

Lake Superior Environmental Monitoring Collaborative

Discussion of ongoing environmental monitoring work

USDA Forest Service

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National Forests in the Basin



Types of Monitoring Data

Aquatic

Monitoring Type	Chequamegon-Nicolet NF	Hiawatha NF	Ottawa NF	Superior NF
Lake Water Quality	Varies, 1990s to Present	Varies, 1980s to Present	Varies, 1990s to present for some	Varies, 1990s to present for some
Water Temperature	1995 to Present			
Stream Crossing Inventory			2004-Present	2001-Present
Stream Segment Classification Inventory	Varies, 1990s to Present			
Stream Temperature				2008-Present
Stream Water Quality - trace metals and nutrients				2011-Present
BMP-Water Quality Monitoring-WI	Varies, 1995-Present			
National BMP Water Quality USFS	Varies, 2013-Present			
Fisheries Surveys	1978-Present		Decades (as early as 1930s in some places)	
Fishery Structure Inventory	1990s-Present			2009
Fish and Benthic Invertebrates		2001-Present	2001-Present	2001-Present
Mussel inventory		2013-Present	2001-Present	2001-Present
Aquatic invasive species inventories		2013-Present	2001-Present	2001-Present

Types of Monitoring Data

Terrestrial

Monitoring Type	Chequamegon-Nicolet NF	Hiawatha NF	Ottawa NF	Superior NF
Wildlife and plant inventory and monitoring (includes RFSS, T&E, selected game species, amphibians, rare plants, non-native invasive plants, small mammals and forest songbirds). <i>NOTE: much of this work/data is done with partners or led by partner agencies and organizations</i>	Varies depending on species	Varies depending on species	Varies depending on species	Varies depending on species
Invasive Plants-New sites	1995-Present			
Permanent Veg Plots	Every 5 years			
Rare Plant (new populations)	1919 to Present			
Botanical Forest Products	2001 to Present			
Forest Best Management Practices		2013-Present	2013-Present	2014
Stand Exam		Varies		
Insect and Disease Aerial Detection		Varies	Long term	

Types of Monitoring Data

Abiotic

Monitoring Type	Chequamegon-Nicolet NF	Hiawatha NF	Ottawa NF	Superior NF
Fire Monitoring Plots (impacts)	2005 to Present			
Climate Change Adaptation Demonstration Projects	2012 to Present			
Soil Disturbance Monitoring of Timber Sale Logging Machines	2014			
Exploratory Drilling Implementation Monitoring				2012 -2014
Exploratory drilling sump performance monitoring				2011-Present
Ice Formation at Culvert Crossings				2013-Present
Dam Inventory				2010
Geomorphic surveys			2001-Present	2001-Present
Groundwater Monitoring Wells	2013-Present			
Private supply well water quality data near exploratory drilling activity				2013
Air Quality	USFS Nationwide	USFS Nationwide	USFS Nationwide	USFS Nationwide
Soundscape Data for ambient and anthropogenic sound.				Started 2014
Road and Trail Monitoring/OHV Use monitoring			2011-Present	

Pursuit of a National Strategy

"We are creating a new, national Inventory, Monitoring and Assessment (IM&A) System to improve land management, policy and investment decisions. Our current constellation of IM&A activities will be transformed into a fully integrated approach to provide easy access to information in a cost-effective and transparent manner to address all lands issues. Because the information will be inclusive, credible and responsive, it will allow us to meet a wide range of business needs defined in collaboration with our land management partners."

-Mary Wagner, U.S. Forest Service Associate Chief

Purpose of a National Strategy

- * Design an IM&A system for national, broad, mid, and local levels that is properly aligned and integrated to achieve priority work of the agency;
- * Ensure consistency of information in time, space, and quality;
- * Work with partners to share information and address common needs;
- * Develop a structure for IM&A governance, performance, and accountability.

Bottom line – the strategy addresses gaps that prevent the agency from easily sharing information, which would allow important conservation questions to be answered

Questions?
Comments?