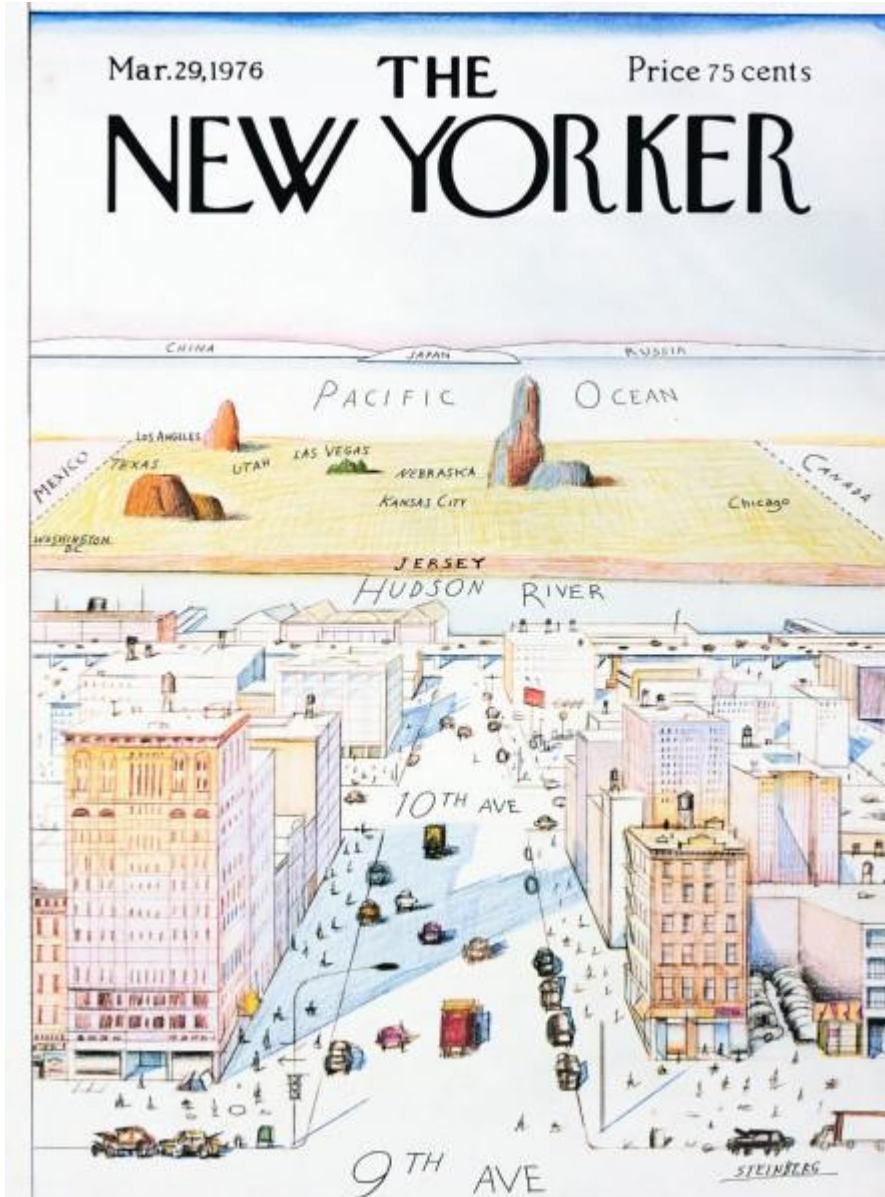


Modeling Workgroup Priorities for 2018

Gary Shenk

CBPO

7/10/2018



- Phase 7
- Climate Change
- Midpoint Support

PSC midpoint meeting 7/9/2018

Overview of Changes

- Corrections to the Phase 6 model
- Changes and corrections to E3 (Everything, Everywhere by Everyone) scenario – a critical component of the allocation methodology
- Tax ditches in Maryland and Delaware

Proposed Final Phase III Planning Targets – Nitrogen

Jurisdiction	Draft Phase III Planning Targets	Proposed Final Phase III Planning Targets
District of Columbia	2.43	2.42
Delaware	4.59	4.55
Maryland	45.30	45.83
New York	11.59	11.31
Pennsylvania	73.18	73.18
Virginia	55.82	55.74
West Virginia	8.24	8.14
Watershed-wide	201.14	201.17

State	Proposed	Adjustment	Final Allocations
DC	2.42	0.00	2.42
DE	4.55	0.00	4.55
MD	45.83	-0.05	45.78
NY	11.31	0.23	11.53
PA	73.18	0.00	73.18
VA	55.74	-0.02	55.73
WV	8.14	0.09	8.22
Total	201.17	0.25	201.41

Supported by watershed and estuarine model runs

PSC Approval!

Decisions Requested Today

1. Approval of modeling corrections and changes identified by the Chesapeake Bay Program Office and jurisdictions
2. Resolution of tax ditches for Delaware and Maryland
3. Approval of the finalization and release of the Phase III WIP planning targets
4. Approval of proposed revisions to the Phase III WIP development schedule

Ongoing WIP Midpoint Support

- Documentation
- Development of optimization - 11:20am
- James Support – 1:30pm
- Non-attaining segments - finalizing
- Open water geographic isolation runs – 1pm

Phase 6 Support

Feb - June

- Migrate to Cloud
- Shut down CBPO computers **Today**
- Share with community
- Systematic connection to estuarine models



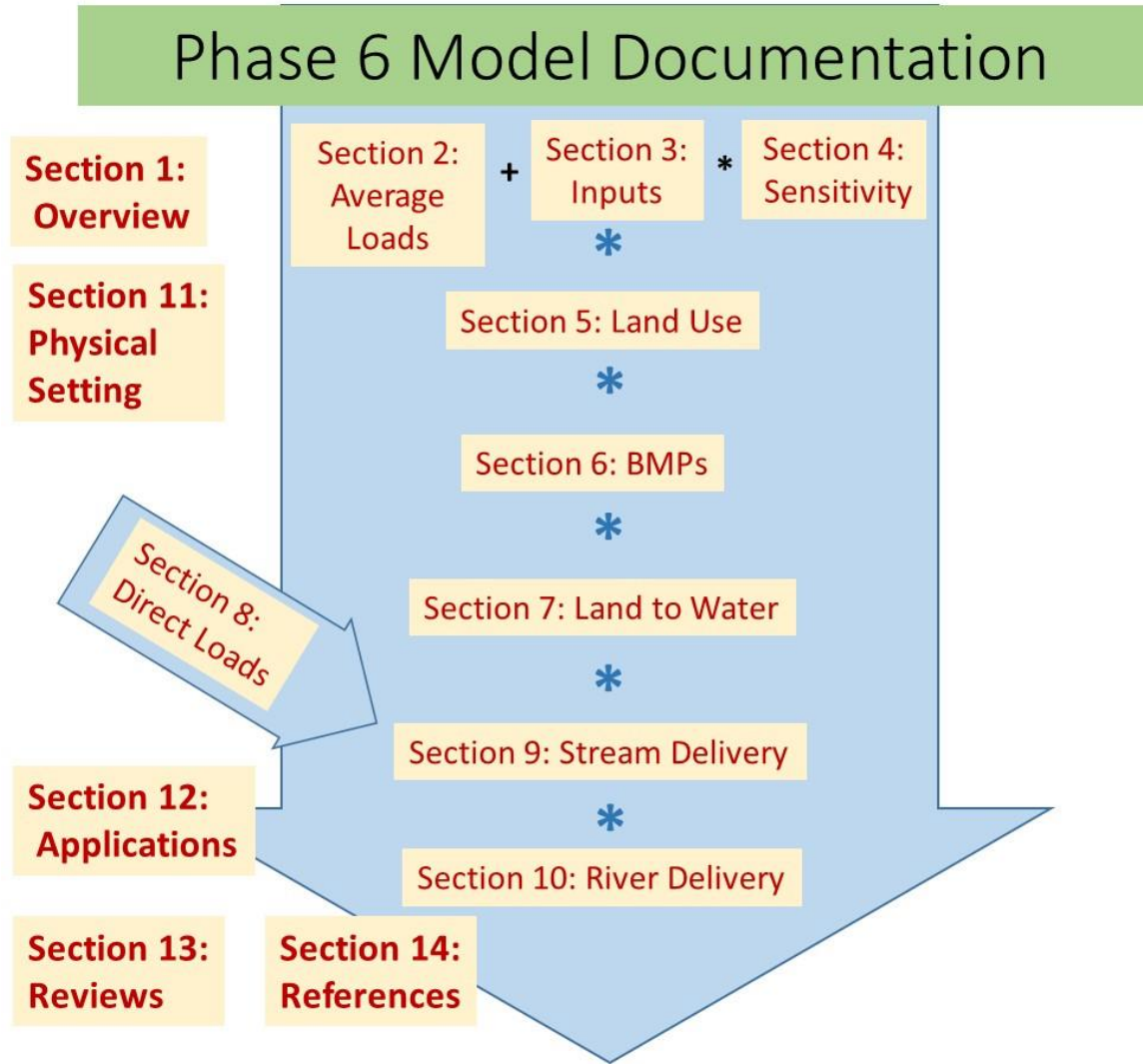
Documentation

- 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



Documentation

- Finalized
- 1 Overview
- 2 Average Loads
- 4 Sensitivity



- Available at cast.chesapeakebay.net

Climate Effects on Oxygen

Watershed Model

increased precipitation volume =



increased precipitation intensity =



increase in temp and evapotranspiration =



WQ Sediment Transport Model

increased watershed loads =



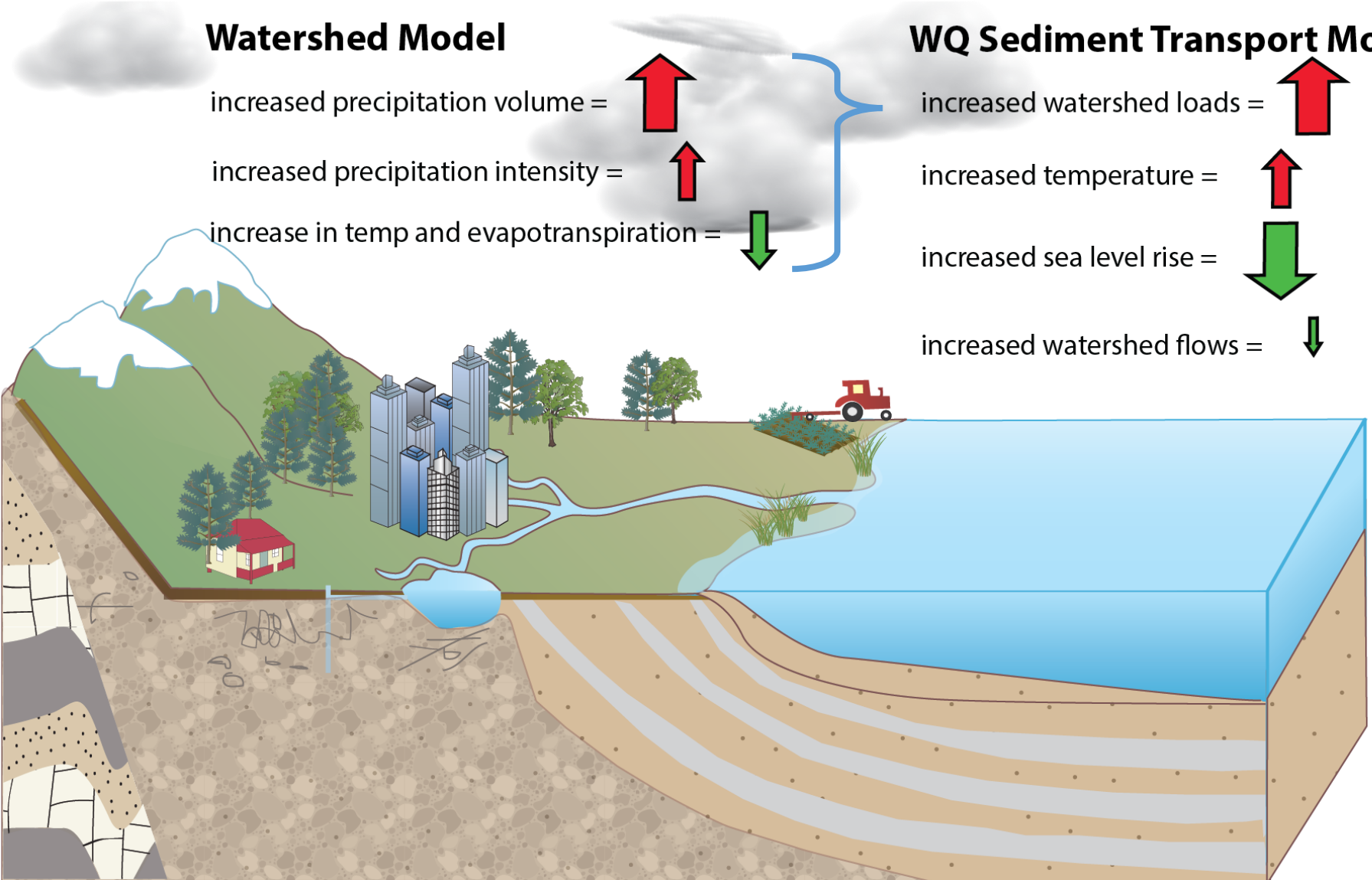
increased temperature =



increased sea level rise =



increased watershed flows =



Climate Change

- Initial runs in the watershed - 10:50am
- Temperature change in the Bay - 11:40am
- Last Month– presentations and discussion at ChesRMS18
- STAC workshop – in planning
- ...much more to come