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Western Airborne Contaminant Assessment Project

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Mercury and certain semi-volatile organic compounds have chemical properties that cause them to accumulate preferentially in cold environments through cold condensation. These contaminants, therefore, may pose a greater threat to high elevation, high latitude ecosystems. Many National Parks are located in high-elevation areas, where contaminant accumulation may be a concern. The National Park Service, in partnership with the U.S. Geological Survey, U. S. Environmental Protection Agency, U. S. Forest Service, Oregon State University and the University of Washington are currently conducting a seven year study to evaluate long range and regional transport and deposition of these contaminants.

The Western Airborne Contaminants Project is designed to determine the risk to ecosystems and food webs in western National Parks from the local, regional, and long range transport of mercury and semi-volatile organic compounds. Parks included in the study represent a latitudinal and coastal to interior gradient: Denali, Gates of the Arctic, Glacier, Mount Rainier, Noatak, Olympic, Rocky Mountain, and Sequoia. The objectives are to determine: presence of contaminants; patterns of accumulation – geographically and by elevation; and sources and ecological threat of specific contaminants. Indicators to be sampled include: snow, fish, water, lake sediments, lichens, vegetation, and subsistence foods. Pacific Northwest parks are slated for the majority of sampling to take place in summer 2005.