Fatal Flaw Review

Initial Proposal to WQGIT and MWG

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P6 WSM Timeline

- December 31st, 2016 All partnership data to CBPO
 - Late-arriving data or decisions may change the time line
- Feb 14-15, 2017 Modeling Workgroup Quarterly
 - Minimal watershed model discussion
- March 2017 Modeling Workgroup
 - Decision on calibration method
 - Response to STAC review
- April 4-5, 2017 Modeling Workgroup Quarterly
- April-May 2017 Review ongoing
- June 2017 final Phase 6 with draft planning targets

Draft P6 WSM – April 4, 2017

- Documentation
- CAST
- Tableau inputs
- Model output spreadsheets (calibration scenario)
- Model calibration results
- Visualization outputs
- Scenarios by mid-April (1985, NA, E3, All Forest, recent progress, WIP2)

Ongoing Review (Decisions and Beta Versions)

- The CBP partnership has built the 2017 modeling tools over the past half-decade through a multitude of decisions made by the PSC, the WQGIT and its subgroups, and the Modeling Workgroup of STAR. The draft Phase 6 model represents the work of hundreds of partners on these groups, in expert panels, and through other modes of participation.
- The review of many components has been ongoing since 2012, with detailed, intensive effort during 2016
- STAC has reviewed the Beta versions of the Phase 6 watershed model, waiting for Conowingo and Climate Change for the final review

Fatal Flaw Review

- A fatal flaw, as defined on next slide, may be the basis for the implementation of changes to the draft Phase 6 model.
- February 2017 MWG
 - · Recommendation for fatal flaw review method
- March 2017 WQGIT
 - Agreement on fatal flaw review method

A Fatal Flaw is:

- A significant impediment in the ability of the partnership to establish reasonable planning targets or evaluate progress toward achieving the planning targets due to:
 - A calculation or method that does not follow the documented final decisions of the CBP partnership
 - A calculation or method, or combinations thereof, that produce illogical results that result in significant impediment
 - The omission of data submitted by the CBP partnership subject to established deadlines
 - The overall failure of the model to match observed flows and loads when compared to the level of performance in previous models

A Fatal Flaw is not:

- An objection to a final decision that has been made by the partnership
- A disagreement with a scientific or technical method or product in favor of another method or product.
- A failure to match loads for particular monitoring station(s) or constituent(s)

Process

- Comment submitted
- Evaluated by CBPO modeling team
- Comments discussed in the Modeling Workgroup and/or WQGIT as appropriate.
- Potential outcomes
 - Decision to make a change
 - Decision to not change
 - Non-consensus bumped to management board

P6 WSM Approval Schedule

- April 3 through end of May ongoing review, potential for changes to be made
- June MWG, WQGIT, MB, and PSC meet to approve final suite of models
- Issues that take longer to resolve may require schedule extension (PSC decision)

Conclusion

- FF briefing paper provided to WQGIT and MWG today
- Feedback taken today thru 2/3
- MWG to consider feedback and make recommendations to WQGIT in February
- WQGIT to seek consensus in March

Discussion....