

## Travis Fuller

The restrictions on Lanthanum-Modified Bentonite Clay (Phoslock) to only water bodies with no flowing water, aeration systems, or grass carp due to the potential for re-suspension and ineffective phosphorus sequestration should be removed for the following reasons. Phoslock has multiple use patterns and can be dosed to target phosphorus specifically in the water column, sediment, or both. Lanthanum-Modified Bentonite Clay is less dense than water and settles rapidly where it increases sediment stability (Egomose, 2010). Re-suspension of Phoslock does not render it ineffective as a phosphorus sequestration tool. If active binding sites are still available, Phoslock will actually bind more phosphorus in the water column before quickly re-settling on the bottom.

If the restriction language for Phoslock is not removed, considerations for adding the same language to Aluminum Sulfate should occur. Phoslock is denser and settles quicker than alum floc and has less chance of moving offsite. Phoslock also has less chance of re-suspension by grass carp or flow than alum floc.

### References

Egomose, S., Reitzel, K., Andersen, F. Ø, & Flindt, M. R. (2010). Chemical Lake Restoration Products: Sediment Stability and Phosphorus Dynamics. *Environmental Science & Technology*, 44(3), 985-991. doi:10.1021/es903260y

Also will ProcellaCOR be considered for addition to the Aquatic Noxious Weed Management Permit?