



Water Quality Monitoring at Acadia National Park

Northeast Temperate Network 2013 Summary Report

Natural Resource Data Series NPS/NETN/NRDS—2014/673



ON THE COVER

Eagle Lake, May 2007

Photograph by: Beth Arsenault

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The Natural Resource Data Series is intended for the timely release of basic data sets and data summaries. Care has been taken to assure accuracy of raw data values, but a thorough analysis and interpretation of the data has not been completed. Consequently, the initial analyses of data in this report are provisional and subject to change.

All manuscripts in the series receive the appropriate level of peer review to ensure that the information is scientifically credible, technically accurate, appropriately written for the intended audience, and designed and published in a professional manner.

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Executive Summary

This report on the water quality of Acadia National Park (ACAD) includes data gathered by the Northeast Temperate Network (NETN) in the 2013 monitoring season and displays these results in graphic form, accompanied by a brief interpretation. The data address the NETN objective to detect change in the status of physical, chemical, or biological attributes of park freshwater bodies.

The NETN freshwater monitoring protocol calls for a total of 37 ACAD lakes, ponds and streams to be sampled monthly from May through October, with 12 sites monitored annually and the remainder visited on a 2 year (streams) or 3 year (lakes and ponds) rotating schedule. Staff measured physical and in-situ water chemistry parameters each month and periodically collected water samples for analysis at the University of Maine's Sawyer Environmental Chemistry Research Laboratory.

Monthly sampling parameters included in-situ water quality measures (pH, specific conductance, temperature, and dissolved oxygen), lake water transparency and light, stream turbidity, weather, stream flow (discharge), and stream and lake/pond stage. In May (stream only), June (lakes and ponds only) and August (all sites), water samples were obtained and analyzed for acid neutralizing capacity (ANC), color, nutrients, dissolved organic carbon (DOC), chloride, sulfate, and chlorophyll a (lakes and ponds only). April and October lake acidification samples were also collected.

The primary environmental stressors affecting ACAD water resources include nutrient enrichment and toxic contaminants within the watershed, atmospheric deposition, and climate change. Monitoring in 2013 revealed that water quality parameters for Acadia National Park were within state standards, and were generally within the range of EPA regional nutrient criteria, where applicable. The values were also typically within the range of Acadia's historic monitoring data record, and there were no indications that significant nutrient enrichment took place during the 2013 season. Analysis results of 2013 quality control samples were all within the acceptable range of accuracy and precision.

Introduction

This report on the water quality of Acadia National Park (ACAD) generated by the Northeast Temperate Network (NETN) Water Quality Monitoring Program includes data gathered in the 2013 monitoring season and displays these results in graphic form, accompanied by a brief interpretation. Appendix A contains data collected in 2013 in tabular form.

The vital signs for freshwater bodies included in the NETN Freshwater Monitoring Protocol (Lombard et al. 2006) are water chemistry, nutrient enrichment, water quantity, and the detection of invasive plant species. These metrics were chosen to address the NPS Inventory and Monitoring Program objective to detect change in the status of physical, chemical, or biological attributes of the ecosystem.

The NETN freshwater monitoring protocol calls for a total of 37 ACAD lakes, ponds, and streams to be sampled monthly from May through October, with 12 sites monitored annually and the remainder visited on a 2 year (streams) or 3 year (lakes/ponds) rotating schedule. Park staff measure physical and in-situ water chemistry parameters during each monthly visit, and periodically gather water samples for analysis at the University of Maine's (UMO) Sawyer Environmental Chemistry Research Laboratory. Additionally, stage height (water level) is recorded weekly at 17 lakes during the open-water season. All monitoring data are incorporated into a series of comprehensive databases that ultimately feed the U.S. Environmental Protection Agency's (EPA) "STORET" data system, the repository for all NPS water quality and quantity data.

Sampling Sites

Acadia National Park lakes, ponds, and streams that are monitored by NETN are mapped in Figure 1. Eight lake and pond sites are sampled annually, while nine additional lakes and ponds are monitored as part of a rotating design in which each site is sampled every 3rd year. A total of 11 lakes and ponds are monitored each year. Three continuous-record stream sites (with stream stage gages that collect data automatically) are sampled annually, and 16 partial-record stream sites (monthly stream flow data collection) are sampled using a rotating design where each site is sampled every other year. Beginning in 2011, one partial-record site (Stanley Brook) is sampled annually due to concerns about potential threats from residential development in the watershed. A maximum of nine partial-record sites and three continuous-record stream sites are sampled each year. The sites monitored in 2013 are listed in Table 1 (lakes and ponds) and Table 2 (streams).

A change was made to the rotation assignments of the partial record stream sites in 2011 which affected the sites sampled in 2013. Monitoring of Man O'War Brook (ACMOWB, USGS station 01022880, 44.31833 °N, 68.31667 °W) was discontinued in 2011 when the fire road used for vehicle access to the site became impassable and was not scheduled for repair. To balance the rotation schedule and spatial coverage of the monitoring site panels, Lurvey Spring Brook (which is in an adjoining watershed to Man O'War) was moved from the Year 1 panel to its current assignment in the Year 2 panel in 2011.



Figure 1. NETN lake and stream monitoring sites at Acadia National Park. Pond sites are included in the lake category.

Table 1. 2013 lake and pond monitoring sites at Acadia National Park.

Name	NETN Site Code	Latitude	Longitude
Annual sites			
Bubble Pond	ACBUBL	44.3450646	-68.2388551
Eagle Lake	ACEAGL	44.3635138	-68.2504239
Echo Lake	ACECHO	44.3270197	-68.3377142
Jordan Pond	ACJORD	44.3311101	-68.2552632
Long Pond	ACLONG	44.3275187	-68.3633332
Seal Cove Pond	ACSEAL	44.3014677	-68.3971887
Upper Hadlock Pond	ACUHAD	44.3213604	-68.2874398
Witch Hole Pond	ACWHOL	44.4000095	-68.2429494
Rotating sites			
Hodgdon Pond	ACHODG	44.3222200	-68.3978000
Lower Hadlock Pond	ACLHAD	44.3114000	-68.2893000
Seawall Pond	ACSEAW	44.2426500	-68.3007400

Table 2. 2013 stream monitoring sites at Acadia National Park.

Name	NETN Site Code	USGS Station #	Latitude	Longitude
Permanent continuous-record sites				
Cadillac Brook	ACCADS	01022835	44.3445581	-68.2170000
Hadlock Brook	ACHADB	01022860	44.3316667	-68.2800000
Otter Creek	ACOTRC	01022840	44.3327778	-68.2072222
Permanent partial-record site				
Stanley Brook	ACSTNL	01022850	44.3055560	-68.2430560
Rotating partial-record sites				
Browns Brook	ACBRWN	01022866	44.3394444	-68.3016940
Bubble Pond Outlet (Eagle Lake inlet)	ACBUBO	01022826	44.3501940	-68.2410830
Duck Pond Brook (inlet to Long Pond)	ACDKLI	10228755	44.3310830	-68.3784720
Duck Brook (North of Rt. 233)	ACDUCK	01022827	44.3775980	-68.2450870
Lake Wood Outlet	ACLKWO	01022808	44.4115980	-68.2730940
Lurvey Spring Brook (inlet to Echo Lake)	ACLSIE	01022878	44.3124167	-68.3352222
Lurvey Brook	ACLVYB	01022892	44.2788890	-68.3577780

Methods

Detailed descriptions of all monitoring methods are found in the original protocol (Lombard et al. 2006) and the most recent protocol update (Gawley et al. 2014). Monthly sampling parameters included in-situ water quality measures (pH, specific conductance, temperature, and dissolved oxygen) determined with a YSI 600XL sonde, Secchi transparency or light penetration (lake and pond sites only), stream turbidity, weather, stream flow (discharge), and stream and lake stage. In May (streams only), June (lakes and ponds only) and August (all sites), water samples were obtained and analyzed for acid neutralizing capacity (ANC), color, nutrients (including total nitrogen, nitrate, and total phosphorus), and chlorophyll *a* (lakes and ponds only). In 2012, dissolved organic carbon (DOC), sulfate, and chloride were added to the analyte list, and total dissolved phosphorus, soluble reactive phosphorus, and total dissolved nitrogen were removed as analytes.

The lake and pond sampling procedure entails collecting all in-situ measurements and water samples from the deep hole (or center, in the case of lakes with uniform bathymetry) of the water body. Nutrient chemistry parameters are analyzed from a series of epilimnion core samples (4-10 meter depth) integrated in a churn splitter if the lake is stratified, or a half-meter grab sample if the lake is unstratified.

Stream discharge was measured using U.S. Geological Survey protocols (Rantz et al. 1982), employing a measuring tape, wading rod, and SonTek FlowTracker or a Price Pygmy current meter to measure a particular cross-sectional area of the stream and the velocity of the water at that cross section.

In-situ stream water chemical and physical measurements and water samples were collected within 5 meters of the location of the discharge measurement. Sonde measurements were taken in the main stream flow with care taken that the sonde was not resting directly on the stream bottom. Grab samples were obtained by submerging the sample bottle directly in the stream with a gloved hand.

Water Quality Standards

Maine Statutes, Title 38, Sections 464, 465, and 465-A define the classification program and water quality standards for Maine waters (Maine State Government 2011, 2007a, 2007b). Existing in-stream water uses and the level of water quality necessary to protect those existing uses must be maintained and protected. All waters in national parks are considered outstanding national resource waters (ONRW) in Maine. The water quality of ONRW must be maintained and protected. Class AA is the highest classification and its standards are applied to waters that are outstanding natural resources.

“Class AA waters must be of such quality that they are suitable for the designated uses of drinking water after disinfection, fishing, agriculture, recreation in and on the water, navigation, and as habitat for fish and other aquatic life. The habitat must be characterized as free-flowing and natural. The aquatic life, DO [Dissolved Oxygen], and bacteria content of Class AA waters shall be as naturally occur” (Maine State Government 2007a). No quantitative criteria are given for AA waters, but the

DO content of Class A waters (the next lowest classification) “shall be not less than 7 parts per million or 75 percent of saturation, whichever is higher”.

Great ponds (more than 10 acres in size) and smaller natural ponds and lakes are all classified as Class GPA waters. “Class GPA waters must be of such quality that they are suitable for the designated uses of drinking water after disinfection, recreation in and on the water, fishing, agriculture, industrial process and cooling water supply, hydroelectric power generation, navigation, and as habitat for fish and other aquatic life. The habitat must be characterized as natural” (Maine State Government 2007b).

“Class GPA waters shall be described by their trophic state based on measures of the chlorophyll *a* content, Secchi Disk Depth (SD), total phosphorus content, and other appropriate criteria.” Water quality standards for Maine indicate that class GPA waters “shall have a stable or decreasing trophic state, subject only to natural fluctuations, and shall be free of culturally induced algal blooms” (Maine State Government 2007b). Bloom conditions are defined as SD measurements of less than 2 meters in lakes having color less than 30 standard platinum units (SPU). Lakes that chronically (more than 5 of the past 10 years) show algal blooms are not in attainment of state water quality standards.

EPA Ecoregion 8 water quality criteria (Table 3; U.S. Environmental Protection Agency 2000a, 2000b) are also used as a benchmark in this report. EPA water quality criteria for nutrients help translate narrative criteria within State or Tribal water quality standards by establishing values for causal variables (e.g., total nitrogen and total phosphorus) and response variables (e.g., turbidity and chlorophyll *a*). Causal variables are necessary to provide sufficient protection of designated uses before impairment occurs and to maintain downstream uses. Early response variables are necessary to provide warning signs of possible impairment and to integrate the effects of variable and potentially unmeasured nutrient loads.

Table 3. EPA Ecoregion 8 nutrient criteria.

Nutrient Criteria	Streams	Lakes
Total Phosphorus	10 µg/L	8 µg/L
Total Nitrogen	0.38 mg/L	0.24 mg/L
Chlorophyll <i>a</i>	0.63 µg/L	2.43 µg/L
Secchi disk depth	N/A	4.93 m

These criteria were developed specifically for Ecoregion 8 (which includes the entire states of Maine, New Hampshire, and Vermont) and are designed to represent conditions of surface waters that are minimally impacted by human activities and thus protect against the adverse effects of nutrient over-enrichment from cultural eutrophication. The values are EPA’s scientific recommendations regarding ambient concentrations of nutrients that protect aquatic resource quality. They do not have any regulatory impact or meaning.

For lakes (waterbodies greater than 10 acres and with mean water residence time of 14 or more days; U.S. Environmental Protection Agency 2000a), the criteria were established based on the lower 25th percentile of lakes that EPA found data for. This percentile of all lakes is expected to approximately correspond to the 75th percentile of reference (undisturbed) lakes. In other words, 75% of lakes in the

ecoregion do not meet the criteria, nor do roughly 25% of reference lakes. For streams and rivers, a parallel approach was used to establish the nutrient criteria (U.S. Environmental Protection Agency 2000b).

Results

Monitoring results for 2013 are displayed in scatter-plot graphs showing all data for each site for a given parameter. The scatter plots of 2013 data are overlaid on box plots representing the overall range and distribution of data values collected from 2006 through 2013 for the specified parameter and site (Appendix A contains all data in tabular form). A box plot (Figure 2) is a summary plot that graphs data as a box representing statistical values. The boundary of the box closest to zero indicates the 25th percentile, a line within the box marks the median, and the boundary of the box farthest from zero indicates the 75th percentile. Whiskers (error bars) above and below the box indicate the 90th and 10th percentiles respectively. Outliers are displayed as black filled circles. At least nine data points are required to compute the 5th, 10th, 90th and 95th percentiles. If a percentile point is unable to be computed, that set of points is not drawn. If EPA or other water quality criteria exist for a particular parameter they are displayed on the graphs as specification lines.

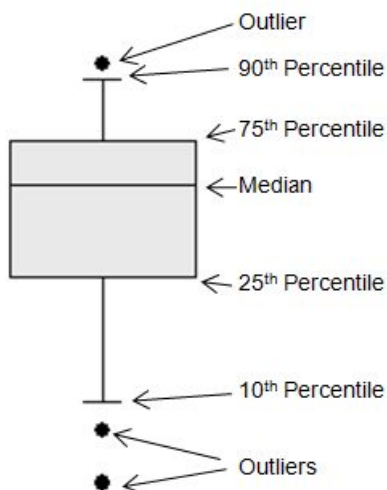


Figure 1. Explanation of box plot graph.

Water Quality

Measures of water quality include specific conductance, pH, water temperature, dissolved oxygen (DO), acid neutralizing capacity (ANC), and apparent color. Assessment of water quality data aids in the interpretation of the biotic condition and ecological processes of surface water resources.

Specific Conductance

Specific conductance (shown for lakes in Figure 3 and streams in Figure 4) is a measure of the ability of water to carry an electrical current, and is directly related to the level of dissolved ions in the water. An increase in specific conductance can be an indicator of pollutants in the water. Naturally occurring values range from less than 20 to more than 1,000 microsiemens per centimeter ($\mu\text{S}/\text{cm}$). Specific conductance values from 2013 were within the appropriate range for low ionic strength waters, and values were generally within the ranges recorded in previous years.

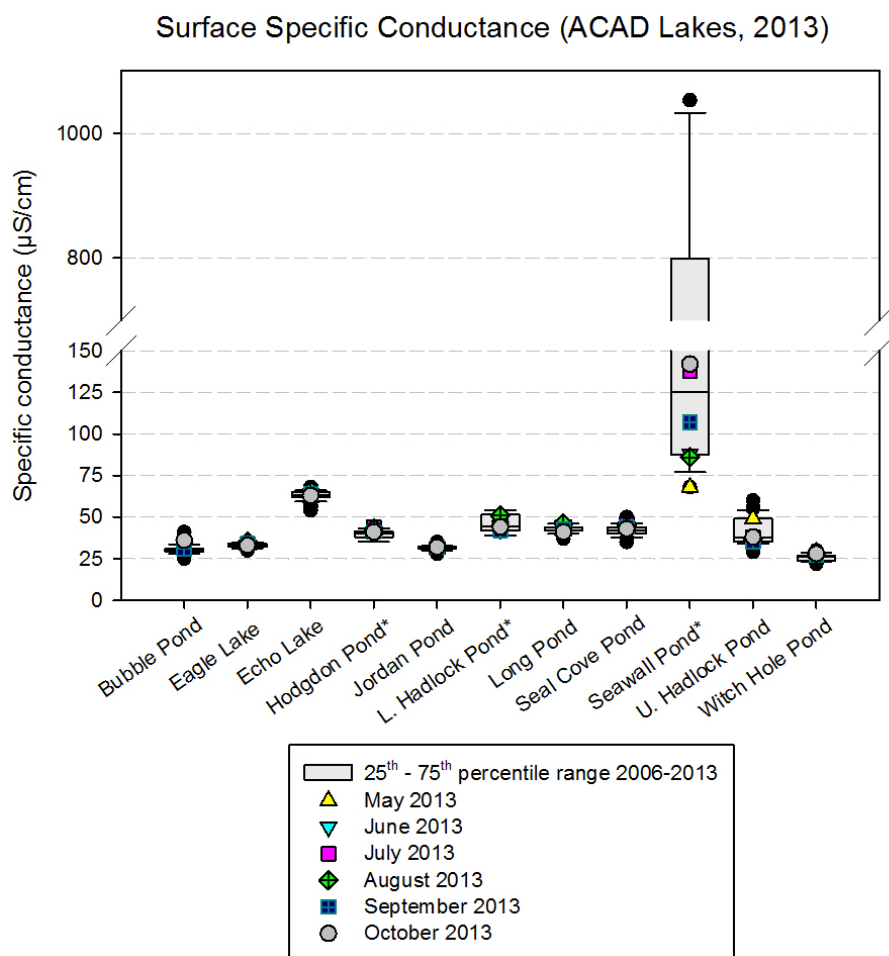


Figure 3. Lake and pond specific conductance from 2013 YSI sonde in-situ measurements overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating sites with data from 2007, 2010, and 2013 only.

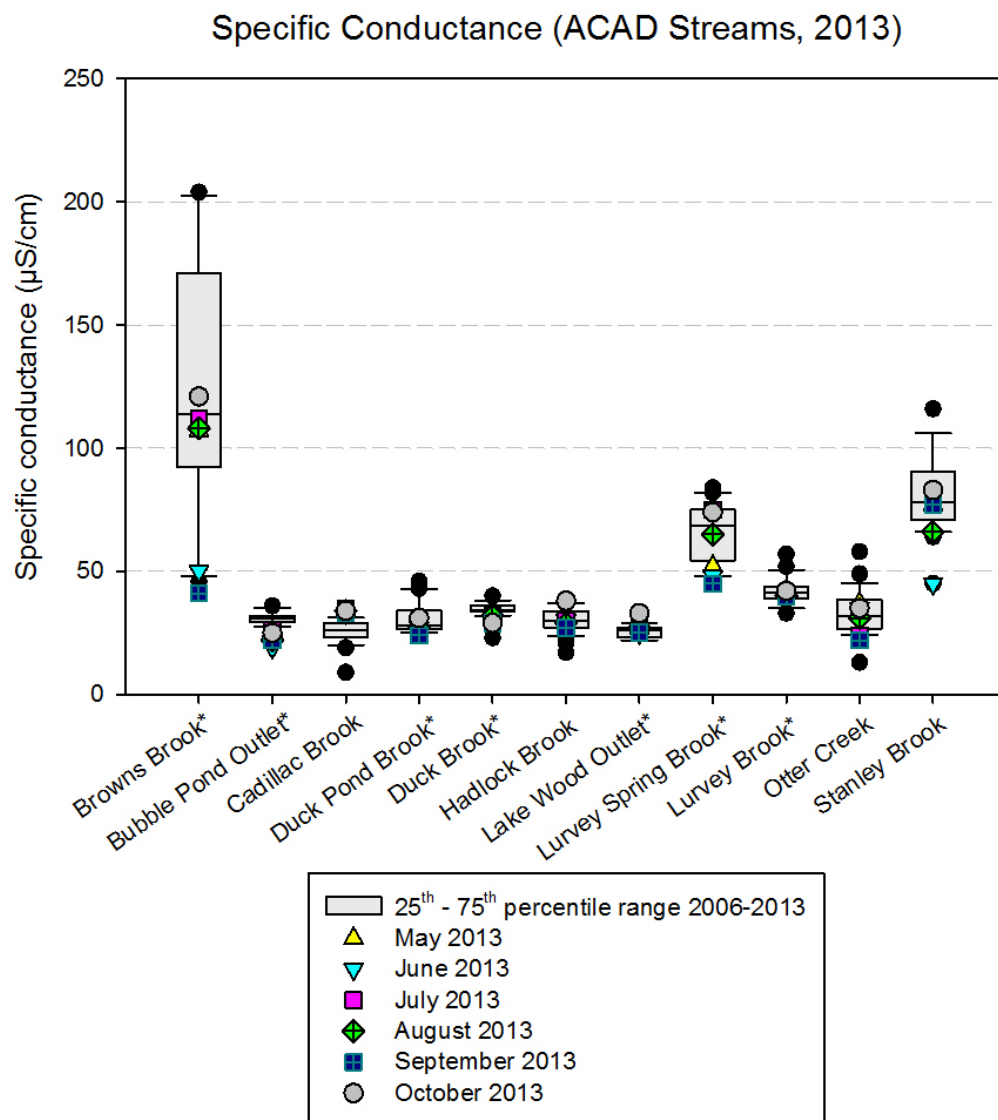


Figure 4. Stream specific conductance from 2013 YSI sonde in-situ measurements overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating partial-record sites with data from 2007, 2009, 2011, and 2013 only.

pH Level

The pH of a water body reflects how acidic or basic the water is, measured on a scale of 1 to 14, with 7 being neutral. Acid waters are below 7, and alkaline waters are above 7. A one unit change in pH represents a 10-fold change in acidity or alkalinity. Maine has no numeric water quality standard for pH, but standards of most northeast states indicate that a pH between 6.5 and 8.0 is within the acceptable range. Most lake and pond pH values from the 2013 monitoring season (Figure 5) were slightly acidic, which is typical of poorly-buffered, unproductive Maine waters. Most sites tended towards higher pH values than in past years, and Eagle Lake and Jordan Pond in particular had pH values consistently above the 75th percentile of the box plots. Some of the smaller sites (including Seawall Pond) with pH values in the lower range are rimmed by wetlands, which contribute natural acidity to the system.

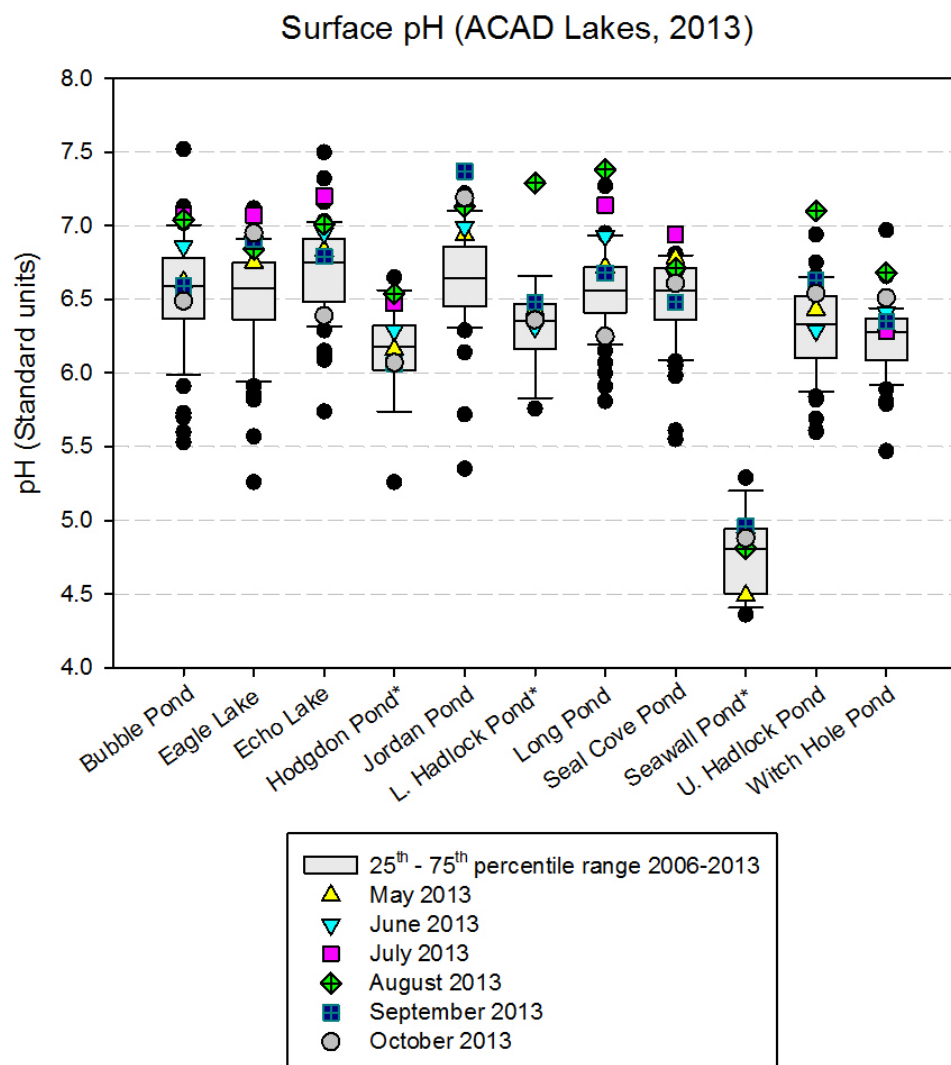


Figure 5. Lake and pond pH from 2013 YSI sonde in-situ measurements overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating sites with data from 2007, 2010, and 2013 only.

The majority of stream pH measurements in 2013 (Figure 6) were also slightly acidic. Lurvey Brook is downstream of wetlands that contribute organic acidity and in turn lower stream pH. Cadillac Brook is a high-elevation stream site, susceptible to episodic acidification from acid deposition due to the minimal buffering of the granite bedrock and thin soils.

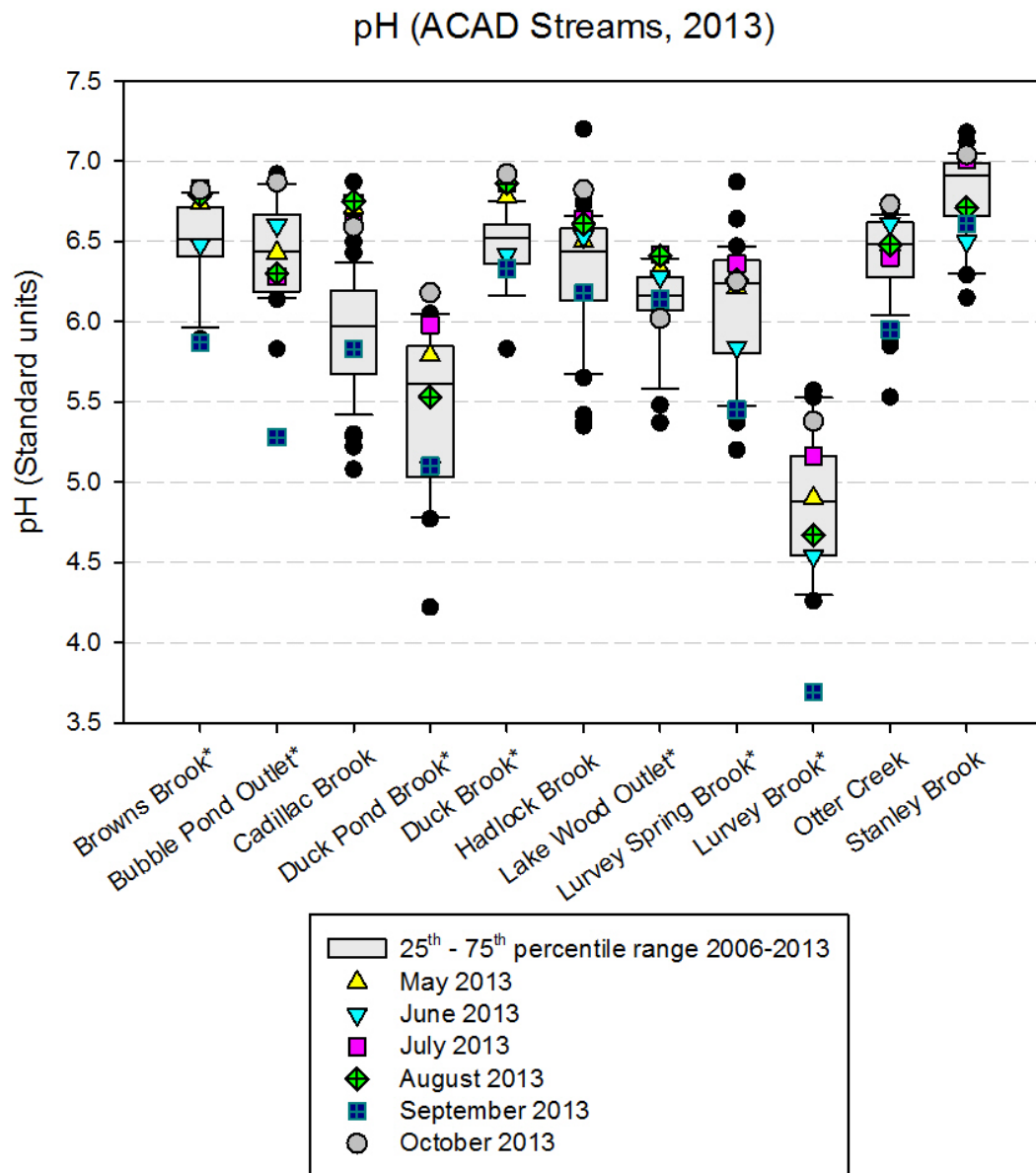


Figure 6. Stream pH from 2013 YSI sonde in-situ measurements overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating partial-record sites with data from 2007, 2009, 2011, and 2013 only.

Temperature

Temperature can affect water chemistry and biology. For example, the amount of oxygen that water can hold is directly related to the temperature of the water. The higher the temperature, the less oxygen water can hold, which can be observed in both diel (day and night) and seasonal shifts. Oxygen will naturally decline during the summer months as water temperatures rise. Temperature can also determine the kinds of plants and animals found in a lake, pond or stream. Certain species of fish, insects, and algae will predominate during the cooler temperatures of the spring and fall, yet be less visible and/or abundant during the warmer temperatures of summer. Many July and August lake, pond, and stream water temperatures (Figures 7 and 8) were in the upper range of variability in 2013, reflecting the contributions of high air temperature and solar radiation. Several May and October lake, pond, and stream temperature values were in the lower range of the historic NETN monitoring data from Acadia.

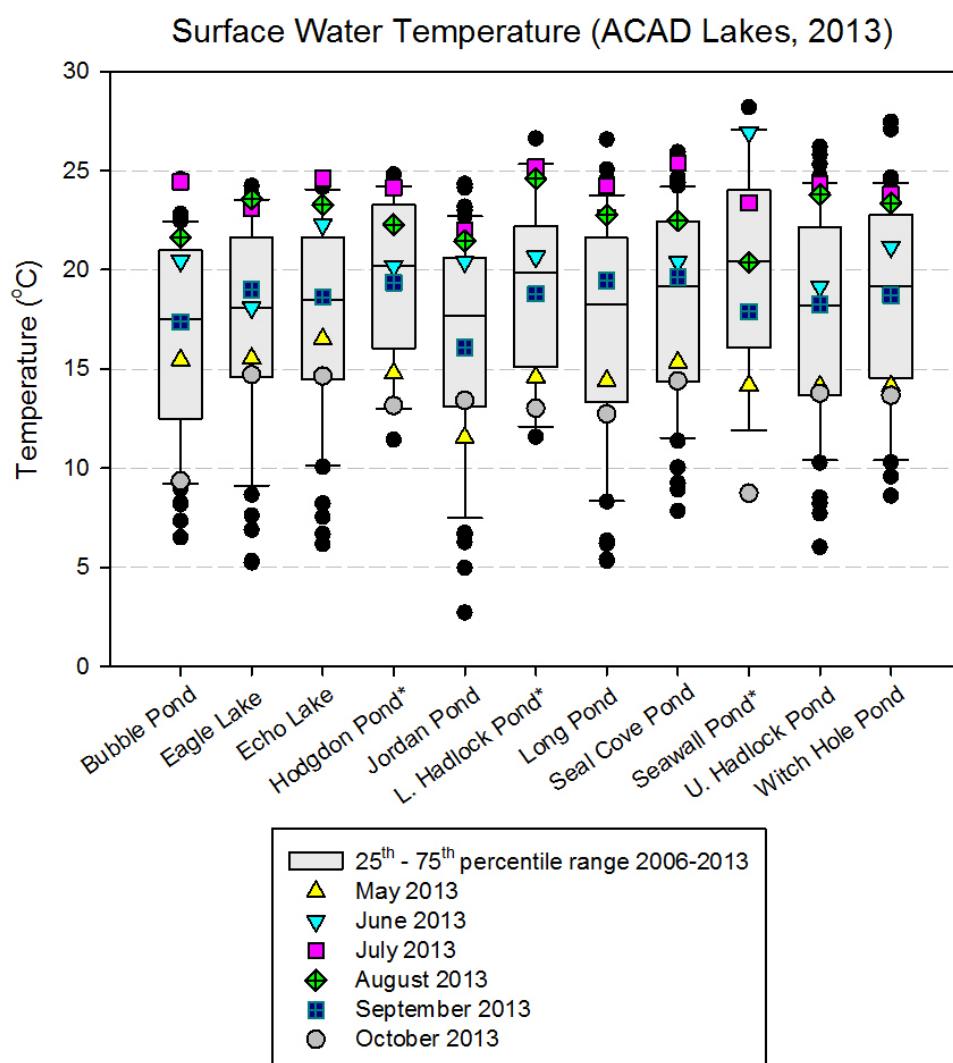


Figure 7. Lake and pond water temperature (surface) from 2013 YSI sonde in-situ measurements overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating sites with data from 2007, 2010, and 2013 only.

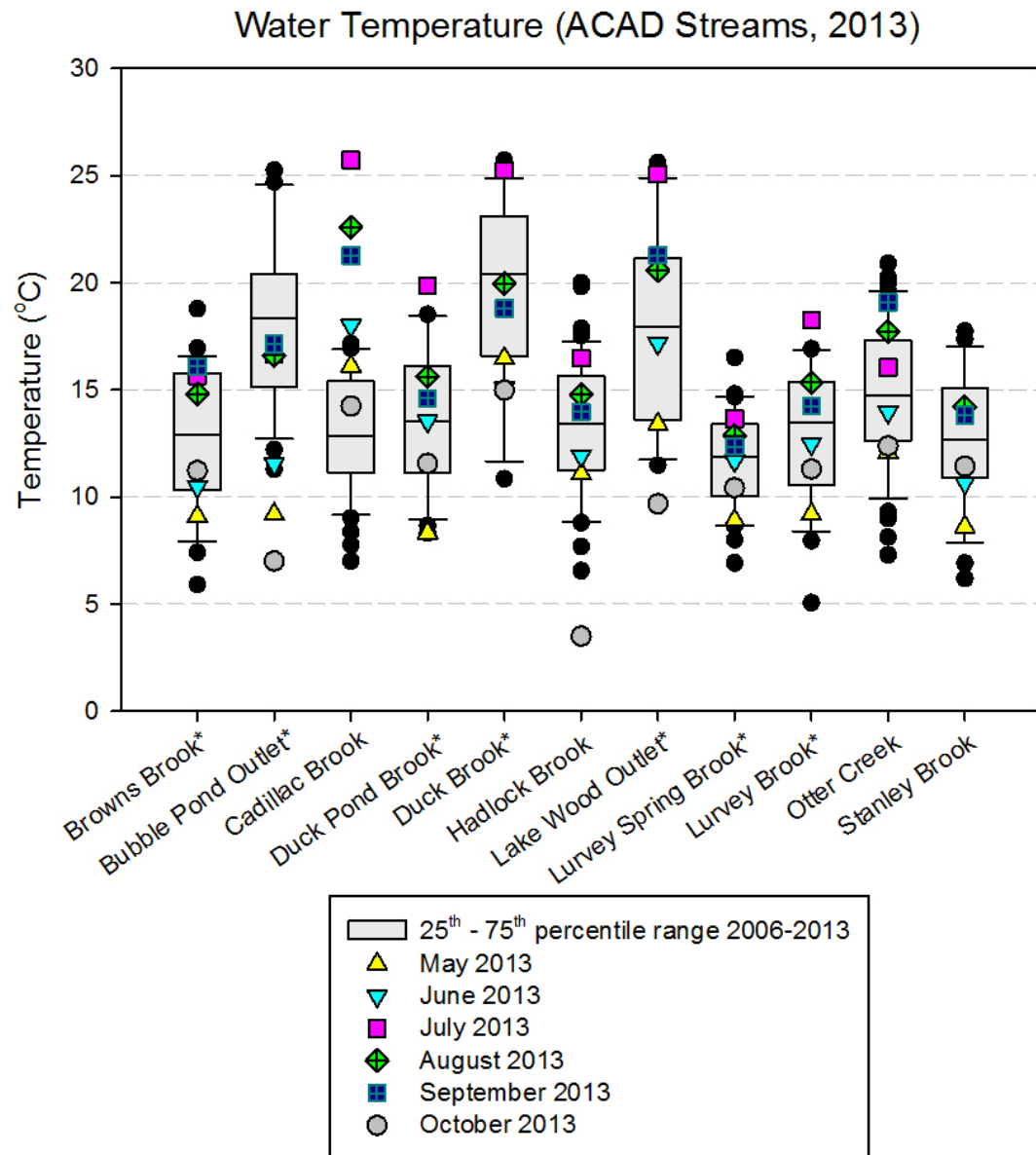


Figure 8. Stream water temperature (surface) from 2013 YSI sonde in-situ measurements overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating partial-record sites with data from 2007, 2009, 2011, and 2013 only.

Dissolved Oxygen

Dissolved oxygen (DO) is a critical indicator of water quality because aquatic life generally needs DO concentrations at or above 5 mg/L to thrive. Low oxygen can directly kill or stress organisms such that they will not be able to successfully reproduce or grow. Water with less than 1 mg/L of oxygen is considered anoxic (no oxygen present). The surface layers of all ACAD lakes and ponds monitored in 2013 were well oxygenated (Figure 9) although mid-summer DO profiles of some of the shallow, more productive lakes showed some moderate oxygen depletion at lower depth. This is a common occurrence as water temperatures rise and temperature stratification inhibits oxygen replenishment to deeper waters. The complete profile data are provided in Table A2 in Appendix A.

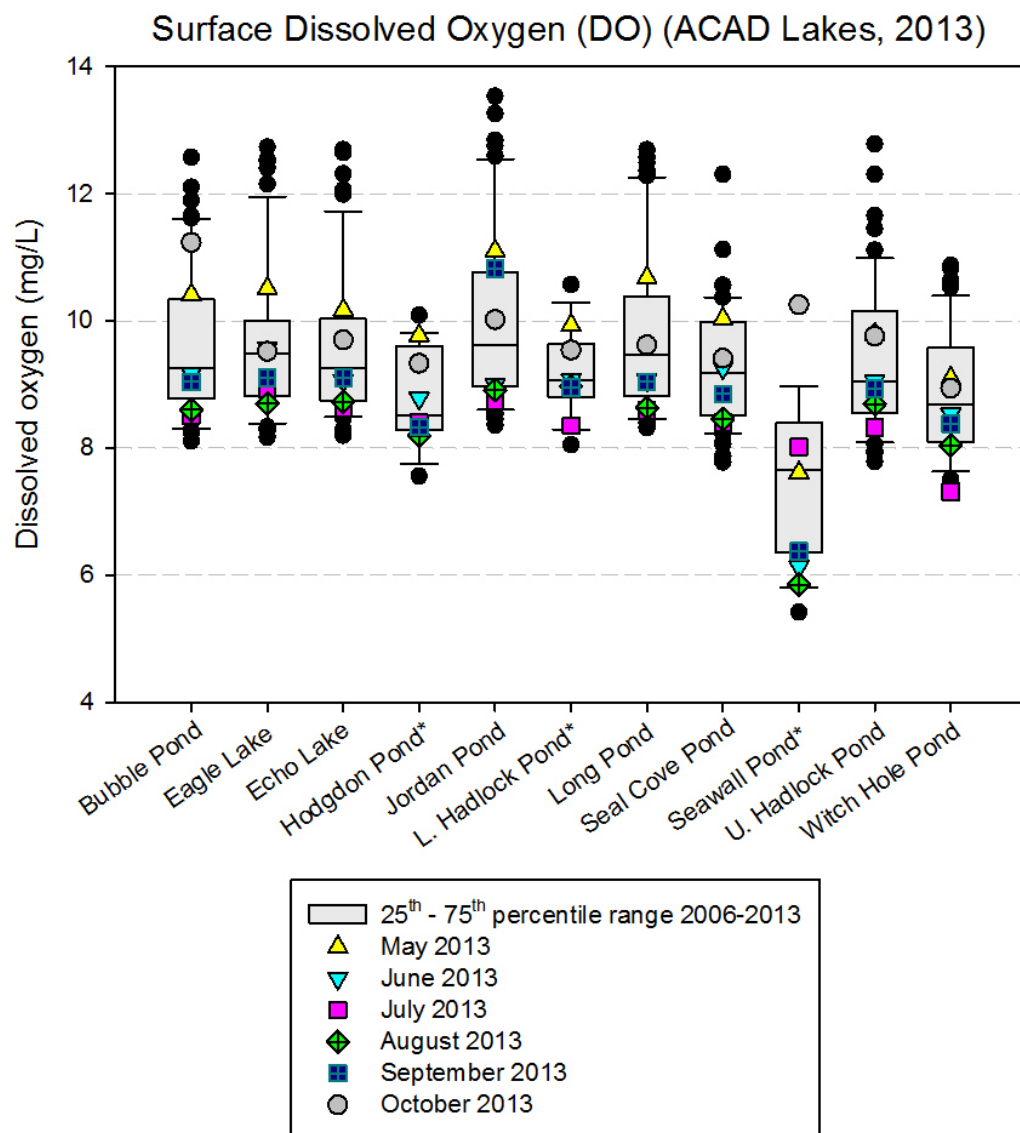


Figure 9. Lake and pond dissolved oxygen (surface) from 2013 YSI sonde in-situ measurements overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating sites with data from 2007, 2010, and 2013 only.

Although Maine has no numerical dissolved oxygen minimum standards for Class AA streams, which includes all streams in Acadia, the DO content of Class A waters (the next lowest classification) is required to be above 7 mg/L. All of the 2013 stream DO measurements (Figure 10) were above this standard.

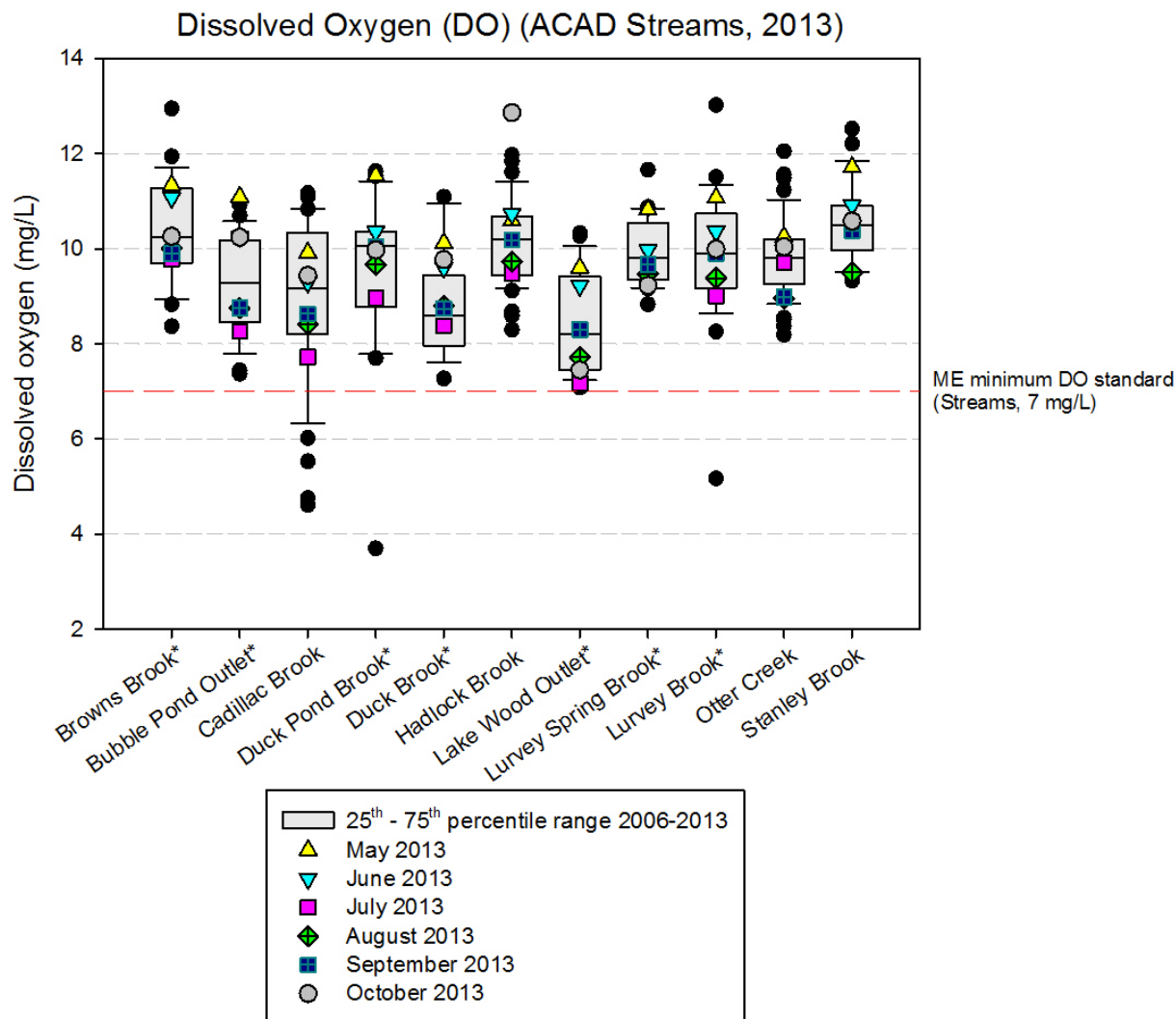


Figure 10. Stream dissolved oxygen (surface) from 2013 YSI sonde in-situ measurements overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating partial-record sites with data from 2007, 2009, 2011, and 2013 only.

Acid Neutralizing Capacity

Acid neutralizing capacity (ANC) is also known as alkalinity, or buffering capacity. It is due primarily to the presence of naturally available bicarbonate, carbonate, and hydroxide ions, with bicarbonate being the major form. Most states do not have numerical criteria for ANC in their water-quality standards. ANC values greater than 100 $\mu\text{eq/L}$ are considered well-buffered, while values less than zero typify acidic waters (Stoddard et al. 2003). Acadia surface waters are generally poorly buffered, a result of chemically-resistant granite bedrock, thin (or absent) soils, and steep slopes with rapid runoff (Kahl et al. 2000). In lakes, ponds, and streams, spring 2013 ANC measurements followed the typical seasonal pattern of being lower than summer values. This is likely due to the contribution of episodic acidification from spring snowmelt and runoff. Several lake and pond ANC values were the highest recorded since the start of NETN monitoring.

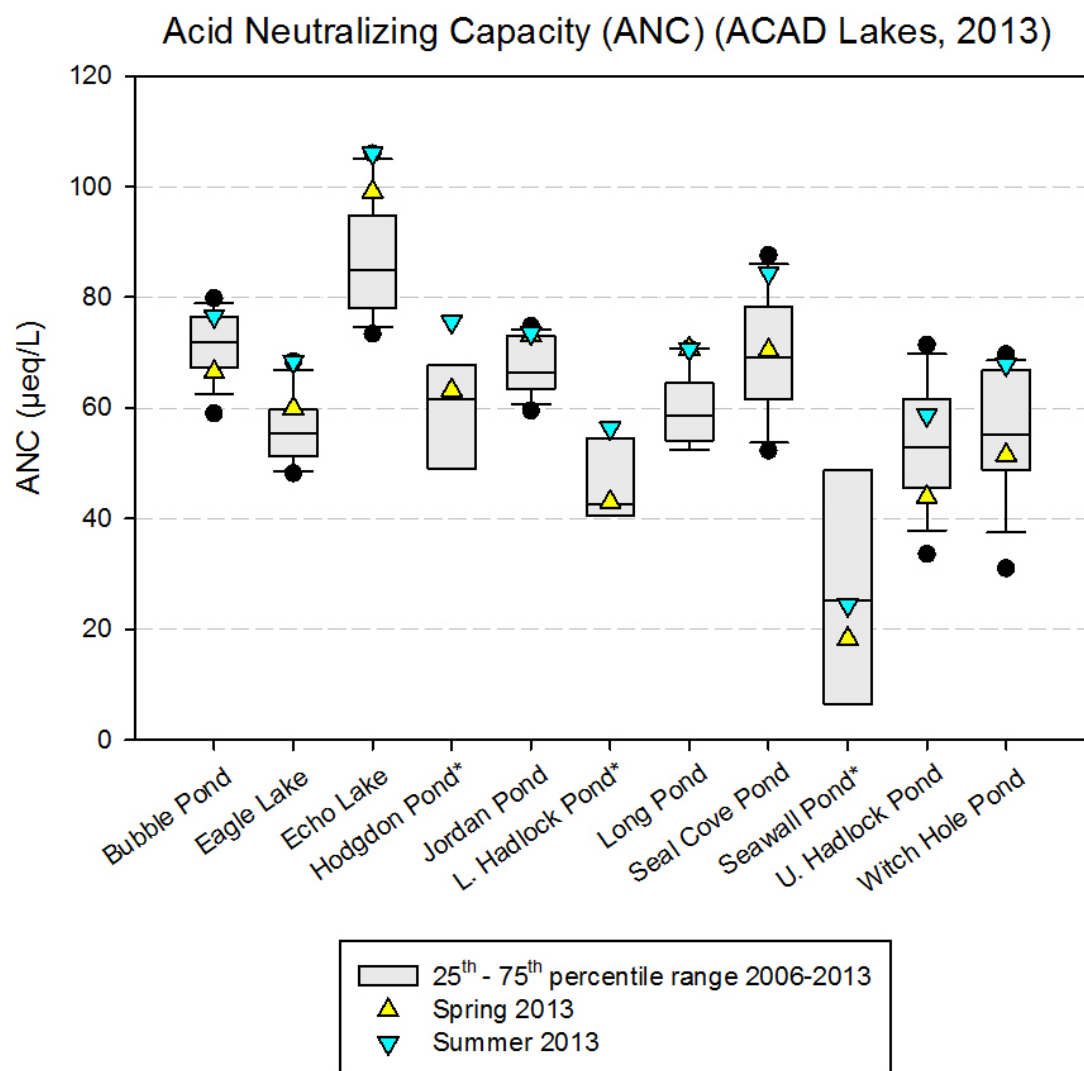


Figure 11. Lake and pond acid neutralizing capacity from 2013 spring and summer water samples overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating sites with data from 2007, 2010, and 2013 only.

Stream ANC (Figure 12) exhibited much greater seasonal variability than lake ANC values, and many of the summer (August) stream ANC measurements were considerably higher than those from the lakes. The higher elevation streams (Cadillac and Hadlock) had the lowest ANC values, along with Duck Pond Brook and Lurvey Brook which are surrounded by naturally acidic wetlands.

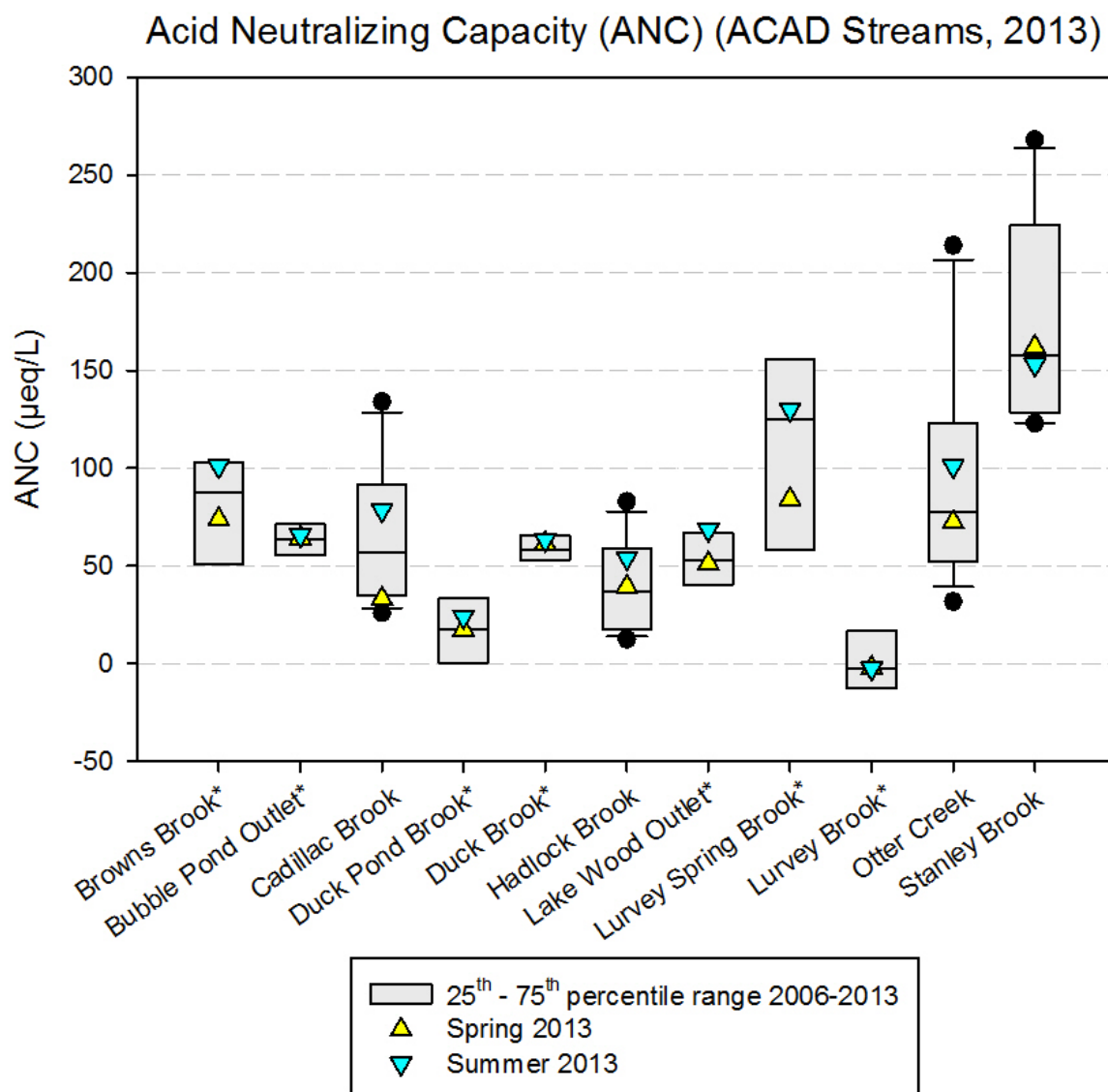


Figure 12. Stream acid neutralizing capacity from 2013 spring and summer water samples overlaid on a box plot of measurements taken from 2006-2012. Sites marked with an asterisk (*) are rotating partial-record sites with data from 2007, 2009, 2011, and 2013 only.

Apparent Color

Color in pond and stream water is caused by natural metallic ions, humus and peat materials, plankton, weeds, and industrial wastes. Color is reported in Platinum-Cobalt (Pt-Co) units (PCU). Apparent color (the measurement method utilized by NETN) is determined on original samples without filtration. Color can be a rough indicator for organic acidity.

Water bodies with apparent color values greater than 25 PCU are considered to be highly colored, and often exhibit reduced water clarity and high phosphorus concentrations. Values of color are usually not included in water quality standards, except to note that they should be as naturally occurs.

Color values from the larger, deeper Acadia lakes were low, both in 2013 samples and in the 2006 to 2013 data (Figure 13). The shallower, more productive lakes and ponds were moderately to highly colored and historic measurements were more variable. This generally reflects the contribution of dissolved organic carbon (DOC) and other organic acidity. Direct measurements of lake, pond, and stream DOC began in 2012 and are graphed in the following section.

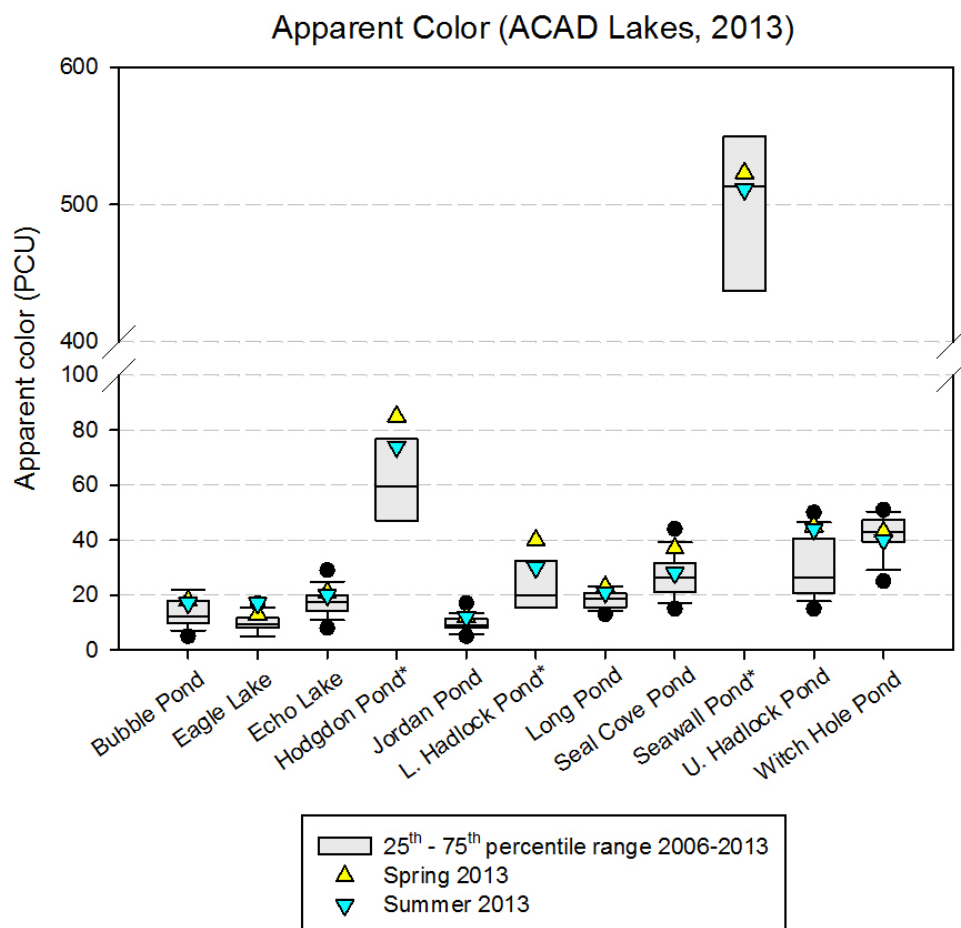


Figure 13. Lake and pond apparent color from 2013 spring and summer water samples overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating sites with data from 2007, 2010, and 2013 only.

Stream apparent color values (Figure 14) were generally low, with the exception of Lurvey and Duck Pond Brooks. Upstream wetlands likely influence the color levels of these streams. The more moderately elevated values in Lurvey Spring and Stanley Brooks could be the effect of runoff and sediment input to the systems from the adjacent roads, carriage roads and erosion from the upstream watershed.

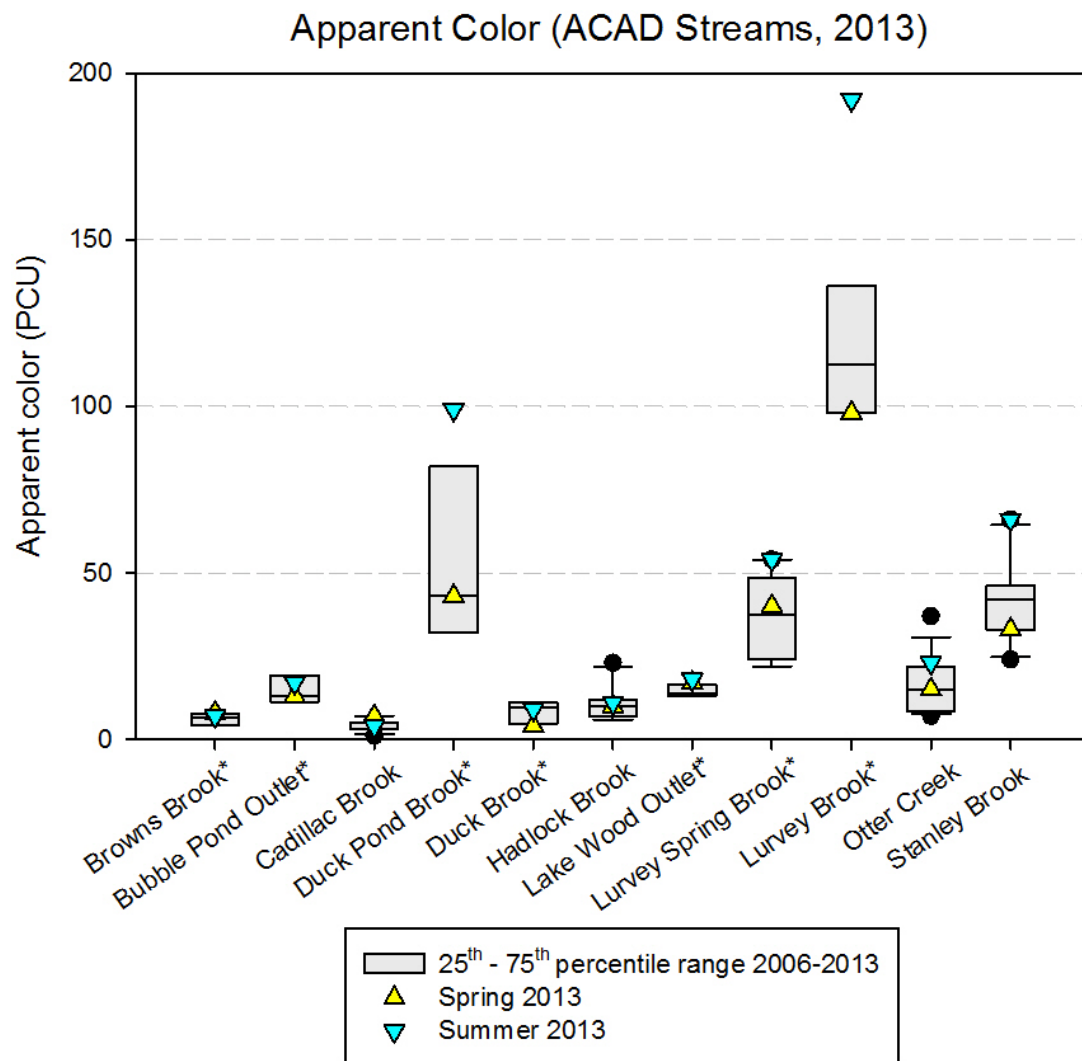


Figure 14. Stream apparent color from 2013 spring and summer water samples overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating partial-record sites with data from 2007, 2009, 2011, and 2013 only.

Dissolved Organic Carbon

Measurement of dissolved organic carbon by NETN began in 2012. Carbon is a nutrient required for biological processes. Sources of organic carbon in water include humic substances from plant and soil organic matter, wetland peat deposits, and atmospheric deposition. Certain forms of DOC can contribute to “tea” color in water, which can affect light attenuation. DOC is also an important part of the energy balance and acid-base chemistry in many freshwater systems. It also affects the transport (solubility and bioavailability) of metals, including mercury, in aquatic systems.

DOC values from Acadia lakes and ponds (Figure 15) were closely related to apparent color values and exhibited very little seasonal change. As expected, the deeper, less productive lakes had lower DOC concentrations in addition to lower apparent color values. Seawall Pond was the notable exception, exhibiting the highest DOC levels and the highest color values. This pond is surrounded by wetlands that contribute organic acidity.

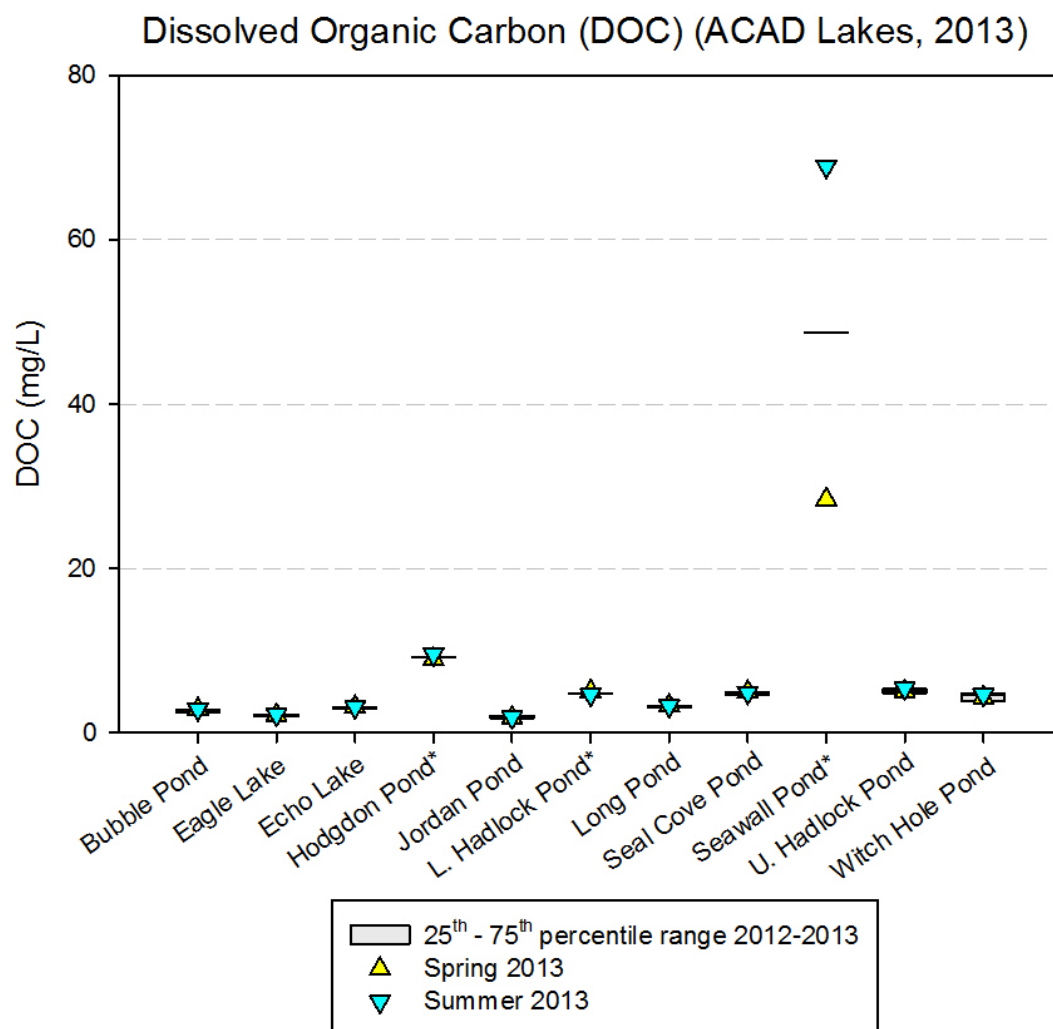


Figure 15. Lake and pond dissolved organic carbon (DOC) from 2013 spring and summer water samples overlaid on a box plot of measurements taken from 2012-2013. Sites marked with an asterisk (*) are rotating sites with data from 2013 only.

DOC values from Acadia streams (Figure 16) were similar to lake and pond DOC values. Lurvey Brook was the notable exception, exhibiting the highest DOC levels of all the 2013 stream samples. Lurvey Brook also had higher color values, and drains wetlands that contribute organic acidity.

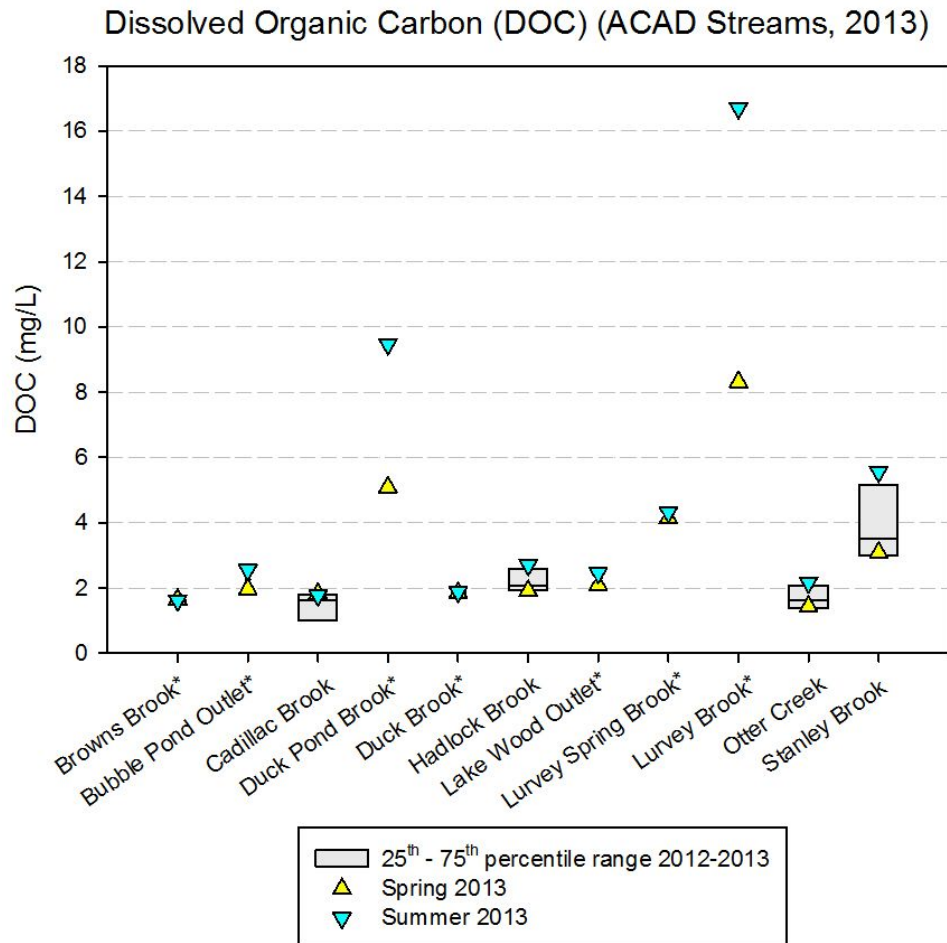
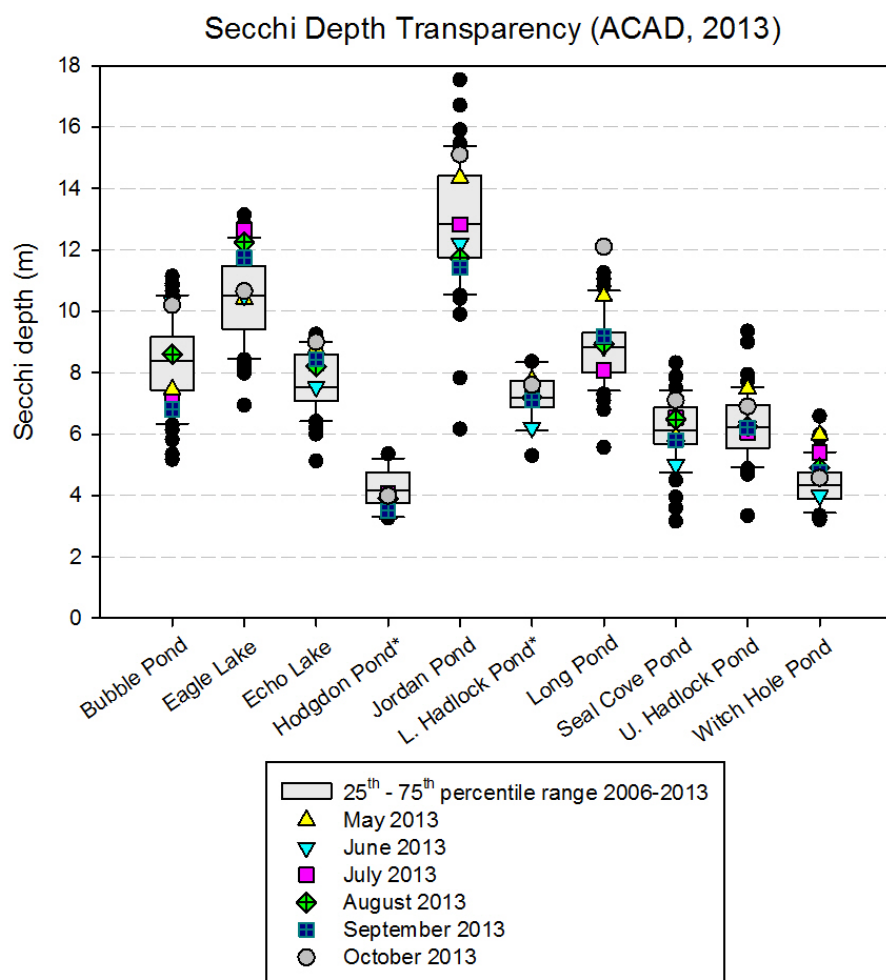


Figure 16. Stream dissolved organic carbon (DOC) from 2013 spring and summer water samples overlaid on a box plot of measurements taken from 2012-2013. Sites marked with an asterisk (*) are rotating sites with data from 2013 only.

Transparency

Transparency measurements can provide simple and affordable assessments of pond and lake productivity. Variation in precipitation is one of the major factors contributing to annual shifts in transparency. Often during drier conditions lakes and ponds will become clearer due to lower runoff of nutrient and soil inputs. In contrast, decreased transparency readings can often be attributed to the effects of high levels of spring and fall precipitation, as well as the cumulative effects of a high rainfall year.

2013 Secchi disk transparency measurements (Figure 17) in the majority of the lakes and ponds were distributed close to historical values for NETN monitoring at Acadia. Transparency depths in smaller and more productive lakes and ponds can frequently be greater than the water depth, and the clarity of these lakes can be better assessed using a radiation sensor to obtain light penetration profiles. Seawall Pond was the only pond in this category in 2013, and Secchi transparency was not measured at this site.



Seawall Pond transparency measurements were greater than pond depth in all months and are not displayed on graph.

Figure 17. Secchi disk transparency from 2013 monthly measurements overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating sites with data from 2007, 2010, and 2013 only.

Light Penetration Profiles

Light penetration profiles can tell us much about the conditions affecting lakes and ponds. Nearly all the energy that drives and controls lake processes is derived from solar energy, which is converted to chemical energy via photosynthesis. This chemical energy is then transported to other areas of the ecosystem as various forms of organic matter. Solar energy, absorbed by the lake and dissipated as heat, plays a large role in defining a lake's thermal structure, stratification, and circulation patterns. These factors in turn affect nutrient cycling and the distribution of dissolved gasses. By understanding the quantity and behavior of the light entering a lake system, we can learn more about how the light is utilized in the system (Wetzel and Likens 2000). Light penetration profiles are used to measure light attenuation in Jordan Pond (since this pond's clarity is of special interest to park managers and researchers) and the Acadia lakes that are too shallow for use of a Secchi disk.

A light penetration profile is obtained using two solar radiation sensors and a datalogger to determine photosynthetically active radiation or "PAR". One of the sensors is lowered into the water column on a weighted lowering frame, while the second sensor ("deck cell") is left on the surface to record ambient light. The datalogger records and processes readings from both sensors, dividing the measurement of light reaching any given depth by the measurement of ambient light, to yield a proportion (often expressed as a percentage). Measurements are taken at one-meter increments of the water column until the light penetration drops below 1%. A light attenuation coefficient can be calculated through analysis of the profile data to quantify the loss of light transmission per meter of depth. A low attenuation coefficient denotes clear water and, conversely, a higher coefficient signifies reduced water clarity. Graphs of 2013 light penetration profiles and a listing of light attenuation coefficients are found in Figure 18 and Figure 19. Full profile data from measurements made in 2013 are listed in Table A6 in Appendix A.

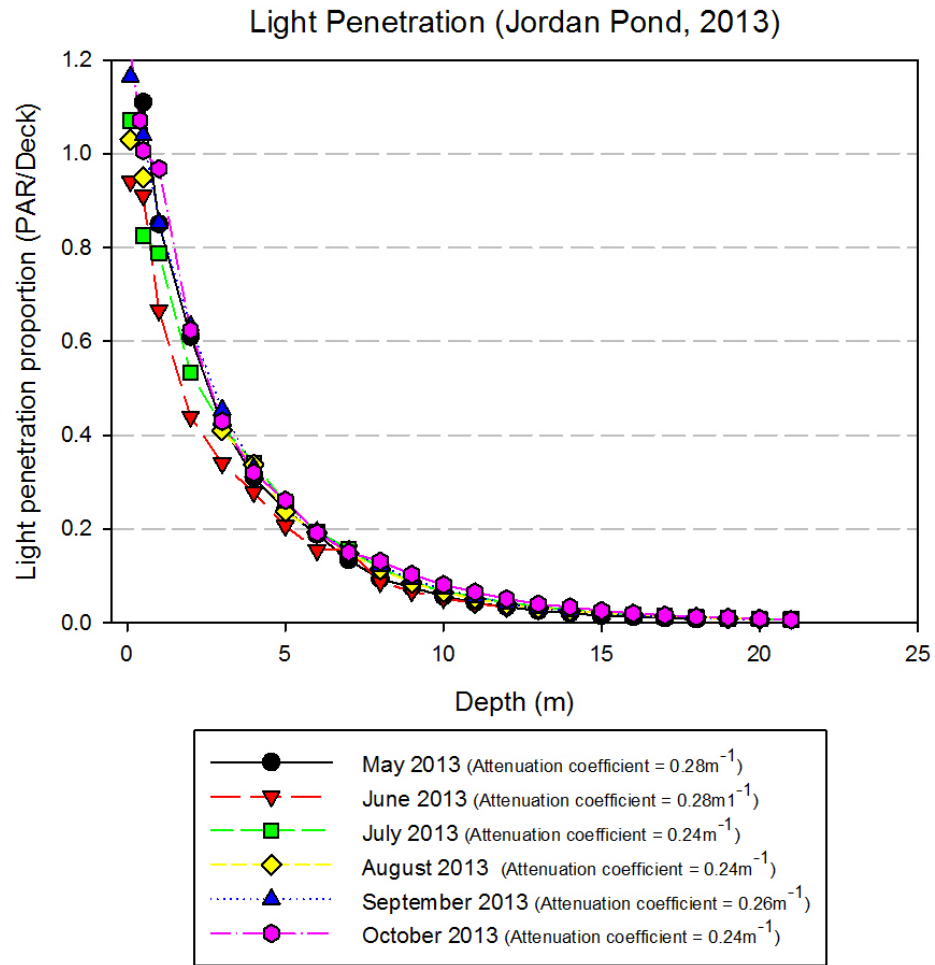


Figure 18. Light penetration profiles from Jordan Pond.

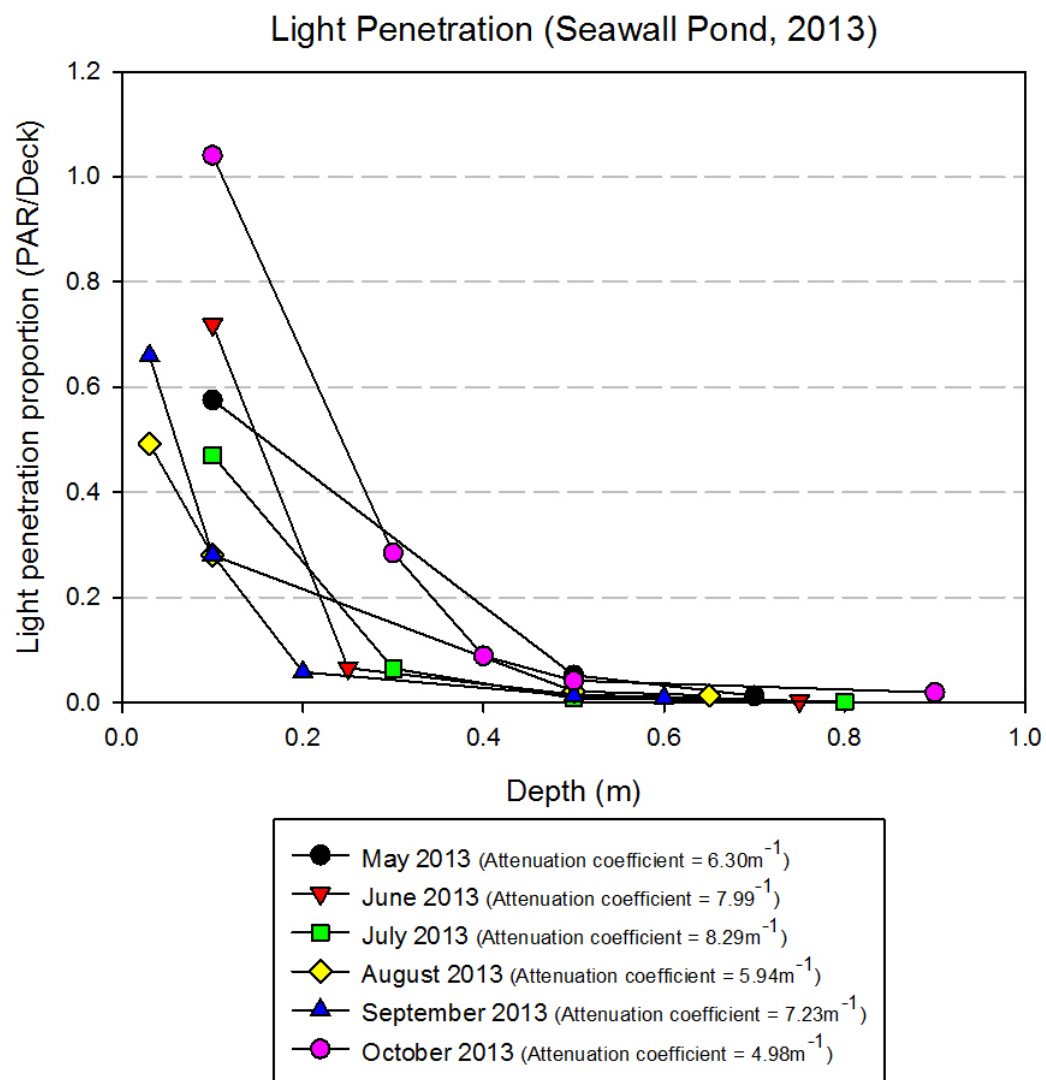


Figure 19. Light penetration profiles from Seawall Pond.

Turbidity

Turbidity is the measure of the relative clarity of a liquid. It is measured by passing light through a water sample to determine how much light is scattered, and the results are reported in nephelometric turbidity units (NTU). Turbidity is caused by suspended matter or impurities that interfere with the clarity of the water. These impurities may include clay, silt, finely divided inorganic and organic matter, soluble colored organic compounds, and plankton and other microscopic organisms. In natural waters, turbidity is often used as an indicator of water quality and productivity. Turbidity is measured in the field using an electronic meter.

Turbidity in the water can create aesthetic, ecological, and health issues. Turbid water may indicate runoff from construction, roads, agriculture or other types of pollution. Suspended sediment can carry nutrients and pesticides throughout the water system. Suspended particles near the surface absorb additional heat from sunlight, raising the water temperature. High turbidity levels can reduce the amount of light reaching lower depths of lakes and streams, which can inhibit growth of submerged aquatic plants, and can interfere with the ability of fish gills to absorb dissolved oxygen. Turbidity values measured in Acadia streams during 2013 (Figure 20), the 2nd year of NETN turbidity testing, were all less than 2 NTU, in the low range of dry-weather turbidity of surface waters (U.S. Environmental Protection Agency 1999).

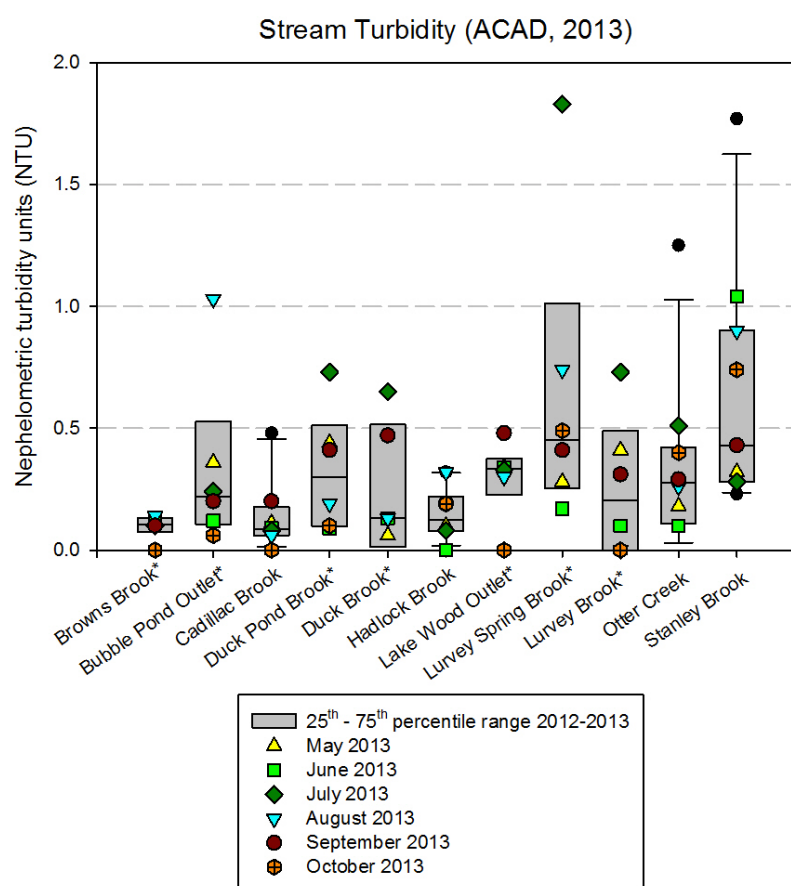


Figure 20. Stream turbidity from 2013 monthly measurements overlaid on a box plot of measurements taken from 2012-2013. Sites marked with an asterisk (*) are rotating sites with data from 2013 only.

Nutrient Enrichment

Nutrient enrichment and the acceleration of eutrophication have been identified in most NETN parks as one of the stressors of greatest concern. Total phosphorus and several forms of nitrogen are measured to give managers information regarding the trophic status and productivity of freshwater systems.

Phosphorus

Phosphorus (P) is one of the major nutrients needed for plant growth. It is generally present in small amounts in natural systems and limits the plant growth in streams and ponds. Total phosphorus (TP) is a measure of both inorganic and organic forms of phosphorus, and is the common water quality standard or criteria metric. Although several forms of phosphorus were tested individually since 2006, tests for total dissolved phosphorus (TDP) and soluble reactive phosphorus (SRP) were discontinued in 2012

In 2013, most TP concentrations in lakes (Figure 21) were low, and the majority were below the EPA Ecoregion 8 criterion of 8 $\mu\text{g/L}$ for lakes and ponds. Although Seawall and Witch Hole Pond values were above this criterion, they were within the expected range for shallow, relatively productive ponds. As described above (“Water Quality Standards”), the EPA criteria do not have any regulatory meaning.

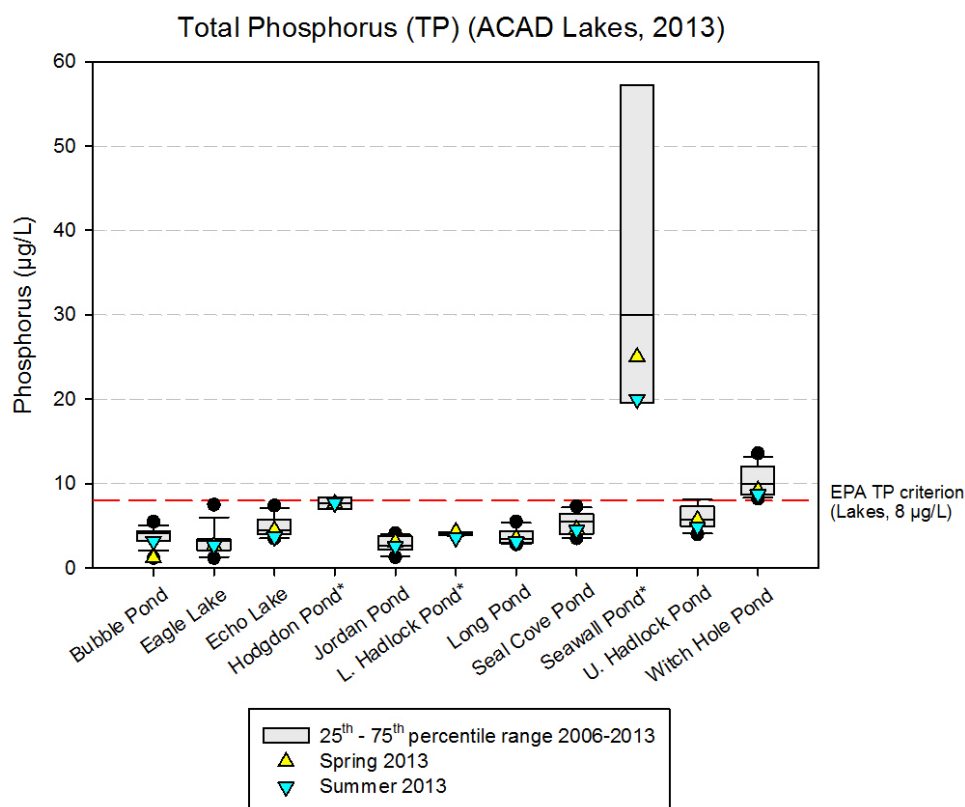


Figure 21. Lake and pond total phosphorus (TP) from 2013 spring and summer water samples. The data are overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating sites with data from 2007, 2010, and 2013 only. There is no numeric Maine state water quality TP standard.

Total phosphorus concentrations in streams (Figure 22) were also generally low in 2013. All TP values were below the EPA Ecoregion 8 criterion of 10 µg/L for streams.

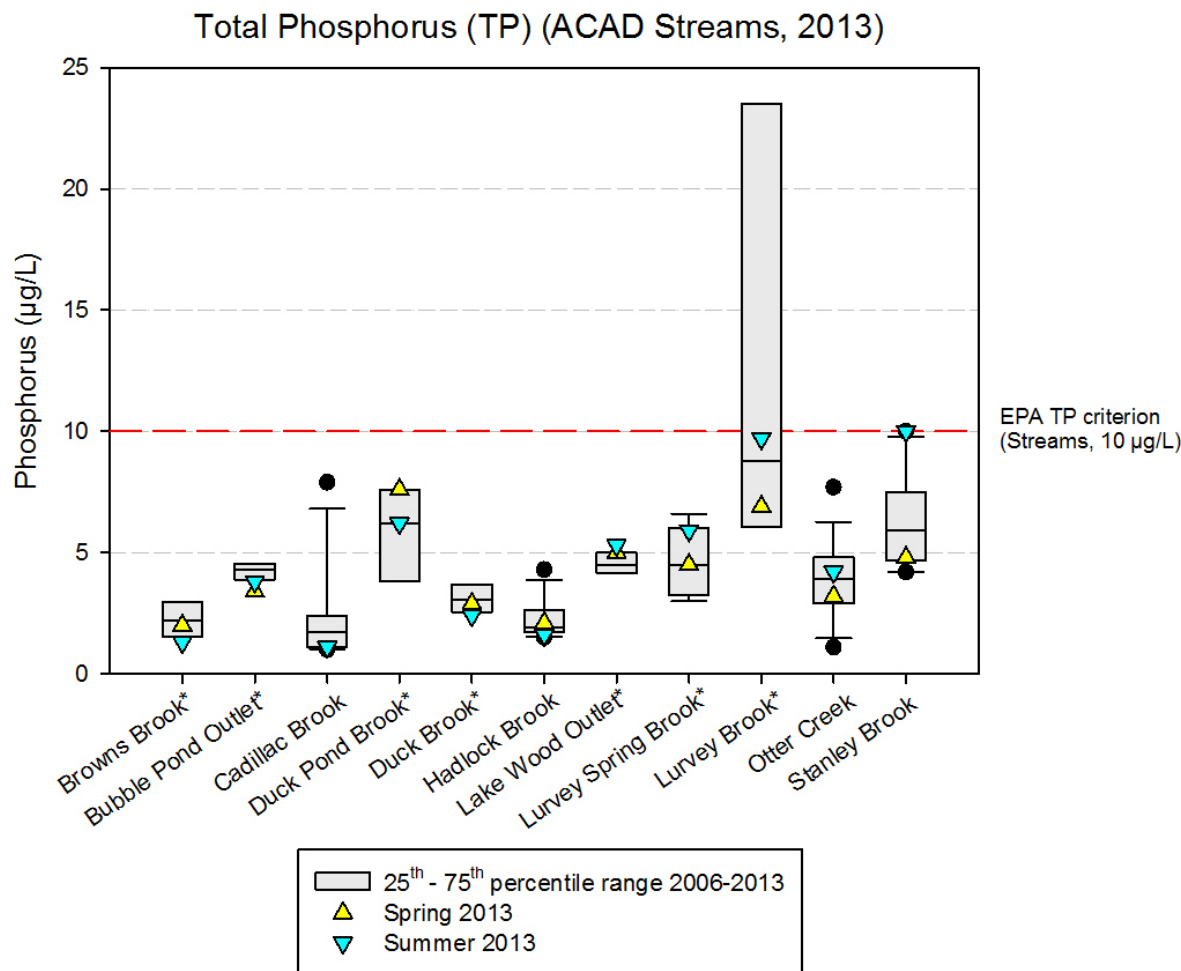


Figure 22. Stream total phosphorus (TP) from 2013 spring and summer water samples. The data are overlaid on a box plot of measurements taken from 2006-2012. Sites marked with an asterisk (*) are rotating partial-record sites with data from 2007, 2009, 2011, and 2013 only. There is no numeric Maine state water quality TP standard.

Nitrogen

Total nitrogen (TN) is a measure of all forms of nitrogen (organic and inorganic). Nitrogen is an essential plant element and is often the limiting nutrient in marine waters, and it can also limit some freshwater systems. The importance of nitrogen in the aquatic environment varies according to the relative amounts of the forms of nitrogen present, including nitrate, nitrite, and ammonia. Nitrate (NO₃) is the most oxidized and stable form of nitrogen in a water body, and is the primary form of nitrogen used by plants as a nutrient. Nitrite (NO₂) is an unstable form of nitrogen that is either rapidly oxidized to nitrate (nitrification) or reduced to nitrogen gas (de-nitrification). This form of nitrogen can also be used as a source of nutrients for plants. Ammonia (NH₃) is generated by bacteria as a decomposition product of nitrogenous organic compounds, and is also readily assimilated by

plants. Results of NO_3 , NO_2 , and NH_3 tests are all reported as the concentrations of the N component of these compounds, expressed in mg/L.

Results for 2013 tests for total nitrogen in lakes and ponds are shown in Figure 23. Most lake and pond TN measurements were in the low range, with most values near or below the EPA Ecoregion 8 criterion of 0.24 mg/L (for lakes), although as with TP this criterion does not have regulatory meaning. Close proximity to the ocean and the frequent presence of waterfowl are likely contributors to the higher values from Seawall Pond. Nitrate results for lakes were very low, with most values below the method reporting limit of 0.01 mg/L (Appendix A, Table A3). Concentrations of nitrite and ammonia in lake samples were all below the method reporting limit.

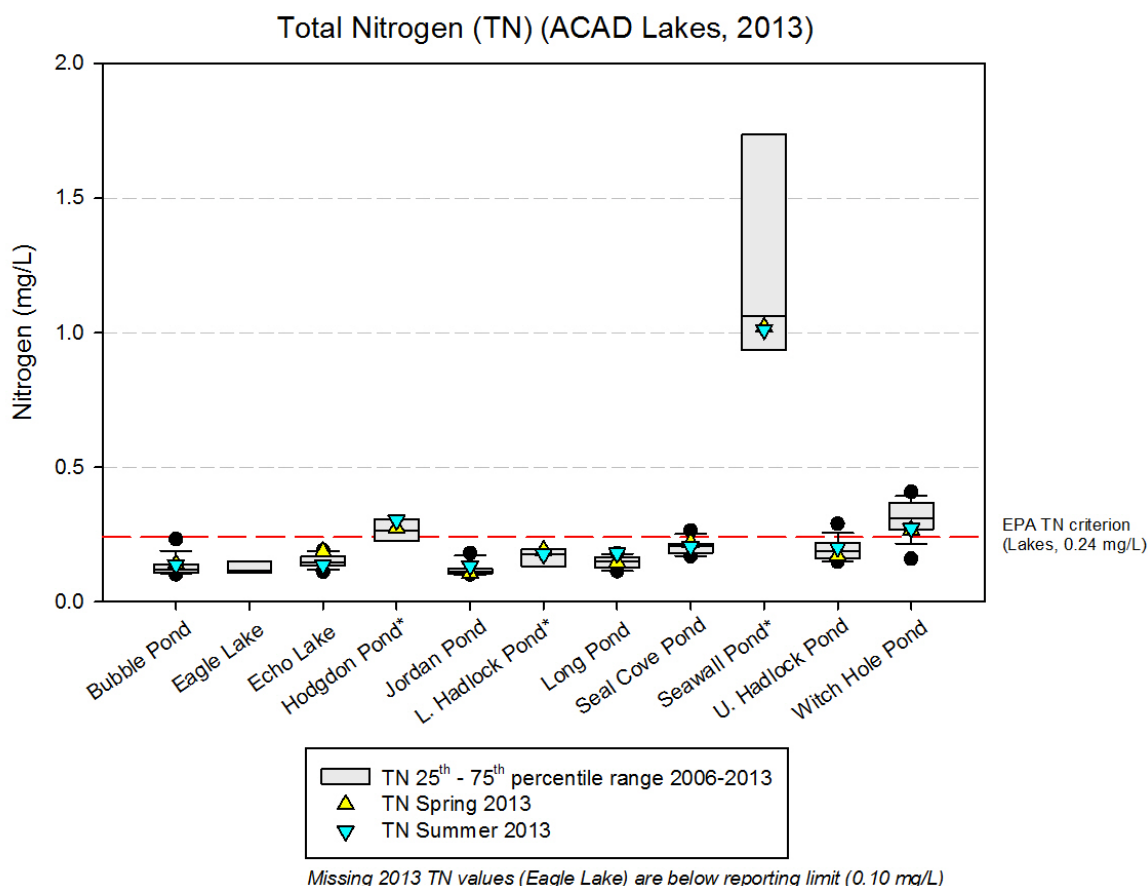


Figure 23. Lake and pond total nitrogen (TN) from 2013 spring and summer water samples. The data are overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating sites with data from 2007, 2010, and 2013 only.

Stream TN measurements (Figure 24) were also low, with all values below the EPA Ecoregion 8 criterion of 0.38 mg/L (for streams). Stream $\text{NO}_3\text{-N}$ values were higher than those of lakes, but still in the low range, with several results below the method reporting limit. As with lakes, concentrations of nitrite and ammonia in Acadia stream samples were all below the method reporting limit.

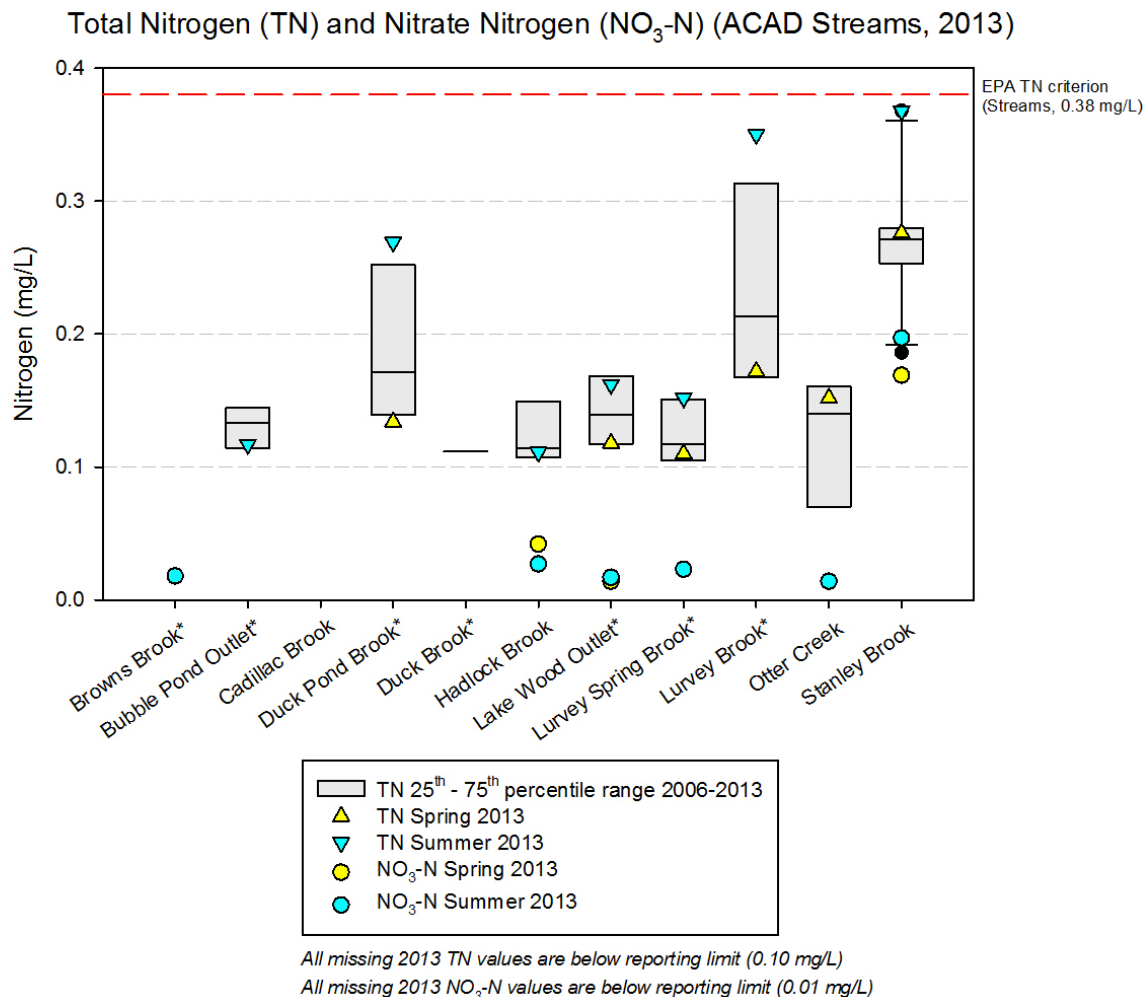


Figure 24. Stream total nitrogen (TN) and the nitrogen component of nitrate ($\text{NO}_3\text{-N}$) from 2013 spring and summer water samples. The data are overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating partial-record sites with data from 2007, 2009, 2011, and 2013 only.

Chlorophyll *a*

The amount of chlorophyll *a* in a water sample is a measure of the concentration of suspended phytoplankton and can be used as an indicator of algal biomass and thus of water quality. Chlorophyll *a* is responsible for photosynthesis and is found in various forms within the living cells of algae, phytoplankton, and other plant matter of water environments. Like other biological response variables, chlorophyll *a* tends to integrate the stresses of various parameters over time, and thus is often an important nutrient-stress parameter to measure.

Chlorophyll *a* concentrations in most ACAD lakes and ponds were low in 2013 (Figure 25), which indicates relatively low algal productivity. Although the slightly elevated TP and TN concentrations in the June sample from Seawall Pond suggest that this pond may have been experiencing a moderate increase in nutrient input, the chlorophyll *a* concentration in the sample suggests that the nutrient inputs did not produce a major algal bloom. A similar assessment can be made about the August sample from Hodgdon Pond.

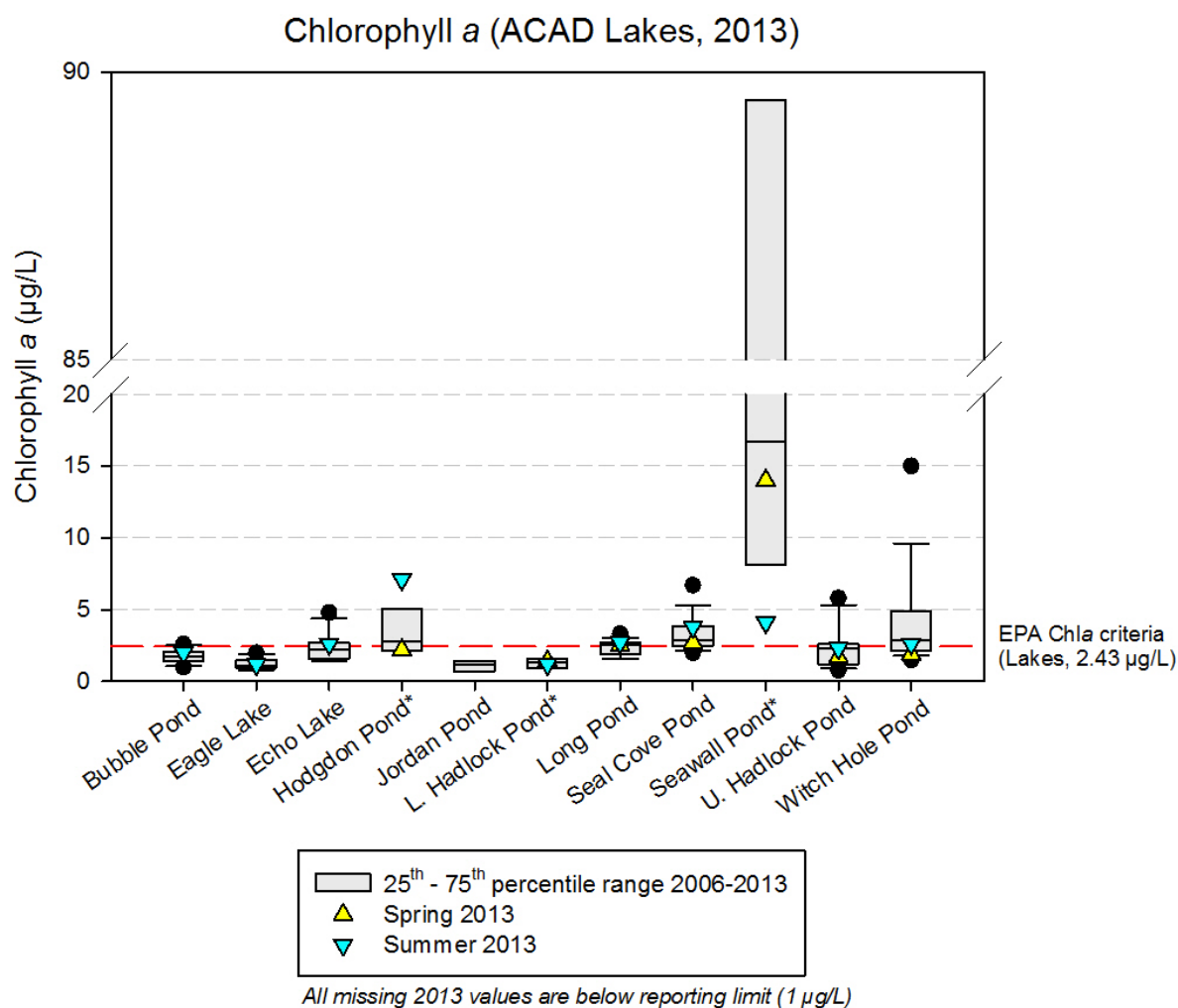


Figure 25. Lake and pond chlorophyll *a* from 2013 spring and summer water samples. The data are overlaid on a box plot of measurements taken from 2006-2013. Sites marked with an asterisk (*) are rotating sites with data from 2007, 2010, and 2013 only.

Other Analytes

Chloride

Chloride is one of the major negatively-charged ions in fresh water systems. The chloride content of natural surface waters will depend to a great extent on the geology of the area. Concentrations are generally greater in lakes that are in proximity to marine regions. Another source of chloride is road run-off from de-icing materials. Chloride is important in terms of metabolic processes, as it influences osmotic salinity balance and ion exchange.

Chloride concentrations in ACAD lakes and ponds were in the low to moderate range in 2013 (Figure 26). Although Echo Lake and Seawall Pond chloride levels were considerably higher than all of the other lakes, the Echo Lake values were within the range of historic test results (mean = 326.4 $\mu\text{eq/L}$, 10th percentile = 248.9 $\mu\text{eq/L}$, 90th percentile = 380.2 $\mu\text{eq/L}$) from Acadia's lake acidification sampling program. No historic chloride data exist for Seawall Pond. Echo Lake and Seawall pond are both located adjacent to major roadways, and run-off of salts from winter road treatment is a possible explanation for elevated chloride concentrations. Seawall Pond is located less than 60 m from the ocean and likely receives significant chloride input from marine aerosols.

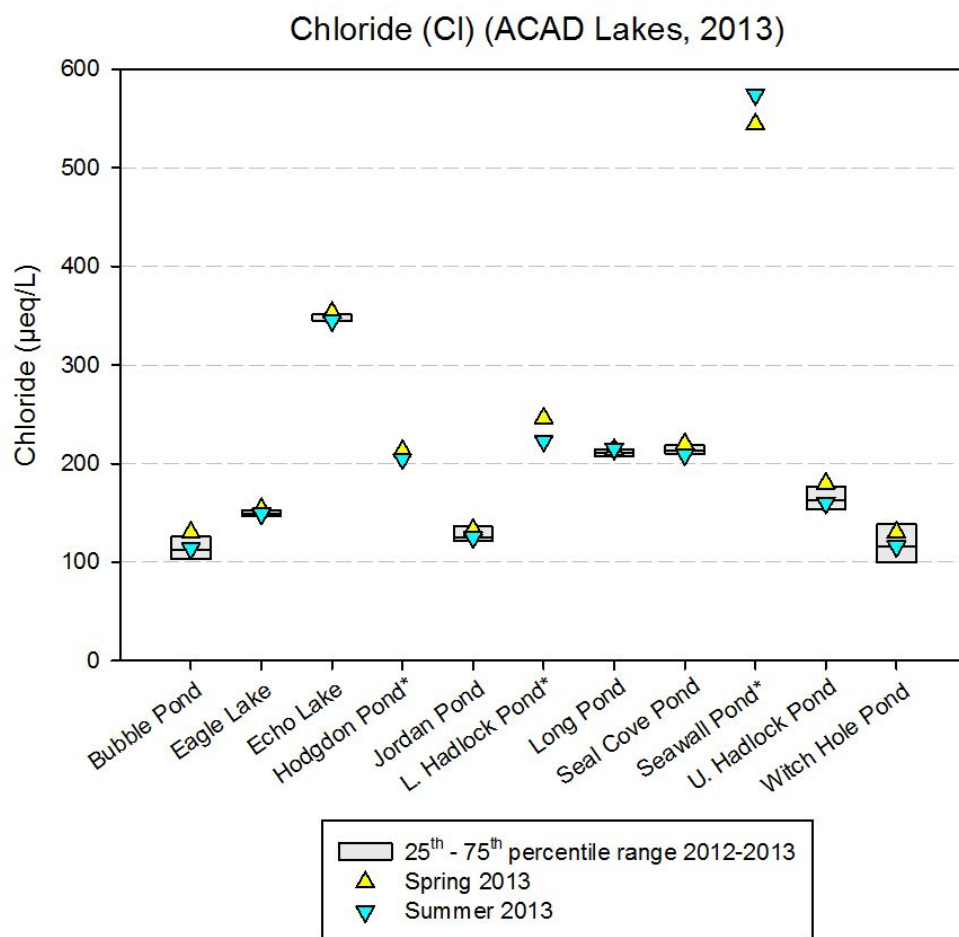


Figure 26. Lake and pond chloride from 2013 spring and summer water samples. The data are overlaid on a box plot of measurements taken from 2012-2013. Sites marked with an asterisk (*) are rotating sites with data from 2013 only.

Chloride concentrations in ACAD streams were in a similar range to lake and pond values (Figure 27), with three significant outliers. Browns Brook, Lurvey Spring Brook and Stanley Brook levels were significantly higher than all of the other streams, but two of these streams were within the range of historic test results (Stanley mean = 305.3 $\mu\text{eq/L}$, 10th percentile = 211.4 $\mu\text{eq/L}$, 90th percentile = 436.4 $\mu\text{eq/L}$; Lurvey Spring Brook mean = 299.3 $\mu\text{eq/L}$, 10th percentile = 209.0 $\mu\text{eq/L}$, 90th percentile = 376.0 $\mu\text{eq/L}$; no historic data available for Browns Brook) from research projects conducted from the 1980s through 2000. The Browns Brook site is upstream of a road crossing, and about 200 meters from a municipal road maintenance facility including sand/salt storage.

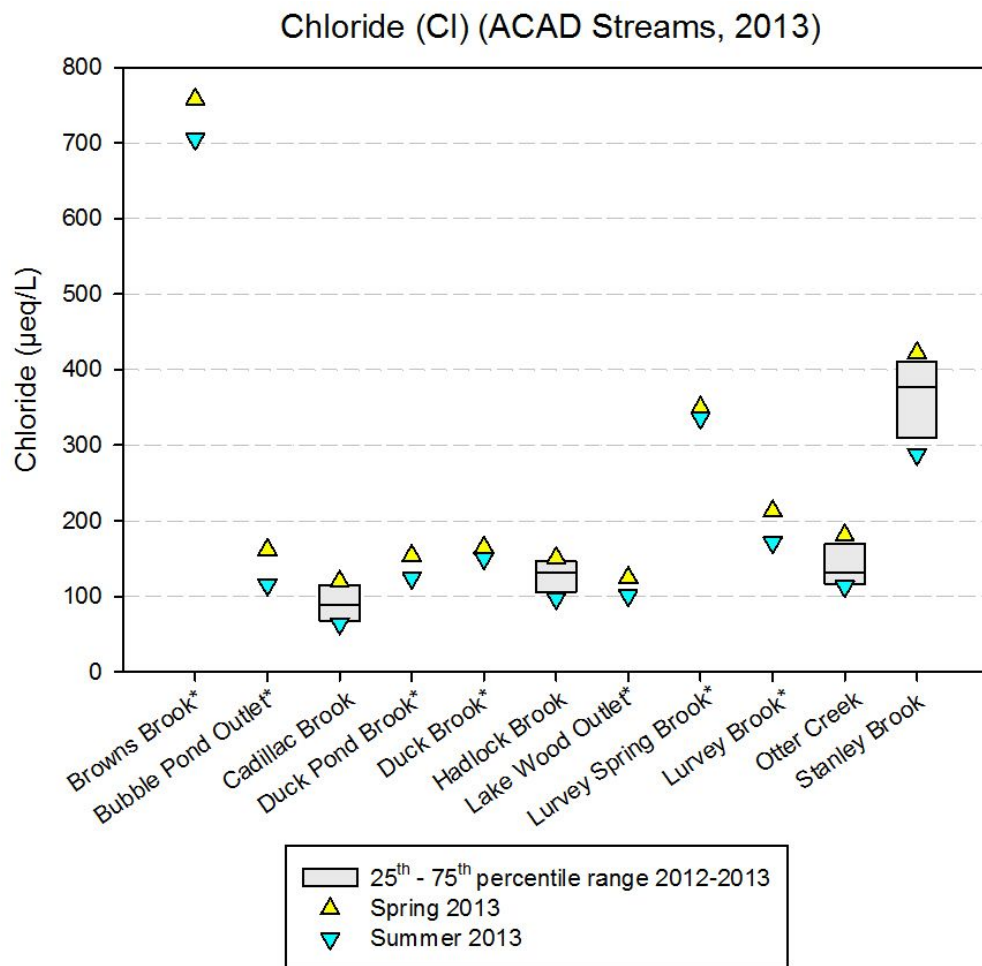


Figure 27. Stream chloride from 2013 spring and summer water samples. The data are overlaid on a box plot of measurements taken from 2012-2013. Sites marked with an asterisk (*) are rotating sites with data from 2013 only.

Sulfate

Sulfate is found in most natural waters, originating from watershed geology, soils, and precipitation. Sulfate can play a major role in acidification of lakes and streams. Sulfate concentrations in sensitive Maine lakes have declined significantly since 1982, in part due to the 1995 implementation of Phase I controls of the Clean Air Act Amendments and in part to other long-term pollution reduction efforts (Kahl 1999).

Sulfate concentrations in ACAD lakes and ponds were low in 2013 (Figure 28) and lower than many of the test results from Acadia's lake acidification sampling program (all ACAD lakes mean = 141.0 $\mu\text{eq/L}$, 10th percentile = 52.9 $\mu\text{eq/L}$, 90th percentile = 217.3 $\mu\text{eq/L}$).

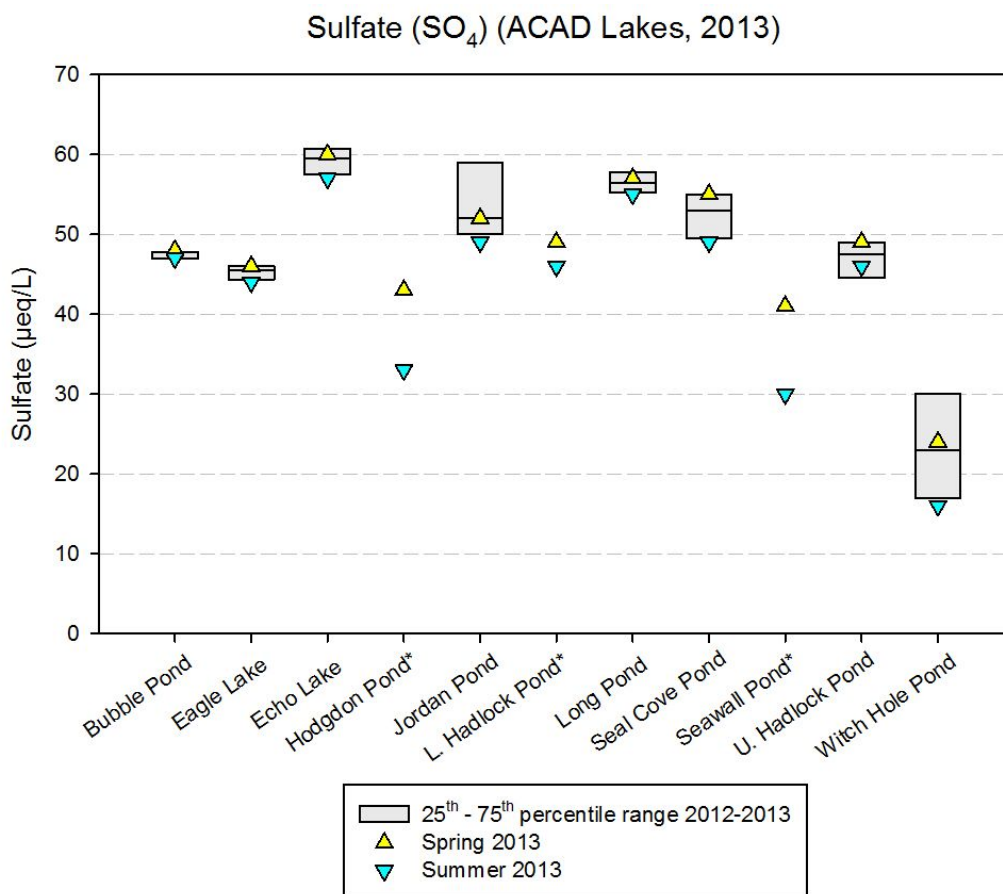


Figure 28. Lake and pond sulfate from 2013 spring and summer water samples. The data are overlaid on a box plot of measurements taken from 2012-2013. Sites marked with an asterisk (*) are rotating sites with data from 2013 only.

Although a few sites were slightly higher than lake and pond values, sulfate concentrations in ACAD streams were also relatively low (Figure 29).

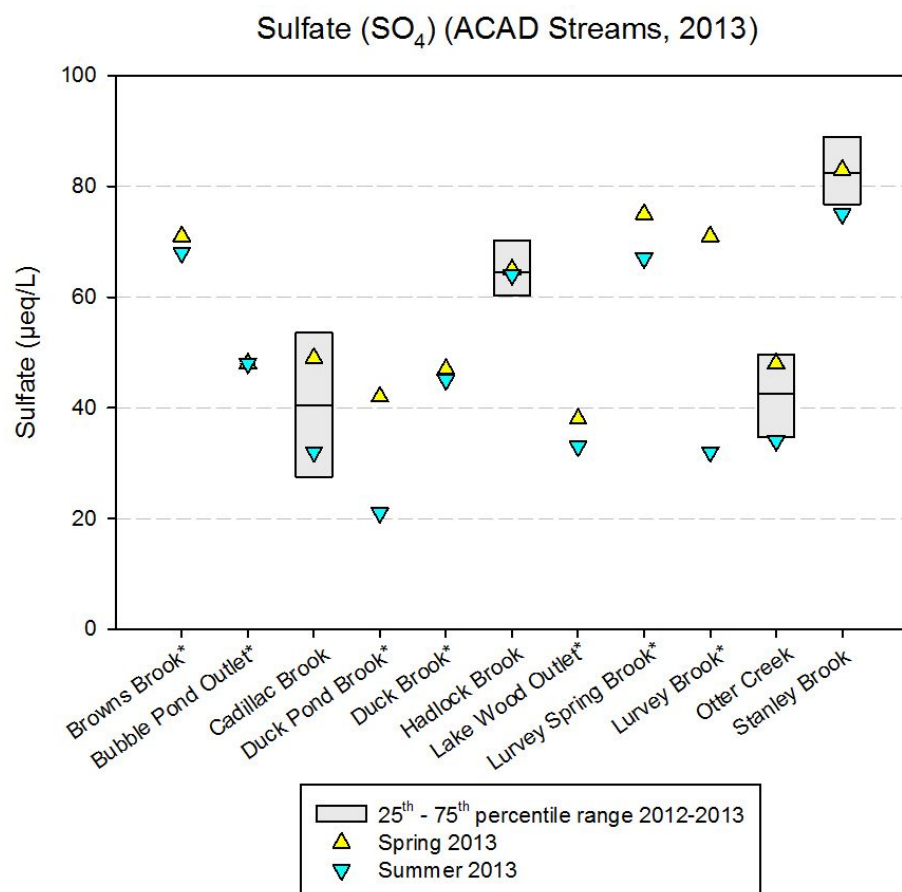


Figure 29. Stream sulfate from 2013 spring and summer water samples. The data are overlaid on a box plot of measurements taken from 2012-2013. Sites marked with an asterisk (*) are rotating sites with data from 2013 only.

Water Quantity

Stream Discharge

Monthly stream discharge measurements (Figure 30), taken with a current meter and wading rod, can be used to calculate loading of nutrient chemical constituents (flow times concentration), and also provides a record of variations in stream flow. Stream stage (height of water) measurements can be paired with discharge values and over time a stage to discharge relationship can be calculated. Once this relationship is established, investigators can interpolate the stream discharge from the stage measurement alone. Numerous discharge measurements at all ranges of streamflow are required to establish and maintain an accurate stage to discharge relationship. Although most streams in Acadia have relatively low flow, measurements in 2013 followed the expected seasonal pattern. Several discharge measurements were in the higher range in June, most flow was at minimal levels in July, August, and October with some higher measurements in September.

NETN staff continue to review discharge and stage measurement methodology and quality assurance/quality control procedures in order to enhance the quality and utility of the water quantity data. Stage to discharge relationship graphs will be produced once sufficient data are collected.

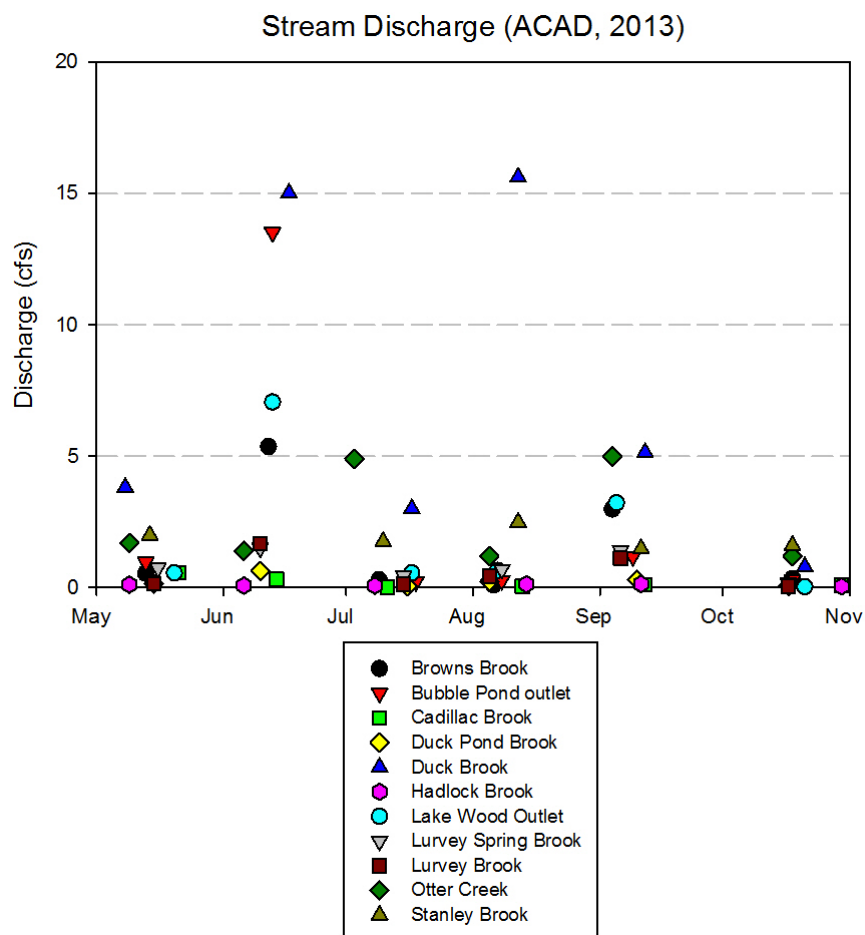


Figure 30. Monthly stream discharge measurements from partial and continuous record sites.

The Otter Creek continuous-record streamflow gage (USGS station 01022840) was installed by USGS in 2006 and is maintained as an index of streamflow at ACAD because of the extent of the stream resources in ACAD. This gage provides detailed streamflow information about one stream in the park, allowing for estimates of loads of constituents at this site, and also provides data to make estimates of streamflow at hydrologically similar ungaged sites or partial-record sites. Figure 31 is a graph of the continuous discharge measurements at Otter Creek for the 2013 calendar year. Real-time data for this site are available at

http://waterdata.usgs.gov/me/nwis/dv/?site_no=01022840&PARAMeter_cd=00060,00065.

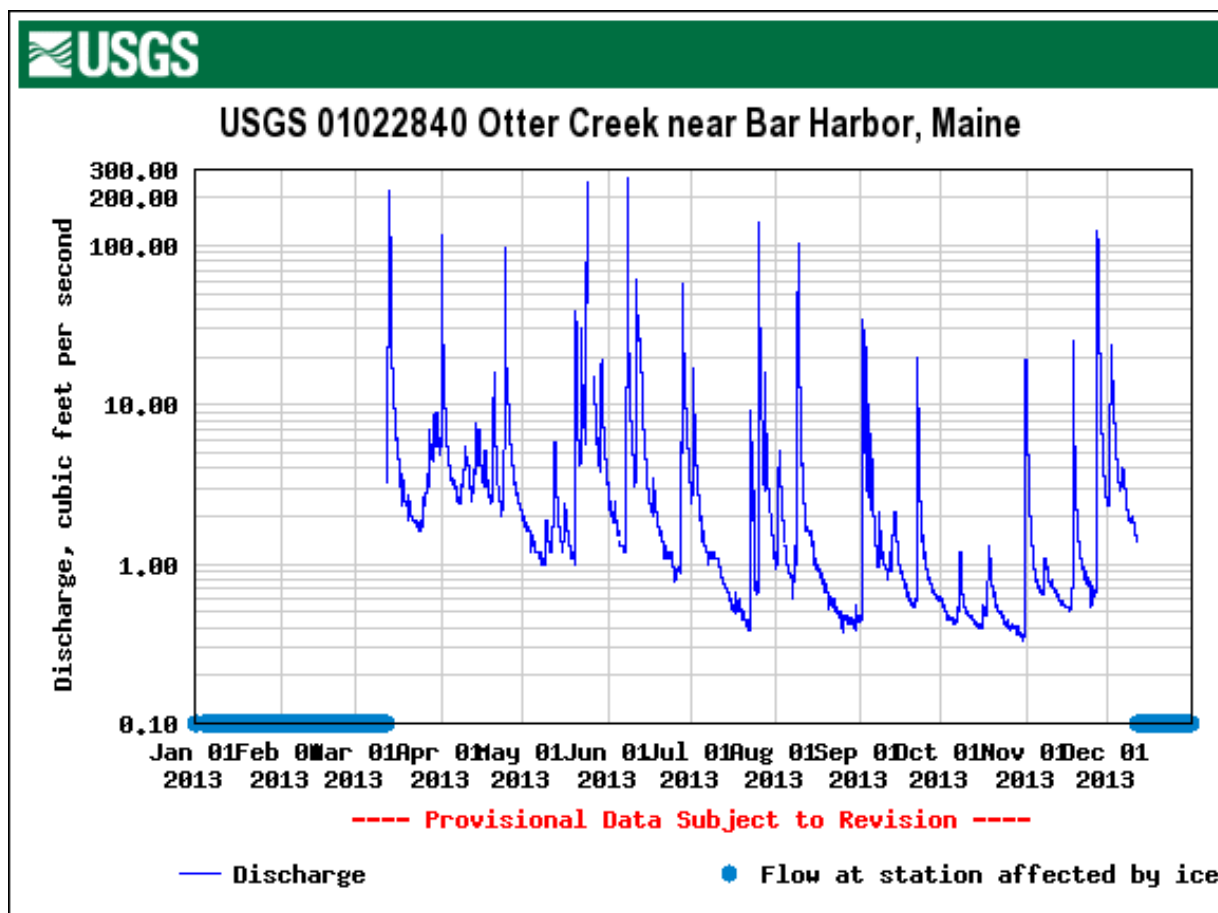


Figure 31. Daily mean discharge from the Otter Creek continuous record site for calendar year 2013.

Stream and Lake Stage

Monthly (stream) and weekly (lake and pond) stage measurements were taken by measuring to the water surface from a fixed datum point. Stream stage was measured during regular monthly monitoring visits to the rotating partial record sites, and the data (stage and discharge) from these visits in 2013 are listed in Table A4 in Appendix A. Discharge and stage were measured continuously, year-round, at the Otter Creek site, and stream stage was measured continuously throughout the ice-free season at the Cadillac Brook and Hadlock Brook permanent record sites. Daily mean stream stage values at these permanent record sites from the 2013 monitoring season are graphed in Figure 32.

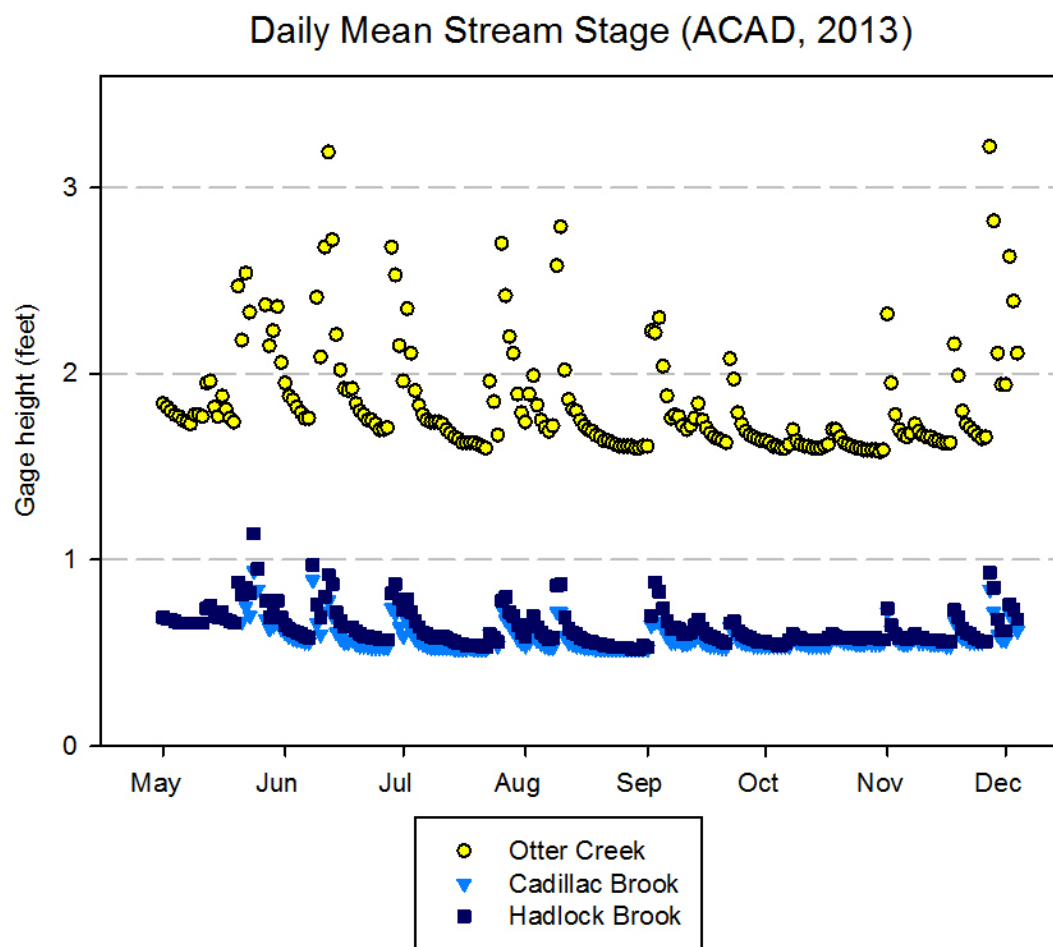


Figure 32. Daily mean stream stage measured in 2013 at NETN permanent record stream monitoring sites in Acadia NP.

Lake stage was measured weekly at all NETN lake monitoring sites throughout the ice-free season. Weekly lake stage data for the 2013 monitoring season is displayed in Figure 33.

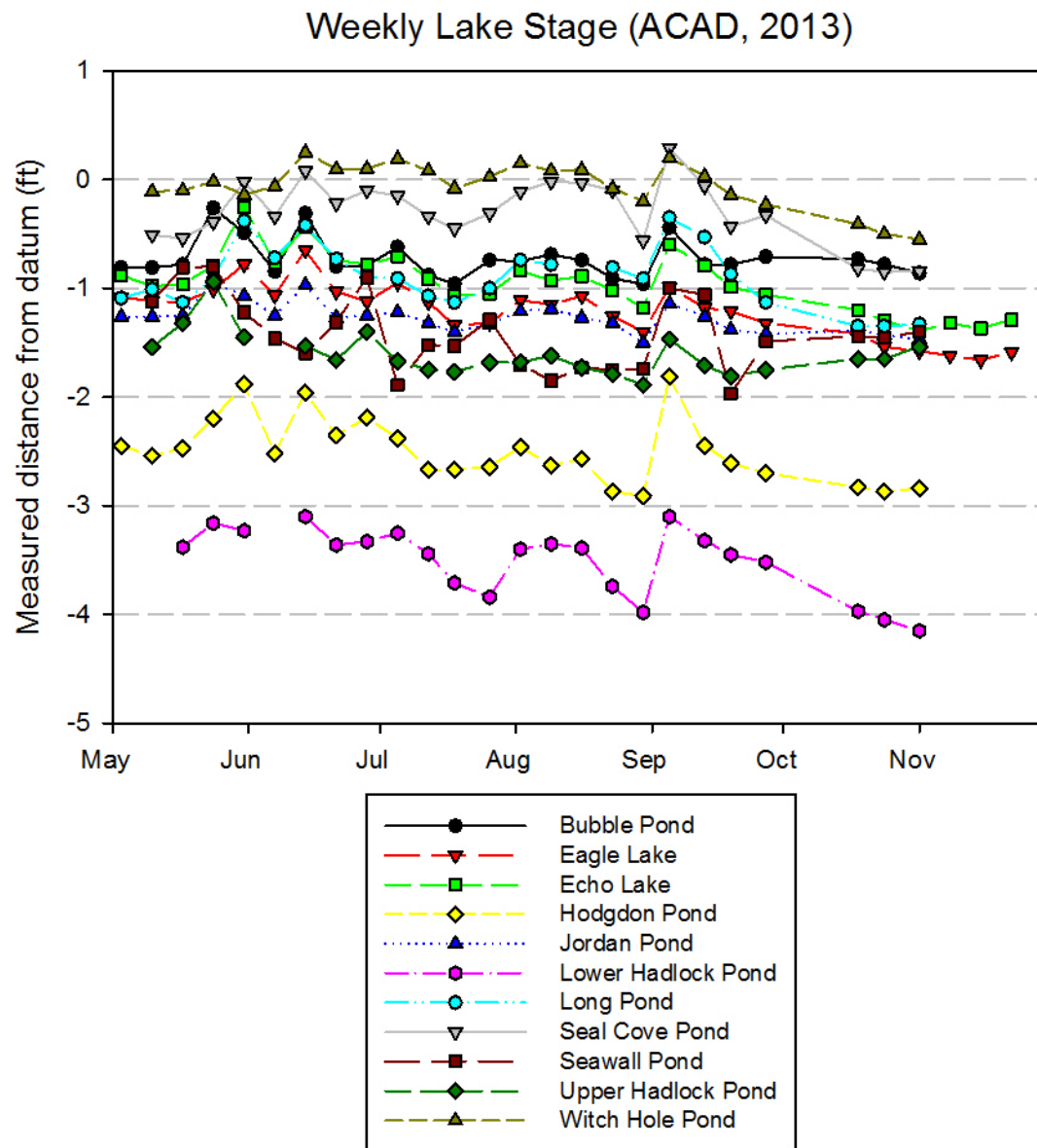


Figure 33. Weekly lake stage measured in 2013 at NETN monitoring sites in Acadia NP.

Invasive Aquatic Plants

NETN's methods for invasive aquatic plant monitoring were adapted from the Maine Center for Invasive Aquatic Plants (MCIAP), a division of the Maine Volunteer Lake Monitoring Program (VLMP). In Acadia, investigators utilize a Level 1 survey, which concentrates on areas of public access and other areas of concentrated boat traffic. Boat launch survey areas extend horizontally along the shoreline at least 100 meters (~300 ft) on either side of the boat launch area, and offshore along the entire length to the depth at which rooted plants are no longer observed (the outermost extent of the littoral zone.) Detailed survey instructions can be found in the NETN protocol (Lombard et al. 2006) and in the MCIAP manual (Maine Center for Invasive Aquatic Plants 2011).

The primary targets of the invasive plant surveys were the 11 plants currently listed by the MCIAP (Table 4). Monitoring is conducted by Acadia National Park staff and volunteers who have received MCIAP training in survey methods and plant identification. The *Maine Field Guide to Invasive Aquatic Plants and their Common Native Look Alikes* (Maine Center for Invasive Aquatic Plants 2007) is used to aid identification in the field, and suspect plants can be sent to the MCIAP for expert identification.

In 2013, invasive aquatic plant monitoring was conducted at Eagle Lake, Echo Lake, Jordan Pond, Long Pond, Seal Cove Pond, and Upper Hadlock Pond. Results indicated that target invasive aquatic plants do not currently exist at any of the sites monitored in Acadia.

Table 4. Maine Center for Invasive Aquatic Plants species of concern.

Common name	Latin name
European Frogbit	<i>Hydrocharis morsus-ranae</i>
Water Chestnut	<i>Trapa natans</i>
Yellow Floating Heart	<i>Nymphoides peltata</i>
Eurasian Water Milfoil	<i>Myriophyllum spicatum</i>
Variable Water Milfoil	<i>Myriophyllum heterophyllum</i>
Parrot Feather	<i>Myriophyllum aquaticum</i>
Fanwort	<i>Cabomba caroliniana</i>
Hydrilla	<i>Hydrilla verticillata</i>
Brazilian Elodea	<i>Egeria densa</i>
European Naiad	<i>Najas minor</i>
Curly-Leaved Pondweed	<i>Potamogeton crispus</i>

During future visits to all NETN parks, monitoring crews will be increasingly attentive for the presence of Didymo (*Didymosphenia geminata*), also known as “rock snot”, a highly invasive alga that has recently invaded the northern reaches of the Connecticut River in New Hampshire and in the White River and Battenkill River in Vermont. This species has a great potential to alter habitats and displace native species, and is of great concern to officials in regions where infestations have been established.

Didymo can easily be spread by waders and potentially by water monitoring equipment and other gear that touches the bottoms of streams in infested areas. Just one cell of the alga breaking off and

drifting downstream can spread the alga. Enhanced equipment cleaning and decontamination procedures are being included in the latest NETN monitoring protocol revision (Gawley et al. 2014).

Since non-native, invasive plants have recently been detected with increasing frequency in New England lakes and ponds, it has become crucial to closely monitor the status of park waters. The early detection of an infestation can make eradication or control more feasible, and it can lead to efforts that reduce the spread of the plant to neighboring water bodies. Designating the early detection of these plants as a NETN vital sign and the ongoing partnership with state and local monitoring and eradication efforts are highly effective prevention strategies.

Quality Assurance and Quality Control (QA/QC)

QA/QC is important to the success of a long-term data collection and trend detection program. Quality assurance (QA) is achieved through the establishment and use of the NETN Freshwater Monitoring Protocol. Specific procedures are used to control critical components of a project such as sampling at the right place with the right equipment and using the right methods. Over the years, staff will change, equipment may be updated, and methods may evolve. Although these changes will be kept to a minimum, changes are inevitable and therefore following an established and well-documented protocol will ensure that the data remain valid.

QA requirements incorporated in the protocol include consistency and low turnover in project leaders and staff, consistency in staff training and oversight, consistency in equipment used and calibration methods, the selection of a well-established chemical laboratory with a proven track record, and a robust sample design that includes an adequate number of field and laboratory quality control (QC) samples.

QC includes the assessment of bias and variability through the use of additional samples such as blank and replicate samples. QC samples are an objective assessment of whether or not QA protocols are adequate. The protocol calls for the collection of two blank and two replicate samples (one each from lakes/ponds and streams, respectively) during both the spring and summer nutrient sampling months at Acadia NP, and the same number, distribution, and schedule at the combined 8 “Lower NETN” parks. Sample collection sites are selected at random from both monitoring groups.

The latest (2014) protocol revision requires in situ measurements, including Secchi transparency, sonde water quality, and stream discharge, to be periodically replicated to ensure that field equipment and observers are performing within the required precision standards. Water quality sonde temperature, pH and specific conductance measurements are to be compared monthly in the laboratory with similar measurements made with a NIST-traceable thermometer and benchtop pH and conductivity meters. Sonde dissolved oxygen measurements will be compared in the field to measurements made using a LaMotte dissolved oxygen test kit (Winkler titration method). These additional procedures will begin network-wide in the 2014 monitoring season.

Nutrient QC Sample Results

Analysis results of all 2013 blank samples collected from Acadia NP lakes, ponds, and streams (Appendix B, Table B1) were below or equal to the method reporting limits, indicating little or no contamination was introduced during the sampling, handling and analysis processes. Replicate sample analysis results (Appendix B, Table B2) showed that all Acadia samples were in the acceptable range of precision (relative percent difference or precision objective in units, depending on sample concentration).

Summary

The majority of the 2013 water quality parameters for the lakes and streams monitored in Acadia National Park were within state standards, and most are very close to EPA Ecoregion 8 criteria, where applicable. Nearly all of the values were within the ranges of historic NETN monitoring data from ACAD. ANC and pH measurements continued to exhibit slightly higher summer values, a recent trend which may reflect a reduction of acid deposition effects.

Apparent color and transparency measurements indicated that Acadia lake and pond waters remained clear, and there were no major runoff or sediment loading events detected by 2013 monitoring data. Nutrient levels (phosphorus and nitrogen) remained relatively low in 2013, and chlorophyll *a* measurements suggested that most lakes retained their minimally to moderately productive status. The slightly elevated nutrient and chlorophyll values in Seawall and Witch Hole Ponds are not a major concern in these small, naturally productive lakes, and all 2013 values were below historic NETN median values. However, future test results must be carefully interpreted to ensure that nutrient enrichment from anthropogenic sources is not becoming a chronic problem. Seawall Pond was an obvious high outlier in most of the analytical results, and this is largely due to its small volume, shallow depth, encircling wetlands, and close (within 60 meters) proximity to the ocean.

Stream chemistry values in 2013 were generally low to moderate, with Duck Pond Brook and Lurvey Brook samples possessing higher concentrations of specific conductance, apparent color, DOC, TP and TN. These values can likely be attributed to the influence of substantial wetland environment in the headwaters of both streams. Monthly turbidity tests showed little evidence of sediment input or other runoff-related issues. Monitoring at the Stanley Brook site showed little to no evidence of negative effects from a substantial bridge construction project conducted upstream during July and August.

Monthly streamflow measurements from partial record sites and continuous-record streamflow gage data have been effective at tracking water quantity in the park and can aid the quantification and interpretation of other water quality data such as the estimation of nutrient loads. Weekly lake stage measurements have continued to build on a 15 year data history documenting the dynamics of lake water levels. Continued review of and refinements to stage measurement techniques, site selection, and QA/QC methodology; as well as the increased use of continuous dataloggers (planned for 2014), will enhance the quality and utility of the water quantity data.

Several additional monitoring activities not included in this report complement the core NETN parameters. Water samples were collected from the eight permanent Acadia NETN lake sites (as well as two additional lakes) in April and October and were analyzed for acid-base chemistry parameters. Results from 2013 were similar to those of the past several years, and suggest that the Clean Air Act and its subsequent revisions appear to be effective in reducing the effects of acid deposition.

Rapid hydro-geomorphic assessment evaluations of stream characteristics were conducted in July at each stream in the yearly rotation. These evaluations provide a qualitative assessment of conditions upstream and influencing the stream discharge and sampling site. This information supports stream

discharge, in situ chemistry, and nutrient sampling analyses, and supplements observations of obvious changes in stream characteristics that are noted on monthly stream data forms. The NETN assessment techniques were adapted from the EPA Rapid Bioassessment protocol (Barbour et al. 1999), and were implemented utilizing a standard operating procedure (SOP) that was completed in December 2011.

ACAD staff also sampled benthic macroinvertebrates in five streams (Lurvey Spring Brook, Duck Brook, Bubble Pond Outlet, Stanley Brook and Browns Brook) in August 2013, as part of an annual monitoring program conducted in cooperation with the Maine Department of Environmental Protection (MDEP). Products of this activity include identification of all collected organisms to the species level, voucher specimens, and analysis of taxonomic diversity and richness. A MDEP modeling program determines a stream water quality classification rating based on the taxonomic data. Taxonomic and deterministic modeling results from 2013 have not yet been delivered to park biologists.

Monitoring under the NETN protocol continues to build on the historic water quality monitoring by park staff and other agencies to provide critical baseline information on the chemical and physical status of the water resources at Acadia National Park. Changes implemented in the 2012 monitoring season have expanded the scope and usefulness of the monitoring data. These changes include taking monthly stream turbidity measurements and the addition of sulfate, chloride, and dissolved organic carbon (DOC) analyses to the spring and summer water chemistry testing. As more data are collected, our ability to detect changes outside this natural range of variability will increase, which in turn will more clearly indicate the status of the vital signs of water quality, nutrient enrichment, water quantity, and the detection of invasive plant species.

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Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013.

Table A1. YSI sonde in-situ stream water quality measurements collected at ACAD. *Duplicate values are quality control check measurements.*

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Browns Brook	5/13/2013	0.13	9.10	11.34	6.74	107
Browns Brook	6/12/2013	0.38	10.49	11.07	6.48	50
Browns Brook	7/9/2013	0.10	15.65	9.77	6.83	112
Browns Brook	8/6/2013	0.10	14.81	10.01	6.79	108
Browns Brook	9/4/2013	0.21	16.09	9.90	5.87	41
Browns Brook	10/18/2013	0.07	11.24	10.26	6.82	121
Bubble Pond Outlet	5/13/2013	0.40	16.46	10.12	6.78	30
Bubble Pond Outlet	6/13/2013	0.32	15.08	9.60	6.42	30
Bubble Pond Outlet	7/18/2013	0.09	25.25	8.38	6.86	32
Bubble Pond Outlet	8/8/2013	0.34	19.96	8.80	6.86	32
Bubble Pond Outlet	9/9/2013	0.33	18.79	8.74	6.33	29
Bubble Pond Outlet	10/18/2013	0.07	14.99	9.77	6.92	29
Cadillac Stream	5/21/2013	0.11	9.19	11.09	6.43	26
Cadillac Stream	6/14/2013	0.15	11.55	10.25	6.60	19
Cadillac Stream	7/11/2013	0.15	16.64	8.26	6.28	26
Cadillac Stream	8/13/2013	0.12	16.60	8.75	6.30	22
Cadillac Stream	9/12/2013	0.12	17.15	8.75	5.28	22
Cadillac Stream	10/30/2013	0.07	7.01	10.24	6.87	25
Duck Brook (North of Rt. 233)	5/8/2013	0.06	16.11	9.92	6.71	34
Duck Brook (North of Rt. 233)	6/17/2013	0.16	18.00	9.29	6.75	33
Duck Brook (North of Rt. 233)	7/17/2013	0.13	25.72	7.72	6.61	35
Duck Brook (North of Rt. 233)	8/12/2013	0.39	22.59	8.41	6.75	34
Duck Brook (North of Rt. 233)	9/12/2013	0.10	21.26	8.63	5.83	33
Duck Brook (North of Rt. 233)	10/21/2013	0.20	14.24	9.44	6.59	34
Duck Pond Brook (Long Pond inlet)	5/15/2013	0.12	8.33	11.53	5.79	29
Duck Pond Brook (Long Pond inlet)	6/10/2013	0.13	13.54	10.36	5.09	27
Duck Pond Brook (Long Pond inlet)	7/16/2013	0.14	19.85	8.96	5.98	30
Duck Pond Brook (Long Pond inlet)	8/5/2013	0.16	15.62	9.66	5.53	27
Duck Pond Brook (Long Pond inlet)	9/10/2013	0.11	14.61	10.07	5.05	24
Duck Pond Brook (Long Pond inlet)	9/10/2013	0.12	14.60	10.05	5.10	24
Duck Pond Brook (Long Pond inlet)	10/17/2013	0.08	11.57	9.97	6.18	31
Duck Pond Brook (Long Pond inlet)	10/17/2013	0.08	11.57	10.05	6.12	31
Hadlock Brook	5/9/2013	0.10	11.08	10.59	6.50	31
Hadlock Brook	6/6/2013	0.15	11.98	10.44	6.54	30
Hadlock Brook	6/6/2013	0.21	11.93	10.58	6.50	30
Hadlock Brook	6/6/2013	0.21	11.92	10.73	6.53	30
Hadlock Brook	7/8/2013	0.14	16.47	9.49	6.64	30
Hadlock Brook	8/14/2013	0.07	14.77	9.73	6.61	29
Hadlock Brook	9/11/2013	0.15	13.97	10.18	6.18	27
Hadlock Brook	10/30/2013	0.14	3.50	12.86	6.82	38
Lake Wood Outlet	5/20/2013	0.19	13.39	9.60	6.33	27
Lake Wood Outlet	6/13/2013	0.18	17.17	9.22	6.28	25
Lake Wood Outlet	7/17/2013	0.19	25.06	7.18	6.42	27
Lake Wood Outlet	8/7/2013	0.17	20.58	7.72	6.41	27
Lake Wood Outlet	9/5/2013	0.18	21.28	8.30	6.14	25
Lake Wood Outlet	10/21/2013	0.20	9.68	7.45	6.01	33
Lake Wood Outlet	10/21/2013	0.20	9.68	7.45	6.02	33
Lurvey Brook	5/15/2013	0.28	9.19	11.07	4.90	42

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A1. YSI sonde in-situ stream water quality measurements collected at ACAD (continued). *Duplicate values are quality control check measurements.*

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Lurvey Brook	6/10/2013	0.17	12.48	10.36	4.54	41
Lurvey Brook	7/15/2013	0.12	18.26	9.01	5.16	40
Lurvey Brook	8/5/2013	0.10	15.34	9.38	4.67	40
Lurvey Brook	9/6/2013	0.12	14.23	9.90	3.69	40
Lurvey Brook	10/17/2013	0.17	11.30	9.99	5.38	42
Lurvey Spring Brook (Echo Lake inlet)	5/16/2013	0.33	8.91	10.82	6.21	52
Lurvey Spring Brook (Echo Lake inlet)	6/10/2013	0.30	11.69	9.97	5.84	48
Lurvey Spring Brook (Echo Lake inlet)	7/15/2013	0.10	13.65	9.61	6.36	75
Lurvey Spring Brook (Echo Lake inlet)	8/8/2013	0.22	12.86	9.47	6.26	65
Lurvey Spring Brook (Echo Lake inlet)	9/6/2013	0.36	12.36	9.67	5.45	45
Lurvey Spring Brook (Echo Lake inlet)	10/17/2013	0.29	10.44	9.23	6.25	74
Otter Creek	5/9/2013	0.17	12.08	10.25	6.48	37
Otter Creek	6/6/2013	0.15	13.96	9.97	6.61	35
Otter Creek	7/3/2013	0.48	16.04	9.71	6.40	24
Otter Creek	8/5/2013	0.12	17.73	8.95	6.48	31
Otter Creek	9/4/2013	0.20	19.08	8.98	5.95	22
Otter Creek	10/18/2013	0.14	12.38	10.04	6.73	35
Stanley Brook	5/14/2013	0.08	8.61	11.71	7.05	77
Stanley Brook	6/12/2013	0.22	10.66	10.91	6.50	45
Stanley Brook	7/10/2013	0.13	13.96	10.41	7.01	77
Stanley Brook	8/12/2013	0.13	14.21	9.50	6.71	66
Stanley Brook	9/11/2013	0.07	13.81	10.38	6.61	77
Stanley Brook	10/18/2013	0.15	11.43	10.58	7.04	83

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD. *Duplicate values are quality control check measurements collected on the upcast.*

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Bubble Pond	5/31/2013	0.0	15.46	10.41	6.62	31
Bubble Pond	5/31/2013	1.0	15.20	10.36	6.67	32
Bubble Pond	5/31/2013	2.0	13.78	10.62	6.61	32
Bubble Pond	5/31/2013	3.0	12.70	10.71	6.54	32
Bubble Pond	5/31/2013	4.0	12.44	10.69	6.51	32
Bubble Pond	5/31/2013	5.0	12.25	10.63	6.52	32
Bubble Pond	5/31/2013	6.0	12.14	10.59	6.52	32
Bubble Pond	5/31/2013	7.0	12.05	10.57	6.52	32
Bubble Pond	5/31/2013	8.0	11.97	10.51	6.51	32
Bubble Pond	5/31/2013	9.0	11.92	10.42	6.49	32
Bubble Pond	5/31/2013	10.0	11.90	10.34	6.48	32
Bubble Pond	5/31/2013	10.7	11.65	4.52	6.24	40
Bubble Pond	6/24/2013	0.0	20.45	9.17	6.86	31
Bubble Pond	6/24/2013	1.0	19.73	9.22	6.80	29
Bubble Pond	6/24/2013	2.0	19.55	9.24	6.78	31
Bubble Pond	6/24/2013	3.0	19.27	9.30	6.73	31
Bubble Pond	6/24/2013	4.0	18.29	9.40	6.66	31
Bubble Pond	6/24/2013	5.0	16.92	9.48	6.56	31
Bubble Pond	6/24/2013	6.0	15.58	9.30	6.41	31
Bubble Pond	6/24/2013	7.0	14.61	8.53	6.15	31
Bubble Pond	6/24/2013	8.0	13.99	8.25	6.05	32
Bubble Pond	6/24/2013	9.0	13.65	7.99	5.97	32
Bubble Pond	6/24/2013	10.0	13.46	7.65	5.94	30
Bubble Pond	6/24/2013	11.0	13.40	7.60	5.92	32
Bubble Pond	6/24/2013	12.0	13.30	7.35	5.92	32
Bubble Pond	6/24/2013	12.3	13.18	5.05	5.95	39
Bubble Pond	7/18/2013	0.2	24.43	8.51	7.07	32
Bubble Pond	7/18/2013	0.6	24.32	8.51	6.98	32
Bubble Pond	7/18/2013	1.0	23.93	8.54	6.96	31
Bubble Pond	7/18/2013	2.0	23.73	8.54	6.96	31
Bubble Pond	7/18/2013	3.0	23.53	8.55	6.96	31
Bubble Pond	7/18/2013	3.0	23.55	8.30	6.52	31
Bubble Pond	7/18/2013	4.0	23.16	8.71	6.95	31
Bubble Pond	7/18/2013	5.0	21.23	9.65	6.90	31
Bubble Pond	7/18/2013	6.0	17.53	9.45	6.63	32
Bubble Pond	7/18/2013	7.0	16.04	6.34	6.03	32
Bubble Pond	7/18/2013	7.0	16.01	7.29	6.28	32
Bubble Pond	7/18/2013	8.0	15.01	6.08	6.08	32
Bubble Pond	7/18/2013	9.0	14.41	5.66	6.02	32
Bubble Pond	7/18/2013	10.0	14.18	5.12	5.97	32
Bubble Pond	7/18/2013	10.0	14.16	4.67	5.95	32
Bubble Pond	7/18/2013	11.0	14.12	4.91	5.94	32
Bubble Pond	7/18/2013	12.0	14.03	4.57	5.93	33
Bubble Pond	7/18/2013	12.0	13.98	2.50	6.03	39
Bubble Pond	8/28/2013	0.1	21.63	8.60	7.04	30
Bubble Pond	8/28/2013	0.5	21.63	8.62	6.99	32
Bubble Pond	8/28/2013	1.0	21.62	8.70	6.90	31
Bubble Pond	8/28/2013	2.0	21.60	8.74	6.86	31
Bubble Pond	8/28/2013	2.0	21.60	8.75	6.85	31
Bubble Pond	8/28/2013	2.0	21.63	8.73	6.70	31
Bubble Pond	8/28/2013	3.0	21.58	8.72	6.85	31
Bubble Pond	8/28/2013	4.0	21.58	8.71	6.83	31

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (μS/cm)
Bubble Pond	8/28/2013	5.0	21.55	8.70	6.82	31
Bubble Pond	8/28/2013	5.0	17.99	7.03	5.89	33
Bubble Pond	8/28/2013	6.0	20.31	8.03	6.52	31
Bubble Pond	8/28/2013	7.0	19.63	7.29	6.28	31
Bubble Pond	8/28/2013	8.0	18.74	6.31	6.10	32
Bubble Pond	8/28/2013	9.0	16.17	2.29	5.80	35
Bubble Pond	8/28/2013	9.0	16.04	2.12	5.74	35
Bubble Pond	8/28/2013	10.0	15.09	1.20	5.73	36
Bubble Pond	8/28/2013	10.0	15.03	1.09	5.74	36
Bubble Pond	8/28/2013	11.0	14.66	0.80	5.72	36
Bubble Pond	8/28/2013	12.0	14.38	0.49	5.78	37
Bubble Pond	8/28/2013	12.1	14.35	0.44	5.79	40
Bubble Pond	9/19/2013	0.1	17.37	9.04	6.59	31
Bubble Pond	9/19/2013	0.5	17.32	9.01	6.60	32
Bubble Pond	9/19/2013	1.0	17.24	9.03	6.61	31
Bubble Pond	9/19/2013	2.0	17.23	9.02	6.60	32
Bubble Pond	9/19/2013	2.0	17.22	9.02	6.60	31
Bubble Pond	9/19/2013	3.0	17.20	9.03	6.61	31
Bubble Pond	9/19/2013	3.0	17.21	9.02	6.58	31
Bubble Pond	9/19/2013	4.0	17.20	9.02	6.60	31
Bubble Pond	9/19/2013	5.0	17.19	8.91	6.50	31
Bubble Pond	9/19/2013	5.0	17.19	8.99	6.61	31
Bubble Pond	9/19/2013	6.0	17.19	8.99	6.61	31
Bubble Pond	9/19/2013	7.0	17.18	8.97	6.61	31
Bubble Pond	9/19/2013	8.0	17.17	8.98	6.61	32
Bubble Pond	9/19/2013	8.0	17.17	8.96	6.61	31
Bubble Pond	9/19/2013	9.0	17.14	8.89	6.59	31
Bubble Pond	9/19/2013	10.0	17.03	8.66	6.53	31
Bubble Pond	9/19/2013	11.0	16.98	8.30	6.45	31
Bubble Pond	9/19/2013	12.0	16.47	7.19	6.26	32
Bubble Pond	9/19/2013	12.0	16.50	6.72	6.26	32
Bubble Pond	10/24/2013	0.5	12.34	10.00	7.13	31
Bubble Pond	10/24/2013	1.0	12.34	10.00	7.07	31
Bubble Pond	10/24/2013	2.0	12.32	10.01	6.99	31
Bubble Pond	10/24/2013	2.0	12.34	9.97	6.80	31
Bubble Pond	10/24/2013	3.0	12.33	10.00	6.98	31
Bubble Pond	10/24/2013	4.0	12.33	9.99	6.95	31
Bubble Pond	10/24/2013	5.0	12.33	9.98	6.90	31
Bubble Pond	10/24/2013	5.0	12.33	9.98	6.90	31
Bubble Pond	10/24/2013	6.0	12.33	9.97	6.89	31
Bubble Pond	10/24/2013	6.0	12.31	9.94	6.79	31
Bubble Pond	10/24/2013	7.0	12.29	9.98	6.87	31
Bubble Pond	10/24/2013	8.0	12.29	9.97	6.86	31
Bubble Pond	10/24/2013	9.0	12.30	9.40	6.76	31
Bubble Pond	10/24/2013	9.0	12.29	9.97	6.83	31
Bubble Pond	10/24/2013	9.0	12.29	9.98	6.83	31
Bubble Pond	10/24/2013	10.0	12.29	9.98	6.82	33
Bubble Pond	10/24/2013	10.8	12.31	8.28	6.80	31
Eagle Lake	5/31/2013	0.0	15.54	10.51	6.75	33
Eagle Lake	5/31/2013	1.0	15.46	10.51	6.73	33
Eagle Lake	5/31/2013	2.0	15.35	10.52	6.73	33
Eagle Lake	5/31/2013	3.0	13.78	10.81	6.73	33

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Eagle Lake	5/31/2013	4.0	12.79	10.86	6.72	33
Eagle Lake	5/31/2013	5.0	12.59	10.78	6.71	31
Eagle Lake	5/31/2013	6.0	12.52	10.77	6.70	33
Eagle Lake	5/31/2013	7.0	12.41	10.77	6.70	33
Eagle Lake	5/31/2013	8.0	12.36	10.78	6.70	31
Eagle Lake	5/31/2013	9.0	12.33	10.76	6.69	33
Eagle Lake	5/31/2013	10.0	12.26	10.76	6.69	33
Eagle Lake	5/31/2013	11.0	12.19	10.76	6.68	33
Eagle Lake	5/31/2013	12.0	12.02	10.74	6.66	33
Eagle Lake	5/31/2013	13.0	11.88	10.67	6.63	33
Eagle Lake	5/31/2013	14.0	11.83	10.69	6.61	33
Eagle Lake	5/31/2013	15.0	11.72	10.70	6.60	33
Eagle Lake	5/31/2013	16.0	11.61	10.70	6.59	33
Eagle Lake	5/31/2013	17.0	11.28	10.75	6.56	31
Eagle Lake	5/31/2013	18.0	10.95	10.82	6.52	33
Eagle Lake	5/31/2013	19.0	10.79	10.83	6.50	33
Eagle Lake	5/31/2013	20.0	10.61	10.88	6.49	33
Eagle Lake	5/31/2013	21.0	10.38	10.90	6.47	33
Eagle Lake	5/31/2013	22.0	10.24	10.90	6.45	33
Eagle Lake	5/31/2013	23.0	10.19	10.86	6.44	33
Eagle Lake	5/31/2013	24.0	10.18	10.82	6.42	33
Eagle Lake	5/31/2013	25.0	10.16	10.80	6.41	33
Eagle Lake	5/31/2013	26.0	10.14	10.78	6.41	33
Eagle Lake	5/31/2013	27.0	10.12	10.76	6.40	33
Eagle Lake	5/31/2013	28.0	10.11	10.74	6.39	33
Eagle Lake	5/31/2013	29.0	10.02	8.46	6.25	34
Eagle Lake	5/31/2013	29.2	10.01	3.12	6.26	45
Eagle Lake	6/18/2013	0.0	18.10	9.57	6.89	33
Eagle Lake	6/18/2013	0.0	18.09	9.58	6.90	33
Eagle Lake	6/18/2013	1.0	17.88	9.58	6.88	33
Eagle Lake	6/18/2013	2.0	17.64	9.60	6.86	32
Eagle Lake	6/18/2013	3.0	17.51	9.60	6.86	32
Eagle Lake	6/18/2013	4.0	17.21	9.65	6.85	32
Eagle Lake	6/18/2013	5.0	16.81	9.71	6.84	32
Eagle Lake	6/18/2013	6.0	16.63	9.70	6.82	32
Eagle Lake	6/18/2013	7.0	16.60	9.71	6.82	32
Eagle Lake	6/18/2013	8.0	15.44	9.93	6.75	32
Eagle Lake	6/18/2013	8.0	15.41	9.97	6.77	32
Eagle Lake	6/18/2013	9.0	14.98	10.01	6.73	31
Eagle Lake	6/18/2013	10.0	14.83	10.02	6.73	32
Eagle Lake	6/18/2013	11.0	14.52	10.02	6.69	32
Eagle Lake	6/18/2013	12.0	12.96	10.15	6.64	33
Eagle Lake	6/18/2013	13.0	12.73	10.09	6.59	33
Eagle Lake	6/18/2013	14.0	12.40	10.03	6.57	33
Eagle Lake	6/18/2013	15.0	12.27	9.98	6.54	33
Eagle Lake	6/18/2013	16.0	12.14	9.96	6.51	33
Eagle Lake	6/18/2013	17.0	12.05	9.95	6.49	33
Eagle Lake	6/18/2013	18.0	12.05	9.93	6.48	33
Eagle Lake	6/18/2013	19.0	12.04	9.92	6.48	33
Eagle Lake	6/18/2013	20.0	12.02	9.89	6.47	33
Eagle Lake	6/18/2013	21.0	11.93	9.90	6.46	33
Eagle Lake	6/18/2013	22.0	11.92	9.89	6.46	33

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Eagle Lake	6/18/2013	23.0	11.87	9.88	6.45	33
Eagle Lake	6/18/2013	24.0	11.87	9.86	6.45	33
Eagle Lake	6/18/2013	25.0	11.86	9.86	6.45	33
Eagle Lake	6/18/2013	26.0	11.79	9.87	6.44	33
Eagle Lake	6/18/2013	27.0	11.77	9.86	6.44	33
Eagle Lake	6/18/2013	28.0	11.74	8.63	6.40	34
Eagle Lake	6/18/2013	28.2	11.69	0.72	6.53	46
Eagle Lake	7/25/2013	0.1	23.13	8.93	7.07	34
Eagle Lake	7/25/2013	0.5	23.12	8.91	7.01	34
Eagle Lake	7/25/2013	1.0	23.13	8.91	6.99	34
Eagle Lake	7/25/2013	2.0	23.12	8.90	6.98	34
Eagle Lake	7/25/2013	3.0	23.12	8.89	6.96	34
Eagle Lake	7/25/2013	4.0	23.10	8.88	6.94	34
Eagle Lake	7/25/2013	5.0	23.10	8.87	6.93	34
Eagle Lake	7/25/2013	6.0	23.07	8.88	6.92	34
Eagle Lake	7/25/2013	7.0	21.64	9.44	6.89	34
Eagle Lake	7/25/2013	7.0	22.43	9.10	6.52	33
Eagle Lake	7/25/2013	8.0	20.42	9.77	6.87	34
Eagle Lake	7/25/2013	9.0	17.24	10.32	6.79	34
Eagle Lake	7/25/2013	10.0	15.39	10.43	6.61	34
Eagle Lake	7/25/2013	11.0	14.16	10.27	6.46	34
Eagle Lake	7/25/2013	11.0	14.13	10.09	6.43	33
Eagle Lake	7/25/2013	12.0	13.66	9.92	6.34	34
Eagle Lake	7/25/2013	13.0	13.24	9.55	6.20	34
Eagle Lake	7/25/2013	13.0	13.32	9.67	6.27	34
Eagle Lake	7/25/2013	14.0	13.12	9.54	6.22	34
Eagle Lake	7/25/2013	15.0	12.99	9.40	6.18	34
Eagle Lake	7/25/2013	16.0	12.86	9.33	6.17	34
Eagle Lake	7/25/2013	17.0	12.83	9.30	6.16	34
Eagle Lake	7/25/2013	18.0	12.80	9.27	6.16	34
Eagle Lake	7/25/2013	19.0	12.77	9.21	6.15	34
Eagle Lake	7/25/2013	20.0	12.76	9.21	6.15	34
Eagle Lake	7/25/2013	21.0	12.75	9.19	6.15	34
Eagle Lake	7/25/2013	22.0	12.74	9.19	6.15	34
Eagle Lake	7/25/2013	23.0	12.74	9.21	6.15	34
Eagle Lake	7/25/2013	24.0	12.74	9.21	6.15	34
Eagle Lake	7/25/2013	25.0	12.73	9.24	6.15	34
Eagle Lake	7/25/2013	26.0	12.71	9.28	6.15	34
Eagle Lake	7/25/2013	26.0	12.72	9.27	6.15	34
Eagle Lake	7/25/2013	27.0	12.69	9.29	6.15	34
Eagle Lake	7/25/2013	28.0	12.66	9.28	6.15	34
Eagle Lake	7/25/2013	29.0	12.63	9.30	6.15	34
Eagle Lake	7/25/2013	30.0	12.62	9.32	6.15	34
Eagle Lake	8/22/2013	0.1	23.57	8.70	6.84	35
Eagle Lake	8/22/2013	0.5	23.57	8.72	6.78	35
Eagle Lake	8/22/2013	1.0	23.56	8.69	6.78	35
Eagle Lake	8/22/2013	2.0	23.54	8.71	6.86	35
Eagle Lake	8/22/2013	2.0	23.53	8.75	6.85	35
Eagle Lake	8/22/2013	3.0	22.68	8.79	6.84	35
Eagle Lake	8/22/2013	4.0	22.22	8.92	6.84	35
Eagle Lake	8/22/2013	5.0	22.06	8.94	6.86	35
Eagle Lake	8/22/2013	6.0	21.94	8.99	6.85	35

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Eagle Lake	8/22/2013	7.0	21.83	9.03	6.83	34
Eagle Lake	8/22/2013	8.0	21.59	9.05	6.86	34
Eagle Lake	8/22/2013	9.0	21.36	9.08	6.85	34
Eagle Lake	8/22/2013	10.0	20.84	9.20	6.79	34
Eagle Lake	8/22/2013	10.0	20.43	9.38	6.58	33
Eagle Lake	8/22/2013	11.0	16.93	9.49	6.52	34
Eagle Lake	8/22/2013	12.0	14.44	8.85	6.18	34
Eagle Lake	8/22/2013	13.0	13.68	8.21	5.99	34
Eagle Lake	8/22/2013	14.0	13.37	7.87	5.90	34
Eagle Lake	8/22/2013	14.1	13.37	7.85	5.91	34
Eagle Lake	8/22/2013	15.1	13.22	7.59	5.87	34
Eagle Lake	8/22/2013	16.0	13.12	7.45	5.84	34
Eagle Lake	8/22/2013	17.0	13.08	7.36	5.83	34
Eagle Lake	8/22/2013	18.0	13.05	7.32	5.83	34
Eagle Lake	8/22/2013	19.0	13.04	7.28	5.83	34
Eagle Lake	8/22/2013	20.0	13.01	7.21	5.88	34
Eagle Lake	8/22/2013	20.0	13.02	7.26	5.83	34
Eagle Lake	8/22/2013	21.0	13.01	7.20	5.83	34
Eagle Lake	8/22/2013	22.0	13.00	7.17	5.84	34
Eagle Lake	8/22/2013	23.0	12.98	7.12	5.85	34
Eagle Lake	8/22/2013	24.0	12.98	7.12	5.85	34
Eagle Lake	8/22/2013	26.0	12.98	7.11	5.85	34
Eagle Lake	8/22/2013	27.0	12.97	7.08	5.85	34
Eagle Lake	8/22/2013	29.0	12.93	7.04	5.88	36
Eagle Lake	8/22/2013	30.0	12.92	7.03	5.89	36
Eagle Lake	9/17/2013	0.2	18.99	9.10	6.91	34
Eagle Lake	9/17/2013	0.5	19.00	9.09	6.89	34
Eagle Lake	9/17/2013	1.0	18.98	9.08	6.85	34
Eagle Lake	9/17/2013	2.1	18.97	9.08	6.85	34
Eagle Lake	9/17/2013	3.0	18.95	9.07	6.85	34
Eagle Lake	9/17/2013	4.1	18.91	9.07	6.84	34
Eagle Lake	9/17/2013	5.1	18.86	9.07	6.84	34
Eagle Lake	9/17/2013	6.0	18.83	8.84	6.45	33
Eagle Lake	9/17/2013	6.0	18.85	9.08	6.83	34
Eagle Lake	9/17/2013	7.0	18.83	9.07	6.82	33
Eagle Lake	9/17/2013	8.0	18.83	9.06	6.82	34
Eagle Lake	9/17/2013	9.0	18.82	9.06	6.82	34
Eagle Lake	9/17/2013	10.0	18.80	9.05	6.81	34
Eagle Lake	9/17/2013	11.1	18.51	8.96	6.75	34
Eagle Lake	9/17/2013	12.0	17.70	8.69	6.60	34
Eagle Lake	9/17/2013	13.0	14.53	7.50	6.26	35
Eagle Lake	9/17/2013	14.0	13.80	7.10	6.13	35
Eagle Lake	9/17/2013	15.0	13.56	6.77	6.06	34
Eagle Lake	9/17/2013	16.0	13.46	6.61	6.02	34
Eagle Lake	9/17/2013	17.0	13.36	6.50	6.00	34
Eagle Lake	9/17/2013	18.1	13.18	6.16	5.97	35
Eagle Lake	9/17/2013	19.0	13.15	5.98	5.94	35
Eagle Lake	9/17/2013	20.0	13.12	5.84	5.93	35
Eagle Lake	9/17/2013	20.0	13.10	5.63	5.89	35
Eagle Lake	9/17/2013	21.0	13.09	5.69	5.92	35
Eagle Lake	9/17/2013	22.0	13.08	5.61	5.92	35
Eagle Lake	9/17/2013	23.0	13.07	5.49	5.88	35

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Eagle Lake	9/17/2013	23.0	13.07	5.57	5.90	35
Eagle Lake	9/17/2013	24.0	13.06	5.51	5.90	35
Eagle Lake	9/17/2013	25.0	13.05	5.46	5.89	35
Eagle Lake	9/17/2013	26.0	13.05	5.40	5.89	35
Eagle Lake	9/17/2013	27.0	13.04	5.35	5.88	35
Eagle Lake	9/17/2013	28.1	13.04	5.35	5.88	35
Eagle Lake	9/17/2013	29.0	13.04	5.34	5.87	35
Eagle Lake	9/17/2013	30.0	13.03	5.28	5.88	35
Eagle Lake	10/23/2013	0.1	14.71	9.52	6.95	33
Eagle Lake	10/23/2013	0.5	14.71	9.51	6.90	33
Eagle Lake	10/23/2013	1.0	14.71	9.50	6.86	33
Eagle Lake	10/23/2013	2.0	14.67	9.49	6.83	33
Eagle Lake	10/23/2013	3.0	14.60	9.49	6.82	33
Eagle Lake	10/23/2013	4.0	14.57	9.47	6.80	33
Eagle Lake	10/23/2013	5.0	14.55	9.47	6.77	33
Eagle Lake	10/23/2013	5.0	14.55	9.47	6.76	33
Eagle Lake	10/23/2013	6.0	14.54	9.46	6.77	33
Eagle Lake	10/23/2013	7.0	14.54	9.48	6.76	33
Eagle Lake	10/23/2013	8.0	14.54	9.48	6.76	33
Eagle Lake	10/23/2013	9.0	14.53	9.48	6.76	33
Eagle Lake	10/23/2013	10.0	14.52	9.49	6.76	33
Eagle Lake	10/23/2013	10.1	14.52	9.36	6.54	33
Eagle Lake	10/23/2013	11.0	14.52	9.49	6.75	33
Eagle Lake	10/23/2013	12.0	14.51	9.49	6.75	33
Eagle Lake	10/23/2013	13.0	14.50	9.46	6.74	31
Eagle Lake	10/23/2013	14.0	14.50	9.44	6.74	33
Eagle Lake	10/23/2013	15.0	14.48	9.42	6.72	33
Eagle Lake	10/23/2013	16.0	14.47	9.36	6.73	33
Eagle Lake	10/23/2013	17.0	14.47	9.38	6.72	33
Eagle Lake	10/23/2013	18.0	14.42	9.41	6.72	31
Eagle Lake	10/23/2013	19.0	14.37	9.34	6.70	33
Eagle Lake	10/23/2013	20.0	14.33	8.78	6.39	33
Eagle Lake	10/23/2013	20.0	14.37	9.32	6.69	33
Eagle Lake	10/23/2013	21.0	14.26	9.03	6.64	34
Eagle Lake	10/23/2013	22.0	13.80	7.85	6.47	35
Eagle Lake	10/23/2013	23.0	12.89	3.31	6.02	36
Eagle Lake	10/23/2013	24.0	12.82	2.93	5.97	37
Eagle Lake	10/23/2013	25.0	12.79	2.59	5.98	38
Eagle Lake	10/23/2013	26.0	12.77	2.42	5.98	38
Eagle Lake	10/23/2013	26.0	12.75	2.15	6.01	36
Eagle Lake	10/23/2013	27.0	12.74	2.24	5.98	39
Echo Lake	5/30/2013	0.1	16.51	10.17	6.83	62
Echo Lake	5/30/2013	1.0	16.03	10.32	6.86	62
Echo Lake	5/30/2013	2.0	15.47	10.57	6.87	62
Echo Lake	5/30/2013	3.0	14.26	10.43	6.87	62
Echo Lake	5/30/2013	4.0	13.87	10.38	6.87	62
Echo Lake	5/30/2013	5.0	13.69	10.34	6.86	62
Echo Lake	5/30/2013	6.0	13.59	10.29	6.86	62
Echo Lake	5/30/2013	7.0	13.51	10.30	6.86	62
Echo Lake	5/30/2013	8.0	13.27	10.29	6.84	62
Echo Lake	5/30/2013	9.0	12.77	10.23	6.79	62
Echo Lake	5/30/2013	10.0	12.25	10.22	6.72	62

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Echo Lake	5/30/2013	11.0	11.59	10.19	6.66	62
Echo Lake	5/30/2013	12.0	10.57	10.30	6.59	62
Echo Lake	5/30/2013	13.0	9.69	10.46	6.53	62
Echo Lake	5/30/2013	14.0	8.97	10.45	6.49	63
Echo Lake	5/30/2013	15.0	8.83	10.35	6.45	63
Echo Lake	5/30/2013	16.0	8.76	10.22	6.43	63
Echo Lake	5/30/2013	17.0	8.71	10.08	6.40	63
Echo Lake	5/30/2013	18.0	8.69	10.02	6.39	63
Echo Lake	5/30/2013	19.0	8.66	9.91	6.37	63
Echo Lake	5/30/2013	19.3	8.63	8.38	6.32	63
Echo Lake	6/25/2013	0.1	22.28	9.06	6.95	64
Echo Lake	6/25/2013	1.0	22.04	9.11	6.95	64
Echo Lake	6/25/2013	2.0	20.85	9.28	6.93	64
Echo Lake	6/25/2013	3.0	19.91	9.39	6.90	63
Echo Lake	6/25/2013	4.0	19.23	9.44	6.85	63
Echo Lake	6/25/2013	4.0	19.18	9.27	6.68	63
Echo Lake	6/25/2013	5.0	18.46	9.52	6.82	65
Echo Lake	6/25/2013	6.0	17.64	9.54	6.75	65
Echo Lake	6/25/2013	7.0	16.79	9.54	6.69	62
Echo Lake	6/25/2013	7.0	16.78	9.53	6.69	62
Echo Lake	6/25/2013	8.0	16.33	9.55	6.64	62
Echo Lake	6/25/2013	9.0	13.94	9.70	6.58	62
Echo Lake	6/25/2013	10.0	12.32	9.42	6.38	62
Echo Lake	6/25/2013	10.0	12.28	9.43	6.39	63
Echo Lake	6/25/2013	11.0	11.67	9.20	6.29	63
Echo Lake	6/25/2013	12.0	11.12	9.06	6.25	63
Echo Lake	6/25/2013	13.0	10.64	8.80	6.18	63
Echo Lake	6/25/2013	14.0	10.63	8.80	6.18	63
Echo Lake	6/25/2013	15.0	10.59	8.77	6.18	65
Echo Lake	6/25/2013	16.0	10.42	8.03	6.18	63
Echo Lake	6/25/2013	16.0	10.43	8.61	6.15	63
Echo Lake	6/25/2013	17.0	10.39	8.55	6.14	63
Echo Lake	6/25/2013	17.9	10.33	8.52	6.14	63
Echo Lake	6/25/2013	18.5	10.22	1.60	6.05	75
Echo Lake	7/22/2013	0.0	24.61	8.62	7.20	65
Echo Lake	7/22/2013	0.5	24.61	8.61	7.18	65
Echo Lake	7/22/2013	1.0	24.60	8.61	7.18	65
Echo Lake	7/22/2013	2.0	24.47	8.60	7.17	65
Echo Lake	7/22/2013	3.0	24.38	8.59	7.16	65
Echo Lake	7/22/2013	3.0	24.40	8.63	6.96	65
Echo Lake	7/22/2013	4.0	24.31	8.60	7.14	65
Echo Lake	7/22/2013	5.0	22.67	8.87	7.03	65
Echo Lake	7/22/2013	6.0	21.38	9.15	6.96	64
Echo Lake	7/22/2013	6.0	21.08	9.20	6.70	64
Echo Lake	7/22/2013	7.0	18.17	9.30	6.66	63
Echo Lake	7/22/2013	8.0	15.54	9.08	6.51	64
Echo Lake	7/22/2013	9.0	13.68	8.75	6.44	64
Echo Lake	7/22/2013	10.0	12.81	7.83	6.24	63
Echo Lake	7/22/2013	10.0	12.75	8.56	6.40	64
Echo Lake	7/22/2013	11.0	11.80	8.27	6.35	64
Echo Lake	7/22/2013	12.0	11.29	7.76	6.27	64
Echo Lake	7/22/2013	13.0	11.12	7.59	6.24	64

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Echo Lake	7/22/2013	14.0	11.04	7.57	6.22	64
Echo Lake	7/22/2013	15.0	10.94	7.47	6.21	64
Echo Lake	7/22/2013	16.0	10.91	7.42	6.18	64
Echo Lake	7/22/2013	17.0	10.87	7.34	6.17	64
Echo Lake	7/22/2013	18.0	10.83	7.26	6.17	63
Echo Lake	7/22/2013	19.0	10.71	0.15	6.01	75
Echo Lake	7/22/2013	19.0	10.73	2.10	6.12	65
Echo Lake	8/27/2013	0.1	23.27	8.73	7.01	66
Echo Lake	8/27/2013	0.5	23.22	8.76	6.99	66
Echo Lake	8/27/2013	1.0	23.13	8.78	6.99	66
Echo Lake	8/27/2013	2.0	22.39	8.92	7.03	66
Echo Lake	8/27/2013	3.0	22.16	8.84	6.95	65
Echo Lake	8/27/2013	3.0	22.16	8.87	6.95	65
Echo Lake	8/27/2013	4.0	22.06	8.84	6.96	65
Echo Lake	8/27/2013	5.0	22.04	8.83	6.95	65
Echo Lake	8/27/2013	5.0	21.66	8.86	6.62	65
Echo Lake	8/27/2013	6.0	21.94	8.78	6.91	65
Echo Lake	8/27/2013	7.0	20.56	7.92	6.60	65
Echo Lake	8/27/2013	8.0	18.71	6.98	6.30	65
Echo Lake	8/27/2013	9.0	16.49	6.61	6.09	65
Echo Lake	8/27/2013	9.0	16.34	6.55	6.08	65
Echo Lake	8/27/2013	10.0	13.55	6.29	6.00	65
Echo Lake	8/27/2013	11.0	12.22	5.69	5.93	64
Echo Lake	8/27/2013	12.0	11.51	4.88	5.86	64
Echo Lake	8/27/2013	13.0	11.29	4.66	5.83	64
Echo Lake	8/27/2013	14.0	11.18	4.64	5.82	64
Echo Lake	8/27/2013	14.0	11.18	4.63	5.82	64
Echo Lake	8/27/2013	15.0	11.09	4.37	5.80	64
Echo Lake	8/27/2013	15.0	11.11	4.33	5.82	64
Echo Lake	8/27/2013	16.0	11.03	4.18	5.79	64
Echo Lake	8/27/2013	17.0	10.99	4.00	5.79	64
Echo Lake	8/27/2013	18.0	10.97	3.92	5.79	64
Echo Lake	8/27/2013	19.0	10.92	2.44	5.80	65
Echo Lake	9/18/2013	0.5	18.62	9.10	6.79	64
Echo Lake	9/18/2013	1.0	18.64	8.98	6.67	64
Echo Lake	9/18/2013	1.0	18.61	9.09	6.79	64
Echo Lake	9/18/2013	2.0	18.56	9.05	6.79	64
Echo Lake	9/18/2013	3.0	18.53	9.01	6.79	64
Echo Lake	9/18/2013	4.0	18.52	9.00	6.78	66
Echo Lake	9/18/2013	5.0	18.52	8.99	6.79	64
Echo Lake	9/18/2013	6.0	18.51	9.00	6.78	64
Echo Lake	9/18/2013	7.0	18.50	9.02	6.79	64
Echo Lake	9/18/2013	7.0	18.47	8.67	6.50	64
Echo Lake	9/18/2013	8.0	18.45	8.90	6.76	64
Echo Lake	9/18/2013	9.0	18.37	8.75	6.71	64
Echo Lake	9/18/2013	10.0	16.45	7.53	6.46	64
Echo Lake	9/18/2013	11.0	12.84	4.86	6.15	65
Echo Lake	9/18/2013	12.0	11.84	4.05	5.97	65
Echo Lake	9/18/2013	12.0	11.77	3.63	5.94	65
Echo Lake	9/18/2013	13.0	11.39	3.40	5.92	65
Echo Lake	9/18/2013	14.0	11.21	3.01	5.90	65
Echo Lake	9/18/2013	15.0	11.09	2.89	5.89	65

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Echo Lake	9/18/2013	16.0	11.00	2.58	5.89	66
Echo Lake	9/18/2013	17.0	10.98	2.48	5.90	66
Echo Lake	9/18/2013	18.0	10.93	2.26	5.90	68
Echo Lake	9/18/2013	19.0	10.89	2.06	5.92	67
Echo Lake	10/22/2013	0.1	14.64	9.70	6.39	63
Echo Lake	10/22/2013	0.5	14.65	9.30	6.52	63
Echo Lake	10/22/2013	1.0	14.64	9.30	6.53	63
Echo Lake	10/22/2013	2.0	14.65	9.30	6.55	63
Echo Lake	10/22/2013	3.0	14.65	9.29	6.56	60
Echo Lake	10/22/2013	4.0	14.64	9.27	6.57	63
Echo Lake	10/22/2013	4.0	14.64	8.96	6.50	63
Echo Lake	10/22/2013	5.0	14.64	9.24	6.59	63
Echo Lake	10/22/2013	6.0	14.64	9.23	6.60	64
Echo Lake	10/22/2013	7.0	14.64	9.23	6.60	63
Echo Lake	10/22/2013	8.0	14.64	9.23	6.61	63
Echo Lake	10/22/2013	8.0	14.50	7.02	6.24	61
Echo Lake	10/22/2013	9.0	14.64	9.21	6.61	63
Echo Lake	10/22/2013	10.0	14.62	9.18	6.61	63
Echo Lake	10/22/2013	11.0	14.62	9.15	6.61	60
Echo Lake	10/22/2013	12.0	14.41	8.67	6.51	64
Echo Lake	10/22/2013	13.0	14.15	7.68	6.39	64
Echo Lake	10/22/2013	14.0	12.56	3.14	5.98	66
Echo Lake	10/22/2013	14.0	12.64	3.44	6.04	66
Echo Lake	10/22/2013	15.0	11.47	1.37	5.91	67
Echo Lake	10/22/2013	16.0	11.19	0.92	5.88	67
Echo Lake	10/22/2013	17.0	10.99	0.66	5.88	68
Echo Lake	10/22/2013	18.0	10.94	0.54	5.88	68
Echo Lake	10/22/2013	19.0	10.81	0.21	5.95	70
Echo Lake	10/22/2013	19.1	10.78	0.14	6.02	79
Hodgdon Pond	5/29/2013	0.0	14.79	9.77	6.16	42
Hodgdon Pond	5/29/2013	0.5	14.80	9.74	6.19	42
Hodgdon Pond	5/29/2013	1.0	14.80	9.73	6.20	42
Hodgdon Pond	5/29/2013	2.0	14.72	9.71	6.19	42
Hodgdon Pond	5/29/2013	3.0	14.47	9.63	6.16	40
Hodgdon Pond	5/29/2013	4.0	13.70	9.47	6.07	42
Hodgdon Pond	5/29/2013	5.0	13.04	9.11	5.89	40
Hodgdon Pond	5/29/2013	5.4	12.89	8.60	5.86	40
Hodgdon Pond	6/20/2013	0.5	20.19	8.78	6.29	42
Hodgdon Pond	6/20/2013	1.0	20.02	8.67	6.21	41
Hodgdon Pond	6/20/2013	1.0	19.97	8.77	6.25	42
Hodgdon Pond	6/20/2013	2.0	19.85	8.75	6.26	42
Hodgdon Pond	6/20/2013	3.0	17.75	7.71	5.89	40
Hodgdon Pond	6/20/2013	3.0	17.57	8.43	5.97	41
Hodgdon Pond	6/20/2013	4.0	14.91	7.12	5.74	41
Hodgdon Pond	6/20/2013	5.0	13.71	5.75	5.61	42
Hodgdon Pond	6/20/2013	5.0	13.65	4.66	5.56	42
Hodgdon Pond	6/20/2013	6.0	12.99	3.71	5.43	43
Hodgdon Pond	6/20/2013	6.0	12.85	1.50	5.67	44
Hodgdon Pond	7/25/2013	0.2	24.14	8.40	6.47	44
Hodgdon Pond	7/25/2013	0.5	24.08	8.38	6.46	44
Hodgdon Pond	7/25/2013	1.0	23.86	8.42	6.37	44
Hodgdon Pond	7/25/2013	1.0	23.81	8.40	6.45	44

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Hodgdon Pond	7/25/2013	2.0	23.63	8.38	6.46	44
Hodgdon Pond	7/25/2013	3.0	21.48	6.49	5.92	44
Hodgdon Pond	7/25/2013	3.0	21.53	5.94	5.83	44
Hodgdon Pond	7/25/2013	4.0	16.26	2.61	5.62	44
Hodgdon Pond	7/25/2013	5.0	14.33	0.19	5.60	46
Hodgdon Pond	7/25/2013	5.0	14.13	0.08	5.65	46
Hodgdon Pond	7/25/2013	5.5	13.75	0.11	5.75	49
Hodgdon Pond	8/26/2013	0.5	22.27	8.19	6.54	43
Hodgdon Pond	8/26/2013	1.0	22.26	8.17	6.31	43
Hodgdon Pond	8/26/2013	1.0	22.27	8.20	6.43	43
Hodgdon Pond	8/26/2013	2.0	22.27	8.22	6.39	43
Hodgdon Pond	8/26/2013	3.0	22.16	7.92	6.29	43
Hodgdon Pond	8/26/2013	3.0	22.17	8.08	6.22	43
Hodgdon Pond	8/26/2013	4.0	18.32	0.75	5.51	43
Hodgdon Pond	8/26/2013	5.0	15.01	0.39	5.98	62
Hodgdon Pond	8/26/2013	5.7	14.32	0.37	6.08	68
Hodgdon Pond	8/26/2013	5.8	14.22	0.36	6.10	70
Hodgdon Pond	9/19/2013	0.1	19.35	8.33	6.06	41
Hodgdon Pond	9/19/2013	0.5	17.92	8.18	5.98	40
Hodgdon Pond	9/19/2013	1.0	17.62	8.06	5.96	40
Hodgdon Pond	9/19/2013	1.0	17.64	8.02	5.98	40
Hodgdon Pond	9/19/2013	2.0	17.44	7.97	5.94	40
Hodgdon Pond	9/19/2013	3.0	17.30	7.77	5.95	40
Hodgdon Pond	9/19/2013	3.0	17.33	7.89	5.93	40
Hodgdon Pond	9/19/2013	4.0	17.10	7.67	5.92	41
Hodgdon Pond	9/19/2013	4.0	17.10	7.63	5.92	41
Hodgdon Pond	9/19/2013	5.0	16.84	5.83	5.84	41
Hodgdon Pond	9/19/2013	5.0	16.89	6.29	5.84	41
Hodgdon Pond	9/19/2013	5.6	16.17	0.71	5.76	48
Hodgdon Pond	9/19/2013	5.6	16.00	0.40	5.79	49
Hodgdon Pond	10/25/2013	0.1	13.15	9.33	6.07	41
Hodgdon Pond	10/25/2013	0.5	13.07	9.03	6.17	41
Hodgdon Pond	10/25/2013	0.5	13.14	8.94	6.23	41
Hodgdon Pond	10/25/2013	1.0	12.84	9.00	6.19	41
Hodgdon Pond	10/25/2013	2.0	12.79	8.95	6.20	41
Hodgdon Pond	10/25/2013	2.0	12.81	8.89	6.21	41
Hodgdon Pond	10/25/2013	3.0	12.76	8.94	6.20	41
Hodgdon Pond	10/25/2013	4.0	12.67	8.47	6.20	41
Hodgdon Pond	10/25/2013	4.0	12.69	8.93	6.20	41
Hodgdon Pond	10/25/2013	5.0	12.66	8.94	6.21	41
Hodgdon Pond	10/25/2013	5.9	12.76	6.65	6.13	42
Hodgdon Pond	10/25/2013	6.0	12.73	2.83	6.05	44
Jordan Pond	5/28/2013	0.0	11.55	11.10	6.94	31
Jordan Pond	5/28/2013	1.0	11.52	11.08	6.92	31
Jordan Pond	5/28/2013	2.0	11.50	11.12	6.88	31
Jordan Pond	5/28/2013	3.0	11.48	11.12	6.88	31
Jordan Pond	5/28/2013	4.0	11.44	11.11	6.88	31
Jordan Pond	5/28/2013	5.0	11.42	11.11	6.87	31
Jordan Pond	5/28/2013	6.0	11.35	11.10	6.87	33
Jordan Pond	5/28/2013	7.0	11.09	11.14	6.87	31
Jordan Pond	5/28/2013	8.0	10.86	11.15	6.85	31
Jordan Pond	5/28/2013	9.0	10.72	11.18	6.84	31

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (μS/cm)
Jordan Pond	5/28/2013	10.0	10.35	11.30	6.83	31
Jordan Pond	5/28/2013	11.0	9.79	11.51	6.82	33
Jordan Pond	5/28/2013	12.0	9.27	11.73	6.79	32
Jordan Pond	5/28/2013	13.0	7.29	12.60	6.70	32
Jordan Pond	5/28/2013	14.0	6.24	13.00	6.64	32
Jordan Pond	5/28/2013	15.0	5.55	13.21	6.62	32
Jordan Pond	5/28/2013	16.0	5.36	13.23	6.61	32
Jordan Pond	5/28/2013	17.0	5.16	13.17	6.59	32
Jordan Pond	5/28/2013	18.0	5.04	13.15	6.58	32
Jordan Pond	5/28/2013	19.0	4.96	13.16	6.57	32
Jordan Pond	5/28/2013	20.0	4.77	13.17	6.56	32
Jordan Pond	5/28/2013	21.0	4.66	13.13	6.55	32
Jordan Pond	5/28/2013	22.0	4.63	13.11	6.56	34
Jordan Pond	5/28/2013	23.0	4.60	13.10	6.57	32
Jordan Pond	5/28/2013	24.0	4.51	13.11	6.57	32
Jordan Pond	5/28/2013	25.0	4.48	13.09	6.57	32
Jordan Pond	5/28/2013	26.0	4.43	13.06	6.56	32
Jordan Pond	5/28/2013	27.0	4.40	13.05	6.57	32
Jordan Pond	5/28/2013	28.0	4.36	13.03	6.55	32
Jordan Pond	5/28/2013	29.0	4.32	13.02	6.55	32
Jordan Pond	5/28/2013	29.9	4.29	12.93	6.55	32
Jordan Pond	6/27/2013	0.0	20.41	8.99	6.99	32
Jordan Pond	6/27/2013	0.5	20.43	8.97	6.99	32
Jordan Pond	6/27/2013	1.0	20.42	8.97	6.98	32
Jordan Pond	6/27/2013	1.0	20.43	8.97	6.99	32
Jordan Pond	6/27/2013	2.0	20.41	8.97	6.98	32
Jordan Pond	6/27/2013	3.0	20.14	9.06	6.75	32
Jordan Pond	6/27/2013	3.0	20.26	9.01	6.98	34
Jordan Pond	6/27/2013	4.0	20.09	9.11	6.96	32
Jordan Pond	6/27/2013	4.0	19.90	9.20	6.97	32
Jordan Pond	6/27/2013	5.0	18.10	9.80	6.96	31
Jordan Pond	6/27/2013	5.0	18.04	9.80	6.95	33
Jordan Pond	6/27/2013	6.0	16.93	10.02	6.94	31
Jordan Pond	6/27/2013	6.0	17.04	9.98	6.93	31
Jordan Pond	6/27/2013	7.0	15.53	10.31	6.92	33
Jordan Pond	6/27/2013	8.0	13.58	10.86	6.90	31
Jordan Pond	6/27/2013	9.0	12.52	11.19	6.86	33
Jordan Pond	6/27/2013	10.0	11.43	11.48	6.78	32
Jordan Pond	6/27/2013	11.0	10.37	11.74	6.75	32
Jordan Pond	6/27/2013	12.0	9.67	11.89	6.70	32
Jordan Pond	6/27/2013	13.0	8.59	12.22	6.65	32
Jordan Pond	6/27/2013	14.0	7.79	12.54	6.61	32
Jordan Pond	6/27/2013	15.0	6.65	12.88	6.58	32
Jordan Pond	6/27/2013	15.0	6.66	12.87	6.59	32
Jordan Pond	6/27/2013	16.0	6.20	13.05	6.55	32
Jordan Pond	6/27/2013	17.0	5.97	13.10	6.54	32
Jordan Pond	6/27/2013	18.0	5.91	13.05	6.61	32
Jordan Pond	6/27/2013	18.0	5.75	13.15	6.53	32
Jordan Pond	6/27/2013	19.0	5.60	13.18	6.54	32
Jordan Pond	6/27/2013	20.0	5.45	13.17	6.52	32
Jordan Pond	6/27/2013	21.0	5.34	13.17	6.52	32
Jordan Pond	6/27/2013	22.0	5.23	13.14	6.52	32

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (μS/cm)
Jordan Pond	6/27/2013	23.0	5.04	13.12	6.51	32
Jordan Pond	6/27/2013	24.0	4.94	13.04	6.50	32
Jordan Pond	6/27/2013	24.0	4.95	13.01	6.49	32
Jordan Pond	6/27/2013	25.0	4.87	12.99	6.48	32
Jordan Pond	6/27/2013	25.0	4.87	12.96	6.48	32
Jordan Pond	6/27/2013	26.0	4.79	12.96	6.48	32
Jordan Pond	6/27/2013	26.0	4.81	12.92	6.49	32
Jordan Pond	6/27/2013	27.0	4.71	12.96	6.48	32
Jordan Pond	6/27/2013	28.0	4.68	12.94	6.48	32
Jordan Pond	6/27/2013	29.0	4.63	12.88	6.48	32
Jordan Pond	6/27/2013	30.0	4.61	12.86	6.47	32
Jordan Pond	7/29/2013	0.5	22.02	8.74	7.15	32
Jordan Pond	7/29/2013	1.0	21.91	8.74	7.13	32
Jordan Pond	7/29/2013	2.0	21.83	8.74	7.12	32
Jordan Pond	7/29/2013	3.0	21.80	8.74	7.11	32
Jordan Pond	7/29/2013	4.0	21.78	8.75	7.10	32
Jordan Pond	7/29/2013	4.0	21.76	8.54	6.84	32
Jordan Pond	7/29/2013	5.0	21.76	8.71	7.09	32
Jordan Pond	7/29/2013	6.0	21.48	8.83	7.08	32
Jordan Pond	7/29/2013	6.0	21.49	8.85	7.08	32
Jordan Pond	7/29/2013	7.0	21.11	8.93	7.06	32
Jordan Pond	7/29/2013	8.0	18.40	10.59	7.05	33
Jordan Pond	7/29/2013	8.0	18.36	10.63	7.02	33
Jordan Pond	7/29/2013	9.0	14.00	11.59	6.93	32
Jordan Pond	7/29/2013	10.0	12.09	11.96	6.83	32
Jordan Pond	7/29/2013	11.0	10.94	12.12	6.78	32
Jordan Pond	7/29/2013	12.0	9.99	12.28	6.73	32
Jordan Pond	7/29/2013	13.0	8.66	12.59	6.66	32
Jordan Pond	7/29/2013	14.0	7.66	12.83	6.62	32
Jordan Pond	7/29/2013	15.0	7.08	13.03	6.58	32
Jordan Pond	7/29/2013	16.0	6.26	13.22	6.53	32
Jordan Pond	7/29/2013	17.0	5.81	13.18	6.50	32
Jordan Pond	7/29/2013	17.0	5.55	13.04	6.52	32
Jordan Pond	7/29/2013	18.0	5.54	13.12	6.46	32
Jordan Pond	7/29/2013	19.0	5.41	13.13	6.46	32
Jordan Pond	7/29/2013	20.0	5.29	13.03	6.44	32
Jordan Pond	7/29/2013	21.0	5.22	12.89	6.43	32
Jordan Pond	7/29/2013	22.0	5.11	12.92	6.43	32
Jordan Pond	7/29/2013	23.0	4.97	12.89	6.42	33
Jordan Pond	7/29/2013	24.0	4.89	12.92	6.41	32
Jordan Pond	7/29/2013	25.0	4.78	12.90	6.40	32
Jordan Pond	7/29/2013	25.0	4.69	12.76	6.40	32
Jordan Pond	7/29/2013	26.0	4.68	12.86	6.39	33
Jordan Pond	7/29/2013	27.0	4.58	12.76	6.37	32
Jordan Pond	7/29/2013	28.0	4.54	12.71	6.36	32
Jordan Pond	7/29/2013	29.0	4.44	12.61	6.33	33
Jordan Pond	7/29/2013	30.0	4.40	12.53	6.32	33
Jordan Pond	8/19/2013	0.1	21.46	8.91	7.13	32
Jordan Pond	8/19/2013	0.1	21.46	8.93	7.30	32
Jordan Pond	8/19/2013	0.5	21.25	8.97	7.12	34
Jordan Pond	8/19/2013	1.0	21.05	9.05	7.11	32
Jordan Pond	8/19/2013	2.0	20.96	8.98	7.10	32

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (μS/cm)
Jordan Pond	8/19/2013	3.0	20.89	8.96	7.08	32
Jordan Pond	8/19/2013	4.0	20.85	8.94	7.08	34
Jordan Pond	8/19/2013	5.0	20.80	8.88	6.83	32
Jordan Pond	8/19/2013	5.0	20.82	8.97	7.06	32
Jordan Pond	8/19/2013	6.0	20.54	9.02	7.06	32
Jordan Pond	8/19/2013	7.0	20.28	9.10	7.06	32
Jordan Pond	8/19/2013	8.0	20.09	9.13	7.05	32
Jordan Pond	8/19/2013	9.0	18.38	10.00	7.01	32
Jordan Pond	8/19/2013	10.0	13.17	12.02	6.99	32
Jordan Pond	8/19/2013	11.0	10.90	12.38	6.72	34
Jordan Pond	8/19/2013	12.0	9.98	12.50	6.62	32
Jordan Pond	8/19/2013	13.0	9.08	12.60	6.55	32
Jordan Pond	8/19/2013	14.0	7.97	12.84	6.49	32
Jordan Pond	8/19/2013	15.0	7.66	12.88	6.57	32
Jordan Pond	8/19/2013	15.0	7.34	12.97	6.44	32
Jordan Pond	8/19/2013	16.0	6.46	13.17	6.41	32
Jordan Pond	8/19/2013	17.0	5.99	13.25	6.38	32
Jordan Pond	8/19/2013	18.0	5.79	13.26	6.36	32
Jordan Pond	8/19/2013	19.0	5.55	13.26	6.36	32
Jordan Pond	8/19/2013	20.0	5.53	13.16	6.47	32
Jordan Pond	8/19/2013	20.0	5.40	13.16	6.34	32
Jordan Pond	8/19/2013	21.0	5.32	13.06	6.34	32
Jordan Pond	8/19/2013	22.0	5.23	12.93	6.32	32
Jordan Pond	8/19/2013	23.0	5.16	12.81	6.31	32
Jordan Pond	8/19/2013	24.0	5.00	12.81	6.31	35
Jordan Pond	8/19/2013	25.0	4.83	12.75	6.29	32
Jordan Pond	8/19/2013	26.0	4.79	12.71	6.27	32
Jordan Pond	8/19/2013	27.0	4.75	12.67	6.27	32
Jordan Pond	8/19/2013	28.0	4.70	12.65	6.27	33
Jordan Pond	8/19/2013	29.0	4.57	12.56	6.27	33
Jordan Pond	8/19/2013	30.0	4.53	12.49	6.25	33
Jordan Pond	9/30/2013	0.1	16.08	10.82	7.37	32
Jordan Pond	9/30/2013	0.1	16.18	10.80	7.25	32
Jordan Pond	9/30/2013	0.5	15.88	10.84	7.23	32
Jordan Pond	9/30/2013	1.0	15.75	10.84	7.20	32
Jordan Pond	9/30/2013	2.0	15.63	10.84	7.18	32
Jordan Pond	9/30/2013	3.0	15.59	10.83	7.16	32
Jordan Pond	9/30/2013	3.0	15.59	10.83	7.15	32
Jordan Pond	9/30/2013	3.0	15.63	11.04	6.94	32
Jordan Pond	9/30/2013	4.0	15.56	10.81	7.13	32
Jordan Pond	9/30/2013	5.0	15.52	10.83	7.11	32
Jordan Pond	9/30/2013	6.0	15.47	10.83	7.11	32
Jordan Pond	9/30/2013	6.0	15.46	10.82	7.11	32
Jordan Pond	9/30/2013	7.0	15.40	10.84	7.10	32
Jordan Pond	9/30/2013	7.0	15.40	11.03	6.87	32
Jordan Pond	9/30/2013	8.0	15.31	10.83	7.09	32
Jordan Pond	9/30/2013	9.0	15.21	10.81	7.07	32
Jordan Pond	9/30/2013	9.0	15.23	11.07	6.81	32
Jordan Pond	9/30/2013	10.0	15.18	10.81	7.06	32
Jordan Pond	9/30/2013	11.0	15.01	10.86	7.04	32
Jordan Pond	9/30/2013	12.0	14.66	10.95	7.02	32
Jordan Pond	9/30/2013	13.0	11.77	12.15	7.00	33

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Jordan Pond	9/30/2013	14.0	8.68	13.25	6.78	33
Jordan Pond	9/30/2013	15.0	7.64	13.34	6.66	33
Jordan Pond	9/30/2013	16.0	7.02	13.45	6.61	33
Jordan Pond	9/30/2013	17.0	6.34	13.53	6.57	33
Jordan Pond	9/30/2013	18.0	5.89	13.49	6.55	33
Jordan Pond	9/30/2013	19.0	5.54	13.40	6.50	33
Jordan Pond	9/30/2013	20.0	5.39	13.25	6.45	33
Jordan Pond	9/30/2013	21.0	5.29	13.17	6.41	33
Jordan Pond	9/30/2013	22.0	5.20	13.02	6.38	33
Jordan Pond	9/30/2013	23.0	5.09	13.06	6.37	33
Jordan Pond	9/30/2013	24.0	4.95	13.08	6.36	33
Jordan Pond	9/30/2013	25.0	4.82	12.99	6.34	33
Jordan Pond	9/30/2013	26.0	4.75	12.96	6.33	33
Jordan Pond	9/30/2013	27.0	4.67	12.89	6.30	33
Jordan Pond	9/30/2013	28.0	4.62	12.84	6.29	33
Jordan Pond	9/30/2013	29.0	4.59	12.78	6.28	33
Jordan Pond	9/30/2013	30.0	4.57	12.76	6.27	33
Jordan Pond	10/23/2013	0.1	13.41	10.02	7.19	32
Jordan Pond	10/23/2013	0.5	13.43	9.98	7.18	32
Jordan Pond	10/23/2013	1.0	13.43	9.99	7.14	32
Jordan Pond	10/23/2013	2.0	13.43	9.97	7.11	32
Jordan Pond	10/23/2013	3.0	13.43	9.95	7.09	32
Jordan Pond	10/23/2013	4.0	13.42	10.00	7.07	32
Jordan Pond	10/23/2013	5.0	13.42	9.98	7.05	32
Jordan Pond	10/23/2013	5.0	13.42	9.86	6.79	32
Jordan Pond	10/23/2013	6.0	13.42	9.93	7.04	32
Jordan Pond	10/23/2013	7.0	13.42	9.94	7.02	32
Jordan Pond	10/23/2013	8.0	13.41	9.92	7.01	32
Jordan Pond	10/23/2013	9.0	13.41	9.90	7.00	32
Jordan Pond	10/23/2013	10.0	13.41	9.88	6.99	35
Jordan Pond	10/23/2013	10.0	13.38	9.86	6.68	32
Jordan Pond	10/23/2013	11.0	13.40	9.90	6.98	32
Jordan Pond	10/23/2013	12.0	13.40	9.89	6.97	35
Jordan Pond	10/23/2013	13.0	13.37	9.89	6.97	32
Jordan Pond	10/23/2013	14.0	12.34	10.36	6.93	32
Jordan Pond	10/23/2013	15.0	9.44	11.75	6.85	33
Jordan Pond	10/23/2013	16.0	7.69	12.31	6.76	33
Jordan Pond	10/23/2013	17.0	6.49	12.40	6.69	33
Jordan Pond	10/23/2013	18.0	5.94	12.39	6.63	32
Jordan Pond	10/23/2013	19.0	5.63	12.44	6.61	32
Jordan Pond	10/23/2013	19.0	5.57	12.32	6.40	36
Jordan Pond	10/23/2013	20.0	5.44	12.39	6.57	32
Jordan Pond	10/23/2013	21.0	5.30	12.26	6.54	33
Jordan Pond	10/23/2013	22.0	5.14	12.07	6.50	33
Jordan Pond	10/23/2013	23.0	5.05	11.91	6.46	33
Jordan Pond	10/23/2013	24.0	4.94	11.82	6.42	33
Jordan Pond	10/23/2013	25.0	4.87	11.75	6.40	33
Jordan Pond	10/23/2013	26.0	4.78	11.65	6.37	33
Jordan Pond	10/23/2013	27.0	4.71	11.53	6.34	33
Jordan Pond	10/23/2013	28.0	4.67	11.42	6.31	33
Jordan Pond	10/23/2013	29.0	4.64	11.36	6.29	33
Jordan Pond	10/23/2013	30.0	4.58	11.35	6.28	33

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Lower Hadlock	5/23/2013	0.0	14.59	9.93	6.43	50
Lower Hadlock	5/23/2013	0.5	14.53	9.93	6.42	50
Lower Hadlock	5/23/2013	1.0	14.37	9.91	6.42	50
Lower Hadlock	5/23/2013	2.0	14.24	9.90	6.42	48
Lower Hadlock	5/23/2013	3.0	14.07	9.90	6.40	50
Lower Hadlock	5/23/2013	4.0	13.85	9.92	6.39	50
Lower Hadlock	5/23/2013	5.0	11.58	11.28	6.25	48
Lower Hadlock	5/23/2013	6.0	9.26	11.59	6.11	48
Lower Hadlock	5/23/2013	7.0	7.78	10.74	5.81	47
Lower Hadlock	5/23/2013	8.0	7.17	10.52	5.76	47
Lower Hadlock	5/23/2013	9.0	6.65	10.04	5.71	47
Lower Hadlock	5/23/2013	10.0	6.35	9.75	5.68	45
Lower Hadlock	5/23/2013	11.0	6.13	9.11	5.65	48
Lower Hadlock	5/23/2013	12.1	5.91	8.05	5.60	48
Lower Hadlock	5/23/2013	12.5	5.84	5.96	5.76	49
Lower Hadlock	6/19/2013	0.0	20.65	9.07	6.31	43
Lower Hadlock	6/19/2013	0.5	20.63	9.06	6.31	44
Lower Hadlock	6/19/2013	1.0	20.59	9.08	6.30	43
Lower Hadlock	6/19/2013	2.0	20.59	8.83	6.18	44
Lower Hadlock	6/19/2013	2.0	20.51	9.09	6.29	43
Lower Hadlock	6/19/2013	3.0	16.54	9.75	6.15	41
Lower Hadlock	6/19/2013	4.0	14.06	9.90	5.98	45
Lower Hadlock	6/19/2013	5.0	12.04	9.81	5.89	46
Lower Hadlock	6/19/2013	5.0	12.41	9.51	5.93	46
Lower Hadlock	6/19/2013	6.0	10.29	10.07	5.84	48
Lower Hadlock	6/19/2013	7.0	8.40	9.46	5.69	48
Lower Hadlock	6/19/2013	8.0	7.51	9.04	5.64	48
Lower Hadlock	6/19/2013	9.0	7.07	7.61	5.63	48
Lower Hadlock	6/19/2013	9.0	6.87	8.47	5.58	46
Lower Hadlock	6/19/2013	10.0	6.64	7.67	5.54	48
Lower Hadlock	6/19/2013	11.0	6.41	6.72	5.50	46
Lower Hadlock	6/19/2013	12.0	6.38	6.45	5.49	46
Lower Hadlock	7/24/2013	0.2	25.18	8.35	6.48	45
Lower Hadlock	7/24/2013	0.5	24.81	8.34	6.47	45
Lower Hadlock	7/24/2013	1.0	24.36	8.36	6.46	45
Lower Hadlock	7/24/2013	2.0	24.10	8.44	6.47	45
Lower Hadlock	7/24/2013	2.0	24.10	8.25	6.15	44
Lower Hadlock	7/24/2013	3.0	23.38	9.33	6.33	44
Lower Hadlock	7/24/2013	4.0	17.31	9.68	5.96	46
Lower Hadlock	7/24/2013	4.0	17.28	9.65	5.93	46
Lower Hadlock	7/24/2013	5.0	13.14	9.74	5.82	47
Lower Hadlock	7/24/2013	5.0	13.47	8.53	5.80	46
Lower Hadlock	7/24/2013	6.0	10.40	9.11	5.76	49
Lower Hadlock	7/24/2013	7.0	8.81	8.47	5.78	49
Lower Hadlock	7/24/2013	8.0	7.94	8.00	5.77	49
Lower Hadlock	7/24/2013	8.0	7.96	6.99	5.69	49
Lower Hadlock	7/24/2013	8.0	7.97	6.60	5.69	49
Lower Hadlock	7/24/2013	9.0	7.32	7.48	5.74	49
Lower Hadlock	7/24/2013	10.0	6.96	6.41	5.71	49
Lower Hadlock	7/24/2013	11.0	6.66	4.95	5.67	49
Lower Hadlock	7/24/2013	12.0	6.49	3.21	5.68	51
Lower Hadlock	7/24/2013	12.0	6.49	2.01	5.73	51

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Lower Hadlock	8/21/2013	0.1	24.60	8.97	7.29	51
Lower Hadlock	8/21/2013	0.5	24.45	8.97	7.06	50
Lower Hadlock	8/21/2013	1.0	23.64	8.95	6.84	50
Lower Hadlock	8/21/2013	2.0	22.95	8.97	6.64	49
Lower Hadlock	8/21/2013	3.0	22.13	9.00	6.52	47
Lower Hadlock	8/21/2013	3.0	22.25	7.98	5.66	40
Lower Hadlock	8/21/2013	3.0	22.12	8.99	6.51	47
Lower Hadlock	8/21/2013	4.0	20.11	8.59	6.07	47
Lower Hadlock	8/21/2013	5.0	15.63	8.05	5.65	49
Lower Hadlock	8/21/2013	6.0	11.34	7.39	5.51	50
Lower Hadlock	8/21/2013	7.0	9.36	6.14	5.42	50
Lower Hadlock	8/21/2013	8.0	8.46	6.04	5.39	49
Lower Hadlock	8/21/2013	9.0	7.43	4.85	5.33	50
Lower Hadlock	8/21/2013	9.0	7.34	4.33	5.42	50
Lower Hadlock	8/21/2013	10.0	7.07	3.75	5.32	50
Lower Hadlock	8/21/2013	11.0	6.90	2.82	5.33	51
Lower Hadlock	8/21/2013	11.3	6.77	1.79	5.39	52
Lower Hadlock	9/16/2013	0.0	18.79	8.95	6.48	42
Lower Hadlock	9/16/2013	0.5	18.80	8.95	6.48	42
Lower Hadlock	9/16/2013	1.0	18.79	8.95	6.47	42
Lower Hadlock	9/16/2013	2.0	18.79	8.79	6.30	42
Lower Hadlock	9/16/2013	2.0	18.80	8.93	6.47	40
Lower Hadlock	9/16/2013	3.0	18.80	8.93	6.47	42
Lower Hadlock	9/16/2013	4.0	18.79	8.93	6.47	40
Lower Hadlock	9/16/2013	5.0	17.88	7.81	6.15	42
Lower Hadlock	9/16/2013	6.0	13.16	6.27	5.68	49
Lower Hadlock	9/16/2013	6.0	12.85	6.80	5.76	50
Lower Hadlock	9/16/2013	7.0	10.33	5.01	5.65	48
Lower Hadlock	9/16/2013	8.0	8.79	4.18	5.62	49
Lower Hadlock	9/16/2013	8.0	8.83	4.80	5.61	50
Lower Hadlock	9/16/2013	9.0	7.88	3.83	5.56	50
Lower Hadlock	9/16/2013	10.0	7.36	2.70	5.55	50
Lower Hadlock	9/16/2013	11.0	7.05	1.58	5.60	52
Lower Hadlock	9/16/2013	12.0	6.80	0.27	5.69	54
Lower Hadlock	10/25/2013	0.1	13.02	9.54	6.36	44
Lower Hadlock	10/25/2013	0.5	12.99	9.51	6.37	42
Lower Hadlock	10/25/2013	1.0	12.79	9.52	6.36	44
Lower Hadlock	10/25/2013	2.0	12.75	9.54	6.36	44
Lower Hadlock	10/25/2013	2.0	12.77	9.38	6.31	44
Lower Hadlock	10/25/2013	3.0	12.71	9.55	6.37	44
Lower Hadlock	10/25/2013	4.0	12.64	9.56	6.35	44
Lower Hadlock	10/25/2013	5.0	12.60	9.55	6.36	44
Lower Hadlock	10/25/2013	6.0	12.57	9.53	6.34	44
Lower Hadlock	10/25/2013	7.0	12.40	9.18	6.28	44
Lower Hadlock	10/25/2013	7.0	12.40	7.98	6.11	42
Lower Hadlock	10/25/2013	8.0	9.19	4.48	5.76	50
Lower Hadlock	10/25/2013	9.0	8.03	1.63	5.59	50
Lower Hadlock	10/25/2013	10.0	7.28	0.15	5.86	53
Lower Hadlock	10/25/2013	10.0	7.29	0.53	5.68	54
Lower Hadlock	10/25/2013	11.0	6.98	0.25	5.93	59
Lower Hadlock	10/25/2013	11.6	7.01	0.16	6.03	61
Long Pond (MDI)	5/30/2013	0.0	14.41	10.68	6.72	42

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Long Pond (MDI)	5/30/2013	0.5	13.92	10.67	6.73	42
Long Pond (MDI)	5/30/2013	1.0	13.65	10.74	6.71	42
Long Pond (MDI)	5/30/2013	2.0	13.16	10.79	6.71	42
Long Pond (MDI)	5/30/2013	3.0	12.79	10.80	6.71	42
Long Pond (MDI)	5/30/2013	4.0	12.54	10.80	6.70	42
Long Pond (MDI)	5/30/2013	5.0	12.47	10.79	6.70	42
Long Pond (MDI)	5/30/2013	6.0	12.45	10.78	6.70	42
Long Pond (MDI)	5/30/2013	7.0	12.43	10.75	6.70	42
Long Pond (MDI)	5/30/2013	8.0	12.41	10.76	6.69	42
Long Pond (MDI)	5/30/2013	9.0	12.24	10.77	6.68	42
Long Pond (MDI)	5/30/2013	10.0	12.15	10.79	6.67	42
Long Pond (MDI)	5/30/2013	11.0	12.09	10.78	6.66	42
Long Pond (MDI)	5/30/2013	12.0	12.04	10.80	6.65	42
Long Pond (MDI)	5/30/2013	13.0	12.01	10.79	6.65	42
Long Pond (MDI)	5/30/2013	14.0	11.91	10.78	6.63	42
Long Pond (MDI)	5/30/2013	15.0	11.49	10.81	6.60	43
Long Pond (MDI)	5/30/2013	16.0	10.13	11.13	6.54	43
Long Pond (MDI)	5/30/2013	17.0	8.44	11.70	6.47	43
Long Pond (MDI)	5/30/2013	18.0	7.88	11.84	6.43	43
Long Pond (MDI)	5/30/2013	19.0	7.67	11.90	6.41	43
Long Pond (MDI)	5/30/2013	20.0	7.37	11.97	6.41	43
Long Pond (MDI)	5/30/2013	21.0	7.08	12.00	6.38	43
Long Pond (MDI)	5/30/2013	22.0	6.99	12.01	6.39	43
Long Pond (MDI)	5/30/2013	23.0	6.93	11.97	6.38	43
Long Pond (MDI)	5/30/2013	24.0	6.89	11.97	6.38	43
Long Pond (MDI)	5/30/2013	25.0	6.85	11.95	6.38	43
Long Pond (MDI)	5/30/2013	26.0	6.83	11.94	6.37	43
Long Pond (MDI)	5/30/2013	27.0	6.81	11.91	6.37	43
Long Pond (MDI)	5/30/2013	28.0	6.79	11.86	6.36	43
Long Pond (MDI)	5/30/2013	29.0	6.77	11.78	6.35	43
Long Pond (MDI)	5/30/2013	30.0	6.76	11.74	6.34	43
Long Pond (MDI)	6/25/2013	0.0	22.74	9.07	6.93	45
Long Pond (MDI)	6/25/2013	0.5	22.65	9.08	6.90	43
Long Pond (MDI)	6/25/2013	1.0	22.56	9.09	6.90	45
Long Pond (MDI)	6/25/2013	2.0	21.87	9.18	6.89	43
Long Pond (MDI)	6/25/2013	3.0	19.95	9.50	6.72	43
Long Pond (MDI)	6/25/2013	4.0	18.97	9.57	6.62	43
Long Pond (MDI)	6/25/2013	5.0	18.18	9.63	6.61	43
Long Pond (MDI)	6/25/2013	6.0	16.84	9.69	6.50	43
Long Pond (MDI)	6/25/2013	7.0	16.45	9.70	6.45	42
Long Pond (MDI)	6/25/2013	8.0	15.73	9.78	6.43	43
Long Pond (MDI)	6/25/2013	9.0	15.26	9.83	6.40	42
Long Pond (MDI)	6/25/2013	10.0	14.47	9.95	6.36	43
Long Pond (MDI)	6/25/2013	11.0	13.79	10.02	6.33	43
Long Pond (MDI)	6/25/2013	12.0	12.74	10.08	6.40	43
Long Pond (MDI)	6/25/2013	12.0	13.31	10.02	6.29	43
Long Pond (MDI)	6/25/2013	13.0	11.76	10.31	6.25	43
Long Pond (MDI)	6/25/2013	14.0	10.81	10.60	6.23	43
Long Pond (MDI)	6/25/2013	15.0	10.35	10.75	6.20	43
Long Pond (MDI)	6/25/2013	17.0	9.15	11.05	6.18	43
Long Pond (MDI)	6/25/2013	18.0	8.79	11.14	6.15	43
Long Pond (MDI)	6/25/2013	19.0	8.63	11.13	6.15	43

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Long Pond (MDI)	6/25/2013	20.0	8.55	11.17	6.14	43
Long Pond (MDI)	6/25/2013	20.0	8.50	11.15	6.25	43
Long Pond (MDI)	6/25/2013	21.0	8.48	11.19	6.15	43
Long Pond (MDI)	6/25/2013	22.0	8.27	11.27	6.14	43
Long Pond (MDI)	6/25/2013	23.0	8.11	11.31	6.15	43
Long Pond (MDI)	6/25/2013	24.0	8.02	11.30	6.14	43
Long Pond (MDI)	6/25/2013	25.0	7.71	11.21	6.21	43
Long Pond (MDI)	6/25/2013	25.0	7.86	11.29	6.15	43
Long Pond (MDI)	6/25/2013	26.0	7.63	11.23	6.12	43
Long Pond (MDI)	6/25/2013	27.0	7.53	11.25	6.13	43
Long Pond (MDI)	6/25/2013	28.0	7.42	11.15	6.12	43
Long Pond (MDI)	6/25/2013	29.0	7.35	11.05	6.12	43
Long Pond (MDI)	6/25/2013	30.0	7.33	11.03	6.12	43
Long Pond (MDI)	7/22/2013	0.5	24.24	8.59	7.14	44
Long Pond (MDI)	7/22/2013	1.0	24.19	8.59	7.10	44
Long Pond (MDI)	7/22/2013	2.0	24.13	8.59	7.08	44
Long Pond (MDI)	7/22/2013	3.0	23.79	8.61	7.06	44
Long Pond (MDI)	7/22/2013	4.0	23.32	8.65	7.03	44
Long Pond (MDI)	7/22/2013	5.0	22.89	8.67	7.00	44
Long Pond (MDI)	7/22/2013	6.0	20.31	9.32	6.95	44
Long Pond (MDI)	7/22/2013	7.0	18.15	9.61	6.83	43
Long Pond (MDI)	7/22/2013	8.0	15.74	9.10	6.54	43
Long Pond (MDI)	7/22/2013	9.0	14.28	9.25	6.43	43
Long Pond (MDI)	7/22/2013	9.0	14.61	9.20	6.28	43
Long Pond (MDI)	7/22/2013	10.0	13.96	9.26	6.37	43
Long Pond (MDI)	7/22/2013	11.0	13.62	9.30	6.33	43
Long Pond (MDI)	7/22/2013	12.0	13.03	9.48	6.31	43
Long Pond (MDI)	7/22/2013	13.0	12.38	9.65	6.31	43
Long Pond (MDI)	7/22/2013	14.0	11.65	9.85	6.30	43
Long Pond (MDI)	7/22/2013	15.0	11.13	10.03	6.29	43
Long Pond (MDI)	7/22/2013	16.0	10.70	10.19	6.28	43
Long Pond (MDI)	7/22/2013	17.0	10.17	10.33	6.28	43
Long Pond (MDI)	7/22/2013	18.0	9.68	10.49	6.27	43
Long Pond (MDI)	7/22/2013	19.0	9.20	10.65	6.27	43
Long Pond (MDI)	7/22/2013	19.0	9.23	10.66	6.26	43
Long Pond (MDI)	7/22/2013	20.0	8.81	10.78	6.26	43
Long Pond (MDI)	7/22/2013	21.0	8.57	10.81	6.26	43
Long Pond (MDI)	7/22/2013	22.0	8.41	10.82	6.25	43
Long Pond (MDI)	7/22/2013	23.0	8.25	10.76	6.24	43
Long Pond (MDI)	7/22/2013	24.0	8.13	10.81	6.23	43
Long Pond (MDI)	7/22/2013	25.0	8.04	10.84	6.23	43
Long Pond (MDI)	7/22/2013	26.0	7.96	10.84	6.23	43
Long Pond (MDI)	7/22/2013	26.0	7.98	10.82	6.23	43
Long Pond (MDI)	7/22/2013	27.0	7.92	10.83	6.22	43
Long Pond (MDI)	7/22/2013	28.0	7.88	10.79	6.22	43
Long Pond (MDI)	7/22/2013	29.0	7.83	10.75	6.21	43
Long Pond (MDI)	7/22/2013	30.0	7.79	10.71	6.20	43
Long Pond (MDI)	8/27/2013	0.1	22.75	8.63	7.38	46
Long Pond (MDI)	8/27/2013	0.5	22.47	8.72	7.16	45
Long Pond (MDI)	8/27/2013	1.0	22.25	8.73	7.00	45
Long Pond (MDI)	8/27/2013	2.0	22.15	8.76	6.89	45
Long Pond (MDI)	8/27/2013	2.0	20.85	9.23	6.43	44

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (μS/cm)
Long Pond (MDI)	8/27/2013	3.0	22.04	8.81	6.85	45
Long Pond (MDI)	8/27/2013	4.0	21.92	8.71	6.79	45
Long Pond (MDI)	8/27/2013	5.0	21.71	8.69	6.73	45
Long Pond (MDI)	8/27/2013	6.0	21.53	8.67	6.69	45
Long Pond (MDI)	8/27/2013	7.0	21.38	8.63	6.63	45
Long Pond (MDI)	8/27/2013	8.0	21.23	8.45	6.56	45
Long Pond (MDI)	8/27/2013	9.0	17.87	7.66	6.26	44
Long Pond (MDI)	8/27/2013	10.0	15.66	7.53	6.02	44
Long Pond (MDI)	8/27/2013	11.0	14.38	7.58	5.96	44
Long Pond (MDI)	8/27/2013	12.0	13.36	7.90	5.93	44
Long Pond (MDI)	8/27/2013	13.0	12.50	8.07	5.92	44
Long Pond (MDI)	8/27/2013	13.0	12.50	8.07	5.92	44
Long Pond (MDI)	8/27/2013	14.0	11.81	8.39	5.91	44
Long Pond (MDI)	8/27/2013	15.0	11.24	8.55	5.91	44
Long Pond (MDI)	8/27/2013	15.0	10.82	8.80	5.97	43
Long Pond (MDI)	8/27/2013	16.0	10.82	8.72	5.90	44
Long Pond (MDI)	8/27/2013	17.0	10.36	8.91	5.91	44
Long Pond (MDI)	8/27/2013	18.0	9.96	9.01	5.91	44
Long Pond (MDI)	8/27/2013	19.0	9.49	9.24	5.92	44
Long Pond (MDI)	8/27/2013	19.0	8.81	9.40	5.93	44
Long Pond (MDI)	8/27/2013	20.0	9.01	9.38	5.92	44
Long Pond (MDI)	8/27/2013	21.0	8.67	9.44	5.92	44
Long Pond (MDI)	8/27/2013	22.0	8.45	9.48	5.92	44
Long Pond (MDI)	8/27/2013	23.0	8.24	9.21	5.92	44
Long Pond (MDI)	8/27/2013	24.0	8.17	9.20	5.91	44
Long Pond (MDI)	8/27/2013	25.0	8.10	9.24	5.90	44
Long Pond (MDI)	8/27/2013	26.0	8.07	9.18	5.89	44
Long Pond (MDI)	8/27/2013	27.0	8.03	9.08	5.88	44
Long Pond (MDI)	8/27/2013	28.0	8.05	9.12	5.87	44
Long Pond (MDI)	8/27/2013	29.0	8.03	9.09	5.87	44
Long Pond (MDI)	8/27/2013	30.0	8.00	9.01	5.86	44
Long Pond (MDI)	9/18/2013	0.1	19.45	9.04	6.68	43
Long Pond (MDI)	9/18/2013	0.5	19.04	9.06	6.69	43
Long Pond (MDI)	9/18/2013	1.0	18.86	9.06	6.69	43
Long Pond (MDI)	9/18/2013	2.0	18.68	9.08	6.69	43
Long Pond (MDI)	9/18/2013	3.0	18.67	9.08	6.70	43
Long Pond (MDI)	9/18/2013	4.0	18.56	9.08	6.69	43
Long Pond (MDI)	9/18/2013	5.0	18.53	9.08	6.60	43
Long Pond (MDI)	9/18/2013	5.1	18.52	9.06	6.69	43
Long Pond (MDI)	9/18/2013	6.0	18.47	9.04	6.68	43
Long Pond (MDI)	9/18/2013	7.1	18.45	9.00	6.68	43
Long Pond (MDI)	9/18/2013	8.0	18.44	8.99	6.67	43
Long Pond (MDI)	9/18/2013	9.1	18.44	8.98	6.67	43
Long Pond (MDI)	9/18/2013	10.0	18.44	8.98	6.67	43
Long Pond (MDI)	9/18/2013	11.0	18.40	8.80	6.41	43
Long Pond (MDI)	9/18/2013	11.0	18.41	8.97	6.67	43
Long Pond (MDI)	9/18/2013	12.0	16.44	8.15	6.40	44
Long Pond (MDI)	9/18/2013	13.0	14.11	7.46	6.13	44
Long Pond (MDI)	9/18/2013	14.0	12.78	7.56	6.07	44
Long Pond (MDI)	9/18/2013	15.0	10.79	8.13	6.06	44
Long Pond (MDI)	9/18/2013	16.0	9.64	8.90	6.06	44
Long Pond (MDI)	9/18/2013	17.0	9.21	9.09	6.06	44

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Long Pond (MDI)	9/18/2013	18.0	8.86	9.26	6.06	44
Long Pond (MDI)	9/18/2013	19.0	8.66	9.25	6.04	44
Long Pond (MDI)	9/18/2013	20.0	8.59	9.29	6.04	44
Long Pond (MDI)	9/18/2013	21.0	8.46	9.21	6.03	44
Long Pond (MDI)	9/18/2013	22.0	8.35	9.25	6.03	44
Long Pond (MDI)	9/18/2013	23.0	8.29	9.16	6.02	44
Long Pond (MDI)	9/18/2013	24.0	8.22	9.02	6.00	44
Long Pond (MDI)	9/18/2013	24.1	8.22	9.07	6.01	44
Long Pond (MDI)	9/18/2013	25.0	8.17	9.00	6.00	44
Long Pond (MDI)	9/18/2013	26.0	8.13	8.95	5.99	44
Long Pond (MDI)	9/18/2013	27.0	8.09	8.85	5.99	44
Long Pond (MDI)	9/18/2013	28.0	8.06	8.80	5.97	44
Long Pond (MDI)	9/18/2013	29.0	8.04	8.73	5.96	44
Long Pond (MDI)	9/18/2013	30.0	8.02	8.60	5.95	44
Long Pond (MDI)	10/29/2013	0.5	12.73	9.62	6.25	41
Long Pond (MDI)	10/29/2013	1.0	12.73	9.60	6.29	43
Long Pond (MDI)	10/29/2013	2.0	12.72	9.60	6.32	43
Long Pond (MDI)	10/29/2013	3.0	12.69	9.62	6.34	43
Long Pond (MDI)	10/29/2013	4.0	12.69	9.59	6.35	43
Long Pond (MDI)	10/29/2013	5.0	12.68	9.60	6.35	43
Long Pond (MDI)	10/29/2013	6.0	12.67	9.59	6.37	43
Long Pond (MDI)	10/29/2013	6.0	12.67	9.56	6.41	43
Long Pond (MDI)	10/29/2013	7.0	12.67	9.59	6.38	43
Long Pond (MDI)	10/29/2013	8.0	12.67	9.57	6.40	43
Long Pond (MDI)	10/29/2013	9.0	12.66	9.57	6.40	43
Long Pond (MDI)	10/29/2013	10.0	12.65	9.57	6.39	43
Long Pond (MDI)	10/29/2013	11.0	12.65	9.56	6.41	43
Long Pond (MDI)	10/29/2013	12.0	12.64	9.56	6.41	43
Long Pond (MDI)	10/29/2013	12.0	12.64	9.43	6.32	43
Long Pond (MDI)	10/29/2013	13.0	12.64	9.55	6.41	43
Long Pond (MDI)	10/29/2013	14.0	12.64	9.55	6.42	42
Long Pond (MDI)	10/29/2013	15.0	12.64	9.55	6.42	43
Long Pond (MDI)	10/29/2013	16.0	12.64	9.57	6.42	43
Long Pond (MDI)	10/29/2013	17.0	12.61	9.54	6.43	43
Long Pond (MDI)	10/29/2013	18.0	11.75	8.97	6.31	44
Long Pond (MDI)	10/29/2013	19.0	9.57	8.00	6.02	44
Long Pond (MDI)	10/29/2013	20.0	9.16	7.86	5.95	44
Long Pond (MDI)	10/29/2013	21.0	9.02	7.87	5.89	44
Long Pond (MDI)	10/29/2013	21.0	8.96	7.91	5.92	44
Long Pond (MDI)	10/29/2013	22.0	8.66	8.02	5.91	44
Long Pond (MDI)	10/29/2013	23.0	8.54	8.07	5.89	44
Long Pond (MDI)	10/29/2013	24.0	8.44	8.00	5.89	44
Long Pond (MDI)	10/29/2013	25.0	8.37	7.92	5.86	44
Long Pond (MDI)	10/29/2013	26.0	8.27	7.80	5.85	44
Long Pond (MDI)	10/29/2013	27.0	8.19	7.62	5.83	44
Long Pond (MDI)	10/29/2013	28.0	8.13	7.37	5.81	44
Long Pond (MDI)	10/29/2013	29.0	8.07	7.18	5.79	44
Long Pond (MDI)	10/29/2013	30.0	8.05	6.97	5.78	44
Seal Cove Pond	5/30/2013	0.1	15.34	10.03	6.78	44
Seal Cove Pond	5/30/2013	1.0	14.47	10.10	6.71	44
Seal Cove Pond	5/30/2013	2.0	14.27	10.09	6.69	44
Seal Cove Pond	5/30/2013	3.0	14.21	10.04	6.66	44

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (μS/cm)
Seal Cove Pond	5/30/2013	4.0	14.02	9.92	6.61	44
Seal Cove Pond	5/30/2013	5.0	13.87	9.85	6.56	44
Seal Cove Pond	5/30/2013	6.0	13.82	9.84	6.53	44
Seal Cove Pond	5/30/2013	7.0	13.72	9.74	6.49	44
Seal Cove Pond	5/30/2013	8.0	13.63	9.59	6.44	44
Seal Cove Pond	5/30/2013	9.0	13.45	9.56	6.40	44
Seal Cove Pond	5/30/2013	10.0	12.69	9.15	6.27	43
Seal Cove Pond	5/30/2013	11.0	12.26	8.87	6.17	44
Seal Cove Pond	5/30/2013	12.0	10.86	7.97	5.99	45
Seal Cove Pond	5/30/2013	12.4	10.49	5.57	5.84	46
Seal Cove Pond	6/20/2013	0.0	20.41	9.26	6.66	44
Seal Cove Pond	6/20/2013	0.5	20.38	9.28	6.74	44
Seal Cove Pond	6/20/2013	1.0	20.34	9.28	6.74	44
Seal Cove Pond	6/20/2013	2.0	20.26	9.15	6.59	47
Seal Cove Pond	6/20/2013	2.0	20.20	9.30	6.75	47
Seal Cove Pond	6/20/2013	3.0	19.54	9.30	6.73	44
Seal Cove Pond	6/20/2013	4.0	19.05	9.18	6.67	44
Seal Cove Pond	6/20/2013	5.0	17.58	8.46	6.28	44
Seal Cove Pond	6/20/2013	5.0	17.67	8.94	6.50	47
Seal Cove Pond	6/20/2013	6.0	16.56	8.50	6.33	44
Seal Cove Pond	6/20/2013	7.0	15.05	7.70	6.14	44
Seal Cove Pond	6/20/2013	8.0	13.69	7.10	6.02	44
Seal Cove Pond	6/20/2013	9.0	13.17	6.57	5.94	44
Seal Cove Pond	6/20/2013	10.0	12.77	5.84	5.88	45
Seal Cove Pond	6/20/2013	10.0	12.77	6.14	5.89	45
Seal Cove Pond	6/20/2013	11.0	12.69	5.96	5.87	45
Seal Cove Pond	6/20/2013	12.0	12.60	5.82	5.86	45
Seal Cove Pond	6/20/2013	13.0	12.34	5.31	5.82	45
Seal Cove Pond	6/20/2013	13.0	12.30	4.76	5.82	45
Seal Cove Pond	7/22/2013	0.0	25.38	8.40	6.94	46
Seal Cove Pond	7/22/2013	0.5	25.39	8.41	6.94	46
Seal Cove Pond	7/22/2013	1.0	25.37	8.41	6.93	46
Seal Cove Pond	7/22/2013	2.0	25.35	8.41	6.93	46
Seal Cove Pond	7/22/2013	3.0	25.29	8.40	6.92	46
Seal Cove Pond	7/22/2013	3.0	25.27	8.20	6.55	46
Seal Cove Pond	7/22/2013	4.0	24.68	8.34	6.86	46
Seal Cove Pond	7/22/2013	5.0	19.95	6.15	6.02	45
Seal Cove Pond	7/22/2013	5.0	20.22	7.08	6.42	46
Seal Cove Pond	7/22/2013	6.0	17.88	5.46	6.12	46
Seal Cove Pond	7/22/2013	7.0	16.38	4.01	5.91	46
Seal Cove Pond	7/22/2013	8.0	14.26	3.89	5.85	46
Seal Cove Pond	7/22/2013	9.0	13.55	3.41	5.81	46
Seal Cove Pond	7/22/2013	10.0	13.26	2.52	5.77	46
Seal Cove Pond	7/22/2013	10.0	13.27	2.82	5.78	46
Seal Cove Pond	7/22/2013	11.0	13.09	2.54	5.77	46
Seal Cove Pond	7/22/2013	12.0	12.98	2.39	5.77	46
Seal Cove Pond	8/26/2013	0.1	22.48	8.46	6.71	45
Seal Cove Pond	8/26/2013	0.5	22.47	8.52	6.71	45
Seal Cove Pond	8/26/2013	1.0	22.46	8.55	6.71	45
Seal Cove Pond	8/26/2013	2.0	22.46	8.57	6.70	45
Seal Cove Pond	8/26/2013	3.0	22.43	8.57	6.69	45
Seal Cove Pond	8/26/2013	4.0	22.42	8.52	6.68	45

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Seal Cove Pond	8/26/2013	5.0	20.29	7.69	6.06	46
Seal Cove Pond	8/26/2013	5.0	22.21	7.81	6.49	45
Seal Cove Pond	8/26/2013	6.0	21.67	6.88	6.19	45
Seal Cove Pond	8/26/2013	7.0	19.97	3.68	5.91	47
Seal Cove Pond	8/26/2013	7.0	19.92	3.66	5.89	47
Seal Cove Pond	8/26/2013	8.0	15.16	0.69	5.68	49
Seal Cove Pond	8/26/2013	9.0	13.70	0.43	5.67	49
Seal Cove Pond	8/26/2013	10.0	13.43	0.32	5.69	49
Seal Cove Pond	8/26/2013	11.0	13.30	0.30	5.71	50
Seal Cove Pond	8/26/2013	12.0	13.16	0.28	5.77	51
Seal Cove Pond	8/26/2013	12.0	13.16	0.28	5.78	51
Seal Cove Pond	9/19/2013	0.1	19.63	8.85	6.48	44
Seal Cove Pond	9/19/2013	0.5	19.49	8.82	6.49	44
Seal Cove Pond	9/19/2013	1.0	18.96	8.74	6.48	44
Seal Cove Pond	9/19/2013	1.0	19.56	8.80	6.53	44
Seal Cove Pond	9/19/2013	2.0	18.45	8.77	6.48	44
Seal Cove Pond	9/19/2013	3.0	18.18	8.72	6.47	44
Seal Cove Pond	9/19/2013	4.0	18.10	8.66	6.46	44
Seal Cove Pond	9/19/2013	5.0	18.05	8.67	6.46	44
Seal Cove Pond	9/19/2013	5.0	18.02	8.56	6.47	43
Seal Cove Pond	9/19/2013	6.0	17.90	8.59	6.44	44
Seal Cove Pond	9/19/2013	7.0	17.76	8.37	6.41	44
Seal Cove Pond	9/19/2013	8.0	17.68	8.09	6.36	44
Seal Cove Pond	9/19/2013	8.0	17.70	7.85	6.39	44
Seal Cove Pond	9/19/2013	9.0	17.67	8.10	6.35	44
Seal Cove Pond	9/19/2013	10.0	16.53	6.53	6.18	46
Seal Cove Pond	9/19/2013	11.0	13.62	1.58	6.13	59
Seal Cove Pond	9/19/2013	12.0	13.15	0.13	6.26	61
Seal Cove Pond	9/19/2013	12.0	13.19	0.48	6.18	61
Seal Cove Pond	10/22/2013	0.1	14.40	9.41	6.61	43
Seal Cove Pond	10/22/2013	0.5	14.40	9.39	6.61	43
Seal Cove Pond	10/22/2013	1.0	14.40	9.39	6.60	43
Seal Cove Pond	10/22/2013	1.0	14.41	9.36	6.58	43
Seal Cove Pond	10/22/2013	2.0	14.40	9.39	6.60	43
Seal Cove Pond	10/22/2013	3.0	14.41	9.36	6.57	46
Seal Cove Pond	10/22/2013	3.0	14.40	9.38	6.60	43
Seal Cove Pond	10/22/2013	4.0	14.40	9.37	6.60	43
Seal Cove Pond	10/22/2013	5.0	14.40	9.37	6.59	43
Seal Cove Pond	10/22/2013	6.0	14.40	9.36	6.59	43
Seal Cove Pond	10/22/2013	7.0	14.40	9.36	6.58	43
Seal Cove Pond	10/22/2013	7.0	14.41	9.35	6.55	43
Seal Cove Pond	10/22/2013	8.0	14.40	9.37	6.58	43
Seal Cove Pond	10/22/2013	9.0	14.40	9.35	6.59	43
Seal Cove Pond	10/22/2013	10.0	14.40	9.36	6.58	43
Seal Cove Pond	10/22/2013	11.0	14.40	9.35	6.58	43
Seal Cove Pond	10/22/2013	12.0	14.40	9.35	6.58	43
Seal Cove Pond	10/22/2013	13.0	14.40	9.35	6.57	43
Seal Cove Pond	10/22/2013	13.0	14.40	9.04	6.43	43
Seawall Pond	5/29/2013	0.1	14.18	7.61	4.49	68
Seawall Pond	5/29/2013	0.5	14.19	7.49	4.49	68
Seawall Pond	5/29/2013	0.6	14.07	7.07	4.51	67
Seawall Pond	5/29/2013	0.7	14.07	7.38	4.54	67

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (μS/cm)
Seawall Pond	5/29/2013	0.7	14.05	7.39	4.54	69
Seawall Pond	6/24/2013	0.0	26.93	6.13	4.88	88
Seawall Pond	6/24/2013	0.0	26.92	6.25	4.88	91
Seawall Pond	6/24/2013	0.3	26.82	5.96	4.87	88
Seawall Pond	6/24/2013	0.5	22.07	3.37	4.82	93
Seawall Pond	6/24/2013	0.5	23.57	3.57	4.83	93
Seawall Pond	7/25/2013	0.1	23.38	8.02	4.92	138
Seawall Pond	7/25/2013	0.1	23.44	8.24	4.92	138
Seawall Pond	7/25/2013	0.5	22.27	7.31	4.88	138
Seawall Pond	7/25/2013	0.5	22.14	7.03	4.87	137
Seawall Pond	7/25/2013	0.7	21.57	6.62	4.87	137
Seawall Pond	8/15/2013	0.0	20.38	5.85	4.81	86
Seawall Pond	8/15/2013	0.1	20.49	5.75	4.80	89
Seawall Pond	8/15/2013	0.1	20.62	5.79	4.78	89
Seawall Pond	8/15/2013	0.2	20.51	5.78	4.79	90
Seawall Pond	8/15/2013	0.3	20.41	5.81	4.80	89
Seawall Pond	8/15/2013	0.5	20.33	5.74	4.78	89
Seawall Pond	8/15/2013	0.6	20.31	5.75	4.84	92
Seawall Pond	9/18/2013	0.1	17.89	6.38	4.96	107
Seawall Pond	9/18/2013	0.1	18.00	6.40	4.96	108
Seawall Pond	9/18/2013	0.1	18.10	6.78	4.97	108
Seawall Pond	9/18/2013	0.5	16.08	5.62	4.91	108
Seawall Pond	9/18/2013	0.6	15.48	5.00	5.05	112
Seawall Pond	10/25/2013	0.1	8.74	10.25	4.88	142
Seawall Pond	10/25/2013	0.5	8.76	10.16	4.75	142
Seawall Pond	10/25/2013	0.5	8.74	10.16	4.80	137
Seawall Pond	10/25/2013	0.6	8.75	10.13	4.76	142
Upper Hadlock	5/22/2013	0.0	14.13	9.79	6.43	49
Upper Hadlock	5/22/2013	0.2	14.14	9.79	6.40	49
Upper Hadlock	5/22/2013	1.0	14.14	9.78	6.39	49
Upper Hadlock	5/22/2013	2.0	14.13	9.78	6.38	49
Upper Hadlock	5/22/2013	3.0	13.99	9.71	6.33	48
Upper Hadlock	5/22/2013	4.0	13.84	9.76	6.31	48
Upper Hadlock	5/22/2013	5.0	13.40	9.82	6.25	49
Upper Hadlock	5/22/2013	6.0	10.82	11.03	6.18	48
Upper Hadlock	5/22/2013	7.0	9.38	10.47	5.99	47
Upper Hadlock	5/22/2013	8.0	8.82	9.49	5.85	47
Upper Hadlock	5/22/2013	9.0	8.59	8.64	5.78	47
Upper Hadlock	5/22/2013	9.8	8.39	8.33	5.77	49
Upper Hadlock	5/22/2013	11.0	8.29	8.22	5.76	48
Upper Hadlock	5/22/2013	12.0	8.23	7.99	5.74	48
Upper Hadlock	5/22/2013	13.0	8.19	7.65	5.72	48
Upper Hadlock	6/19/2013	0.6	19.16	9.05	6.29	35
Upper Hadlock	6/19/2013	1.0	19.14	8.99	6.25	35
Upper Hadlock	6/19/2013	2.0	19.09	9.01	6.23	35
Upper Hadlock	6/19/2013	2.0	19.08	8.98	6.23	35
Upper Hadlock	6/19/2013	2.0	19.12	8.51	6.10	35
Upper Hadlock	6/19/2013	3.0	15.83	9.27	6.04	34
Upper Hadlock	6/19/2013	4.0	13.09	9.24	5.91	35
Upper Hadlock	6/19/2013	5.0	12.28	8.75	5.80	38
Upper Hadlock	6/19/2013	6.0	10.78	7.58	5.73	40
Upper Hadlock	6/19/2013	6.0	11.32	8.41	5.74	39

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Upper Hadlock	6/19/2013	7.0	9.87	6.98	5.54	43
Upper Hadlock	6/19/2013	7.0	9.86	7.09	5.56	45
Upper Hadlock	6/19/2013	8.0	9.56	6.59	5.53	44
Upper Hadlock	6/19/2013	9.0	9.39	6.33	5.54	44
Upper Hadlock	6/19/2013	10.0	9.36	6.20	5.61	44
Upper Hadlock	6/19/2013	10.0	9.36	6.27	5.57	45
Upper Hadlock	6/19/2013	11.0	9.30	6.15	5.58	45
Upper Hadlock	6/19/2013	11.0	9.30	6.17	5.57	45
Upper Hadlock	6/19/2013	12.0	9.27	6.10	5.58	45
Upper Hadlock	6/19/2013	13.0	9.20	6.01	5.57	47
Upper Hadlock	6/19/2013	13.3	9.15	3.32	5.74	46
Upper Hadlock	7/24/2013	0.0	24.31	8.32	6.63	38
Upper Hadlock	7/24/2013	0.5	24.29	8.33	6.56	38
Upper Hadlock	7/24/2013	1.0	24.00	8.34	6.53	38
Upper Hadlock	7/24/2013	2.0	23.55	8.26	6.48	38
Upper Hadlock	7/24/2013	2.0	23.57	8.19	6.27	38
Upper Hadlock	7/24/2013	3.0	22.94	8.15	6.34	38
Upper Hadlock	7/24/2013	4.0	16.14	9.13	5.92	37
Upper Hadlock	7/24/2013	4.0	16.14	8.37	5.81	36
Upper Hadlock	7/24/2013	5.0	13.71	6.67	5.67	40
Upper Hadlock	7/24/2013	6.0	11.94	6.11	5.67	41
Upper Hadlock	7/24/2013	7.0	10.72	5.42	5.65	43
Upper Hadlock	7/24/2013	8.0	10.11	4.49	5.64	44
Upper Hadlock	7/24/2013	9.0	9.75	3.29	5.56	44
Upper Hadlock	7/24/2013	9.0	9.78	4.00	5.62	44
Upper Hadlock	7/24/2013	10.0	9.63	3.50	5.61	45
Upper Hadlock	7/24/2013	11.0	9.54	3.23	5.60	45
Upper Hadlock	7/24/2013	12.0	9.47	2.40	5.61	45
Upper Hadlock	7/24/2013	12.0	9.47	2.71	5.61	45
Upper Hadlock	8/20/2013	0.1	23.79	8.69	7.10	37
Upper Hadlock	8/20/2013	1.0	23.29	8.82	6.91	37
Upper Hadlock	8/20/2013	1.0	23.31	8.79	6.89	37
Upper Hadlock	8/20/2013	2.0	22.37	8.88	6.62	37
Upper Hadlock	8/20/2013	3.0	20.24	8.26	6.12	35
Upper Hadlock	8/20/2013	4.0	17.90	6.48	5.64	34
Upper Hadlock	8/20/2013	5.0	15.24	3.78	5.35	40
Upper Hadlock	8/20/2013	5.0	11.99	2.69	5.39	43
Upper Hadlock	8/20/2013	6.0	12.84	3.23	5.24	42
Upper Hadlock	8/20/2013	7.0	10.74	1.97	5.24	44
Upper Hadlock	8/20/2013	8.0	10.23	1.47	5.23	45
Upper Hadlock	8/20/2013	9.0	9.92	1.15	5.27	45
Upper Hadlock	8/20/2013	10.0	9.82	1.00	5.34	45
Upper Hadlock	8/20/2013	10.0	9.85	0.99	5.41	45
Upper Hadlock	8/20/2013	11.0	9.77	0.92	5.37	46
Upper Hadlock	8/20/2013	11.9	9.73	0.81	5.44	48
Upper Hadlock	9/16/2013	0.4	18.26	8.93	6.63	35
Upper Hadlock	9/16/2013	1.0	18.26	8.92	6.61	37
Upper Hadlock	9/16/2013	2.0	18.25	8.90	6.58	35
Upper Hadlock	9/16/2013	3.0	18.23	8.84	6.53	36
Upper Hadlock	9/16/2013	4.0	18.02	8.50	6.43	36
Upper Hadlock	9/16/2013	5.0	17.19	6.13	5.99	37
Upper Hadlock	9/16/2013	5.0	17.16	6.88	6.18	37

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (µS/cm)
Upper Hadlock	9/16/2013	5.0	17.13	5.29	5.95	37
Upper Hadlock	9/16/2013	6.0	14.29	1.80	5.75	43
Upper Hadlock	9/16/2013	7.0	11.37	0.68	5.64	46
Upper Hadlock	9/16/2013	8.0	10.51	0.21	5.62	47
Upper Hadlock	9/16/2013	9.0	10.09	0.14	5.70	49
Upper Hadlock	9/16/2013	9.0	10.08	0.08	5.78	49
Upper Hadlock	9/16/2013	10.0	9.97	0.15	5.75	50
Upper Hadlock	9/16/2013	11.0	9.90	0.12	5.77	52
Upper Hadlock	9/16/2013	12.0	9.87	0.11	5.78	51
Upper Hadlock	9/16/2013	13.0	9.86	0.10	5.80	51
Upper Hadlock	10/21/2013	0.1	13.77	9.76	6.54	38
Upper Hadlock	10/21/2013	0.5	13.75	9.64	6.54	36
Upper Hadlock	10/21/2013	1.0	13.72	9.62	6.53	38
Upper Hadlock	10/21/2013	2.0	13.68	9.52	6.47	38
Upper Hadlock	10/21/2013	2.0	13.57	9.58	6.52	36
Upper Hadlock	10/21/2013	3.0	13.48	9.55	6.51	38
Upper Hadlock	10/21/2013	4.0	13.45	9.53	6.50	38
Upper Hadlock	10/21/2013	5.0	13.34	9.37	6.41	38
Upper Hadlock	10/21/2013	5.0	13.41	9.48	6.47	38
Upper Hadlock	10/21/2013	6.0	13.32	9.48	6.46	38
Upper Hadlock	10/21/2013	7.0	13.21	9.38	6.43	38
Upper Hadlock	10/21/2013	8.0	13.17	9.35	6.42	38
Upper Hadlock	10/21/2013	9.0	13.01	8.17	6.26	39
Upper Hadlock	10/21/2013	9.0	13.06	8.98	6.36	39
Upper Hadlock	10/21/2013	10.0	11.95	2.87	5.93	46
Upper Hadlock	10/21/2013	11.0	9.96	0.39	6.02	54
Upper Hadlock	10/21/2013	12.0	9.83	0.19	6.05	57
Witch Hole Pond	5/23/2013	1.0	14.15	9.10	6.32	29
Witch Hole Pond	5/23/2013	2.0	14.11	9.07	6.29	29
Witch Hole Pond	5/23/2013	3.0	14.06	8.92	6.24	29
Witch Hole Pond	5/23/2013	4.0	14.00	8.90	6.22	31
Witch Hole Pond	5/23/2013	5.0	13.90	8.78	6.19	29
Witch Hole Pond	5/23/2013	6.0	12.11	7.14	5.82	30
Witch Hole Pond	5/23/2013	7.0	10.35	5.91	5.60	30
Witch Hole Pond	5/23/2013	8.0	10.02	5.14	5.48	30
Witch Hole Pond	5/23/2013	9.0	9.85	4.14	5.43	30
Witch Hole Pond	5/23/2013	9.2	9.82	2.58	5.68	33
Witch Hole Pond	6/18/2013	0.5	21.16	8.53	6.41	26
Witch Hole Pond	6/18/2013	1.0	20.92	8.62	6.34	27
Witch Hole Pond	6/18/2013	2.0	19.47	8.65	6.25	27
Witch Hole Pond	6/18/2013	3.0	16.67	7.69	5.94	27
Witch Hole Pond	6/18/2013	4.0	15.19	7.50	5.88	27
Witch Hole Pond	6/18/2013	5.0	13.42	6.47	5.80	28
Witch Hole Pond	6/18/2013	6.0	12.60	4.77	5.69	29
Witch Hole Pond	6/18/2013	7.0	11.72	3.33	5.62	29
Witch Hole Pond	6/18/2013	8.0	11.28	2.33	5.60	30
Witch Hole Pond	6/18/2013	9.0	10.75	1.48	5.61	30
Witch Hole Pond	6/18/2013	9.3	10.56	1.21	5.72	35
Witch Hole Pond	7/24/2013	0.5	23.79	7.31	6.28	27
Witch Hole Pond	7/24/2013	1.0	23.67	7.32	6.25	28
Witch Hole Pond	7/24/2013	2.0	23.56	7.16	6.14	28
Witch Hole Pond	7/24/2013	2.0	23.56	7.29	6.22	27

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (μS/cm)
Witch Hole Pond	7/24/2013	3.0	22.02	5.21	5.81	29
Witch Hole Pond	7/24/2013	4.0	17.26	4.39	5.67	29
Witch Hole Pond	7/24/2013	5.0	14.43	3.33	5.60	30
Witch Hole Pond	7/24/2013	5.0	14.36	2.24	5.66	29
Witch Hole Pond	7/24/2013	6.0	12.55	0.67	5.57	30
Witch Hole Pond	7/24/2013	7.0	11.68	0.24	5.67	32
Witch Hole Pond	7/24/2013	8.0	11.31	0.07	5.88	35
Witch Hole Pond	7/24/2013	8.0	11.29	0.04	5.92	36
Witch Hole Pond	7/24/2013	8.9	10.98	0.05	6.02	41
Witch Hole Pond	8/22/2013	0.5	23.36	8.04	6.68	27
Witch Hole Pond	8/22/2013	1.0	22.85	8.11	6.57	27
Witch Hole Pond	8/22/2013	2.0	22.55	8.04	6.43	27
Witch Hole Pond	8/22/2013	3.0	19.94	5.38	5.77	28
Witch Hole Pond	8/22/2013	3.0	20.85	5.25	5.83	27
Witch Hole Pond	8/22/2013	4.0	18.79	1.23	5.54	29
Witch Hole Pond	8/22/2013	5.0	15.44	0.35	5.40	31
Witch Hole Pond	8/22/2013	5.0	15.44	0.34	5.40	31
Witch Hole Pond	8/22/2013	6.0	12.84	0.30	5.54	34
Witch Hole Pond	8/22/2013	7.0	11.73	0.26	5.87	40
Witch Hole Pond	8/22/2013	7.0	11.77	0.28	5.79	40
Witch Hole Pond	8/22/2013	8.0	11.37	0.28	5.86	43
Witch Hole Pond	8/22/2013	9.0	11.02	0.26	5.95	46
Witch Hole Pond	8/22/2013	9.3	10.96	0.26	5.98	47
Witch Hole Pond	9/16/2013	0.5	18.71	8.38	6.35	27
Witch Hole Pond	9/16/2013	1.0	18.71	8.39	6.35	27
Witch Hole Pond	9/16/2013	2.0	18.67	8.38	6.33	27
Witch Hole Pond	9/16/2013	2.0	18.67	8.14	6.21	27
Witch Hole Pond	9/16/2013	3.0	18.47	8.02	6.24	27
Witch Hole Pond	9/16/2013	4.0	17.49	6.44	5.99	27
Witch Hole Pond	9/16/2013	4.0	17.48	5.29	5.92	27
Witch Hole Pond	9/16/2013	5.0	16.79	4.90	5.84	28
Witch Hole Pond	9/16/2013	6.0	14.20	0.25	5.62	32
Witch Hole Pond	9/16/2013	6.0	14.18	0.08	5.73	32
Witch Hole Pond	9/16/2013	7.0	12.12	0.11	5.92	43
Witch Hole Pond	9/16/2013	7.0	12.12	0.11	5.90	43
Witch Hole Pond	9/16/2013	8.0	11.68	0.10	6.01	45
Witch Hole Pond	9/16/2013	9.0	11.46	0.10	6.05	46
Witch Hole Pond	9/16/2013	9.4	11.35	0.07	6.07	47
Witch Hole Pond	10/21/2013	0.0	13.67	8.94	6.51	28
Witch Hole Pond	10/21/2013	0.5	13.67	8.73	6.36	28
Witch Hole Pond	10/21/2013	1.0	13.65	8.70	6.31	28
Witch Hole Pond	10/21/2013	2.0	13.62	8.69	6.26	28
Witch Hole Pond	10/21/2013	2.0	13.59	8.62	6.27	28
Witch Hole Pond	10/21/2013	3.0	13.49	8.75	6.26	28
Witch Hole Pond	10/21/2013	4.0	13.34	8.90	6.26	28
Witch Hole Pond	10/21/2013	5.0	13.21	8.85	6.25	28
Witch Hole Pond	10/21/2013	6.0	13.15	8.75	6.25	28
Witch Hole Pond	10/21/2013	6.0	13.13	8.50	6.28	28
Witch Hole Pond	10/21/2013	7.0	13.09	8.66	6.24	28
Witch Hole Pond	10/21/2013	8.0	12.90	8.09	6.19	29
Witch Hole Pond	10/21/2013	8.0	12.89	7.16	6.27	30
Witch Hole Pond	10/21/2013	9.0	11.53	1.89	6.10	55

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A2. YSI sonde in-situ lake and pond water quality measurements collected at ACAD (continued).
Duplicate values are quality control check measurements collected on the upcast.

Site	Date	Depth (m)	Temp (C)	DO (mg/L)	pH	Specific Conductance (μ S/cm)
Witch Hole Pond	10/21/2013	9.1	11.30	0.72	6.15	57

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2012 (continued).

Table A3. Laboratory nutrient chemistry data for ACAD. “<MRL” indicates the result was below the method reporting limit (0.1 for TN, 1.0 for NO₃, 0.005 for NO₂, 0.08 for NH₃, and 1.0 for Chl a). *Missing values indicate data are unavailable.*

Site Type	Site	Date	ANC (µeq/L)	Apparent Color (PCU)	DOC (mg/L)	TP (µg/L)	TN (mg/L)	NO ₃ (µeq/L)	NO ₃ -N [calc.] (mg/L)	NO ₂ (mg/L)	NH ₃ (mg/L)	Chl a (µg/L)	Cl (µeq/L)	SO ₄ (µeq/L)
Lake	Bubble Pond	6/24/2013	66.50	18	2.88	1.2	0.139	<MRL	<MRL	<MRL	<MRL	<MRL	130	48
Lake	Bubble Pond	8/28/2013	76.60	17	2.86	3.2	0.137	<MRL	<MRL	<MRL	<MRL	2.0	114	47
Lake	Eagle Lake	6/18/2013	59.90	13	2.15	2.6	<MRL	<MRL	<MRL	<MRL	<MRL	<MRL	154	46
Lake	Eagle Lake	8/22/2013	68.40	17	2.24	2.7	<MRL	<MRL	<MRL	<MRL	<MRL	1.2	149	44
Lake	Echo Lake	6/25/2013	99.10	21	3.16	4.5	0.186	<MRL	<MRL	<MRL	<MRL	<MRL	353	60
Lake	Echo Lake	8/27/2013	106.00	20	3.14	3.7	0.135	<MRL	<MRL	<MRL	<MRL	2.6	345	57
Lake	Hodgdon Pond	6/20/2013	63.20	85	8.94	7.6	0.275	<MRL	<MRL	<MRL	<MRL	2.2	213	43
Lake	Hodgdon Pond	8/26/2013	75.50	74	9.57	7.7	0.302	<MRL	<MRL	<MRL	<MRL	7.1	205	33
Lake	Jordan Pond	6/27/2013	73.10	12	1.79	3.1	0.105	<MRL	<MRL	<MRL	<MRL	<MRL	133	52
Lake	Jordan Pond	8/19/2013	73.50	12	1.89	2.6	0.132	<MRL	<MRL	<MRL	<MRL	<MRL	125	49
Lake	Long Pond (MDI)	6/25/2013	70.70	23	3.33	3.5	0.146	<MRL	<MRL	<MRL	<MRL	2.5	214	57
Lake	Long Pond (MDI)	8/27/2013	70.60	21	3.29	3.1	0.180	<MRL	<MRL	<MRL	<MRL	2.7	215	55
Lake	Lower Hadlock	6/19/2013	43.00	40	5.05	4.3	0.191	<MRL	<MRL	<MRL	<MRL	1.4	246	49
Lake	Lower Hadlock	8/21/2013	56.30	30	4.65	3.6	0.176	<MRL	<MRL	<MRL	<MRL	1.2	223	46
Lake	Seal Cove Pond	6/20/2013	70.40	37	4.98	4.6	0.220	<MRL	<MRL	<MRL	<MRL	2.7	220	55
Lake	Seal Cove Pond	8/26/2013	84.40	28	4.91	4.5	0.204	<MRL	<MRL	<MRL	<MRL	3.8	209	49
Lake	Seawall Pond	6/24/2013	18.30	523	28.40	25.0	1.020	<MRL	<MRL	0.012	0.09	14	544	41
Lake	Seawall Pond	8/15/2013	24.40	511	68.90	20.0	1.010	<MRL	<MRL	0.011	0.08	4.1	574	30
Lake	Upper Hadlock	6/19/2013	43.90	45	5.05	5.7	0.171	<MRL	<MRL	<MRL	<MRL	1.7	180	49
Lake	Upper Hadlock	8/20/2013	58.70	44	5.42	4.9	0.202	<MRL	<MRL	<MRL	<MRL	2.3	160	46
Lake	Witch Hole Pond	6/18/2013	51.50	43	4.29	9.2	0.266	<MRL	<MRL	<MRL	<MRL	1.9	130	24
Lake	Witch Hole Pond	8/22/2013	67.90	40	4.64	8.7	0.271	<MRL	<MRL	<MRL	<MRL	2.6	116	16
Stream	Browns Brook	5/13/2013	73.90	8	1.65	2.0	<MRL	<MRL	<MRL	<MRL	<MRL		758	71
Stream	Browns Brook	8/6/2013	101.00	7	1.62	1.3	<MRL	1.3	0.018	<MRL	<MRL		705	68
Stream	Bubble Pond Outlet	5/13/2013	64.30	13	1.96	3.4	<MRL	<MRL	<MRL	<MRL	<MRL		162	48
Stream	Bubble Pond Outlet	8/8/2013	65.60	17	2.55	3.8	0.117	<MRL	<MRL	<MRL	<MRL		115	48
Stream	Cadillac Stream	5/21/2013	33.10	7	1.83	<MRL	<MRL	<MRL	<MRL	<MRL	<MRL		120	49
Stream	Cadillac Stream	8/13/2013	78.50	4	1.77	1.1	<MRL	<MRL	<MRL	<MRL	<MRL		64	32
Stream	Duck Brook	5/8/2013	61.60	4	1.85	2.9	<MRL	<MRL	<MRL	<MRL	<MRL		165	47
Stream	Duck Brook	8/12/2013	63.30	9	1.88	2.4	<MRL	<MRL	<MRL	<MRL	<MRL		150	45
Stream	Duck Pond Brook	5/15/2013	17.40	43	5.09	7.6	0.134	<MRL	<MRL	<MRL	<MRL		154	42
Stream	Duck Pond Brook	8/5/2013	24.00	99	9.47	6.2	0.269	<MRL	<MRL	<MRL	<MRL		124	21
Stream	Hadlock Brook	5/9/2013	39.40	10	1.91	2.1	<MRL	3.0	0.042	<MRL	<MRL		151	65
Stream	Hadlock Brook	8/14/2013	54.00	11	2.71	1.6	0.111	1.9	0.027	<MRL	<MRL		97	64

Appendix A. Acadia National (ACAD) Water Monitoring Data, 2013 (continued).

Table A3. Laboratory nutrient chemistry data for ACAD (continued). “<MRL” indicates the result was below the method reporting limit (0.1 for TN, 1.0 for NO₃, 0.005 for NO₂, 0.08 for NH₃, and 1.0 for Chl a). *Missing values indicate data are unavailable*

Site Type	Site	Date	ANC (µeq/L)	Apparent Color (PCU)	DOC (mg/L)	TP (µg/L)	TN (mg/L)	NO ₃ (µeq/L)	NO ₃ -N [calc.] (mg/L)	NO ₂ (mg/L)	NH ₃ (mg/L)	Chl a (µg/L)	Cl (µeq/L)	SO ₄ (µeq/L)
Stream	Lake Wood Outlet	5/20/2013	51.20	17	2.09	5.0	0.118	1.0	0.014	<MRL	<MRL		125	38
Stream	Lake Wood Outlet	8/7/2013	68.50	18	2.46	5.3	0.162	1.2	0.017	<MRL	<MRL		101	33
Stream	Lurvey Brook	5/15/2013	-2.20	98	8.32	6.9	0.172	<MRL	<MRL	<MRL	<MRL		213	71
Stream	Lurvey Brook	8/5/2013	-2.40	192	16.70	9.7	0.350	<MRL	<MRL	<MRL	<MRL		171	32
Stream	Lurvey Spring Brook	5/16/2013	84.10	40	4.14	4.5	0.110	<MRL	<MRL	<MRL	<MRL		350	75
Stream	Lurvey Spring Brook	8/8/2013	130.00	54	4.32	5.9	0.152	1.6	0.023	<MRL	<MRL		336	67
Stream	Otter Creek	5/9/2013	72.40	15	1.43	3.2	0.152	<MRL	<MRL	<MRL	<MRL		181	48
Stream	Otter Creek	8/5/2013	101.00	23	2.17	4.2	<MRL	1.0	0.014	<MRL	<MRL		113	34
Stream	Stanley Brook	5/14/2013	162.00	33	3.09	4.8	0.276	12.0	0.169	<MRL	<MRL		422	83
Stream	Stanley Brook	8/12/2013	153.00	66	5.56	10.0	0.368	14.0	0.197	<MRL	<MRL		288	75

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A4. Stream stage and discharge data for ACAD. *Missing values indicate data are unavailable.*

Site	Date	Datum name	Distance from datum (ft)	Total CS area (sqft)	Average velocity (f/s)	Discharge (cfs)
Browns Brook	5/13/2013	SD1	-0.47	6.50	0.19	0.54
Browns Brook	5/13/2013	SD1	-0.46	6.50	0.19	0.54
Browns Brook	6/12/2013	SD1	-0.04	8.42	0.64	5.36
Browns Brook	6/12/2013	SD1	-0.03	8.42	0.64	5.36
Browns Brook	7/9/2013	SD1	-0.54	3.57	0.08	0.30
Browns Brook	7/9/2013	SD1	-0.52	3.57	0.08	0.30
Browns Brook	8/6/2013	SD1	-0.55	2.71	0.04	0.10
Browns Brook	8/6/2013	SD1	-0.55	2.71	0.04	0.10
Browns Brook	9/4/2013	SD1	-0.14	7.18	0.42	2.98
Browns Brook	9/4/2013	SD1	-0.14	7.18	0.42	2.98
Browns Brook	10/18/2013	SD1	-0.38	4.32	0.08	0.34
Browns Brook	10/18/2013	SD1	-0.40	4.32	0.08	0.34
Bubble Pond Outlet	5/13/2013	SD1	-1.79	4.19	0.23	0.97
Bubble Pond Outlet	5/13/2013	SD1	-1.78	4.19	0.23	0.97
Bubble Pond Outlet	6/13/2013	SD1	-1.17	7.44	1.82	13.51
Bubble Pond Outlet	6/13/2013	SD1	-1.20	7.44	1.82	13.51
Bubble Pond Outlet	7/18/2013	SD1	-2.48	1.25	0.17	0.21
Bubble Pond Outlet	7/18/2013	SD1	-2.48	1.25	0.17	0.21
Bubble Pond Outlet	8/8/2013	SD1	-1.91	3.73	0.01	0.27
Bubble Pond Outlet	8/8/2013	SD1	-1.91	3.73	0.01	0.27
Bubble Pond Outlet	9/9/2013	SD1	-1.77	4.92	0.24	1.19
Bubble Pond Outlet	9/9/2013	SD1	-1.79	4.92	0.24	1.19
Bubble Pond Outlet	10/18/2013	SD1	-2.42	1.85	0.16	0.30
Bubble Pond Outlet	10/18/2013	SD1	-2.39	1.85	0.16	0.30
Cadillac Stream	5/21/2013	Global Logger	0.68			0.57
Cadillac Stream	5/21/2013	RP3	0.42			0.57
Cadillac Stream	5/21/2013	RP3	0.43			0.57
Cadillac Stream	5/21/2013	RP2	0.33			0.57
Cadillac Stream	5/21/2013	RP2	0.34			0.57
Cadillac Stream	5/21/2013	Global Logger	0.68			0.57
Cadillac Stream	6/14/2013	RP3	0.39			0.32
Cadillac Stream	6/14/2013	RP2	0.31			0.32
Cadillac Stream	6/14/2013	Global Logger	0.60			0.32
Cadillac Stream	6/14/2013	RP2	0.31			0.32
Cadillac Stream	6/14/2013	RP3	0.39			0.32
Cadillac Stream	7/11/2013	RP2	0.23			0.01
Cadillac Stream	7/11/2013	Global Logger	0.54			0.01
Cadillac Stream	7/11/2013	RP2	0.23			0.01
Cadillac Stream	7/11/2013	RP3	0.33			0.01
Cadillac Stream	8/13/2013	RP3	0.34			0.05
Cadillac Stream	8/13/2013	RP2	0.25			0.05
Cadillac Stream	8/13/2013	RP3	0.34			0.05
Cadillac Stream	8/13/2013	Global Logger	0.55			0.05
Cadillac Stream	8/13/2013	RP2	0.25			0.05
Cadillac Stream	9/12/2013	RP3	0.35			0.11
Cadillac Stream	9/12/2013	Global Logger	0.56			0.11
Cadillac Stream	9/12/2013	RP2	0.27			0.11
Cadillac Stream	9/12/2013	RP2	0.27			0.11
Cadillac Stream	9/12/2013	RP3	0.35			0.11
Cadillac Stream	10/30/2013	RP2	0.26			0.09
Cadillac Stream	10/30/2013	Global Logger	0.55			0.09
Cadillac Stream	10/30/2013	RP3	0.34			0.09
Duck Brook (North of Rt. 233)	5/8/2013	SD1	-0.67	4.57	0.83	3.82

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A4. Stream stage and discharge data for ACAD (continued). *Missing values indicate data are unavailable.*

Site	Date	Datum name	Distance from datum (ft)	Total CS area (sqft)	Average velocity (f/s)	Discharge (cfs)
Duck Brook (North of Rt. 233)	5/8/2013	SD1	-0.67	4.57	0.83	3.82
Duck Brook (North of Rt. 233)	6/17/2013	SD1	-0.23	7.85	1.91	15.01
Duck Brook (North of Rt. 233)	6/17/2013	SD1	-0.23	7.85	1.91	15.01
Duck Brook (North of Rt. 233)	6/17/2013	SD1	-0.23	7.85	1.91	15.01
Duck Brook (North of Rt. 233)	7/17/2013	SD1	-0.79	4.36	0.69	3.00
Duck Brook (North of Rt. 233)	7/17/2013	SD1	-0.79	4.36	0.69	3.00
Duck Brook (North of Rt. 233)	8/12/2013	SD1	-0.28	8.39	1.86	15.61
Duck Brook (North of Rt. 233)	8/12/2013	SD1	-0.29	8.39	1.86	15.61
Duck Brook (North of Rt. 233)	9/12/2013	SD1	0.55	5.43	0.95	5.14
Duck Brook (North of Rt. 233)	9/12/2013	SD1	0.57	5.43	0.95	5.14
Duck Brook (North of Rt. 233)	10/21/2013	SD1	-0.83	4.42	0.18	0.79
Duck Brook (North of Rt. 233)	10/21/2013	SD1	-0.83	4.42	0.18	0.79
Duck Pond Brook (Long Pond inlet)	5/15/2013	SD1	-0.78	1.29	0.12	0.15
Duck Pond Brook (Long Pond inlet)	5/15/2013	SD1	-0.79	1.29	0.12	0.15
Duck Pond Brook (Long Pond inlet)	6/10/2013	SD1	0.65	1.82	0.35	0.63
Duck Pond Brook (Long Pond inlet)	6/10/2013	SD1	0.66	1.82	0.35	0.63
Duck Pond Brook (Long Pond inlet)	7/16/2013	SD1	-0.89	0.97	0.05	0.05
Duck Pond Brook (Long Pond inlet)	7/16/2013	SD1	-0.89	0.97	0.05	0.05
Duck Pond Brook (Long Pond inlet)	8/5/2013	SD1	-0.71	1.42	0.16	0.23
Duck Pond Brook (Long Pond inlet)	8/5/2013	SD1	-0.69	1.42	0.16	0.23
Duck Pond Brook (Long Pond inlet)	9/10/2013	SD1	0.76	1.32	0.23	0.30
Duck Pond Brook (Long Pond inlet)	9/10/2013	SD1	0.76	1.32	0.23	0.30
Duck Pond Brook (Long Pond inlet)	10/17/2013	SD1	-0.80	1.18	0.06	0.07
Duck Pond Brook (Long Pond inlet)	10/17/2013	SD1	-0.80	1.18	0.06	0.07
Hadlock Brook	5/9/2013	RM3	0.54			0.12
Hadlock Brook	5/9/2013	RP1	-1.20			0.12
Hadlock Brook	5/9/2013	Global Logger	0.68			0.12
Hadlock Brook	5/9/2013	RM2	0.17			0.12
Hadlock Brook	5/9/2013	RM3	0.54			0.12
Hadlock Brook	5/9/2013	Global Logger	0.68			0.12
Hadlock Brook	6/6/2013	Global Logger	0.59			0.08
Hadlock Brook	6/6/2013	RP1	-1.21			0.08
Hadlock Brook	6/6/2013	RM2	0.15			0.08
Hadlock Brook	6/6/2013	RM3	0.52			0.08
Hadlock Brook	7/8/2013	Global Logger	0.59			0.08
Hadlock Brook	7/8/2013	RM3	0.53			0.08
Hadlock Brook	7/8/2013	RM2	0.15			0.08
Hadlock Brook	7/8/2013	RP1	-1.21			0.08
Hadlock Brook	8/14/2013	RP1	-1.19			0.13
Hadlock Brook	8/14/2013	Global Logger	0.60			0.13
Hadlock Brook	8/14/2013	RM3	0.55			0.13
Hadlock Brook	8/14/2013	RM2	0.18			0.13
Hadlock Brook	8/14/2013	RM2	0.18			0.13
Hadlock Brook	8/14/2013	RP1	-1.19			0.13
Hadlock Brook	8/14/2013	RM3	0.55			0.13
Hadlock Brook	9/11/2013	RP1	-0.20			0.14
Hadlock Brook	9/11/2013	RM2	0.17			0.14
Hadlock Brook	9/11/2013	RM3	0.55			0.14
Hadlock Brook	9/11/2013	Global Logger	0.60			0.14
Hadlock Brook	9/11/2013	Global Logger	0.60			0.14
Hadlock Brook	9/11/2013	RP1	-1.20			0.14
Hadlock Brook	9/11/2013	RM2	0.17			0.14
Hadlock Brook	9/11/2013	RM3	0.55			0.14

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A4. Stream stage and discharge data for ACAD (continued). *Missing values indicate data are unavailable.*

Site	Date	Datum name	Distance from datum (ft)	Total CS area (sqft)	Average velocity (f/s)	Discharge (cfs)
Hadlock Brook	9/11/2013	Global Logger	0.60			0.14
Hadlock Brook	10/30/2013	RM3	0.52			0.05
Hadlock Brook	10/30/2013	RP1	-1.23			0.05
Hadlock Brook	10/30/2013	RP1	-1.23			0.05
Hadlock Brook	10/30/2013	RM2	0.14			0.05
Hadlock Brook	10/30/2013	Global Logger	0.57			0.05
Hadlock Brook	10/30/2013	RM2	0.14			0.05
Hadlock Brook	10/30/2013	RM3	0.52			0.05
Lake Wood Outlet	5/20/2013	SD1	-0.25	1.23	0.45	0.56
Lake Wood Outlet	5/20/2013	SD1	-0.27	1.23	0.45	0.56
Lake Wood Outlet	6/13/2013	SD1	0.29	4.96	1.42	7.06
Lake Wood Outlet	6/13/2013	SD1	0.28	4.96	1.42	7.06
Lake Wood Outlet	7/17/2013	SD1	-0.26	2.76	0.20	0.56
Lake Wood Outlet	7/17/2013	SD1	-0.26	2.76	0.20	0.56
Lake Wood Outlet	8/7/2013	SD1	-0.29	1.97	0.33	0.65
Lake Wood Outlet	8/7/2013	SD1	-0.29	1.97	0.33	0.65
Lake Wood Outlet	9/5/2013	SD1	0.02	4.44	0.73	3.22
Lake Wood Outlet	9/5/2013	SD1	0.02	4.44	0.73	3.22
Lake Wood Outlet	10/21/2013	SD1	-0.41	0.76	0.04	0.03
Lake Wood Outlet	10/21/2013	SD1	-0.40	0.76	0.04	0.03
Lurvey Brook	5/15/2013	SD1	2.54	1.30	0.12	0.16
Lurvey Brook	5/15/2013	SD1	2.51	1.30	0.12	0.16
Lurvey Brook	7/15/2013	SD1	-2.57	2.47	0.05	0.13
Lurvey Brook	7/15/2013	SD1	-2.52	2.47	0.05	0.13
Lurvey Brook	8/5/2013	SD1	-2.46	2.41	0.18	0.44
Lurvey Brook	8/5/2013	SD1	-2.45	2.41	0.18	0.44
Lurvey Brook	9/6/2013	SD1	-2.17	3.32	0.34	1.12
Lurvey Brook	9/6/2013	SD1	-2.17	3.32	0.34	1.12
Lurvey Brook	10/17/2013	SD1	-2.58	1.35	0.04	0.05
Lurvey Brook	10/17/2013	SD1	-2.58	1.35	0.04	0.05
Lurvey Spring Brook (Echo Lake inlet)	5/16/2013	SD3	-2.67	2.64	0.29	0.75
Lurvey Spring Brook (Echo Lake inlet)	5/16/2013	SD3	-2.67	2.64	0.29	0.75
Lurvey Spring Brook (Echo Lake inlet)	6/10/2013	SD3	-2.56	3.27	0.46	1.51
Lurvey Spring Brook (Echo Lake inlet)	6/10/2013	SD3	-2.56	3.27	0.46	1.51
Lurvey Spring Brook (Echo Lake inlet)	7/15/2013	SD3	-2.77	2.20	0.20	0.44
Lurvey Spring Brook (Echo Lake inlet)	7/15/2013	SD3	-2.77	2.20	0.20	0.44
Lurvey Spring Brook (Echo Lake inlet)	8/8/2013	SD3	-2.70	2.49	0.28	0.70
Lurvey Spring Brook (Echo Lake inlet)	8/8/2013	SD3	-2.70	2.49	0.28	0.70
Lurvey Spring Brook (Echo Lake inlet)	9/6/2013	SD3	-2.56	3.60	0.39	1.41
Lurvey Spring Brook (Echo Lake inlet)	9/6/2013	SD3	-2.56	3.60	0.39	1.41
Lurvey Spring Brook (Echo Lake inlet)	10/17/2013	SD3	-2.78	1.72	0.10	0.18
Lurvey Spring Brook (Echo Lake inlet)	10/17/2013	SD3	-2.77	1.72	0.10	0.18
Otter Creek	5/9/2013	USGS	1.81			1.70
Otter Creek	5/9/2013	USGS	1.82			1.70
Otter Creek	6/6/2013	USGS	1.77			1.40
Otter Creek	6/6/2013	USGS	1.77			1.40
Otter Creek	7/3/2013	USGS	2.12			4.90
Otter Creek	7/3/2013	USGS	2.11			4.90
Otter Creek	8/5/2013	USGS	1.73			1.20
Otter Creek	8/5/2013	USGS	1.74			1.20
Otter Creek	9/4/2013	USGS	2.13			5.00
Otter Creek	9/4/2013	USGS	2.11			5.00
Otter Creek	10/18/2013	USGS	1.77			1.20

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A4. Stream stage and discharge data for ACAD (continued). *Missing values indicate data are unavailable.*

Site	Date	Datum name	Distance from datum (ft)	Total CS area (sqft)	Average velocity (f/s)	Discharge (cfs)
Otter Creek	10/18/2013	USGS	1.77			1.20
Stanley Brook	5/14/2013	SD1	-0.25	2.29	0.87	2.00
Stanley Brook	5/14/2013	SD2	-1.06	2.29	0.87	2.00
Stanley Brook	5/14/2013	SD2	-1.05	2.29	0.87	2.00
Stanley Brook	5/14/2013	SD1	-0.26	2.29	0.87	2.00
Stanley Brook	6/12/2013	SD2	-0.38	8.88	2.31	20.48
Stanley Brook	6/12/2013	SD2	-0.38	8.88	2.31	20.48
Stanley Brook	8/12/2013	SD1	-0.30	4.96	0.50	2.49
Stanley Brook	8/12/2013	SD2	-0.96	4.96	0.50	2.49
Stanley Brook	8/12/2013	SD2	-0.96	4.96	0.50	2.49
Stanley Brook	9/11/2013	SD2	-1.03	3.73	0.40	1.48
Stanley Brook	9/11/2013	SD1	-0.40	3.73	0.40	1.48
Stanley Brook	9/11/2013	SD2	-1.02	3.73	0.40	1.48
Stanley Brook	10/18/2013	SD2	-1.05	4.07	0.40	1.61
Stanley Brook	10/18/2013	SD2	-1.06	4.07	0.40	1.61

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A5. Lake water transparency data for ACAD. “B” after transparency value indicates disk pattern still visible at pond bottom.

Site	Date	Secchi Depth (m)	(B=disk hit bottom)
Bubble Pond	5/31/2013	7.45	
Bubble Pond	6/24/2013	10.31	
Bubble Pond	7/18/2013	7.05	
Bubble Pond	8/28/2013	8.60	
Bubble Pond	9/19/2013	6.80	
Bubble Pond	10/24/2013	10.20	
Eagle Lake	5/31/2013	10.41	
Eagle Lake	6/18/2013	10.51	
Eagle Lake	7/25/2013	12.66	
Eagle Lake	8/22/2013	12.25	
Eagle Lake	9/17/2013	11.75	
Eagle Lake	10/23/2013	10.65	
Echo Lake	5/30/2013	8.78	
Echo Lake	6/25/2013	7.54	
Echo Lake	7/22/2013	8.31	
Echo Lake	8/27/2013	8.20	
Echo Lake	9/18/2013	8.43	
Echo Lake	10/22/2013	9.00	
Hodgdon Pond	5/29/2013	3.41	
Hodgdon Pond	6/20/2013	3.84	
Hodgdon Pond	7/25/2013	4.08	
Hodgdon Pond	8/26/2013	3.90	
Hodgdon Pond	9/19/2013	3.50	
Hodgdon Pond	10/25/2013	3.99	
Jordan Pond	5/28/2013	14.35	
Jordan Pond	6/27/2013	12.20	
Jordan Pond	7/29/2013	12.83	
Jordan Pond	8/19/2013	11.74	
Jordan Pond	9/30/2013	11.42	
Jordan Pond	10/23/2013	15.10	
Long Pond (MDI)	5/30/2013	10.49	
Long Pond (MDI)	6/25/2013	8.86	
Long Pond (MDI)	7/22/2013	8.07	
Long Pond (MDI)	8/27/2013	8.93	
Long Pond (MDI)	9/18/2013	9.20	
Long Pond (MDI)	10/29/2013	12.10	
Lower Hadlock	5/23/2013	7.76	
Lower Hadlock	6/19/2013	6.21	
Lower Hadlock	7/24/2013	7.25	
Lower Hadlock	8/21/2013	7.20	
Lower Hadlock	9/16/2013	7.10	
Lower Hadlock	10/25/2013	7.60	
Seal Cove Pond	5/30/2013	5.93	
Seal Cove Pond	6/20/2013	5.00	
Seal Cove Pond	7/22/2013	6.53	
Seal Cove Pond	8/26/2013	6.48	
Seal Cove Pond	9/19/2013	5.80	
Seal Cove Pond	10/22/2013	7.10	
Upper Hadlock	5/22/2013	7.48	
Upper Hadlock	6/19/2013	6.24	
Upper Hadlock	7/24/2013	6.04	
Upper Hadlock	8/20/2013	6.25	
Upper Hadlock	9/16/2013	6.21	

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A5. Lake water transparency data for ACAD (continued). “B” after transparency value indicates disk pattern still visible at pond bottom.

Site	Date	Secchi Depth (m)	(B=disk hit bottom)
Upper Hadlock	10/21/2013	6.90	
Witch Hole Pond	5/23/2013	5.98	
Witch Hole Pond	6/18/2013	4.00	
Witch Hole Pond	7/24/2013	5.40	
Witch Hole Pond	8/22/2013	4.90	
Witch Hole Pond	9/16/2013	4.77	
Witch Hole Pond	10/21/2013	4.57	

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2013 (continued).

Table A6. Light penetration profiles for ACAD.

Site	NETN Code	Date	Depth (m)	Deck cell ($\mu\text{mol s}^{-1} \text{m}^{-2}$)	PAR cell ($\mu\text{mol s}^{-1} \text{m}^{-2}$)	Proportion of penetration (PAR/Deck)
Jordan Pond	ACJORD	5/28/2013	0.10	1,149.90	1,436.10	1.25
Jordan Pond	ACJORD	5/28/2013	0.50	1,185.30	1,315.00	1.11
Jordan Pond	ACJORD	5/28/2013	1.00	1,168.50	995.32	0.85
Jordan Pond	ACJORD	5/28/2013	2.00	1,163.60	708.98	0.61
Jordan Pond	ACJORD	5/28/2013	3.00	1,144.40	482.66	0.42
Jordan Pond	ACJORD	5/28/2013	4.00	1,143.60	354.84	0.31
Jordan Pond	ACJORD	5/28/2013	5.00	1,129.60	271.92	0.24
Jordan Pond	ACJORD	5/28/2013	6.00	1,122.10	211.39	0.19
Jordan Pond	ACJORD	5/28/2013	7.00	1,103.80	147.97	0.13
Jordan Pond	ACJORD	5/28/2013	8.00	1,103.60	103.30	0.09
Jordan Pond	ACJORD	5/28/2013	9.00	1,099.30	83.08	0.08
Jordan Pond	ACJORD	5/28/2013	10.00	1,113.30	63.21	0.06
Jordan Pond	ACJORD	5/28/2013	11.00	1,080.10	46.32	0.04
Jordan Pond	ACJORD	5/28/2013	12.00	1,074.80	36.82	0.03
Jordan Pond	ACJORD	5/28/2013	13.00	1,052.60	27.35	0.03
Jordan Pond	ACJORD	5/28/2013	14.00	1,085.40	22.62	0.02
Jordan Pond	ACJORD	5/28/2013	15.00	1,071.20	16.27	0.02
Jordan Pond	ACJORD	5/28/2013	16.00	1,084.20	13.98	0.01
Jordan Pond	ACJORD	5/28/2013	17.00	967.53	9.96	0.01
Jordan Pond	ACJORD	5/28/2013	18.00	1,065.60	8.26	0.01
Jordan Pond	ACJORD	5/28/2013	18.00	1,036.90	8.87	0.01
Jordan Pond	ACJORD	6/27/2013	0.10	556.43	523.60	0.94
Jordan Pond	ACJORD	6/27/2013	0.50	503.46	458.77	0.91
Jordan Pond	ACJORD	6/27/2013	1.00	559.20	372.47	0.67
Jordan Pond	ACJORD	6/27/2013	2.00	502.84	221.18	0.44
Jordan Pond	ACJORD	6/27/2013	3.00	467.70	159.04	0.34
Jordan Pond	ACJORD	6/27/2013	4.00	460.69	127.72	0.28
Jordan Pond	ACJORD	6/27/2013	5.00	461.13	95.29	0.21
Jordan Pond	ACJORD	6/27/2013	6.00	451.67	69.93	0.15
Jordan Pond	ACJORD	6/27/2013	7.00	419.09	55.56	0.16
Jordan Pond	ACJORD	6/27/2013	8.00	465.76	40.43	0.09
Jordan Pond	ACJORD	6/27/2013	9.00	492.60	33.00	0.07
Jordan Pond	ACJORD	6/27/2013	10.00	552.16	28.97	0.05
Jordan Pond	ACJORD	6/27/2013	11.00	603.24	24.84	0.04
Jordan Pond	ACJORD	6/27/2013	12.00	647.93	21.13	0.03
Jordan Pond	ACJORD	7/29/2013	0.10	1,325.90	1,421.20	1.07
Jordan Pond	ACJORD	7/29/2013	0.50	1,619.00	1,327.80	0.83
Jordan Pond	ACJORD	7/29/2013	1.00	1,848.80	1,457.10	0.79
Jordan Pond	ACJORD	7/29/2013	2.00	1,799.00	958.81	0.53
Jordan Pond	ACJORD	7/29/2013	3.00	1,883.40	790.45	0.42
Jordan Pond	ACJORD	7/29/2013	4.00	1,839.00	626.14	0.34
Jordan Pond	ACJORD	7/29/2013	5.00	1,898.90	487.37	0.26
Jordan Pond	ACJORD	7/29/2013	6.00	1,822.40	352.76	0.19
Jordan Pond	ACJORD	7/29/2013	7.00	1,379.20	217.66	0.16
Jordan Pond	ACJORD	7/29/2013	8.00	1,664.00	193.36	0.12
Jordan Pond	ACJORD	7/29/2013	9.00	1,897.70	164.16	0.09
Jordan Pond	ACJORD	7/29/2013	10.00	1,850.90	123.42	0.07
Jordan Pond	ACJORD	7/29/2013	11.00	1,871.80	102.04	0.05
Jordan Pond	ACJORD	7/29/2013	12.00	1,851.40	79.36	0.04
Jordan Pond	ACJORD	7/29/2013	13.00	1,842.20	63.44	0.03
Jordan Pond	ACJORD	7/29/2013	14.00	1,835.80	49.21	0.03
Jordan Pond	ACJORD	7/29/2013	15.00	1,951.80	41.41	0.02
Jordan Pond	ACJORD	7/29/2013	16.00	1,918.40	33.80	0.02
Jordan Pond	ACJORD	7/29/2013	17.00	1,728.00	24.89	0.01

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2012 (continued).

Table A6. Light penetration profiles for ACAD (continued).

Site	NETN Code	Date	Depth (m)	Deck cell ($\mu\text{mol s}^{-1} \text{m}^{-2}$)	PAR cell ($\mu\text{mol s}^{-1} \text{m}^{-2}$)	Proportion of penetration (PAR/Deck)
Jordan Pond	ACJORD	7/29/2013	18.00	1,882.60	22.34	0.01
Jordan Pond	ACJORD	7/29/2013	19.00	1,813.10	17.74	0.01
Jordan Pond	ACJORD	7/29/2013	20.00	1,930.80	16.06	0.01
Jordan Pond	ACJORD	7/29/2013	21.00	1,961.60	13.48	0.01
Jordan Pond	ACJORD	8/19/2013	0.10	1,338.90	1,381.40	1.03
Jordan Pond	ACJORD	8/19/2013	0.50	1,580.10	1,501.30	0.95
Jordan Pond	ACJORD	8/19/2013	3.00	1,610.40	660.98	0.41
Jordan Pond	ACJORD	8/19/2013	4.00	1,605.00	541.13	0.34
Jordan Pond	ACJORD	8/19/2013	5.00	1,620.40	383.43	0.24
Jordan Pond	ACJORD	8/19/2013	6.00	1,606.70	309.46	0.19
Jordan Pond	ACJORD	8/19/2013	7.00	1,587.60	234.33	0.15
Jordan Pond	ACJORD	8/19/2013	8.00	1,605.50	182.24	0.11
Jordan Pond	ACJORD	8/19/2013	9.00	1,610.20	137.79	0.09
Jordan Pond	ACJORD	8/19/2013	10.00	1,605.60	104.61	0.07
Jordan Pond	ACJORD	8/19/2013	11.00	1,602.40	81.84	0.05
Jordan Pond	ACJORD	8/19/2013	12.00	1,610.60	63.42	0.04
Jordan Pond	ACJORD	8/19/2013	13.00	1,624.00	50.70	0.03
Jordan Pond	ACJORD	8/19/2013	14.00	1,576.60	40.60	0.03
Jordan Pond	ACJORD	8/19/2013	15.00	1,546.20	33.53	0.02
Jordan Pond	ACJORD	8/19/2013	16.00	1,531.10	26.67	0.02
Jordan Pond	ACJORD	8/19/2013	17.00	1,534.30	22.00	0.01
Jordan Pond	ACJORD	8/19/2013	18.00	1,528.90	17.93	0.01
Jordan Pond	ACJORD	8/19/2013	19.00	1,552.80	14.75	0.01
Jordan Pond	ACJORD	8/19/2013	20.00	1,561.20	12.13	0.01
Jordan Pond	ACJORD	9/30/2013	0.10	1,380.50	1,781.40	1.29
Jordan Pond	ACJORD	9/30/2013	0.10	1,457.50	1,697.40	1.16
Jordan Pond	ACJORD	9/30/2013	0.50	1,428.20	1,483.90	1.04
Jordan Pond	ACJORD	9/30/2013	0.50	1,392.70	1,369.60	0.98
Jordan Pond	ACJORD	9/30/2013	1.00	1,466.80	1,251.40	0.85
Jordan Pond	ACJORD	9/30/2013	2.00	1,427.30	903.99	0.63
Jordan Pond	ACJORD	9/30/2013	3.00	1,485.10	675.13	0.45
Jordan Pond	ACJORD	9/30/2013	4.00	1,451.30	479.65	0.33
Jordan Pond	ACJORD	9/30/2013	5.00	1,413.00	362.26	0.26
Jordan Pond	ACJORD	9/30/2013	6.00	1,423.40	275.64	0.19
Jordan Pond	ACJORD	9/30/2013	7.00	1,337.20	205.89	0.15
Jordan Pond	ACJORD	9/30/2013	8.00	1,316.50	160.11	0.12
Jordan Pond	ACJORD	9/30/2013	9.00	1,280.40	118.58	0.09
Jordan Pond	ACJORD	9/30/2013	10.00	1,325.10	95.47	0.07
Jordan Pond	ACJORD	9/30/2013	11.00	1,312.40	72.15	0.05
Jordan Pond	ACJORD	9/30/2013	12.00	1,303.00	54.05	0.04
Jordan Pond	ACJORD	9/30/2013	13.00	1,397.20	42.75	0.03
Jordan Pond	ACJORD	9/30/2013	14.00	1,349.50	34.10	0.03
Jordan Pond	ACJORD	9/30/2013	15.00	1,356.80	27.47	0.02
Jordan Pond	ACJORD	9/30/2013	16.00	1,386.00	21.96	0.02
Jordan Pond	ACJORD	9/30/2013	17.00	1,367.00	18.09	0.01
Jordan Pond	ACJORD	9/30/2013	18.00	1,347.30	14.57	0.01
Jordan Pond	ACJORD	9/30/2013	19.00	1,355.90	11.79	0.01
Jordan Pond	ACJORD	9/30/2013	20.00	1,384.20	9.66	0.01
Jordan Pond	ACJORD	10/23/2013	0.10	1,019.70	1,241.10	1.22
Jordan Pond	ACJORD	10/23/2013	0.40	1,025.50	1,098.30	1.07
Jordan Pond	ACJORD	10/23/2013	0.50	993.53	1,000.30	1.01
Jordan Pond	ACJORD	10/23/2013	1.00	1,014.20	981.93	0.97
Jordan Pond	ACJORD	10/23/2013	2.00	1,009.60	629.88	0.62
Jordan Pond	ACJORD	10/23/2013	3.00	997.62	429.08	0.43
Jordan Pond	ACJORD	10/23/2013	4.00	995.67	318.64	0.32

Appendix A. Acadia National Park (ACAD) Water Monitoring Data, 2012 (continued).

Table A6. Light penetration profiles for ACAD (continued).

Site	NETN Code	Date	Depth (m)	Deck cell ($\mu\text{mol s}^{-1} \text{m}^{-2}$)	PAR cell ($\mu\text{mol s}^{-1} \text{m}^{-2}$)	Proportion of penetration (PAR/Deck)
Jordan Pond	ACJORD	10/23/2013	5.00	1,023.50	267.72	0.26
Jordan Pond	ACJORD	10/23/2013	6.00	962.60	184.56	0.19
Jordan Pond	ACJORD	10/23/2013	7.00	962.75	144.66	0.15
Jordan Pond	ACJORD	10/23/2013	8.00	955.17	125.30	0.13
Jordan Pond	ACJORD	10/23/2013	9.00	963.05	99.11	0.10
Jordan Pond	ACJORD	10/23/2013	10.00	959.81	78.09	0.08
Jordan Pond	ACJORD	10/23/2013	10.00	959.67	78.63	0.08
Jordan Pond	ACJORD	10/23/2013	11.00	958.61	62.55	0.07
Jordan Pond	ACJORD	10/23/2013	12.00	957.08	49.22	0.05
Jordan Pond	ACJORD	10/23/2013	13.00	988.73	39.53	0.04
Jordan Pond	ACJORD	10/23/2013	14.00	1,000.80	33.72	0.03
Jordan Pond	ACJORD	10/23/2013	15.00	1,036.70	26.87	0.03
Jordan Pond	ACJORD	10/23/2013	16.00	1,112.00	22.21	0.02
Jordan Pond	ACJORD	10/23/2013	17.00	1,103.00	18.04	0.02
Jordan Pond	ACJORD	10/23/2013	18.00	1,025.40	12.91	0.01
Jordan Pond	ACJORD	10/23/2013	19.00	966.94	10.72	0.01
Jordan Pond	ACJORD	10/23/2013	19.00	984.49	10.81	0.01
Jordan Pond	ACJORD	10/23/2013	20.00	998.24	8.71	0.01
Jordan Pond	ACJORD	10/23/2013	21.00	1,018.40	6.94	0.01
Seawall Pond	ACSEAW	5/29/2013	0.10	115.03	66.18	0.58
Seawall Pond	ACSEAW	5/29/2013	0.50	95.39	4.95	0.05
Seawall Pond	ACSEAW	5/29/2013	0.70	106.13	1.35	0.01
Seawall Pond	ACSEAW	5/29/2013	0.70	88.05	0.98	0.01
Seawall Pond	ACSEAW	6/24/2013	0.10	1,488.70	1,095.20	0.72
Seawall Pond	ACSEAW	6/24/2013	0.25	1,536.80	100.85	0.07
Seawall Pond	ACSEAW	6/24/2013	0.50	996.02	14.84	0.01
Seawall Pond	ACSEAW	6/24/2013	0.75	391.78	1.14	0.00
Seawall Pond	ACSEAW	7/25/2013	0.10	533.06	250.60	0.47
Seawall Pond	ACSEAW	7/25/2013	0.30	542.86	35.05	0.06
Seawall Pond	ACSEAW	7/25/2013	0.50	561.65	4.77	0.01
Seawall Pond	ACSEAW	7/25/2013	0.80	561.17	0.82	0.00
Seawall Pond	ACSEAW	8/15/2013	0.03	1,846.40	908.77	0.49
Seawall Pond	ACSEAW	8/15/2013	0.10	1,852.80	518.97	0.28
Seawall Pond	ACSEAW	8/15/2013	0.50	1,848.60	39.54	0.02
Seawall Pond	ACSEAW	8/15/2013	0.65	1,832.50	24.81	0.01
Seawall Pond	ACSEAW	9/18/2013	0.03	1,249.60	824.14	0.66
Seawall Pond	ACSEAW	9/18/2013	0.10	1,212.50	340.62	0.28
Seawall Pond	ACSEAW	9/18/2013	0.20	1,189.90	68.86	0.06
Seawall Pond	ACSEAW	9/18/2013	0.50	1,218.20	15.73	0.01
Seawall Pond	ACSEAW	9/18/2013	0.60	1,199.60	10.82	0.01
Seawall Pond	ACSEAW	10/25/2013	0.10	831.00	863.55	1.04
Seawall Pond	ACSEAW	10/25/2013	0.30	831.90	236.47	0.28
Seawall Pond	ACSEAW	10/25/2013	0.40	768.07	67.61	0.09
Seawall Pond	ACSEAW	10/25/2013	0.50	784.92	32.78	0.04
Seawall Pond	ACSEAW	10/25/2013	0.90	834.33	15.91	0.02

Appendix B. Acadia National Park (ACAD) Blank and Replicate Water Samples, 2013.

Table B1. 2013 Blank sample analysis results (Acadia NP).

Site	Date	ANC (µeq/L)	A Color (PCU)	DOC (mg/L)	Chla (µg/L)	Cl (µeq/L)	SO ₄ (µeq/L)	TP (µg/L)	TN (mg/L)	NO ₂ (mg/L)	NO ₃ (µeq/L)	NH ₃ (mg/L)
ACUHAD	6/19/2013	0.5	1	<MRL 0.5		<MRL 2	<MRL 2	<MRL 1	<MRL 0.1	<MRL 0.005	<MRL 1	<MRL 0.08
ACWHOL	8/22/2013	3.3	1	<MRL 0.5		<MRL 2	<MRL 2	<MRL 1	<MRL 0.1	<MRL 0.005	<MRL 1	<MRL 0.08
ACLVYB	5/15/2013	-0.4	0	<MRL 0.5		<MRL 2	<MRL 2	<MRL 1	<MRL 0.1	<MRL 0.005	<MRL 1	<MRL 0.08
ACBUBO	8/8/2013	0.9	0	<MRL 0.5		<MRL 2	<MRL 2	<MRL 1	<MRL 0.1	<MRL 0.005	<MRL 1	<MRL 0.08

Table B2. Replicate sample analysis results and measurement quality analysis (Acadia NP).

Site	Date	Color Reg	Color Rep	Diff (PCU)	% Diff	DOC Reg	DOC Rep	Diff (mg/L)	% Diff	ANC Reg	ANC Rep	Diff (µeq/L)	% Diff	Chla Reg	Chla Rep	Diff (µg/L)	% Diff
ACSTNL	5/14/2013	33	34	-1.0	3.0%	3.09	3.17	-0.08	2.59%	162.0	163.0	-1.0	0.6%	n/a	n/a		
ACHODG	6/20/2013	85	85	0.0	0.0%	8.94	8.8	0.14	1.57%	63.2	63.8	-0.6	0.9%	2.2	2.1	0.1	0.05
ACLSIE	8/8/2013	54	55	-1.0	1.9%	4.32	4.34	-0.02	0.46%	130.0	118.0	12.0	9.2%	n/a	n/a		
ACECHO	8/27/2013	20	21	-1.0	5.0%	3.14	3.14	0.00	0.00%	106.0	107.0	-1.0	0.9%	2.6	2.5	0.1	0.04

Site	Date	TP Reg	TP Rep	Diff (µg/L)	% Diff	TN Reg	TN Rep	Diff (mg/L)	% Diff	NO ₃ Reg	NO ₃ Rep	Diff (µeq/L)	% Diff	NO ₂ Reg	NO ₂ Rep	Diff (mg/L)	% Diff
ACSTNL	5/14/2013	4.8	4.7	0.1	2.1%	0.28	0.25	0.03	10.5%	12.0	12.0	0.00	0.0%	< MRL	< MRL		
ACHODG	6/20/2013	7.6	8.8	-1.2	15.8%	0.28	0.27	0.00	1.1%	< MRL	< MRL			< MRL	< MRL		
ACLSIE	8/8/2013	5.9	6.7	-0.8	13.6%	0.15	0.15	0.01	3.9%	1.6	1.6	0.00	0.0%	< MRL	< MRL		
ACECHO	8/27/2013	3.7	3.7	0.0	0.0%	0.14	0.15	-0.01	8.1%	< MRL	< MRL			< MRL	< MRL		

Site	Date	NH ₃ Reg	NH ₃ Rep	Diff (mg/L)	% Diff	SO ₄ Reg	SO ₄ Rep	Diff (µeq/L)	% Diff	Cl Reg	Cl Rep	Diff (µeq/L)	% Diff
ACSTNL	5/14/2013	< MRL	< MRL			83	83	0.0	0.0%	422	422	0.0	0.0%
ACHODG	6/20/2013	< MRL	< MRL			43	43	0.0	0.0%	213	213	0.0	0.0%
ACLSIE	8/8/2013	< MRL	< MRL			67	67	0.0	0.0%	336	334	2.0	0.6%
ACECHO	8/27/2013	< MRL	< MRL			57	57	0.0	0.0%	345	347	-2.0	0.6%

The Department of the Interior protects and manages the nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its special responsibilities to American Indians, Alaska Natives, and affiliated Island Communities.

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National Park Service
U.S. Department of the Interior



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