Implementation of Expert Panel Recommendations

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Modeling Workgroup
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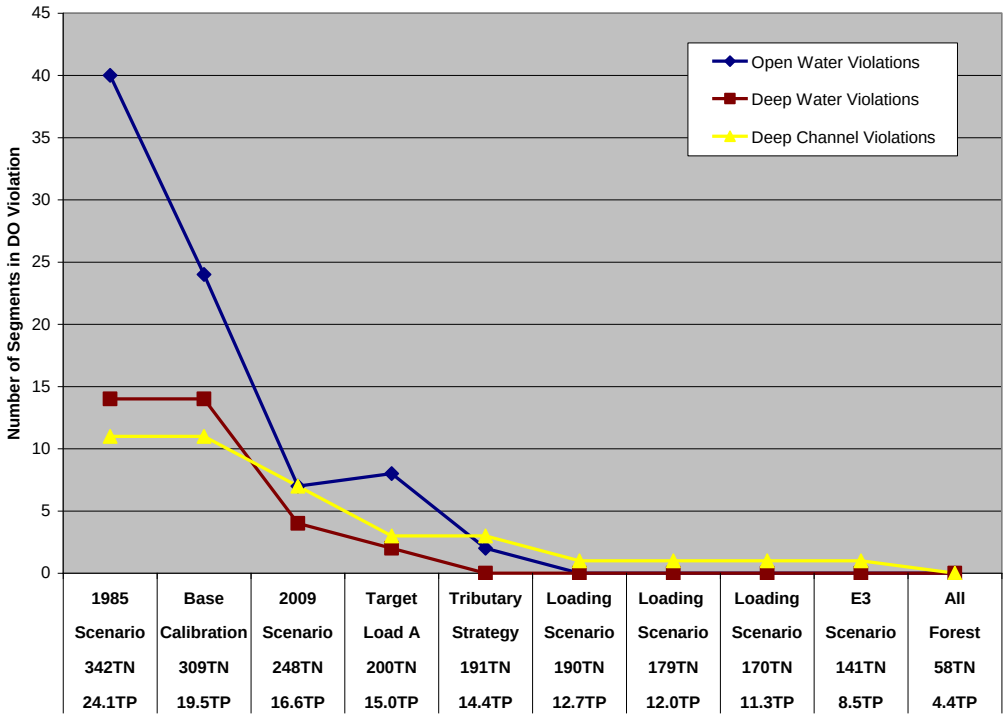
2 Principles to follow

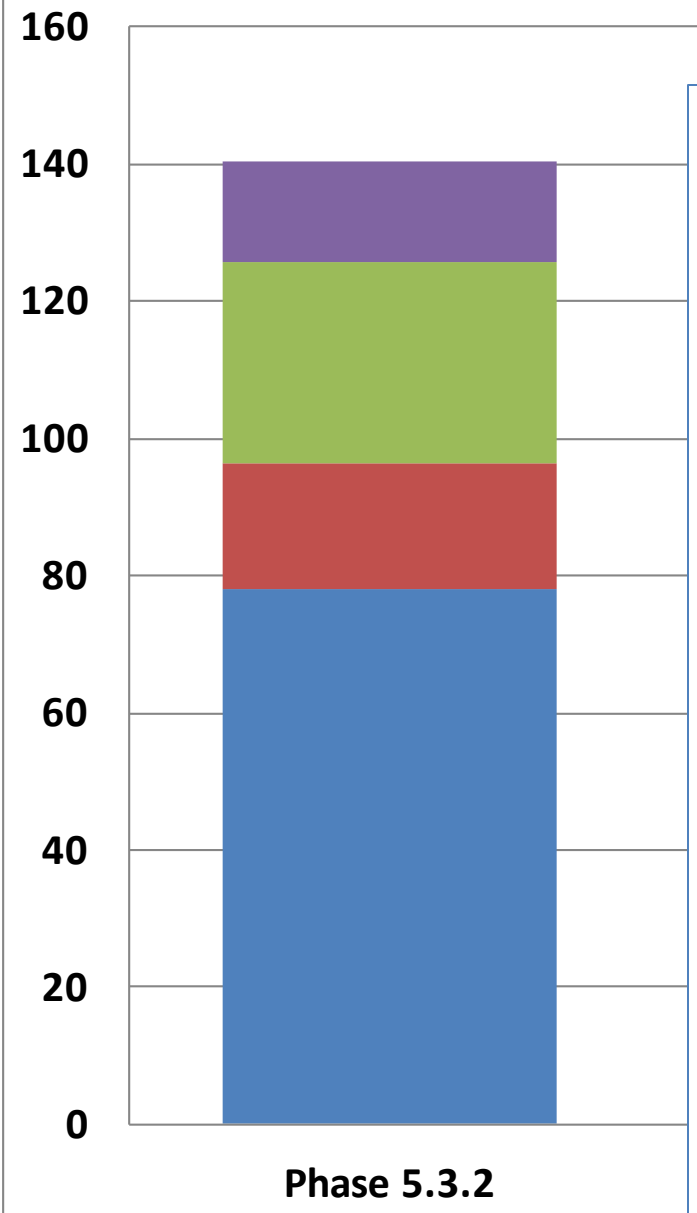
- Honor the panel recommendations as the accumulation of the best science
- Ensure that we are modeling in a way that best measures real changes on the ground.



Theoretical Example

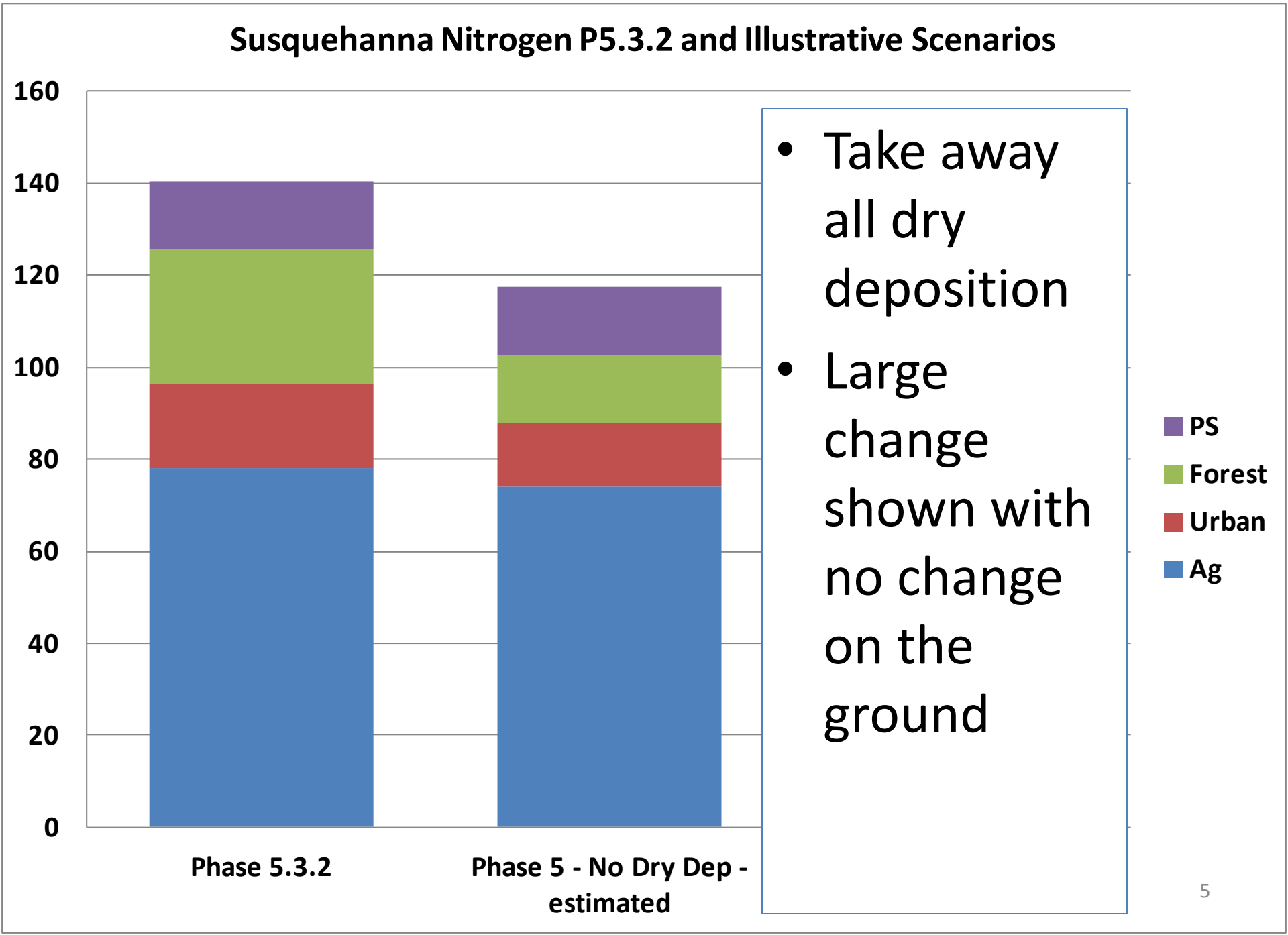
- Dry atmospheric deposition estimates have varied significantly through the history of CBP modeling
- Phase 2 – No dry deposition modeled
- Phase 4 – about 30% of wet deposition
- Phase 5 – about 100% of wet deposition
- Suppose we were right in phase 2…

Susquehanna Nitrogen P5.3.2 and Illustrative Scenarios

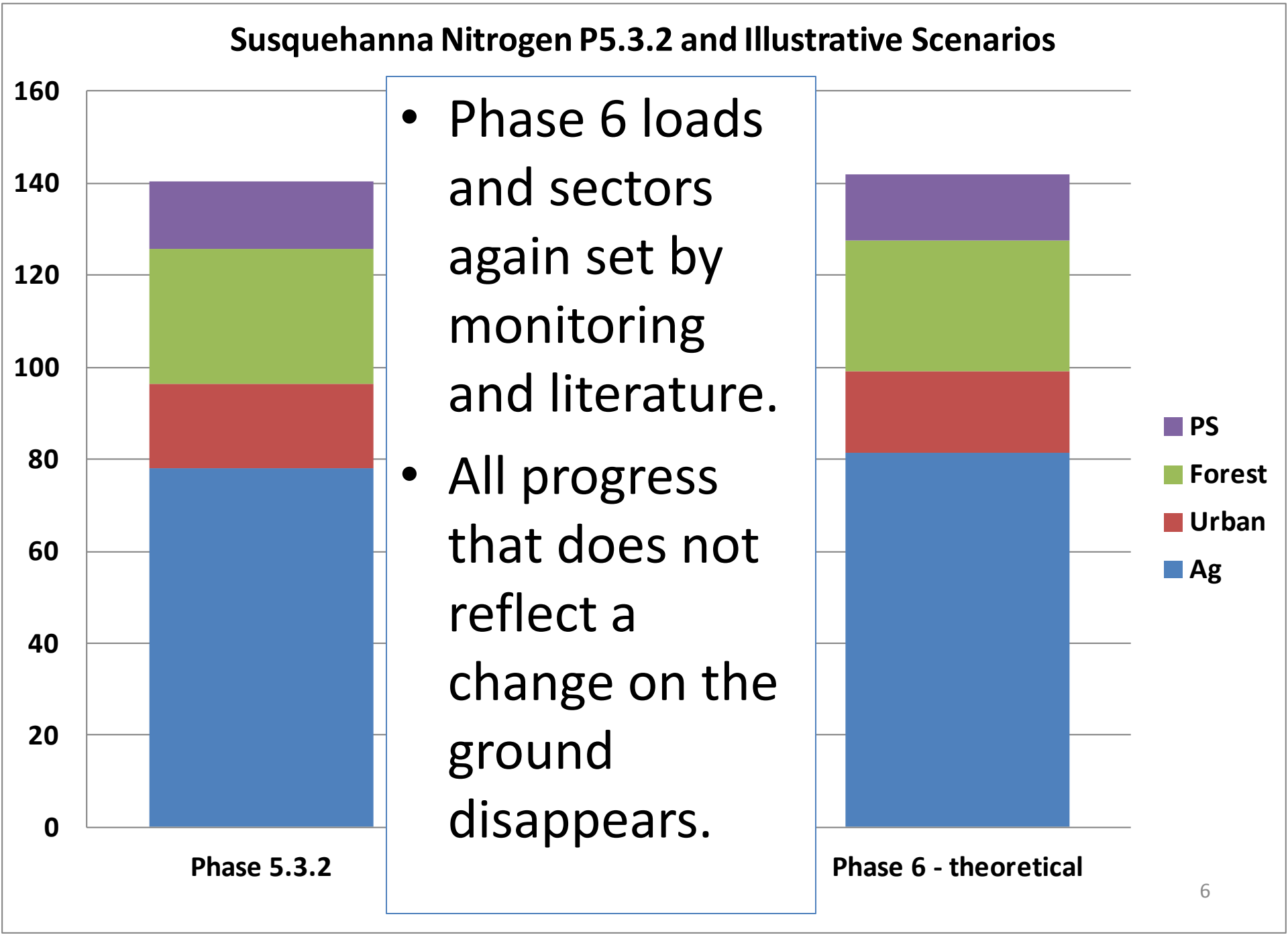


- Total Susquehanna load matches long term monitoring
- Sector breakouts determined by multiple lines of evidence in the literature and modeling

PS
Forest
Urban
Ag



- Take away all dry deposition
- Large change shown with no change on the ground



- Phase 6 loads and sectors again set by monitoring and literature.
- All progress that does not reflect a change on the ground disappears.

Erosion and Sediment Control Panel

Practice Type	Sediment		Nitrogen		Phosphorus	
	Phase 5.3.2	Phase 6	Phase 5.3.2	Phase 6	Phase 5.3.2	Phase 6
Level 1		74		0		0
Level 2		85		0		0
Level 3		90		0		0

1. Honor the panel recommendations as the accumulation of the best science

Summary Efficiency Reductions

Practice Type	Sediment		Nitrogen		Phosphorus	
	Phase 5.3.2	Phase 6	Phase 5.3.2	Phase 6	Phase 5.3.2	Phase 6
Level 1	40	74	25	0	40	0
Level 2		85		0		0
Level 3		90		0		0

2. Ensure that we are modeling in a way that best measures real changes on the ground

Summary Efficiency Reductions

2. Ensure that we are modeling in a way that best measures real changes on the ground

Practice Type	Sediment	
	Phase 5.3.2	Phase 6
Level 1	40	74
Level 2		85
Level 3		90

L1 lets through 26%

L2 lets through 15%

L2 reduces the L1 sediment by 58% (15%/26%)

Summary Efficiency Reductions

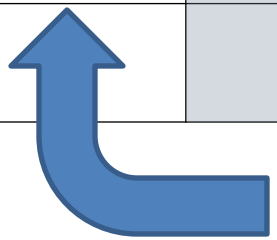
2. Ensure that we are modeling in a way that best measures real changes on the ground

Practice Type	Sediment	
	Phase 5.3.2	Phase 6
Level 1	40	74
Level 2	65	85
Level 3		90

L1 lets through 26%

L2 lets through 15%

L2 reduces the L1 sediment by 58% (15%/26%)



L2 reduces the L1 sediment by 58% (35%/60%)

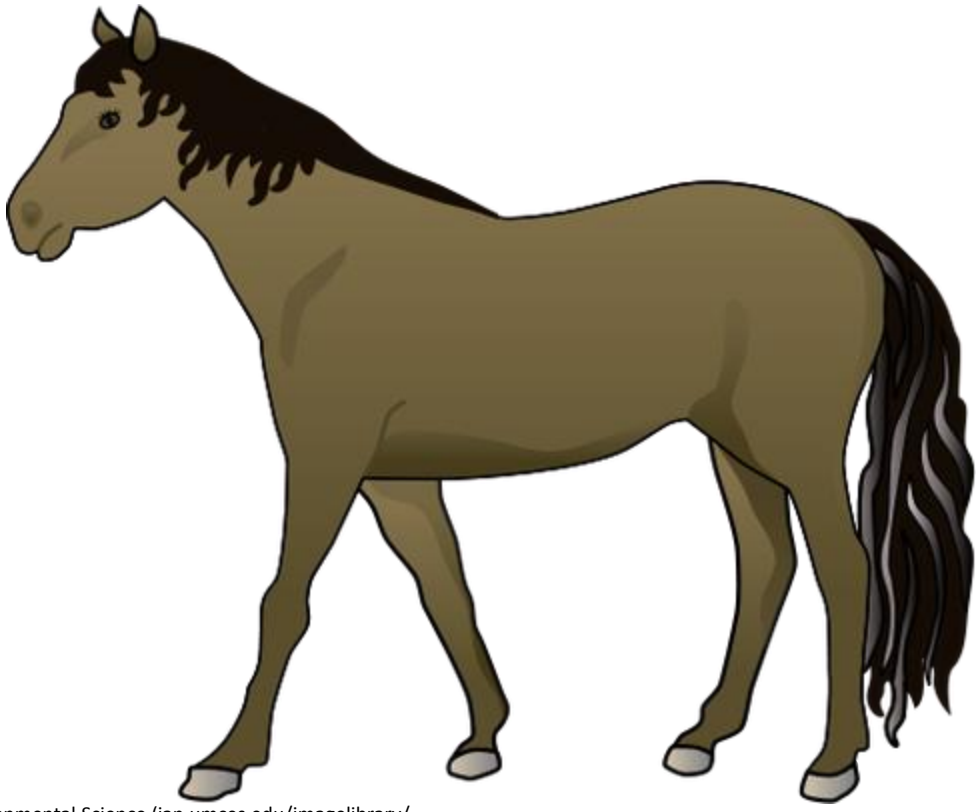
Summary Efficiency Reductions

Practice Type	Sediment		Nitrogen		Phosphorus	
	Phase 5.3.2	Phase 6	Phase 5.3.2	Phase 6	Phase 5.3.2	Phase 6
Level 1	40	74	25	0	40	0
Level 2	65	85	25	0	40	0
Level 3	77	90	25	0	40	0

Horse Sense

- I measure a horse to be 15 hands high
- You measure the same horse to be 14 hands high.

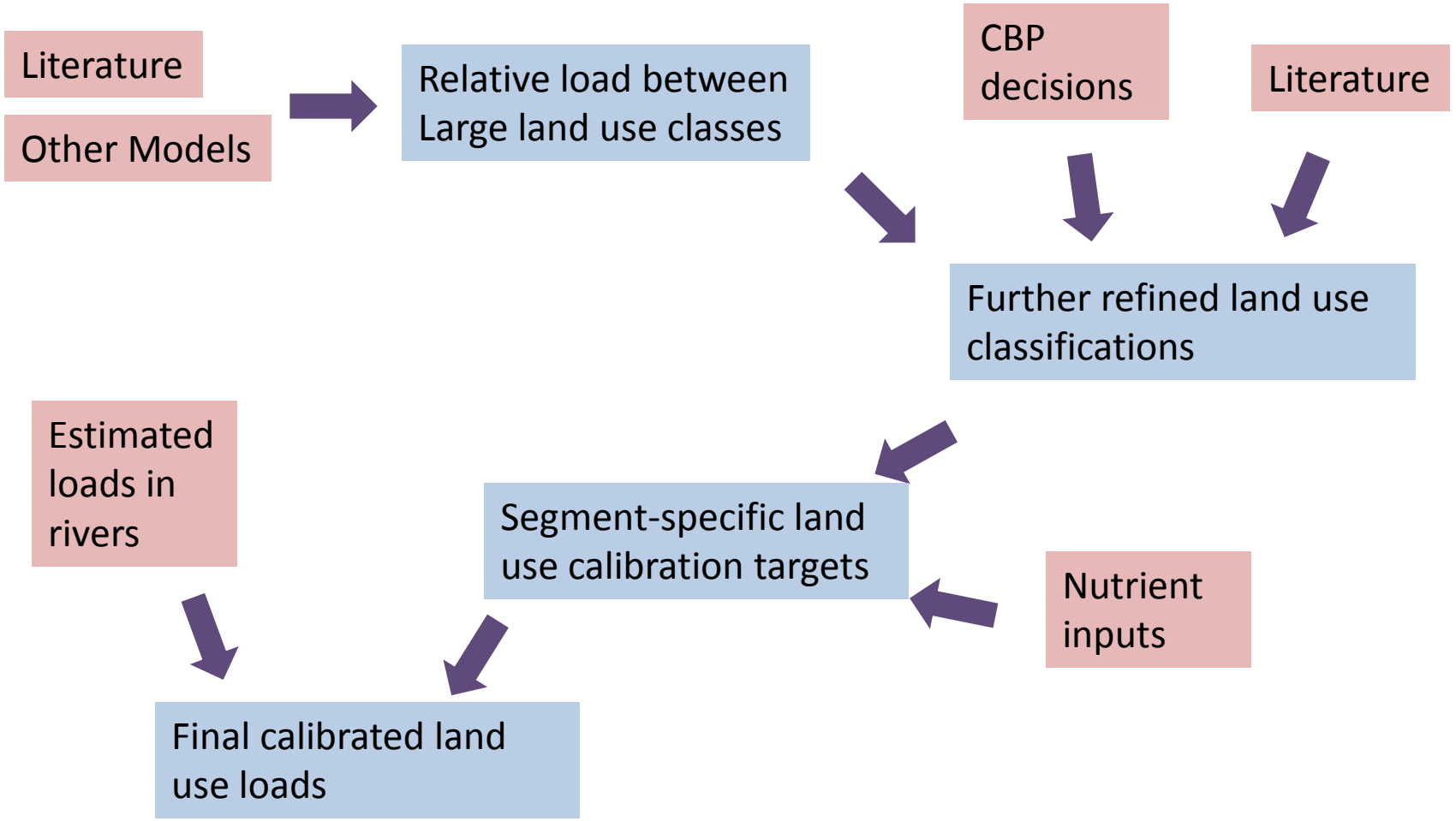
- No matter which one is more accurate, is the correct interpretation that the horse shrunk 4 inches?



Proposed Statement to WQGIT

- The full recommendations of the CBP partnership will be honored in Phase 6, subject to approval by the partnership, availability of data, and feasibility of implementation. Many groups are also making recommendations toward Phase 5.3.2. The Phase 5.3.2 watershed model and the estuarine water quality model are calibrated together and allow the partnership to estimate the change in loads that will be necessary to meet water quality. Therefore it is imperative that the implementation of partnership recommendations in phase 5.3.2 best account for real changes on the ground that occur after the calibration period and are not simply accounting changes. Any changes, positive or negative, that are not reflective of changes on the ground would not carry over into phase 6 and hence would give a false sense of implementation progress or lack of progress.

Land Use Load Decisions – Phase 5



Loading Rate Partnership Issues

- Other CBP groups expressing opinions
  - Panels, STAC, WorkGroups, GITs
- Possible Modeling Workgroup Statement:
  - Input on loading rates from all groups within CBP partnership is very welcome.
  - Final responsibility for calibration to water quality data rests with the Modeling Workgroup

Land Use Load Decisions – Phase 6