

Water-Data Report 2011

**05199940 GA-GWA-DOSH CREEK NEAR HUBBARD, MN**

Mississippi Headwaters Basin  
Mississippi Headwaters Subbasin

LOCATION.--Lat 47°11'04", long 95°12'42" referenced to North American Datum of 1983, Clearwater County, MN, Hydrologic Unit 07010101.

**WATER-QUALITY RECORDS**

REMARKS.--This site is part of the Sentinel Lakes project, a joint project with the Minnesota DNR and PCA to examine potential linkages between climate change, lake morphology, and fish habitat in the form of temperature and dissolved oxygen distributions. Sampling of physical, chemical, and biological parameters and subsequent data analysis effort will be used to calibrate bio-physical lake models that will be used to forecast future water quality conditions in deep lakes with cold-water fish populations.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 1 of 5

[CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; mg/L, milligrams per liter; mm Hg, millimeters of mercury; per mil, parts per thousand; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Medium name	Barometric pressure, mm Hg (00025)	Dissolved oxygen, unfiltered, water, mg/L (00300)	pH, unfiltered, field, standard units (00400)	pH, unfiltered, laboratory, standard units (00403)	Specific conductance, unfiltered, laboratory, µS/cm at 25 °C (90095)	Specific conductance, unfiltered, water, µS/cm at 25 °C (00095)	Temperature, water, °C (00010)
06-01-2011	1215	Surface water	727	8.2	7.0	7.9	155	153	15.2

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 2 of 5

[CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; mg/L, milligrams per liter; mm Hg, millimeters of mercury; per mil, parts per thousand; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Sampler type (84164)	Dissolved solids dried at 180 °C, water, filtered, mg/L (70300)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as CaCO <sub>3</sub> (39086)	Bicarbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00453)
06-01-2011	1215	Grab sample	101	22.0	6.22	.85	1.21	77.8	94.9

## 05199940 GA-GWA-DOSH CREEK NEAR HUBBARD, MN—Continued

## WATER-QUALITY DATA

## WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 3 of 5

[CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; mg/L, milligrams per liter; mm Hg, millimeters of mercury; per mil, parts per thousand; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Carbon (inorganic plus organic), suspended sediment, total, mg/L (00694)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Inorganic carbon, suspended sediment, total, mg/L (00688)	Silica, water, filtered, mg/L as SiO <sub>2</sub> (00955)	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)	Ammonia, water, filtered, mg/L as N (00608)
06-01-2011	1215	.59	.08	.04	< .03	6.34	.34	.86	.67	.013

## WATER-QUALITY DATA

## WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 4 of 5

[CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; mg/L, milligrams per liter; mm Hg, millimeters of mercury; per mil, parts per thousand; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrite, water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L as P (00671)	Particulate nitrogen, suspended in water, mg/L (49570)	Phosphorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	Iron, water, filtered, µg/L (01046)	Manganese, water, filtered, µg/L (01056)
06-01-2011	1215	.010	< .001	.021	.06	.030	.058	212	12.6

## WATER-QUALITY DATA

## WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 5 of 5

[CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; mg/L, milligrams per liter; mm Hg, millimeters of mercury; per mil, parts per thousand; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Boron, water, filtered, µg/L (01020)	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, unfiltered, mg/L (00680)	Deuterium/Protium ratio, water, unfiltered, per mil (82082)	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil (82085)
06-01-2011	1215	12	.59	14.0	-63.70	-7.95