



# Alternative Futures: Accounting for Growth in the Chesapeake Bay Watershed September 15, 2011

U.S Geological Survey - Maryland-Delaware-D.C. Water Science Center 5522 Research Park Drive Baltimore, MD 21228 **Phone:** 443.498.5500 **Directions:** <a href="http://md.water.usgs.gov/directions/baltimore.html">http://md.water.usgs.gov/directions/baltimore.html</a>

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**Workshop objective:** This workshop will be used to generate 2 to 5 alternative future land use scenarios with supporting policy narratives for the Chesapeake Bay watershed and a list of needed improvements to the Chesapeake Bay Program Office method for simulating those scenarios. The alternative future scenarios will be used to evaluate the impact of land use policies and planning as a water quality Best Management Practice to reduce and minimize future increases in nutrient and sediment loads to streams and the Chesapeake Bay.

#### 8:30 – Coffee and Snacks

#### 9:00 – Introduction

Facilitator(s): Renee Thompson and Peter Claggett

Opening Remarks: Peter Claggett, USGS, Welcome, Workshop Format and Goals

Small Group: Introductions, Name, Organization,	and answer to:	"Thinking about	water quality,
my most important concern about future growth is	?"		

**9:30 - Alternative Land Use Scenarios in the context of the TMDL, Rich Batiuk, Associate Director for Science, U.S. EPA Chesapeake Bay Program Office.** How will EPA use alternative futures in evaluating state Watershed Implementation Plans (WIPs) and offset strategies? How might alternative scenarios inform the 2017 TMDL Re-evaluation?

10:00 – Planning as a BMP: One county's use of alternate scenarios for planning, Steven Stewart, Baltimore County Department of Environmental Protection and Resource Management. What is the role of land use planning and alternative scenarios in accounting for growth and assessing future impacts to water quality? How can planning improve water quality?

10:30 – Chesapeake Bay Land Change Model: Trend Scenario, Peter Claggett, Research Geographer, USGS Chesapeake Bay Program Office. Peter will introduce the currently modeled Development Trend scenario for the Bay watershed and explain how land use change impacts to water quality are currently modeled.

11:00 – 11:15 – Break

11:15 – Urban Infill: One Potential Alternative Future, Renee Thompson. Renee will use the concept of urban infill to illustrate how the water quality impacts of policies that promote and incentivize urban infill can be estimated with the current set of CBP models. This example is intended to provide a framework for group discussions.

## 11:45 – Current and Future Trends (small group discussions)

**Moderator:** Renee Thompson

In development in the past and expectations for the future, participants will discuss trends they have seen, keeping in mind the location, pattern, and extent of new development.

Questions to be answered: What have been the major development trends over the past decade? What is the relationship between those trends and water quality (nitrogen, phosphorus, sediment)? What policies and planning strategies influenced those trends? Do you expect those trends to continue over next decade - why or why not?

#### **12:30** – **Lunch** (**provided**)

1:30 – Policies for the Future (small group discussions) Individuals write down realistic ideas about changes in the location, pattern, and extent of new development they feel would improve or minimize impacts to water quality. The group will consider what potential changes in policies or strategies would be needed to realize those alternative future development scenarios.

**Moderator:** Peter Claggett

**Objective:** Work in small groups to generate ideas that can be used to craft Alternative Future Scenarios. Identify alternative future development scenarios and the policies and assumptions needed to realize them. Prioritize the policies and strategies.

### 2:30 - Priority Policies (report out) -

Moderator: Jim Baird, American Farmland Trust

**Objective:** Each group will report out their top policy developed in the previous session. This will be repeated for three rounds. Groups will be asked to not repeat what they've already heard.

3:00 - Break

#### 3:15 – Crafting Alternative Future Scenarios (plenary discussion)

Facilitator: Peter Claggett

**Objective:** Workshop organizers will facilitate a discussion to cluster the list of priority policies into groups based on similarities in their presumed impacts on the location, pattern, and extent of new development or other commonalities. Policies that cannot be simulated using the current CBP modeling framework will be highlighted and potential changes to the modeling framework will be discussed to accommodate such policies in the future.

#### 4:00 – Adjourn