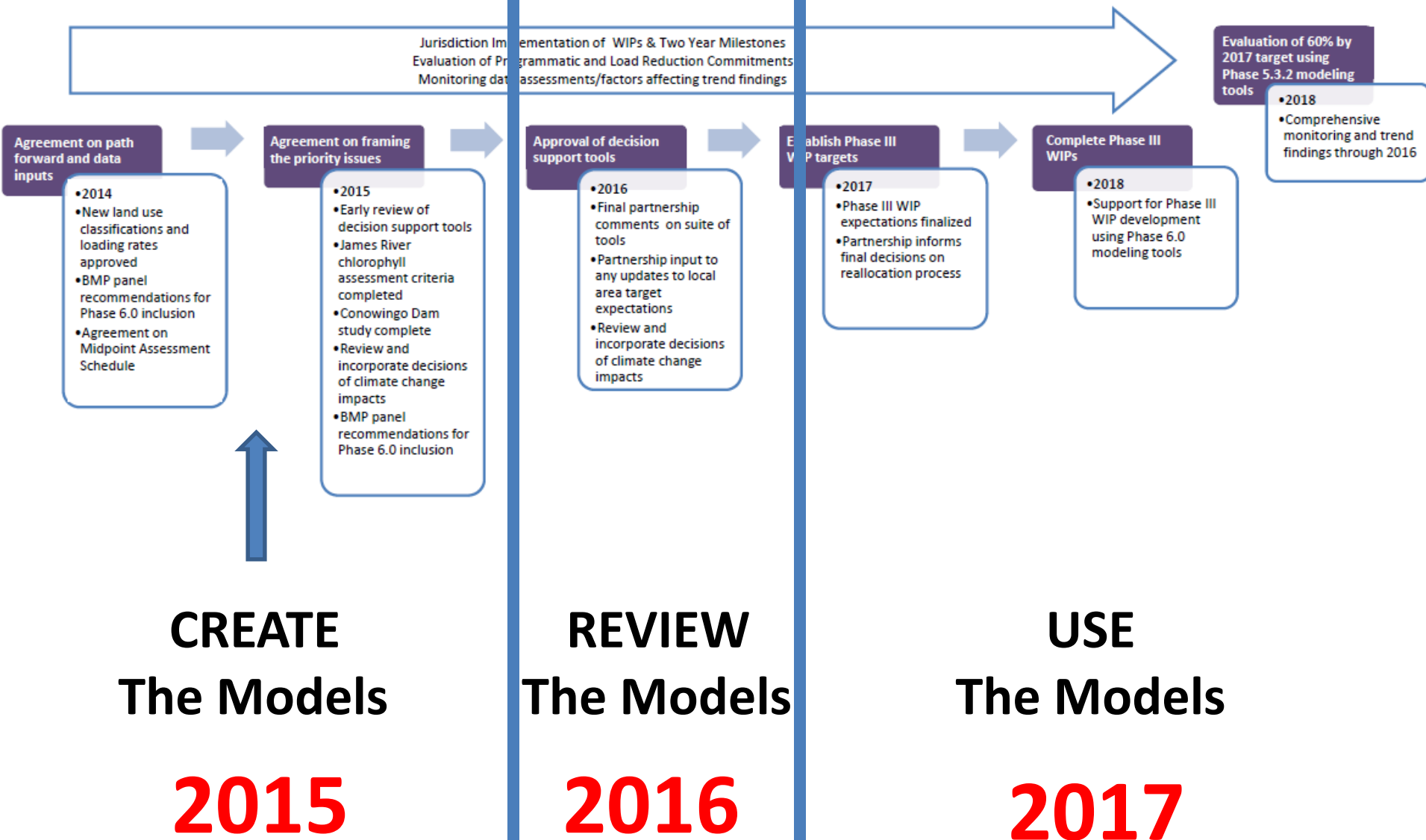


# Modeling Workgroup Update

WQGIT Meeting May 11, 2015

## Midpoint Assessment Timeline



# Mid Point Assessment Modeling Workgroup Priorities

## ***Watershed Model***

- Revise Watershed Model system structure
- Revisit Watershed Model calibration methods, including regional factors

## ***Water Quality and Sediment Transport Model***

- Refine and update the Water Quality and Sediment Transport Model (WQSTM)
- Refinement of shallow water simulation for improved assessment of open water DO and SAV/clarity standards

## ***Airshed Model***

- Update Airshed Model to new CMAQ Bidirectional Ammonia Model

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## ***TMDL Charges***

- Effects of Conowingo infill on Chesapeake Bay WQS
- Examine the influence of climate change (CC) on Chesapeake WQ standards and the 2010 Bay TMDL
- Review James River chlorophyll criteria and James River TMDL allocations
- Influence of oyster filter feeders on water quality, with increased aquaculture and sanctuary development

## ***STAR Requests***

- Support needs of water quality goal team and TMDL Mid-point assessment support
- Assess and Explain Water Quality Trends

# April Quarterly

- Big focus on model enhancements, full day on Watershed Model
- Prior work accomplished extension of WSM to recent years and improved hydrology and sediment simulation
- P6 land uses, global targets, N & P sensitivities and lag
- Things are lining up to allow development of first P6 model with P6 landuses by July quarterly
- Estuary modeling - explicit simulation of shoreline loads and shallow water simulation in the WQSTM and update on the shallow water multiple model project
- Status of contract for air deposition
- Discussion of STAC workshops relevant to MWG charge that will take place in the coming year - Conowingo, Climate Change, Uncertainty, Optimization, Shallow Water

# Schedule Planning

- MWG Chairs and Mod Team to block time in June to develop detailed schedule
- Remainder of 2015, when we need to have tools developed, but equally important thru end of 2016 as related to the review process and “tweaks”
- Schedule to include identification of deliverables and key communication points to WQGIT and other partnership groups/ teams

# Future Communications

- Prepping for a “WG chairs” meeting in June to discuss process for application of global targets to P6 landuses (Ag, USW, Forestry, LU)
- Planning a comprehensive, detailed Watershed Model presentation to WQGIT in September and our recommendations for the schedule thru 2016

Questions? Thank you