

EPA Launches National Lake Survey

The WDNR is planning to use the national lake survey effort to complement and enhance its own lake monitoring and assessment efforts in Wisconsin.

Our nation's lakes will be undergoing a check-up in 2007 as the Environmental Protection Agency (EPA) initiates a statistical survey. The goal of the survey is to discover what percentages of the nation's lakes are in good, fair or poor condition. A "stress test" will also be performed to examine the relative importance of nutrients, non-native species, lakeshore development, pathogens and other stressors on lake conditions.

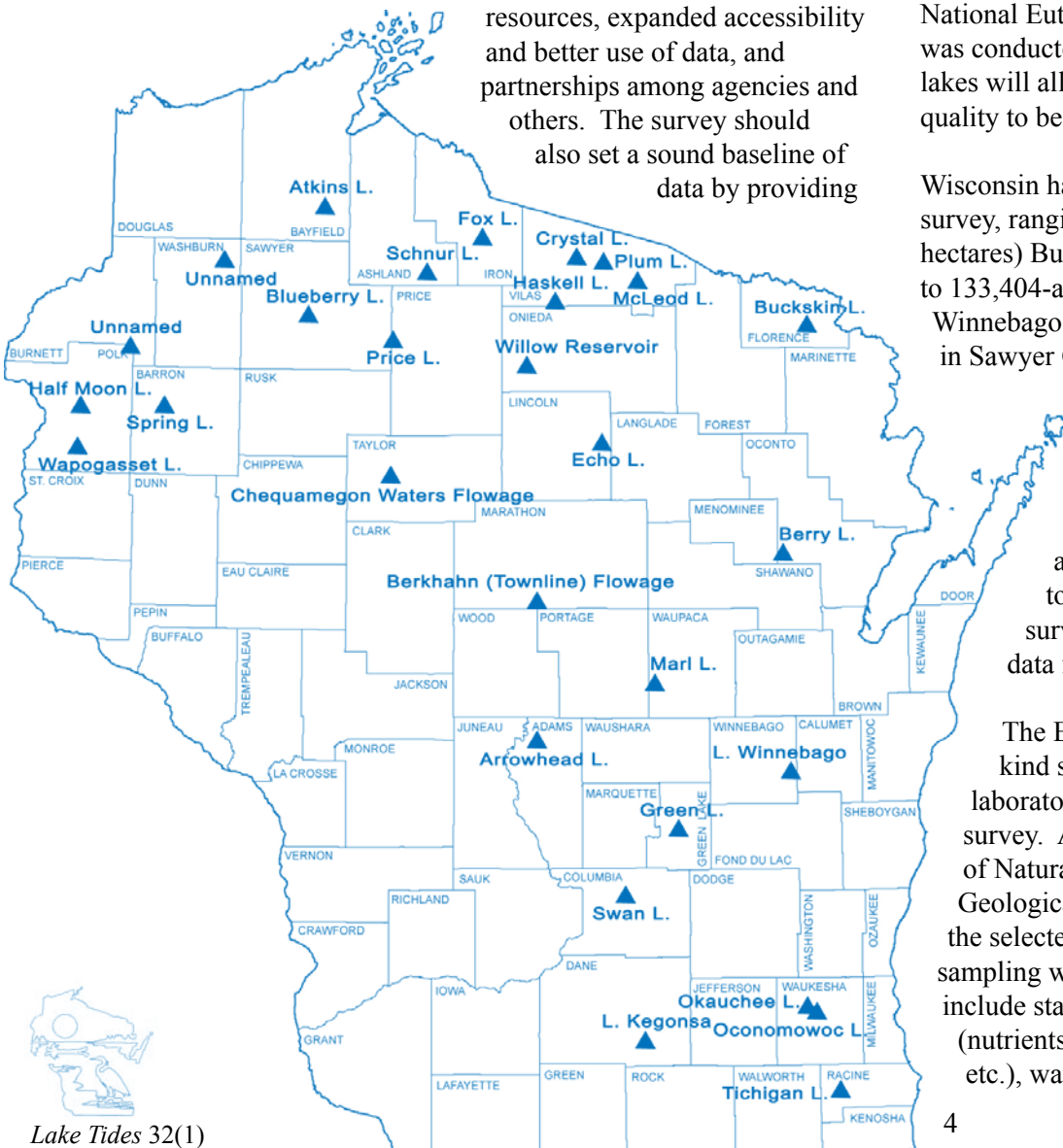
The EPA's approach is multi-faceted, and designed to strengthen state, tribal and interstate monitoring programs. This will encourage more efficient use of resources, expanded accessibility and better use of data, and partnerships among agencies and others. The survey should also set a sound baseline of data by providing

documented information on the extent of water quality problems and key stressors on our nation's lakes.

A total of 909 lakes, representing five size classes and distributed relatively evenly across the lower 48 states, are included in the survey. The lakes were selected randomly (excluding the Great Lakes) from a sample that includes freshwater lakes (natural and man-made) and ponds and reservoirs that are at least one meter deep (3.28 feet) and over 10 acres (4 hectares). A second set of samples will be conducted from 91 of the lakes. These lakes are a subset of lakes from the EPA's National Eutrophication Survey (NES) that was conducted in 1972. Surveying these 91 lakes will allow other potential trends in water quality to be examined.

Wisconsin has 29 lakes included in the survey, ranging in size from 11-acre (4.6 hectares) Buckskin Lake in Florence County to 133,404-acre (53,989 hectares) Lake Winnebago. Two of the lakes, Blueberry Lake in Sawyer County and Haskell Lake in Vilas County, are located within tribal jurisdictions. Several of the lakes already have ongoing monitoring through citizen monitoring or other efforts, and that information will be used to supplement the national lakes survey data and provide background data for interpretation.

The EPA is providing funding and in-kind services to support the field and laboratory work needed to complete the survey. A team of Wisconsin Department of Natural Resources (WDNR) and U.S. Geological Survey staff will be sampling the selected lakes during a mid-summer sampling window. Samples to be collected include standard water quality constituents (nutrients, pH, color, chlorophyll a, etc.), water clarity, physical profiles,

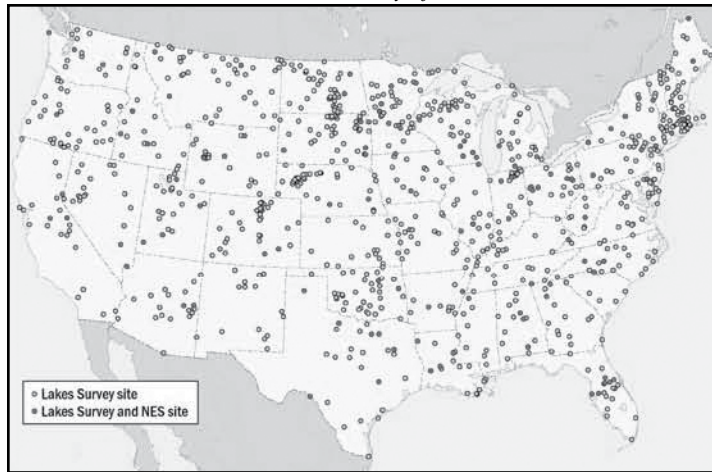


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phytoplankton and zooplankton, a sediment core, algal toxins, pathogens, and benthos (lake-bottom organisms). In addition, a comprehensive shoreline assessment will be performed at 10 sites around each lake. These core indicators will be examined to diagnose the lake's water quality, ecological integrity, and recreational value.

The WDNR staff has been actively involved in refining the sampling design, selecting metrics, reviewing field and laboratory protocols, conducting site reconnaissance, and communicating with other states on plans for the survey. The WDNR is planning to use the national lake survey effort to complement and enhance its own lake monitoring and assessment efforts in Wisconsin. For example, WDNR may add more lakes to better report on lake conditions representative of the full range of Wisconsin lake types. The WDNR may also collect additional data, such as detailed aquatic plant information or enhanced littoral and shoreland habitat parameters.

Source: USEPA's Survey of the Nation's Lakes Fact Sheet



A total of 909 lakes are included in the national lake survey.

Results of the national survey of lakes will be analyzed and compiled during 2008, with a final report issued in 2009. For more information on the survey of the nation's lakes, visit www.epa.gov/owow/lakes/lakessurvey.

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Moving Expressions

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To share your creative license plate, email a high-quality electronic photo to uwexlakes@uwsp.edu or send a high-quality print to *Lake Tides*, UWEX-Lakes, 800 Reserve Street, Stevens Point, WI 54481.

