CLAD 4-year Accomplishments (2015-2019)

Direct and indirect accomplishments where CLAD initiated, supported, or funded the work.

1. Sponsored a critical load session at Acid Rain 2015 (October 2015)
2. Attendance at CLAD meetings during the Spring and Fall NADP meetings is between 18 and 41 participants
3. Published NCLD Critical Load Map Summary (October 2015)
5. Produced Air Quality and Ecosystem Services General Technical Report and Ecosphere special issue (in progress)
6. CLAD-approved critical load definitions (in progress)

CLAD 4-year Accomplishments (2011-2015)

Direct and indirect accomplishments where CLAD initiated, supported, or funded the work.

1. Sponsored a critical load session at the Fall NADP Scientific Symposia for the past 4 years - 2011 to present
2. Attendance at CLAD meetings during the Spring and Fall NADP meetings is between 18 and 41 participants
5. CLAD-FOCUS submission of compiled U.S. critical load data to the UNECE in 2011 (T. Moore, J. Lynch)
6. CLAD-FOCUS competed 1.0v National Critical Load database (NCLD) and FOCUS Phase I Report 2011 (T. Moore, J. Lynch)
7. Funded (EPA) the development of empirical nitrogen critical loads for ecoregions of the United States (L. Pardo) and publications Pardo, et al. 2011 a, b
8. CLAD developed a NADP Critical Loads Brochure 2011 (T. Blett)


11. Funded (EPA and USGS), contributed critical loads and support to the NAPAP 2011 (D. Burns, R. Haeuber)


13. CLAD-FOCUS Phase II Workplan Completed, establishing five “workgroups” to review specific critical load issues and research needs. These group include: a) Improve the Forest Ecosystem Critical Load Estimates, b) Improve the CLs of Nutrient Nitrogen for Epiphytic Lichens, c) Improve Empirical CLs of Nitrogen, d) Improve Surface Water CL Calculations and Uncertainty, and e) Maintain and Expand the CL Database 2012 (C. Huber)

14. CLAD-FOCUS completed a review of the methodologies and identification of potential approaches to improve the base cation weathering (BCw) and ANC leaching (ANCleach) parameters of the Simple Mass Balance (SMB) model/equation used to calculate terrestrial/forest ecosystem CLs in the U.S. 2012 (J. Phelan)

15. CLAD-FOCUS completed improvements of the CL model for lichens by calibrating it for each EcoRegion in the US. Linda Geiser and the USFS are utilizing the Forest Inventory and Analysis (FIA) lichen species, as well as associated tree species, information from plots across the country to expand the lichen dataset for the CL model 2012 (L. Geiser)

16. CLAD provided scientific information and critical load data for review of the NAAQS Secondary Standard for NOx and SOx 2013 (J. Lynch and R. Scheffe) and publication - Scheffe et al. 2014

17. Funded (EPA) the development and test of a national methodology to estimate Soil Base Cation Weathering Rates with the PROFILE model to support terrestrial/forest ecosystem CLs 2013 (J. Phelan and R. Waite) and publication Phelan et al. 2014

18. CLAD-FOCUS added a workgroup to address biodiversity and critical loads. The group will respond, informally, to the UNECE-CCE “Call for Data” (C. Clark)
19. CLAD-FOCUS publication of the National Critical Load database (NCLD) 2013 (T. Blett) and publication Blett et al. 2014

20. CLAD-FOCUS sponsored John Wesley Powell Center for Analysis and Synthesis Project - Forecasting Forest Response to N Deposition: integrating data from individual plant responses to soil chemistry with a continental-scale gradient analysis 2013-present (L. Pardo, T. Blett, C. Huber)

21. CLAD-FOCUS completed 2.0v National Critical Load database (NCLD) 2013 (J. Lynch and C. Huber)

22. Supported the John Wesley Powell Center Analysis and Synthesis Project - Nitrogen Meta-analysis of impacts of N deposition on understory species composition 2013- present (C. Clark)


26. CLAD Workshop - Very Simple Dynamic Model (VSD) by Dr. Reinds, Senior Scientist at Wageningen University & Research Centre 2014 (J. Phelan, T. Blett)


31. CLAD competed 2.5v National Critical Load database (NCLD) 2015 (J. Lynch and C. Huber)
References Cited


