

# Modeling Workgroup Priorities for 2018

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CBPO

4/99/2018

# Climate Effects on Oxygen

## Watershed Model

increased precipitation volume =



increased precipitation intensity =



increase in temp and evapotranspiration =



## WQ Sediment Transport Model

increased watershed loads =



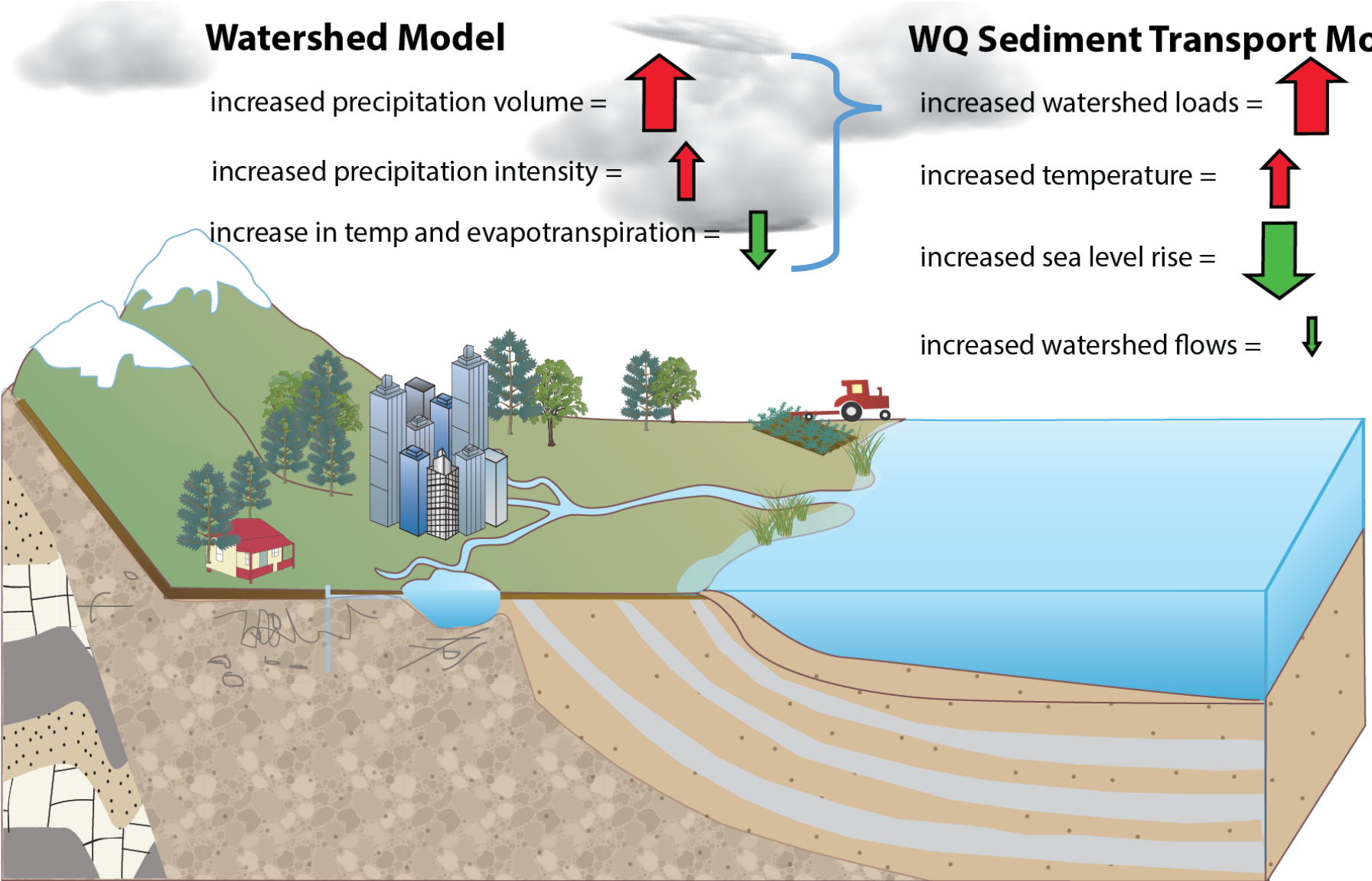
increased temperature =



increased sea level rise =



increased watershed flows =



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Do we have good inputs?

- 10:45 – MACA data - Najjar

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Does the watershed model react to climate change appropriately?

- 11:15 – CHAMP (Najar and Friedrichs)

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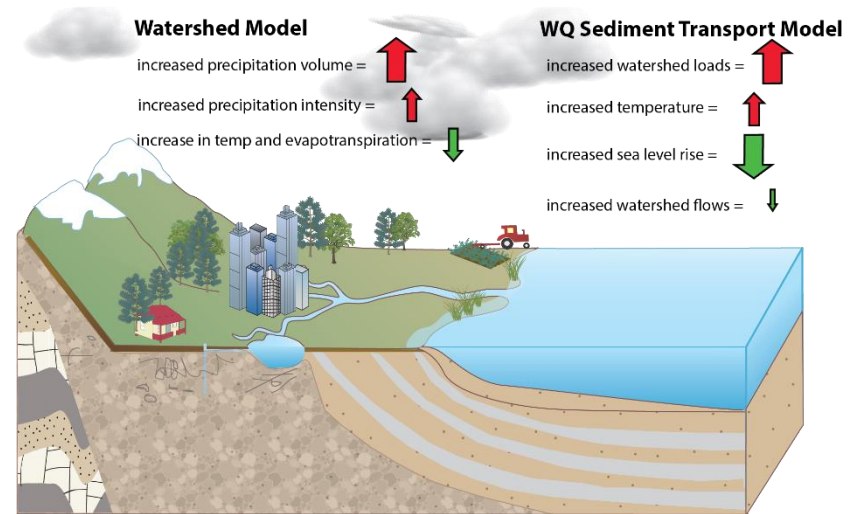


Do the estuarine models react to climate change appropriately?

- 11:15 – CHAMP (Najar and Friedrichs)

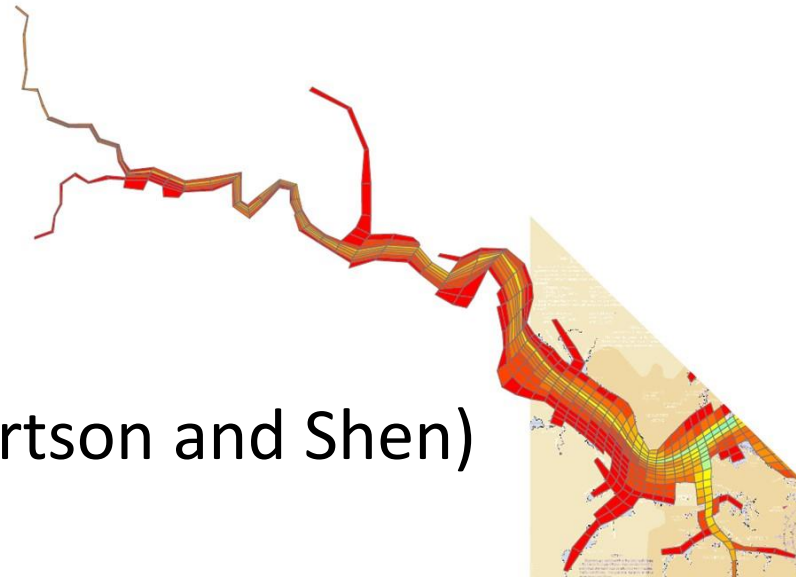
# Climate Change 2018 - 2019

- Watershed climate inputs
- Watershed sensitivities
- Estuarine inputs
- Comparisons with other efforts
- CHAMP project
- STAC workshop Proposal
- Session at the Chesapeake Research & Modeling Symposium 2018
- 11:30 Presentation today (Linker)



# Support VA in James Chlorophyll Re-Assessment of Standards- 2018

- Supply watershed model scenarios
  - Supply estuarine boundary conditions
  - Provide review in MWQ
- 
- 1pm and 1:30pm today (Robertson and Shen)





# Documentation

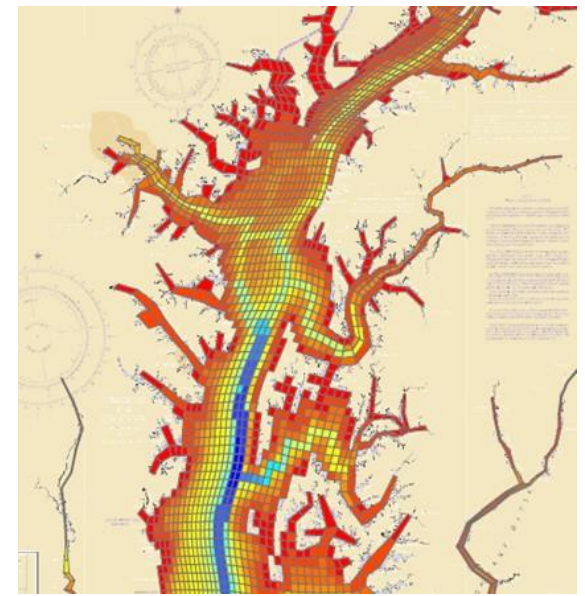
## April - December

- Watershed model review response
- Estuarine model review response
- Watershed model documentation
- Application of models to decisions
  - Climate Change
  - Conowingo
  - Growth
- STAC Uncertainty Workshop
- STAC Modeling Workshop
- Peer-reviewed publications





# WIP Support Now -> forever



- Non-attaining segments
  - (Wu and Keisman) 1:30pm tomorrow
- Determine appropriate metric in open water for geo runs
- Optimization (Kaufman – 10:05 tomorrow)



# Phase 6 Support

## Feb - June

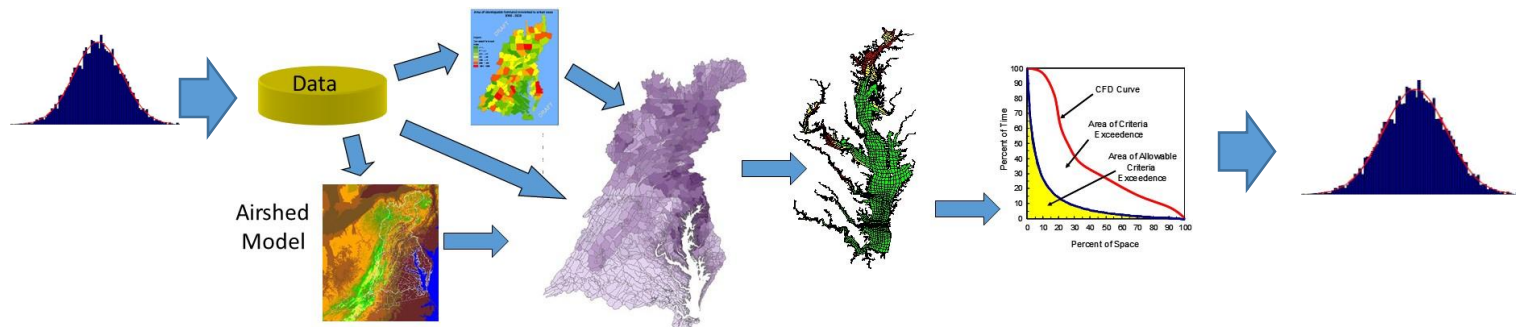
- Migrate to Cloud
- Final cleanup
- Share with community
- Systematic connection to estuarine models



# Uncertainty Analysis

## Late 2018 - ?

- Complete STAC workshop report
- Determine management purpose of uncertainty analysis
- Develop and apply methods



# Development 2018 - 2023



