Overview
The National Atmospheric Deposition Program (NADP) has a new litterfall mercury monitoring initiative to complement the Mercury Deposition Network (MDN) monitoring for mercury in precipitation and the Atmospheric Mercury Network (AMNet) monitoring for mercury in air. The litterfall monitoring initiative offers a way for a NADP site sponsor to get measurements to approximate a large part of the mercury dry deposition in a forest landscape. A site sponsor subscribes to the litterfall monitoring initiative for a fee and receives: supplies for collecting annual samples of litterfall from a forest study plot near their site, analysis of the samples for mercury and methylmercury, and data on mercury and methylmercury concentrations and litterfall mercury deposition. Like other NADP network data, the litterfall mercury monitoring data will be hosted on the NADP website. In combination with data from the MDN and AMNet networks, the litterfall data can be used to examine ranges of mercury dry deposition, to estimate combined wet and dry mercury deposition, and to evaluate mercury models.

History
In April 2012, the NADP Executive Committee approved the new initiative for litterfall mercury monitoring. This new initiative is described in a 12-Point Plan required by NADP. This plan was supported by advocates from the U.S. Geological Survey, U.S. Environmental Protection Agency, National Park Service, U.S. Forest Service, and from the NADP subcommittee chairs for Network Operations and Ecological Response and Outreach. The plan was reviewed and recommended for approval by a panel appointed by the Executive Committee and discussed in meetings of the NADP Network Operations and Joint Subcommittees. The elements of the plan are based on a 3-year study at 23 MDN sites in 15 states that was published in a scientific journal and presented at two NADP science symposiums and the international mercury conference.

Transition Program
The new initiative for litterfall mercury monitoring involves a 5-year transition program operated by the U.S. Geological Survey. The transition program will support the evaluation and improvements typical for new initiatives while adding a network of sites with annual litterfall mercury data. There are two requirements for an NADP site to participate in the litterfall mercury monitoring initiative as part of the transition program: (1) forest near the NADP site that is suitable for establishing a representative study plot for collecting annual litterfall samples; and (2) payment of the annual fee to the NADP Program Office to support the costs of sampling supplies, sample analysis, shipping, and site support. The 2012 annual fee is $2,600 per site.

For More Information
Additional details about the new initiative for litterfall mercury monitoring are in the 12-Point Plan, including protocols for site selection, sample collection, and data management. For more information about starting litterfall sample collection, contact the U.S. Geological Survey transition program site liaison, Martin Risch at 317-600-2763, mrrisch@usgs.gov.

The 12-Point Plan is available at http://nadp.isws.illinois.edu/newIssues/litterfall

The litterfall mercury study is available at http://www.sciencedirect.com/science/article/pii/S0269749111003319