## Strategic plan to establish and implement nitrogen critical loads and target loads for national forests and national parks in the Pacific Northwest, USA

Tonnie Cummings, Tamara Blett, Linda Geiser, Rick Graw, Jill McMurray, Steve Perakis, Ellen Porter and Regina Rochefort

The Clean Air Act and agency policies provide the basis for the National Park Service and the U.S. Forest Service to work with regulatory agencies and others to protect the air quality and air pollution-sensitive resources of national parks and national forests. A workgroup comprised of National Park Service, U.S. Forest Service and U.S. Geological Survey scientists has developed a five-year strategic plan to establish and implement nitrogen critical loads and target loads for areas managed by the National Park Service and the U.S. Forest Service in the states of Idaho, Oregon and Washington. The plan includes publication of a "state of knowledge" report that describes known and potential ecological effects of nitrogen in the Pacific Northwest and prioritizes data needs, development of nitrogen critical and target loads specific to Pacific Northwest ecosystems, preparation of GIS maps showing areas that exceed the nitrogen critical and target loads, and implementation of critical and target loads through National Park Service and U.S. Forest Service planning and policy mechanisms. Ultimately, the National Park Service and the U.S. Forest Service intend to collaborate with local, state and federal regulatory agencies to obtain emission reductions from sources that contribute to critical and target load exceedances in national parks and national forests.

## Author affiliations and contact information:

Tonnie Cummings, National Park Service, 601 E. Reserve St., Vancouver, WA 98661, 360-816-6201, tonnie\_cummings@nps.gov

Tamara Blett, National Park Service, P.O. Box 25287, Denver, CO 80225, 303-969-2011, tamara blett@nps.gov

Linda Geiser, U.S. Forest Service, P.O. Box 1148, Corvallis, OR 97339, 541-231-9452, <a href="mailto:lgeiser@fs.fed.us">lgeiser@fs.fed.us</a>

Rick Graw, U.S. Forest Service, P.O. Box 3623, Portland, OR 97208, 503-808-2918, rgraw@fs.fed.us

Jill McMurray, U.S. Forest Service, P.O. Box 130, Bozeman, MT 59711, 406-587-6892, jamcmurray@fs.fed.us

Steve Perakis, U.S. Geological Survey, 3200 SW Jefferson Way, Corvallis, OR 97331, 541-750-0991, <a href="mailto:sperakis@usgs.gov">sperakis@usgs.gov</a>

Ellen Porter, National Park Service, P.O. Box 25287, Denver, CO 80225, 303-969-2617, ellen porter@nps.gov

Regina Rochefort, National Park Service, 810 State Route 20, Sedro-Woolley, WA 98284, 360-854-7202, regina rochefort@nps.gov