STEP 2: Define your concern.

The negative effects of atmospheric deposition occur on sites that are sensitive to acidification or nitrogen saturation/eutrophication AND have excessive amounts of deposition. Decide whether to focus on acidification or nitrogen saturation/eutrophication, or both, in the following analysis.

Include all CLs that showed exceedance in Step 1.

Consider the ecosystem characteristics that indicate sensitivity to deposition, referring to the "Acidity" and "Nutrient Nitrogen" boxes, below. Interdisciplinary discussion with ecologists, geologists, hydrologists, soil scientists, fisheries biologists, air specialists, etc. can help identify whether one, both, or neither of these CL categories might be of concern to the forest. Results of these discussions can reduce the list of CLs you address in your analysis. (Later you will see how maps of CL exceedance can be used to identify areas at greater risk of harm from deposition.)

If investigation indicates a focus on empirical CLs of nutrient nitrogen, review the "User's Guide for setting empirical critical loads for nutrient nitrogen" for an explanation of how to refine the broad CL ranges provided for each forest and incorporate the concept of data reliability.

Proceed to Step 3 to identify the types of data available for the assessment.

Does your forest have any of the characteristics of ecosystem sensitivity?

Acidity

- Is there elevated deposition of sulfur or nitrogen in the area?
- Does the lithology/geology of the area have a low buffering capacity for acidity?
- Does the area have shallow soils?
- Does the area have very old weathered soils?
- Is the area found at high elevation?
- Do you have water chemistry data that indicates low buffering capacity (i.e. ANC, pH values)

Nutrient Nitrogen

- Is there elevated deposition of nitrogen in the system?
- Did the area historically have low nitrogen deposition?
- Have there been observed shifts in species composition of sensitive species in the area?
- Are there elevated stream water nitrate concentrations?