



Maryland Commission on Climate Change

Science and Technology Working Group

2019 Work Plan

Introduction

2019 is an important year for the MCCC with several major decisions and deliverables to be completed. The intent of the STWG is to assist MDE staff in reviewing pertinent information and preparing information that can help inform actions or decisions taken by the MCCC. The functions can be defined as hindsight (review of past information), insight (working with agency staff and others to package unbiased information in an understandable and actionable way), and foresight (anticipation of issues and articulation of alternative futures based on different actions).

Workplan

1. A small liaison team from the STWG will be established so that a representative will be present at MWG, AWG and ECO Working Group Meetings. If advance warning is provided by a Working Group on a particular topic, STWG will strive to ensure the relevant experts from the STWG are also present. Scientific information may not be provided immediately but it will shorten the response time from the STWG.

2. Tracking IPCC and Related Reports or Activities

MDE Staff and STWG will track relevant IPCC and related products, including papers, reports, and press releases. MDE will maintain this e-library of papers and reports. MDE will send links or announcements of key documents/links to MCCC participants. Additions from other MCCC members are welcome.

3. Reviews. (Hindsight)

Provide advice to questions posed by MDE Staff on the current emission inventories (by source and location, where possible) and how those estimates may be improved.

4. Insights

4.1. Blue Carbon

There is significant potential in Maryland to link wetland restoration to carbon sinks. This activity supports both the mitigation and adaptation mission of the MCCC. This may also create public outreach opportunities and linking with other Maryland programs such as the Dredge Material Management Program and CoastSmart.

STWG will work with staff from MDE and other state agencies to host a meeting that builds upon the 2018 NOAA Sea Grant workshop on coastal wetlands and the January

2019 workshop of the Maryland Dredge Material Management Program. This meeting will explore the potential and feasibility for carbon sequestration in coastal regions.

4.2. GGRA Over-the-Shoulder Review

A small group of STWG will work with MDE staff to review the model assumptions, algorithms and uncertainties with accounting for GHG emissions as part of the GGRA Plan. This will not be a formal independent review but an 'over-the-shoulder' colleague review that explores the details of the model. This review will also consider the latest IPCC reports on emissions.

4.3. Requests from MCCC Working Groups and the Commission

STWG will respond to specific questions from Working Groups or the Commission and specific scientific experts will be invited to participate in meetings as requested. Current requests include: 1) understanding the estimates associated with potential emission changes related to Maryland's I-495 and I-270 P3 transportation initiatives; 2) reconsidering the impact of climate change on human health in the region; and 3) consideration of vulnerability and expenditure modeling associated with critical infrastructure (dams, power transmission, gas lines, roads and weirs).

5. Foresights

STWG will work with MDE staff prepare reports or presentations on the following:

5.1. Climate Impacts to Maryland's Agriculture

The summary report from the 2018 workshop will be completed.

5.2. Modeling and Communicating Results: Recommendations will be developed for a Maryland Modeling Strategy for mitigating and adapting to climate change.

5.3. Innovations

Direct Removal of GHG, Stabilization of Polar Ice, and Emerging Concepts. The STWG will track these emerging technologies with periodic reporting to the MCCC.

5.4. Managing uncertainty

The 2018 MCCC Report recommended the development of a more specific exposition of uncertainties in the GHG inventories. Working with MDE staff, the 2019 activities of the STWG will initiate a 'living document' that summarizes the type and magnitude of uncertainties.