

Monitoring Resources

Visibility Monitoring

Forest Service Scene Monitoring Website -current- Real time webcam images from Class I areas plus historical data representative of FS Class I areas. (<http://www.fsvisimages.com>)

Resource Condition Monitoring:

Guidelines for Measuring the Physical, Chemical and Biological Condition of Wilderness Ecosystems (with focus on monitoring needed to support air resource management responsibilities). 1987. Fox, Bernabo and Hood. Rocky Mountain Forest and Range Experiment Station, General Technical Report RM-146. (http://www.fs.fed.us/rm/pubs_rm/rm_gtr146.html)

A Screening Procedure for Identifying Acid-Sensitive Lakes from Catchments Characteristics. 2005. Berg, et al. Environmental Monitoring and Assessment 105:285-307 (See [Screening Procedure.pdf](#))

Water Monitoring

- **Field Guide for Surface Water Sample and Data Collection**. June 2001. Air Pro-ram, USDA Forest Service. (See [Field Guide for Surface Water Sampling.pdf](#))
- USFS/USGS Water and Soils Lab, Fort Collins, Colorado (<http://www.fs.fed.us/rm/waterlab/>)
- **Guidance on a full array of stream ecosystem components: Monitoring Wilderness Stream Ecosystems**. January 2001. Rocky Mountain Research Station General Technical Report RMRS-GTR-70.

Lichen Monitoring

- *Lichen Monitoring in US National Forests and Parks: Publications* (<http://ocid.nacse.org/qml/research/airlichen/index.html>)
- Geiser, L. 2004. (Manual for Monitoring Air Quality Using Lichens on National Forests of the Pacific Northwest). USDA-Forest Service Pacific Northwest Region Technical Paper, R6-NR-AQ-TP-1-04. 126 pp. ([AQBPMthds.pdf](#))
- Forest Inventory and Analysis/Forest Health Monitoring: lichen community sampling manual: (http://www.fia.fs.fed.us/library/field-guides-methods-proc/docs/2007/p3_4-0_sec10_10_2007.pdf)
- Lichens of North America: (<http://www.lichen.com/>)
- Forest Service Lichens and Air Quality Database and Clearinghouse: (<http://www.nacse.org/lichenair/>)
- Region 6 Air Quality Biomonitoring Program using Lichens: (<http://www.fs.fed.us/r6/aq/lichen/>)
- *Lichens as Bioindicators of Air Quality*. 1993. Rocky Mountain Forest and Range Experiment Station, General Technical Report RM-224.
- Blett, T., L. Geiser, and E. Porter. 2003. *Air Pollution-Related Lichen Monitoring in National Parks, Forests, and Refuges: Guidelines for Studies Intended for Regulatory and management purposes*. U.S. Dept. of the Interior Technical Report NPSD 2292. 25pp. ([NPSGuidetoStudies.pdf](#))

Ozone Monitoring

- FS National Ozone Monitoring Protocol: Forest Inventory and Analysis/Forest Health Monitoring (http://www.fia.fs.fed.us/library/field-guides-methods-proc/docs/2007/p3_4-0_sec9_10_2007.pdf)