

To: Tim Seastedt

Workshop summary report

Workshop: Alkalinity budgets, Tues 1:00 PM

Organizer: Bob Santore, Grad. Student Syracuse Univ.

Summary:

Twenty-two participants from 8 LTER sites and several non-LTER sites attended. Annual alk. budgets were presented for HBR, AND, LUQ, LVWS, Cone Pond, NH and Pancake Hall Creek, NY.

Comparisons of these budgets showed considerable variation. At the extremes were AND with alk. fluxes about ten times that for LVWS. Of interest to the group were the relative contributions of terrestrial and aquatic systems to the alkalinity production within a landscape. Data for Cone Pond showed the aquatic system to be approx. 3 times as active as the surrounding terrestrial system. Also of interest were biotic and abiotic interactions. Data for HBR showed a changing influence of vegetation over a 25 year period as NPP at that site slowed. These changes were offset by changes in weathering rates.

Discussion centered around how differences across sites could be organized around relevant research questions. Questions of interest to the

group included terrestrial-aquatic interactions, biotic-abiotic interactions, and the specific contributions of processes such as ^{mineral} weathering or NPP to the alkalinity budget of a given system.

Action Plan:

Suitable interest was expressed to in cross-site comparisons to expand the list of sites we have alk. budgets for. Those sites represented by workshop participants (AND, ARC, CUOT, LUQ, LVWS, HBR, NTL, NWT). Worksheets will be sent to these sites to help organize and standardize this effort. The resulting budgets could contribute to a cross-site comparison paper focused on the interactions between and relative role of aquatic and terrestrial systems to alk. budgets at LTER sites. This paper may be submitted to the LTER site comparison book being edited by C. Bledsoe.