

# HOUSE BILL 881

M4, M1, M3

5lr1521  
CF SB 256

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By: **Delegate Frush**

Introduced and read first time: February 13, 2015

Assigned to: Environment and Transportation

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## A BILL ENTITLED

1 AN ACT concerning

2 **Maryland Shoreline Risk Assessment, Preparation, and Adaptation Act**

3 FOR the purpose of requiring the Department of Agriculture, on or before a certain date,  
4 to conduct a comprehensive assessment of the impacts of climate change on  
5 agriculture in the State; requiring the assessment to identify, evaluate, and quantify  
6 the economic impact of certain risks of climate change on agriculture in the State;  
7 requiring the assessment to examine the latest climate science, recommend certain  
8 preparation and adaptation strategies, and identify ways in which the Department  
9 of Agriculture may provide technical assistance to farmers; requiring the  
10 Department of Agriculture to update its assessment every certain number of years  
11 and to make it publicly available on its Web site; requiring the Department of  
12 Agriculture to consult with the Maryland Commission on Climate Change and the  
13 Coast Smart Council to complete the assessment; requiring the University of  
14 Maryland Center for Environmental Science to establish certain sea level rise  
15 projections and update them every 5 years; requiring the sea level rise projections to  
16 include certain maps and to be made publicly available on the Internet; requiring  
17 the Department of the Environment, on or before a certain date and in consultation  
18 with the Commission on Climate Change and the Coast Smart Council, to conduct a  
19 certain assessment, update the assessment every 5 years, and make the assessment  
20 publicly available on the Internet; requiring the Secretary of Natural Resources to  
21 update the Maryland Environmental Policy Act guidelines to require the  
22 consideration of certain climate change risks; requiring a State capital project that  
23 involves the construction of a highway, beginning on a certain date, to be constructed  
24 in compliance with certain siting and design criteria established by the Coast Smart  
25 Council; requiring the Department of Planning, in consultation with the Coast Smart  
26 Council, to develop certain model local laws and ordinances; altering the State's  
27 Economic Growth, Resource Protection, and Planning Policy to include the  
28 consideration of climate change risks; and generally relating to preparing for and  
29 adapting to climate change impacts in the State.

30 BY adding to

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EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



1 Article – Agriculture  
2 Section 2–108  
3 Annotated Code of Maryland  
4 (2007 Replacement Volume and 2014 Supplement)

5 BY adding to  
6 Article – Environment  
7 Section 2–1212  
8 Annotated Code of Maryland  
9 (2013 Replacement Volume and 2014 Supplement)

10 BY repealing and reenacting, with amendments,  
11 Article – Natural Resources  
12 Section 1–304  
13 Annotated Code of Maryland  
14 (2012 Replacement Volume and 2014 Supplement)

15 BY repealing and reenacting, with amendments,  
16 Article – State Finance and Procurement  
17 Section 3–602.3 and 5–7A–01  
18 Annotated Code of Maryland  
19 (2009 Replacement Volume and 2014 Supplement)

20 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND,  
21 That the Laws of Maryland read as follows:

22 **Article – Agriculture**

23 **2–108.**

24 **(A) ON OR BEFORE JULY 1, 2016, THE DEPARTMENT SHALL CONDUCT A**  
25 **COMPREHENSIVE ASSESSMENT OF THE IMPACTS OF CLIMATE CHANGE ON**  
26 **AGRICULTURE IN THE STATE.**

27 **(B) (1) THE ASSESSMENT SHALL IDENTIFY AND EVALUATE ALL**  
28 **POTENTIAL RISKS OF CLIMATE CHANGE ON AGRICULTURE, INCLUDING:**

29 **(i) DROUGHT;**

30 **(ii) THE EFFECT OF RISING TEMPERATURES ON CROP AND**  
31 **LIVESTOCK SPECIES SPECIFIC TO THE STATE;**

32 **(iii) INCREASED PREVALENCE OF INSECTS, PESTS, AND**  
33 **DISEASES, INCLUDING SOYBEAN RUST;**

1 (IV) FLOODING, INCLUDING SHORELINE FLOODING, A RISING  
2 WATER TABLE, AND SALTWATER INTRUSION; AND

3 (V) SOIL EROSION.

4 (2) THE ASSESSMENT SHALL QUANTIFY THE ECONOMIC IMPACT OF  
5 EACH POTENTIAL CLIMATE CHANGE RISK ON AGRICULTURE IN THE STATE.

6 (3) THE ASSESSMENT SHALL:

7 (I) EXAMINE THE LATEST CLIMATE SCIENCE;

8 (II) RECOMMEND PREPARATION AND ADAPTATION STRATEGIES  
9 TO LESSEN THE IMPACT OF CLIMATE CHANGE ON AGRICULTURE IN THE STATE; AND

10 (III) IDENTIFY WAYS IN WHICH THE DEPARTMENT MAY PROVIDE  
11 TECHNICAL ASSISTANCE TO FARMERS TO PREPARE FOR AND ADAPT TO THE  
12 CONSEQUENCES OF CLIMATE CHANGE.

13 (C) (1) THE DEPARTMENT SHALL UPDATE ITS ASSESSMENT EVERY 5  
14 YEARS.

15 (2) THE DEPARTMENT SHALL MAKE ITS ASSESSMENT AVAILABLE TO  
16 THE PUBLIC ON ITS WEB SITE.

17 (D) THE DEPARTMENT SHALL CONSULT WITH THE MARYLAND  
18 COMMISSION ON CLIMATE CHANGE AND THE COAST SMART COUNCIL TO  
19 COMPLETE AND UPDATE THE ASSESSMENT.

20 Article – Environment

21 2-1212.

22 (A) (1) THE UNIVERSITY OF MARYLAND CENTER FOR ENVIRONMENTAL  
23 SCIENCE SHALL ESTABLISH SCIENCE-BASED SEA LEVEL RISE PROJECTIONS FOR  
24 THE STATE'S SHORELINES AND UPDATE THEM AT LEAST EVERY 5 YEARS.

25 (2) THE SCIENCE-BASED SEA LEVEL RISE PROJECTIONS SHALL  
26 INCLUDE MAPS THAT INDICATE THE AREAS IN THE STATE THAT MAY BE MOST  
27 AFFECTED BY STORM SURGES, FLOODING, AND EXTREME WEATHER EVENTS.

28 (3) THE SCIENCE-BASED SEA LEVEL RISE PROJECTIONS REQUIRED  
29 UNDER THIS SUBSECTION SHALL BE MADE PUBLICLY AVAILABLE ON THE INTERNET.

1           **(B) (1) ON OR BEFORE JULY 1, 2016, THE DEPARTMENT, IN**  
2 **CONSULTATION WITH THE MARYLAND COMMISSION ON CLIMATE CHANGE AND THE**  
3 **COAST SMART COUNCIL, SHALL CONDUCT A COMPREHENSIVE ASSESSMENT OF THE**  
4 **ENVIRONMENTAL AND ECONOMIC IMPACTS OF SEA LEVEL RISE, INCREASED**  
5 **PRECIPITATION AND TEMPERATURE, STORM SURGES, FLOODING, AND EXTREME**  
6 **WEATHER EVENTS ON THE STATE’S MAJOR CITIES AND TOWNS, INCLUDING THE**  
7 **CITY OF ANNAPOLIS, BALTIMORE CITY, AND OCEAN CITY.**

8           **(2) THE DEPARTMENT SHALL:**

9                   **(I) UPDATE THE ASSESSMENT EVERY 5 YEARS; AND**

10                   **(II) MAKE THE ASSESSMENT PUBLICLY AVAILABLE ON THE**  
11 **INTERNET.**

12                                   **Article – Natural Resources**

13 1–304.

14           (a) As of July 1, 1974, all State agencies shall prepare, in conjunction with each  
15 proposed State action significantly affecting the quality of the environment, an  
16 environmental effects report including, but not limited to, a discussion of:

17                   (1) The effects of the proposed action on the environment, including  
18 adverse and beneficial environmental effects that are reasonably likely if the proposal is  
19 implemented or if it is not implemented;

20                   (2) Measures that might be taken to minimize potential adverse  
21 environmental effects and maximize potential beneficial environmental effects, including  
22 monitoring, maintenance, replacement, operation, and other follow-up activities; and

23                   (3) Reasonable alternatives to the proposed action that might have less  
24 adverse environmental effects or greater beneficial environmental effects, including, the  
25 alternative of no action.

26           (b) The Secretary of Natural Resources prior to December 31, 1973, shall issue  
27 guidelines to assist State agencies in the preparation of environmental effects reports in  
28 accordance with this subtitle and pursuant to the public notice provisions of § 10–112 of  
29 the State Government Article, including, but not limited to, provision for:

30                   (1) Comment upon the proposed State action by public and private  
31 organizations and individuals with jurisdiction by law, special expertise, or recognized  
32 interest prior to the request for legislation;

33                   (2) The possibility of the preparation of single program environmental  
34 effects reports if a series of actions taken individually are of minimal significance but if the

1 cumulative effect of the actions on the environment is significant or if a series of actions  
2 are related either geographically or as logical parts in a chain of contemplated actions;

3 (3) The possibility of the preparation of modified environmental effects  
4 reports on remaining decisions significantly affecting the quality of the environment that  
5 are parts of actions begun before but not completed by July 1, 1974; and

6 (4) The issuance of guidelines, in accordance with this subtitle and  
7 pursuant to the guidelines issued by the Secretary of Natural Resources, for the  
8 preparation of environmental effects reports by each State agency that takes actions that  
9 significantly affect the quality of the environment.

10 (C) THE SECRETARY OF NATURAL RESOURCES SHALL UPDATE THE  
11 GUIDELINES REQUIRED IN SUBSECTION (B) OF THIS SECTION TO REQUIRE THE  
12 CONSIDERATION OF CLIMATE CHANGE RISKS, INCLUDING SEA LEVEL RISE,  
13 INCREASED PRECIPITATION AND TEMPERATURE, STORM SURGES, FLOODING, AND  
14 EXTREME WEATHER EVENTS.

#### 15 Article – State Finance and Procurement

16 3–602.3.

17 (a) (1) In this section the following words have the meanings indicated.

18 (2) “100–year base flood” means a flood having a 1% chance of being  
19 equaled or exceeded in any given year.

20 (3) “Base flood elevation” means:

21 (i) the water surface elevation of the 100–year base flood as  
22 specified on Federal Emergency Management Agency flood insurance rate maps; or

23 (ii) in an area of shallow flooding:

24 1. the highest adjacent natural grade added to the depth  
25 number specified in feet on the flood insurance rate map; or

26 2. if the depth number is not specified on the flood insurance  
27 rate map, 4 feet.

28 (4) (i) “Coast Smart” means a construction practice in which  
29 preliminary planning, siting, design, construction, operation, maintenance, and repair of a  
30 structure avoids or minimizes future impacts associated with coastal flooding and sea level  
31 rise.

1 (ii) “Coast Smart” includes design criteria and siting criteria that are  
2 applicable throughout the entire life cycle of a project.

3 (5) “Design criteria” means standard specifications related to the shape,  
4 size, or form of a construction practice.

5 **(6) “HIGHWAY” HAS THE MEANING STATED IN § 8–101 OF THE**  
6 **TRANSPORTATION ARTICLE.**

7 **[(6)] (7)** (i) “Replacement cost” means, at the time of reconstruction,  
8 the cost of reconstructing a structure and its surrounding property to full use with  
9 materials of the same kind and quality as the original materials.

10 (ii) “Replacement cost” does not include:

- 11 1. the value of the land on which a structure is located; or
- 12 2. for tax purposes, a deduction for depreciation.

13 **[(7)] (8)** “Siting criteria” means specifications related to the location or  
14 use of a structure.

15 **[(8)] (9)** “Special flood hazard area” means land in a tidally influenced  
16 floodplain that is:

17 (i) subject to at least a 1% chance of flooding in any given year; and

18 (ii) designated by the Federal Emergency Management Agency in  
19 flood insurance studies and on flood insurance rate maps as Zone A, AE, AH, AO, A1–30,  
20 A99, VE, or V1–30.

21 **[(9)] (10)** “Structure” means:

22 (i) a walled or roofed building;

23 (ii) a manufactured home; or

24 (iii) a gas or liquid storage tank that is principally above ground.

25 **[(10)] (11)** “Substantial damage” means damage caused by any source that  
26 is sustained by a structure such that the cost of reconstruction to its before–damaged  
27 condition is at least half of the structure’s replacement cost before the damage occurred.

28 (b) (1) This subsection applies to State capital projects planned and built by  
29 units of State government that are partially or fully funded with State funds.

1 (2) Beginning July 1, 2015, if a State capital project includes the  
2 construction of a structure or the reconstruction of a structure with substantial damage,  
3 the structure shall be constructed or reconstructed in compliance with siting and design  
4 criteria established under subsection (c) of this section.

5 **(3) BEGINNING JULY 1, 2016, IF A STATE CAPITAL PROJECT**  
6 **INVOLVES THE CONSTRUCTION OF A HIGHWAY, THE HIGHWAY SHALL BE**  
7 **CONSTRUCTED IN COMPLIANCE WITH SITING AND DESIGN CRITERIA ESTABLISHED**  
8 **UNDER SUBSECTION (C) OF THIS SECTION.**

9 (c) (1) In consultation with the Department of Natural Resources, the Coast  
10 Smart Council established under § 3-1002 of the Natural Resources Article shall establish  
11 Coast Smart siting and design criteria to address sea level rise and coastal flood impacts  
12 on capital projects.

13 (2) The criteria adopted under this subsection shall include:

14 (i) guidelines, and any other directives applicable to the preliminary  
15 planning and construction of a proposed capital project;

16 (ii) a requirement that the lowest floor elevation of each structure  
17 located within a special flood hazard area is built at an elevation of at least 2 feet above the  
18 base flood elevation; and

19 (iii) provisions establishing a process to allow a unit of State  
20 government to obtain a waiver from complying with the requirements of subsection (b) of  
21 this section.

22 **(D) ON OR BEFORE JULY 1, 2016, THE DEPARTMENT OF PLANNING, IN**  
23 **CONSULTATION WITH THE COAST SMART COUNCIL, SHALL DEVELOP MODEL LOCAL**  
24 **LAWS AND ORDINANCES THAT INCORPORATE COAST SMART SITING AND DESIGN**  
25 **CRITERIA IN THE DEVELOPMENT AND CONSTRUCTION OF STRUCTURES AND**  
26 **HIGHWAYS.**

27 5-7A-01.

28 The State Economic Growth, Resource Protection, and Planning Policy is the  
29 following:

30 (1) quality of life and sustainability: a high quality of life is achieved  
31 through universal stewardship of the land, water, and air resulting in sustainable  
32 communities and protection of the environment;

33 (2) public participation: citizens are active partners in the planning and  
34 implementation of community initiatives and are sensitive to their responsibilities in  
35 achieving community goals;

1 (3) growth areas: growth is concentrated in existing population and  
2 business centers, growth areas adjacent to these centers, or strategically selected new  
3 centers;

4 (4) community design: compact, mixed-use, walkable design consistent  
5 with existing community character and located near available or planned transit options is  
6 encouraged to ensure efficient use of land and transportation resources and preservation  
7 and enhancement of natural systems, open spaces, recreational areas, and historical,  
8 cultural, and archeological resources;

9 (5) infrastructure: growth areas have the water resources and  
10 infrastructure to accommodate population and business expansion in an orderly, efficient,  
11 and environmentally sustainable manner;

12 (6) transportation: a well-maintained, multimodal transportation system  
13 facilitates the safe, convenient, affordable, and efficient movement of people, goods, and  
14 services within and between population and business centers;

15 (7) housing: a range of housing densities, types, and sizes provides  
16 residential options for citizens of all ages and incomes;

17 (8) economic development: economic development and natural  
18 resource-based businesses that promote employment opportunities for all income levels  
19 within the capacity of the State's natural resources, public services, and public facilities are  
20 encouraged;

21 (9) environmental protection: land and water resources, including the  
22 Chesapeake and coastal bays, are carefully managed to restore and maintain healthy air  
23 and water, natural systems, and living resources;

24 (10) resource conservation: waterways, forests, agricultural areas, open  
25 space, natural systems, and scenic areas are conserved;

26 (11) stewardship: government, business entities, and residents are  
27 responsible for the creation of sustainable communities by collaborating to balance efficient  
28 growth with resource protection; [and]

29 (12) implementation: strategies, policies, programs, and funding for growth  
30 and development, resource conservation, infrastructure, and transportation are integrated  
31 across the local, regional, State, and interstate levels to achieve these visions; AND

32 **(13) PREPARATION AND ADAPTATION: CONSIDERATION OF CLIMATE**  
33 **CHANGE RISKS, INCLUDING SEA LEVEL RISE, INCREASED PRECIPITATION AND**  
34 **TEMPERATURE, STORM SURGES, AND FLOODING, BASED ON AVAILABLE DATA**  
35 **PREDICTING THE LIKELIHOOD OF FUTURE EXTREME WEATHER EVENTS.**



1 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect July  
2 1, 2015.