2015 Update Mtg: Phosphorus Update 2015

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Phosphorus research update

Carolyn DeMoranville, UMass Cranberry Station
Status

- Continue to monitor harvest and winter floods
- General downward trend in P in water over time as P fertilizer is reduced
- Winter flood P conc. much lower than harvest
- Crops maintained
- Filter work underway
Site 3 has averaged 10 lb/a P for >10 years
Site 3 has averaged 10 lb/a P for >10 years
Site B has averaged 10 lb/a P for >10 years
Filter Bed
The container
Pump in bog edge

Pipe (black) goes under dirt road and comes up into the pvc

Water comes into filter via perforated pvc

Pipe with filtered water exiting from base of filter box
Sand in filter bed: note iron floc (rusty material).

Phosphorus reacting with iron in the soil and water.

This is particulate material and is clogging the filter.
Tried adding a series of perforated pipes into the sand to move water from the perforated PVC on the edge into the sand and guiding water into the sand across the entire bed.

Arrow shows edge of box: note that water enters along that edge.
Water entering filter bed
Iron floc continues to be an issue – need for settling tank?
Winterized