# Review of our work to date: Healthy Watersheds and Land Use Management Strategies

Chesapeake Bay Program
*Science. Restoration. Partnership.*

Maintain Healthy Watersheds Goal Implementation Team
Spring Meeting

04/30/2015

# Review: Management Strategies (MS)


*"Within one year the signing of the Chesapeake Bay Watershed Agreement, the CBP's Goal Implementation Teams will develop Management Strategies for the Outcomes that support the Agreement's goals." – Chesapeake Bay Watershed Agreement, signed* ***June 16th, 2014***

# 5 themes of the Bay Watershed Agreement Outcomes

**Abundant Life:**

- Blue Crab
- Black Ducks
- Fish Habitat
- Brook Trout

etc.

**Clean Water:**

**- Healthy Watersheds**

- Toxic Contaminants Research

etc.

**Climate Change:**

- Climate Adaptation
- Climate Monitoring and Assessment


**Conserved Lands:**

**- Land Use Outcomes**

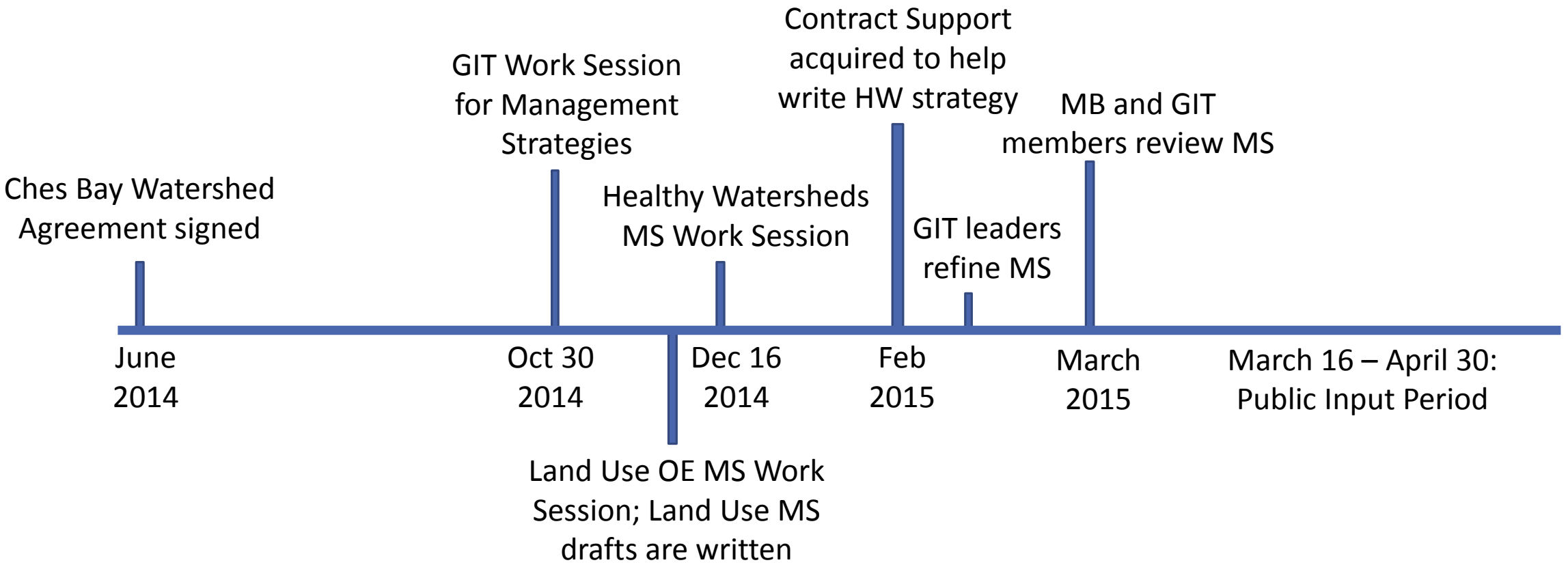
**- Protected Lands**

**Engaged Communities:**

- Local leadership
- Citizen Stewardship

etc.

# Recap: MS Development



# Recap: Healthy Watersheds MS Development

**Oct 30 GIT meeting:** Work Session for Management Strategies

**Dec 16 GIT meeting:** Healthy Watersheds MS Work Session

**Feb:** TetraTech Contractor support acquired to work on the strategy; next, GIT leaders worked to refine the strategy

**Mar:** Strategy sent to GIT and Management Board members

**March 16th – April 30th:** Public Input Period

# Recap: Land Use Options Evaluation MS Development

**Oct 30 GIT meeting:** Work Session for Management Strategies

**Dec 8 meeting:** Land Use Options Evaluation MS Work Session

**Dec:** MS draft is written (a big thank you to Jason Dubow!)

**Feb:** MS is refined based on Management Board comments

**March 16th – April 30th:** Public Input Period

# Recap: Land Use Methods & Metrics MS Development

**Oct 30 GIT meeting:** Work Session for Management Strategies

**Dec:** MS draft is written (a big thank you to Peter Claggett!)

**Feb:** MS is refined based on Management Board comments

**March 16th – April 30th:** Public Input Period

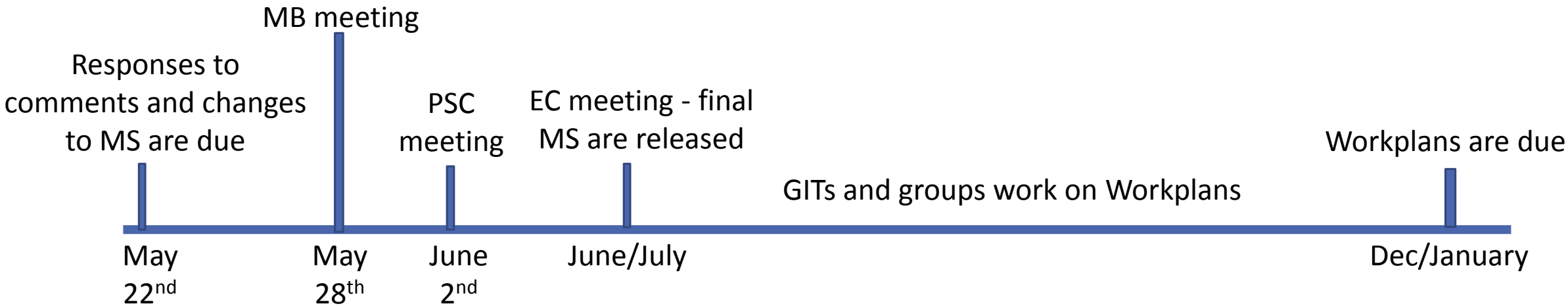
# Explanation of Land Use Methods & Metrics work

- The Land Use Workgroup (LUWG), under the leadership of Peter Claggett (CBPO USGS & LUWG Coordinator), is working independently on this Management Strategy.
- Our GIT is overseeing this process.
- If you are interested in becoming more involved with this MS, please contact Tuana for more information.

# Review: Land Use Methods & Metrics Outcome

*Continually improve the knowledge of land conversion and the associated impacts throughout the watershed. By 2016, develop a Chesapeake Bay watershed-wide methodology and local level metrics for characterizing the rate of farmland, forest and wetland conversion, measuring the extent and rate of change in impervious surface coverage and quantifying the potential impacts of land conversion to water quality, healthy watersheds and communities. Launch a public awareness campaign to share this information with citizens, local governments, elected officials and stakeholders.*

# Next up in MS development:



# Next up in MS development:

**May 22nd:** Responses to comments and changes to MS are due

**May 28th:** Management Board Meeting

**June 2nd:** PSC Meeting

**June/July:** EC meeting and release of final MS

**June – Oct:** GITs and groups work on Workplans

**Dec/Jan:** Workplans are due

# Review: Healthy Watersheds Outcome

*100 percent of state-identified currently healthy waters and watersheds remain healthy.*

**Photo Credit: Mike Zarro (mzarro Flickr)**

# Healthy Watersheds: Management Approaches

## 1 Track the health…

of watersheds and our effectiveness in protecting them

1) Where are the healthy watersheds located?

2) Which healthy watersheds are threatened? (E.g., by energy or urban development)

3)What is being done to ensure that healthy watersheds are protected? (E.g., local land policies, easements, citizen stewardship)

4) How are we tracking the health and viability of those watersheds over time? (E.g., landscape characteristics, changes in land use)

# Healthy Watersheds: Management Approaches

## 2 Strengthen local commitment and capacity…

to protect healthy watersheds

Land Trusts

Local Officials

Watershed Organizations

Other champions

Local leadership is the key to unlocking local potential and harnessing the power and creativity of local actors to protect healthy watersheds.

# Healthy Watersheds: Management Approaches

## 3 Increase communication within the federal family…

So that federal programs and agency decision-making are more protective of state-identified healthy watersheds

Opportunities include both the implementation and oversight of regulatory programs and decision-making processes for agencies like:

- FERC
- US DOT
- State DOT
- US EPA and state environmental and natural resource agencies

# Healthy Watersheds: Management Approaches

## 4 Support state-based efforts…

Encourage and recognize important activities within states

INSTAR HEALTHY WATERS

MARYLAND Smart, Green & Growing GREENPRINT

Growing our Economy
Growing our Communities
Growing Greener

# Review: Land Use Options Evaluation Outcome

*By the end of 2017, with the direct involvement of local governments or their representatives, evaluate policy options, incentives and planning tools that could assist them in continually improving their capacity to reduce the rate of conversion of agricultural lands, forests and wetlands as well as the rate of changing landscapes from more natural lands that soak up pollutants to those that are paved over, hardscaped or otherwise impervious. Strategies should be developed for supporting local governments' and others' efforts in reducing these rates by 2025 and beyond.*

# Land Use Options: Current Efforts

- Current efforts in current land conversion reduction efforts will be determined through the tasks listed under the management approach.
- At all levels of government and among many NGO organizations, efforts to promote and implement smart growth measures are underway.

# Land Use Options: Gaps

- Gaps in current land conversion reduction efforts will be determined through the tasks listed under the management approach.
- Waiting until 2017 to investigate the development of strategies to support local governments' and others' efforts to reduce land conversion rates.
- The MS highlights additional needs outside the scope of this outcome, including additional support needed for:
  - Information related to the economic justification for implementation of land use policies related to reducing the rate of land change conversion.
  - Ensuring ongoing support for education as local government representatives change.

# Land Use Options: Factors Influencing

- Completing the evaluation component presents a technical and administrative challenge.
- Ability to engage local governments in conducting the evaluation.
- Reducing land conversion rates presents a political and educational challenge.
- Baseline for local level metrics for characterizing land conversion rates are dependent on the Land Use Methods and Metrics Outcome.
- ***Future*** change overlooked in the face of ***present*** land impacts and water quality related goals (i.e., TMDL).
- Level and type of land conversion reduction policy and implementation efforts is highly varied across the watershed.

# Land Use Options: Management Approaches

- Conduct a comprehensive review/study of existing land use “policy options, incentives and planning tools” currently being implemented at the local/state scale.
- Create an online repository of such examples to serve as a user-friendly knowledge base, including studies and reports of the costs, benefits and effectiveness of such examples.
- Conduct a professional survey of local government and related groups to identify which “policy options, incentives and planning tools” have been most effective at reducing land conversion rates, and to determine additional information and tools needed to achieve a reduction in land conversion rates.