Intro to N Sensitivity Discussion

Gary Shenk

1/28/2015

Phase 6

Fertilizer
Manure
Atmospheric deposition
(…)

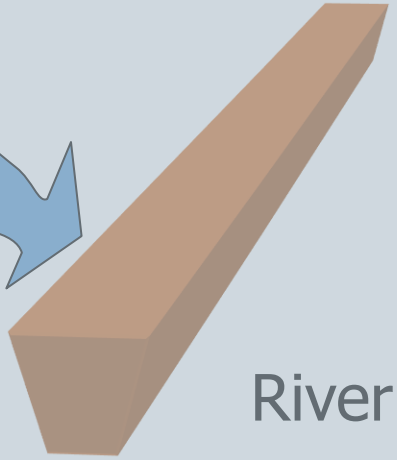
Precipitation

Nutrient Submodels

Guido Yactayo Tues 1:30

BMPs,
Land to Stream,
Stream to River

Temporal Nutrient model



Hydrology submodel

Sediment submodel

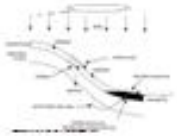
River

Phase 6

Nutrients

Field

Land to stream



Estimate Spatial Average EOS Based on land use and inputs

Estimate watershed delivery variance based on landscape parameters

Stream to River

Estimate small stream effects

River to Estuary

Directly Simulated in HSPF for river averaging at least 100 cfs

Calibrated to WQ data

Phase 6

Nutrients

Load =

Calibrated load **+ Sensitivity * Δ Inputs**

*

BMPs

*

Watershed Delivery Variance Centered on 1

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Stream Delivery

*

River Delivery

Estimate Spatial Average EOS Based on land use and inputs

Estimate watershed delivery variance based on landscape parameters

Estimate small stream effects

Directly Simulated in HSPF

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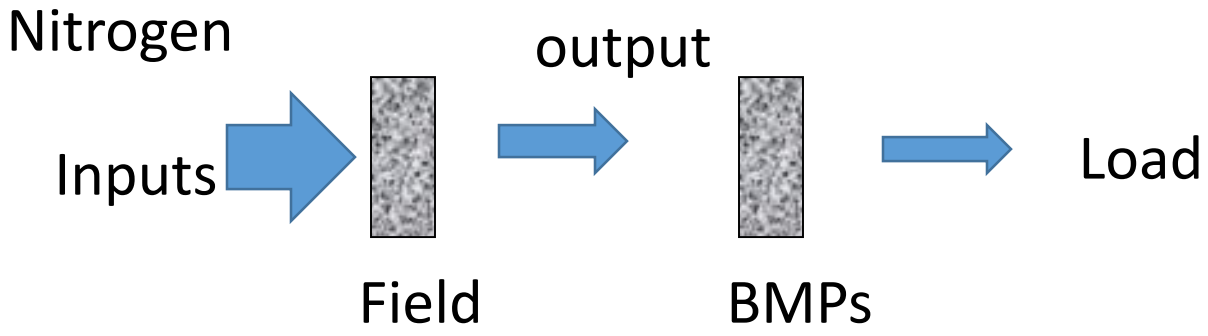
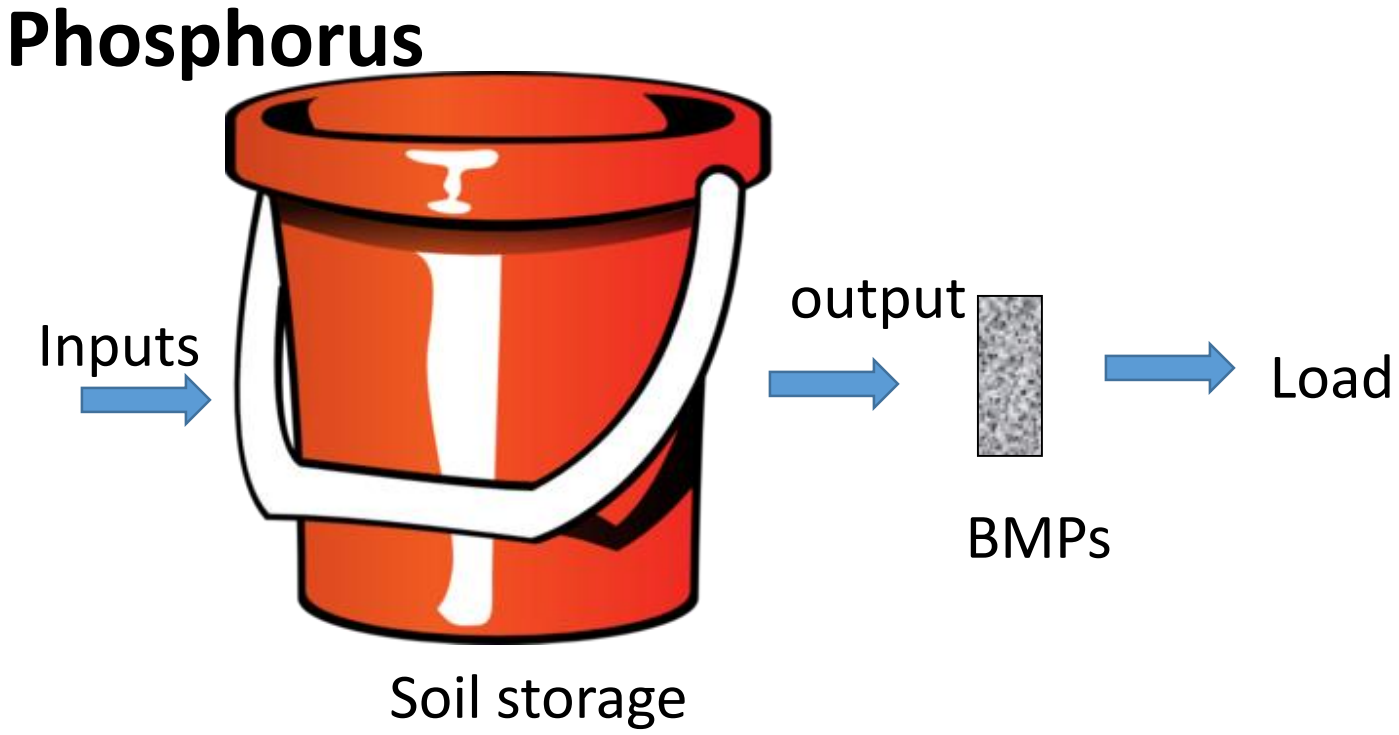
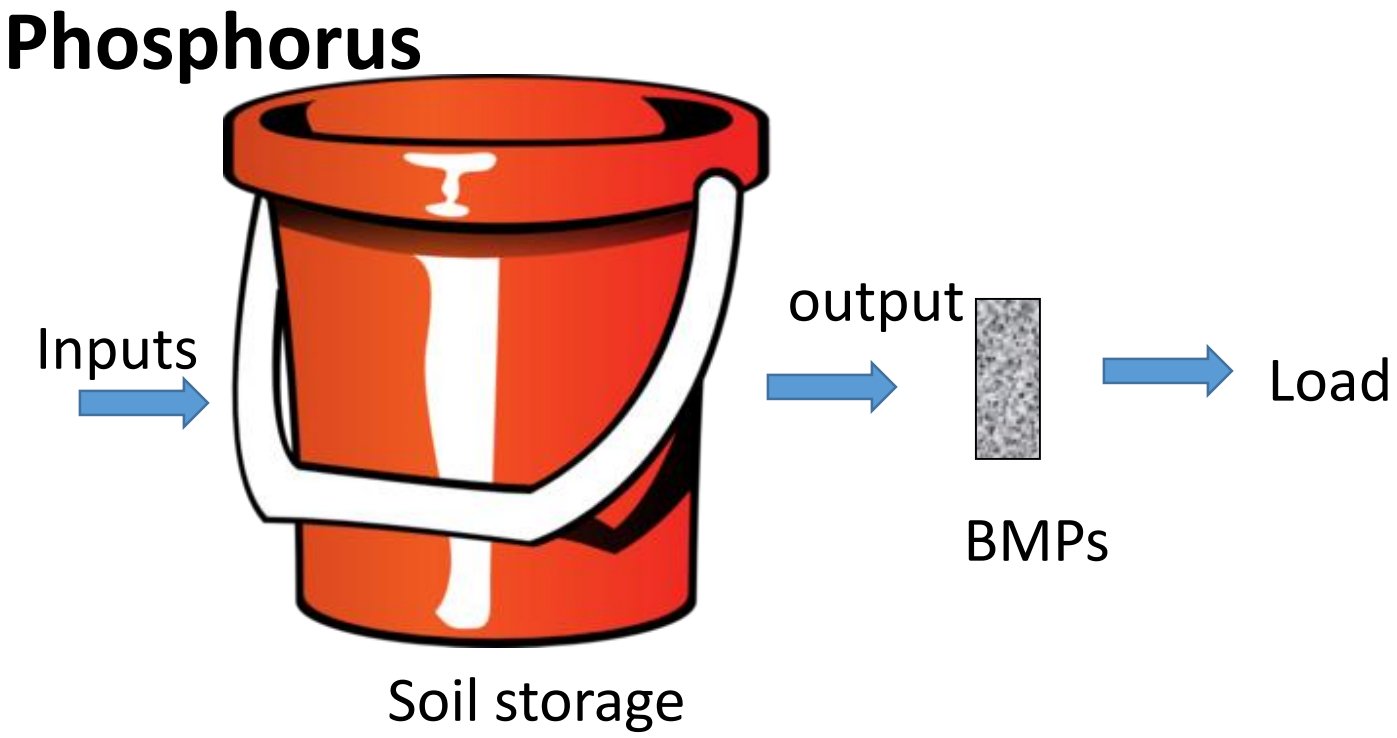
Conceptual Model of Nitrogen Sensitivity



STAC Phosphorus Report



STAC Phosphorus Report



CBP Management Question

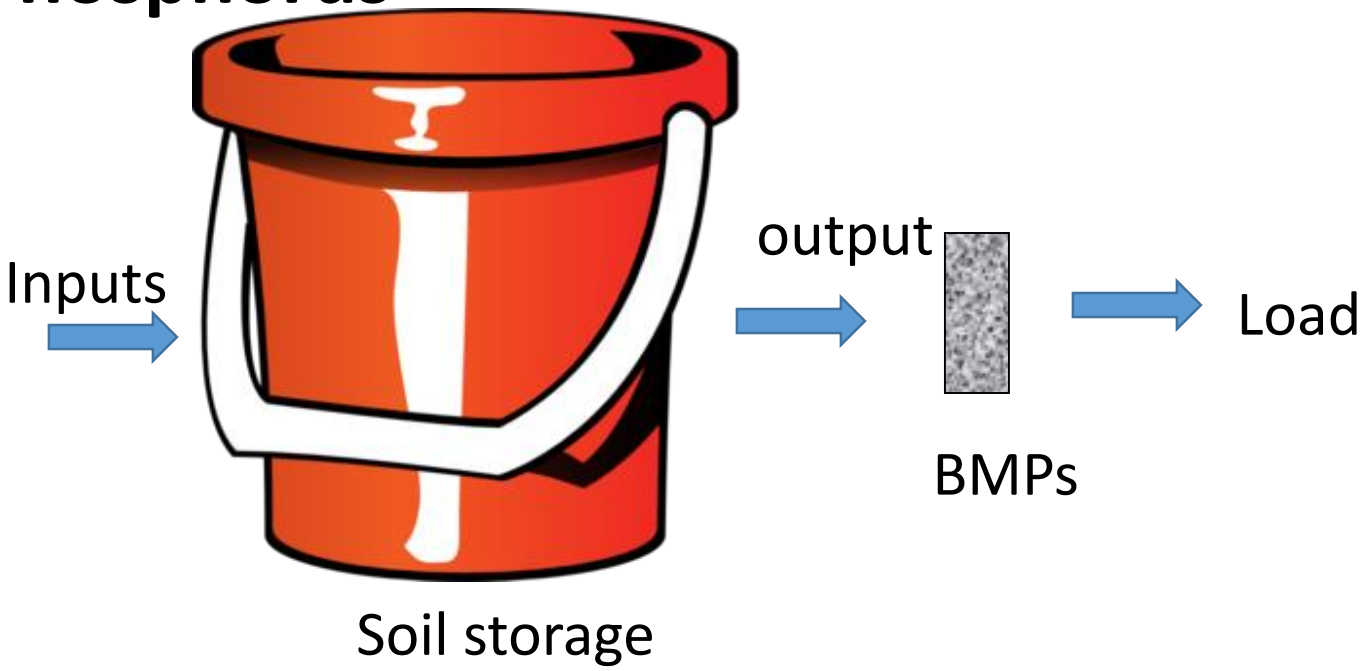
"What set of management practices will produce the necessary water quality response over the **long term**?"

New Management Issues

"What do we mean by **long term**?"
"When will we see these changes?"

STAC Phosphorus Report

Phosphorus



- Gather Soil Data
- Investigate APLE