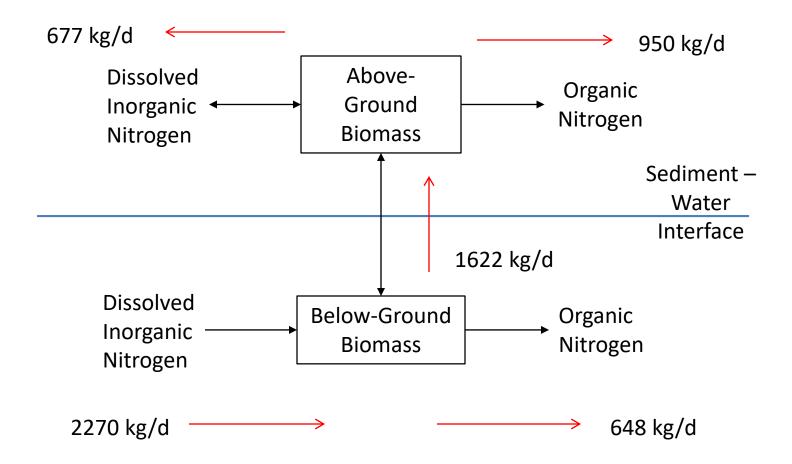
#### The Question

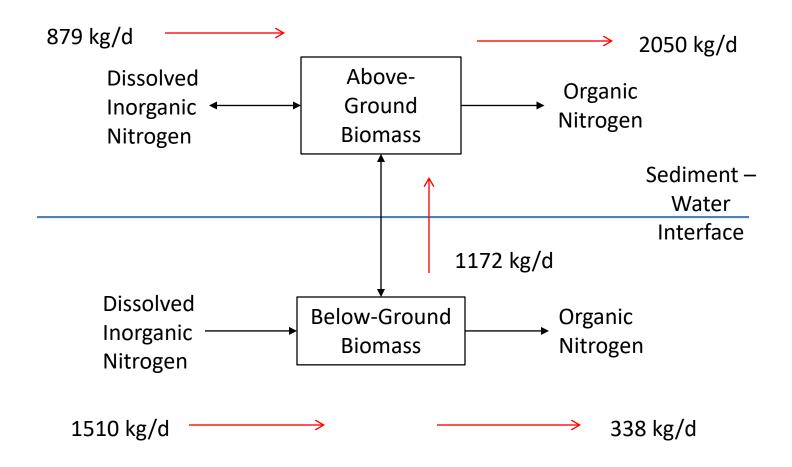
- We want to know how SAV influences nutrient cycling. How much nutrient is removed from water column by SAV?
- We quantify these fluxes within the model code.
- We need to export the desired information from the code and put it into useful form.

# The Nitrogen Cycle



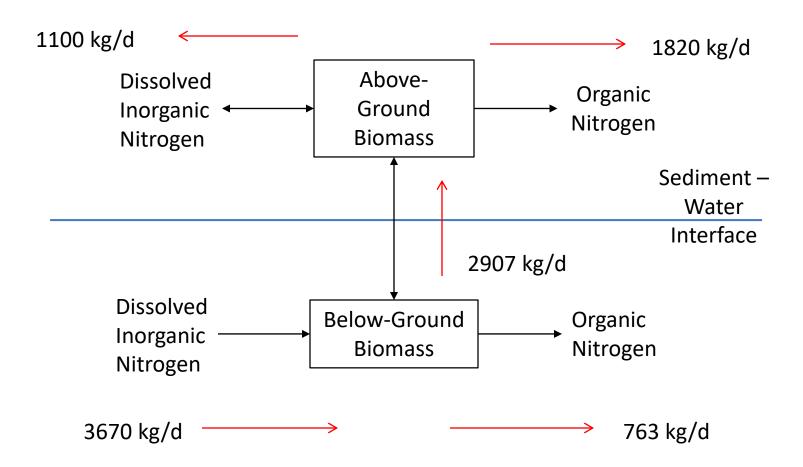
We quantify and can report out the indicated fluxes (CB7PH, zostera).

# The Nitrogen Cycle



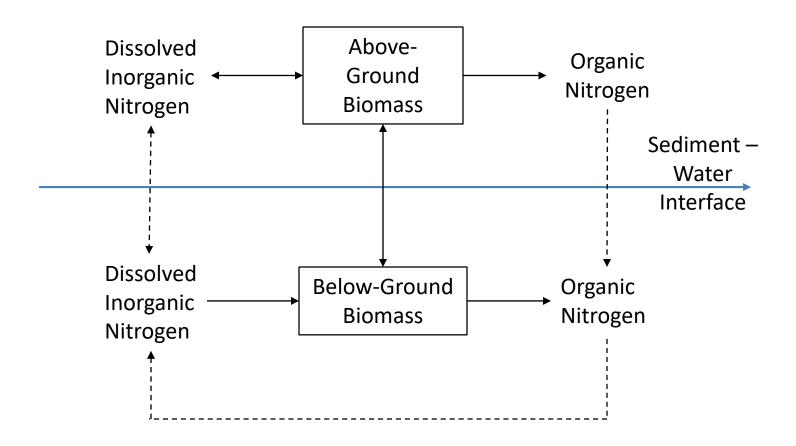
We quantify and can report out the indicated fluxes (CB1TF, vallisneria).

# The Nitrogen Cycle



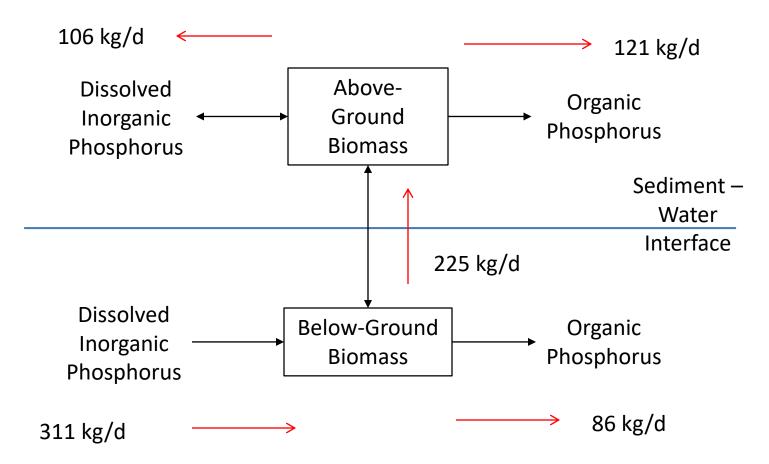
We quantify and can report out the indicated fluxes (TANMH, ruppia).

# Complications



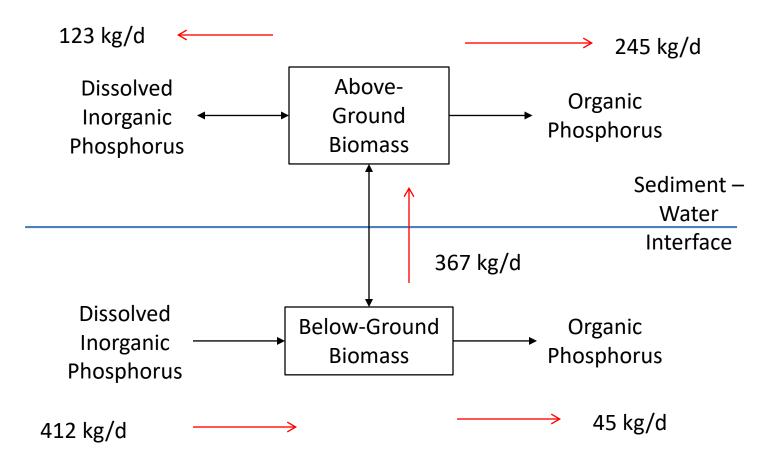
We quantify and can report out the additional fluxes but it is difficult to isolate the influence of SAV.

# The Phosphorus Cycle



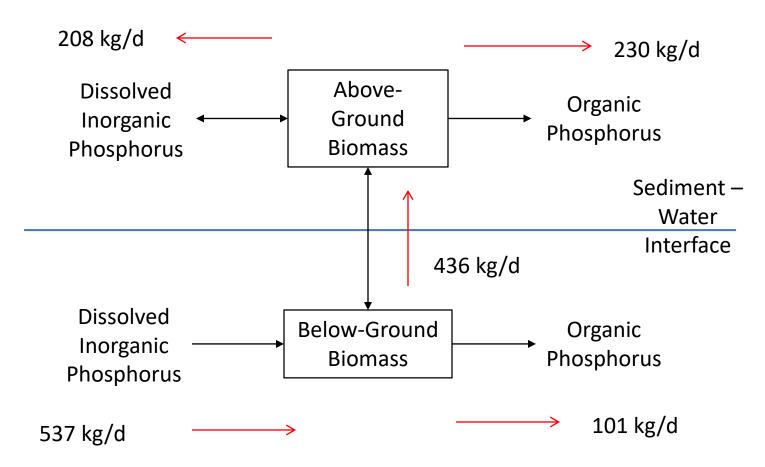
We quantify and can report out the indicated fluxes (CB7PH, zostera).

# The Phosphorus Cycle



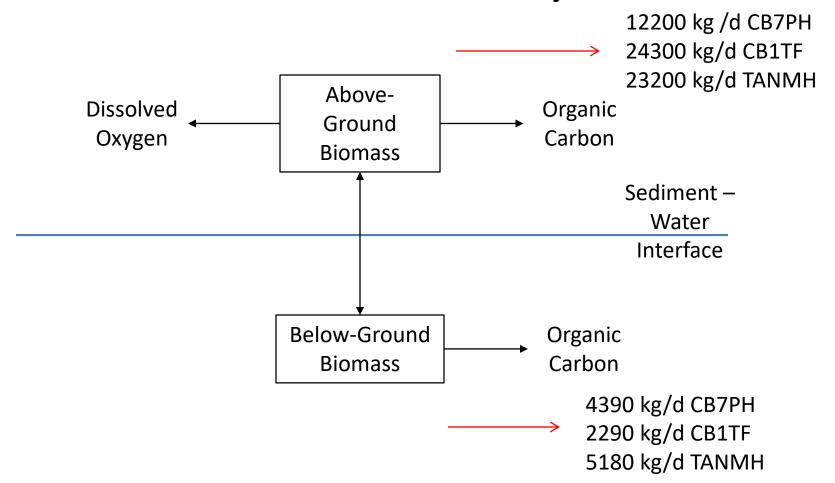
We quantify and can report out the indicated fluxes (CB1TF, vallisneria).

# The Phosphorus Cycle



We quantify and can report out the indicated fluxes (TANMH, ruppia).

#### The Carbon/DO Cycle



We quantify and can report out the indicated fluxes (CB7PH).

#### **Status**

- We have the code installed and QC'd in at the Bay Program.
- We have a post-processor to organize the material into useful form.
- We need guidance as to what information is requested by the sponsor.

#### Next Steps?

- Compare SAV nutrient fluxes to local and systemwide external loads. Calibration and WIP3
- Run calibration with and without SAV. Examine water quality as indicated by stoplight plots etc.
- Run WIP3 with and without SAV. Examine water quality as indicated by stoplight plots etc.
- Perform detailed mass balance analysis of sediment water fluxes etc?