –** Designing a Historic Cultural Resiliency Plan **(Started 10/1/14)**
- **Baltimore City –** Tracking of Coastal Adaptation Strategies **(Started 11/15/14)**
- **Baltimore County –** Floodplain Area Resiliency Initiative through CRS **(Started 5/4/14)**
- **Calvert County –** Preparing for Sea Level Rise in Calvert County **(Started 1/1/15)**
- **Prince George's County –** Creating a Coastal Flood Risk Reduction Program **(Started 10/1/14)**
- **Town of Snow Hill –** Updating Zoning Ordinance and Coastal Floodplain Maps **(Started 10/1/14)**
- **Talbot County –** Developing a Hazard Risk Reduction Public Outreach Campaign **(Started 10/1/14)**

PLUS! Meet our new sustainability & preparedness friend!

So…

*Adaptive * Ready * Resilient* – **You tell us**

STOP GLOBAL WARMING!
STOP GLOBAL WARMING!
WE'VE GOT TO WORK ON OUR TIMING.
COX & FORKUM ©2005
www.CoxAndForkum.com

Kate Skaggs
Kate.Skaggs@maryland.gov
(410) 260-8743
http://dnr.maryland.gov/CoastSmart/

Chesapeake Bay National Estuarine Research Reserve Maryland Coastal Training Program

MARYLAND Smart, Green & Growing

MARYLAND DEPARTMENT OF NATURAL RESOURCES

NOAA

Photo Credit: Lee Goodwin