Utah Lake CNP Studies		
FileName	**Title**	**ArticleType**
Abu Hmeidan 2017 thesis	Characterizing Current and Geologic Phosphorus in Utah Lake Sediment Using Field Samples, Laboratory Methods, and Statistical Analysis: Implications for Water Quality Issues	Thesis
Abu Hmeidan et al. 2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article
Allert et al. 2006	Using On-Site Bioassays to Determine Selenium Risk to Propagated Endangered Fishes	Journal Article
Bradshaw et al. 1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article
Brahney 2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report
Brett 2019a Letter	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter
Brett 2019b Letter	Response to LaVere Merritt June 12, 2019 memo	Letter
Brett 2019c Letter	Untitled	Letter
Collins 2019 Thesis	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis
Gaeta and Landom 2016a	A whole-ecosystem response of a shallow lake to drought and an invasive carp removal, with an emphasis on endangered fish conservation	Report
Gaeta and Landom 2016b	Final environmental assessment for removal and control of nonnative carp in Utah Lake to support june sucker recovery	Report
Goel et al. 2020	Utah Lake Sediment–Water Nutrient Interactions	Report
Greaves and Hirst 1919	THE PHOSPHORUS, POTASSIUM, AND NITROGEN CONTENT OF THE WATERS OF THE INTERMOUNTAIN REGION	Journal Article
Hines 2011 Thesis	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis
Hogsett et al. 2019	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article
Horns 2005	Utah Lake Comprehensive Management Plan Resource Document	Report
Kelso and Baker 2020	Organic Matter is a Mixtur ganic Matter is a Mixture of Terrestrial, A estrial, Autochthonous, and ochthonous, and Wastewater Effluent in an Urban River	Journal Article
Li et al. 2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article
Li et al. 2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article
Merrell 2015 Thesis	Utah Lake Sediment Phosphorus Analysis	Thesis
Merritt 2017 Letter	Utah Lake: A Few Considerations	White Paper
Merritt and Miller 2016	Interim Report on Nutrient Loadings to Utah Lake	Report
Miller and Provenza 2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article
Miller 2020	Updated Interim Report on Nutrients in Precipitation on Utah Lake	Report
Miller and Richards 2020 Sum	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report
Narteh 2011	Mapping and Modeling Chlorophyll-a Concentrations in Utah Lake Using Landsat 7 ETM+ Imagery	Thesis
Olsen 2018 Thesis	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis
Olsen et al. 2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article
PSOMAS and SWCA 2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report
Randall 2017 Thesis	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis
Randall et al. 2019	Sediment potentially controls in-lake phosphorus cycling and harmful cyanobacteria in shallow, eutrophic Utah Lake	Journal Article
Reidhead 2019 Thesis	Significance of the Rates of Atmospheric Deposition Around Utah Lake and Phosphorus-Fractionation of Local Soils	Thesis
Shah et al. 2017	Nitrogen sources and transformations within the Jordan River, Utah and Microbial community response to energy and nutrient availability in the Jordan River, Utah	Report
Squires and Rushforth 1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article
Sundrud 1971 Thesis	The biochemical response of Provo Bay to nutrient inflow	Thesis
Toole 1974 Thesis	The benthic communities of the eastern rocky shore areas of Goshen Bay, Utah Lake	Thesis
Wang et al. 2017	THE HISTORICAL RECORDS OF STABLE ISOTOPES (13C AND 15N) AND TRACE METALS ALONG UTAH LAKE – JORDAN RIVER TRANSITION ZONE, UTAH (USA)	Guidebook chapter
Whiting et al. 1978	ENVIRONMENTAL INTERACTION IN SUMMER ALGAL COMMUNITIES OF UTAH LAKE	Journal Article

Related Utah Lake Studies

FileName	Author(s)	Year	Title	ArticleType	Details
Andersen et al. 2006	Andersen et al.	2006	Status of June Sucker in Utah Lake and Refuges	Journal Article	Relative abundance of fish species (number and weight) 1978-1979
Barnes and Toole 1981	Barnes and Toole	1981	MACROINVERTEBRATE AND ZOOPLANKTON COMMUNITIES OF UTAH LAKE: A REVIEW OF THE LITERATURE	Journal Article	Macroinvertebrate and zooplankton abundance in different zones
Baskin et al. 2002	Baskin et al.	2002	Water-Quality Assessment of the Great Salt Lake Basins, Utah, Idaho, and Wyoming—Environmental	USGS Report	Water quality assessment - land use, water budget, threats to water quality
Brotherson 1987	Brotherson	1987	PLANT COMMUNITY ZONATION IN RESPONSE TO SOIL GRADIENTS IN A SALINE MEADOW NEAR UTAH LAKE,	Journal Article	Soil nutrient and mineral content and plant cover on the shore of Utah Lake
Brotherson et al. 1986	Brotherson et al.	1986	COMPARATIVE HABITAT AND COMMUNITY RELATIONSHIPS OF ATRIPLEX CONFERTIFOLIA AND	Journal Article	Soil nutrient and mineral content and plant cover on the shore of Utah Lake
Brown and Baasandorj	Brown and Baasandorj	NA	Utah Winter Fine Particulate Study (UWFPS)	Proposal?	Seems to be a proposal to conduct air sampling, but includes background information about nutrient content of PM
Callister 2008 Thesis	Callister	2008	A Three-Dimensional, Time-Dependent Circulation Model of Utah Lake	Thesis	Documentation of model development and validation for predicting flow circulation patterns and temperature distributions over time for Utah Lake
Cole 2014 Thesis	Cole	2014	ECOMORPHOLOGICAL AND GENETIC INVESTIGATIONS INTO THE UTAH LAKE, UT SUCKER COMPLEX WITH COMPARISONS TO THE JACKSON LAKE, WY SUCKER COMPLEX	Thesis	Investigation of the ecology, morphology and genetics of Utah Lake sucker population compared to Jackson Lake, Wyoming sucker population
Gaeta et al. 2018	Gaeta et al.	2018	A preliminary common carp population model and standardized seining to evaluate of the common carp removal in Utah Lake, UT	Report	Population model was developed to evaluate effectiveness of mechanical carp removal effort to reduce carp biomass and increase overall ecosystem health in Utah Lake
Gaeta et al. 2019	Gaeta et al.	2019	An age-structured common carp population model and standardized seining to support common carp removal in UtahLake, UT	Report	Population model results showed that mechanical removal substantially reduced adult carp abundance and biomass in Utah Lake, and that compensatory recruitment may have been initiated as a result
Grimes et al. 1980	Grimes et al.	1980	A COMPARISON OF EPIPHYTIC DIATOM ASSEMBLAGES ON LIVING AND DEAD STEMS OF THE COMMON GRASS PHRAGMITES AUSTRALIS	Journal Article	Purpose of this study was to illuminate distribution patterns of diatom epiphytes on living and dead specimens of a single macro-phyte host (Phragmites australis (Cav.) Trin.ex Steaded) in Utah Lake, Utah. Findings support the view that Utah Lake is a slightly saline, eutrophic system
Harding 1970	Harding	1970	A PRELIMINARY REPORT ON THE ALGAL SPECIES PRESENTLY FOUND IN UTAH LAKE	Journal Article	Preliminary study was the first in a series to update and contribute to the known algal flora of Utah Lake since 1931
King 2019 Thesis	King	2019	The Response of Utah Lake's Plant and Algal Community Structure to Cultural Eutrophication	Thesis	Discusses measurement in "regime shift" throughout 0-60 cm and 0-74 cm sediment cores for Goshen Bay and Provo Bay, respectively. Percentages that may be of interest are % C, % N and C:N ratio
Kulmatiski et al. 2010	Kulmatiski et al.	2010	NONNATIVE PHRAGMITES AUSTRALIS INVASION INTO UTAH WETLANDS	Journal Article	Invasion of nonnative P. australis common reed species in the wetlands of northern Utah and experiment comparing the growth rates between native and nonnative plant types
Landom and Walsworth 2020	Landom and Walsworth	2020	Biotic community response to Common Carp removal and lake level fluctuations in Utah Lake, UT	Report	Study of biotic community changes driven by lake level fluctuations, but also differentiated beneficial responses more correlated with carp removal than lake level fluctuations
Landom et al. 2019	Landom et al.	2019	Seasonal and annual changes in the near-shore Utah Lake macrophyte community	Report	Assessment of potential growth of submerged vegetation coverage as a result of manual carp removal effort. Results showed there was not an increase of vegetation coverage across sample years of 2016-2018. The relationship between macrophyte coverage and macroinvertebrate abundances suggested non-linear potential "refuge" effects
Lytle and Smith 1995	Lytle and Smith	1995	SEASONAL NUTRIENT CYCLING IN POTAMOGETON PECTINATUS OF THE LOWER PROVO RIVER	Journal Article	Investigates mineral content (including N and P) in leaf tissue of *Potamogeton pectinatus,* a common submersed aqautic plant of Great Basin wetlands
Miller and Crowl 2006	Miller and Crowl	2006	Effects of common carp (Cyprinus carpio) on macrophytes and invertebrate communities in a	Journal Article	Experiment on effects of carp on macrophytes and invertebrates
Page et al. 2018	Page et al.	2018	A novel cross-satellite based assessment of the spatio-temporal development of a cyanobacterial harmful	Journal Article	Cross-satellite based monitoring methods for CyanoHABs
Richards 2016 Letter	Richards	2016	Utah Department of Water Quality 2016 Draft Integrative Report Comment Letter	Letter	Also includes three reports: 1. "Is reliance on a single bioassessment metric for assessing water quality in Utah's rivers and streams prudent?". 2. "Real and Perceived Macroinvertebrate Assemblage Variability in the Jordan River, Utah can Effect Water Quality Assessments".
Richards 2018	Richards	2018	Relationships between Phytoplankton Richness and Diversity, Zooplankton Abundance, and cyanoHAB	Report	Phytoplankton and zooplankton abundance, richness, and evenness
Richards 2019a	Richards	2019	Zooplankton Assemblages in Highly Regulated Utah Lake: 2015-2018	Report	Zooplankton abundance, richness, and evenness
Richards 2019b	Richards	2019	Spatial and Temporal Variability in Zooplankton Assemblages in Utah Lake 2015 to 2019	Report	Zooplankton abundance, richness, and evenness
Richards 2019c	Richards	2019	Factors Effecting the Ecological Health and Integrity of Utah Lake with a Focus on the Relationships between Water Column Regulators, Benthic Ecosystem Engineers, and CyanoHABs	Report	Watershed diversions, water levels, cyanoHABs, turbidity, Temperature, pesticides, zooplankton, invasive fish, mollusks, midges
Richards and Miller 2017	Richards and Miller	2017	Utah Lake Research 2016 Progress Report	Report	Phytoplankton and zooplankton assemblages, benthic macroinvertebrates
Richards and Miller 2019	Richards and Miller	2019	A Provisional Multi-Metric Index of Biological Integrity (MIBI) to Assess Water Quality in Utah Lake centered on Regulatory Directives	Report	MIBI
Squires et al. 1979	Squires et al.	1979	COMPETITIVE DISPLACEMENT AS A FACTOR INFLUENCING PHYTOPLANKTON DISTRIBUTION IN UTAH LAKE, UTAH	Journal Article	Spatial distribution of phytoplankton species in Utah Lake
Stamp et al. 2008	Stamp et al.	2008	LOWER PROVO RIVER ECOSYSTEM FLOW RECOMMENDATIONS FINAL REPORT	Report	References the water quality data collected by Central Utah Water Conservancy District (CUWCD) and Utah DWQ
Su and vonStackelberg 2020	Su and vonStackelberg	2020	Utah Lake Hydrodynamic (EFDC) and Water Quality	Report	Utah Lake WASP and EFDC model report
Toole 1974 Thesis	Toole	1974	The benthic communities of the eastern rocky shore areas of Goshen Bay, Utah Lake	Thesis	Abundance of macroinvertebrates in Goshen Bay - specific taxa

Related Studies of Other Systems					
FileName	**Author(s)**	**Year**	**Title**	**ArticleType**	**Details**
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Bett Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	In addition to sampling data provided for Utah Lake water quality data for Deer Creek Reservoir and Great Salt Lake, Farmington Bay
Penn et al. 2000	Penn et al.	2000	Seasonality in phosphorus release rates from the sediments of a hypereutrophic lake under a matrix of pH and redox conditions	Journal Article	Study in Onodaga Lake located in Syracuse, NY. Phosphorus release rates measured on intact sediment cores found to range from 3 to 38 mg/m2-day, with a time weighted annual average calcuated at 10 mg/m2-day.
Toner and Catling 2019	Toner and Catling	2019	A carbonate-rich lake solution to the phosphate problem of the origir life	Journal Article	Study of how carbonate-rich lakes can promote accumulation of phosphate precipitation
USGS 2003	USGS	2003	Water Quality at Fixed Sites in the Great Salt Lake Basins, Utah, Idaho and Wyoming, Water Years 1999–2000	Report	Discharge, LULC, nutrients in tributaries and sourc waters to the Great Salt Lake. Includes Jordan River downstream of Utah Lake.
USGS 2012	USGS	2012	Assessment of Total Nitrogen and Total Phosphorus in Selected Surfa Water of the National Park Service Northern Colorado Plateau	Report	TN and TP in surface waters in the Northern Colorad Plateau Network

Agreement Guide

Agreement	
High	< 10% difference in estimates
Medium-High	< 25% difference in estimates
Medium	< 50% difference in estimates
Medium-Low	>50% difference, <500% difference
Low	>500% difference

Utah Lake CNP Data																			
FileName	Author(s)	Year	Title	ArticleType	Process or Pool	Fraction	Rate or Amount	Units	Aggregation	Year	Month	Location	Measured or Estimated?	Approach	Notes	Evidence amount (number of studies)	Agreement	Confidence	Comments
Abu Hmeidan 2017 thesis	Abu Hmeidan	2017	Characterizing Current and Geologic Phosphorus in Utah Lake Sediment Using Field Samples, Laboratory Methods, and Statistical Analysis: Implications for Water Quality Issues	Thesis	Sediment P	TP	280	ppm	Minimum	2015-2016		Lakewide	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan et al. 2018	3	Medium	High	
Abu Hmeidan 2017 thesis	Abu Hmeidan	2017	Characterizing Current and Geologic Phosphorus in Utah Lake Sediment Using Field Samples, Laboratory Methods, and Statistical Analysis: Implications for Water Quality Issues	Thesis	Sediment P	TP	465	ppm	Minimum	2015-2016		Provo Bay	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan et al. 2018	3	Medium	High	
Abu Hmeidan 2017 thesis	Abu Hmeidan	2017	Characterizing Current and Geologic Phosphorus in Utah Lake Sediment Using Field Samples, Laboratory Methods, and Statistical Analysis: Implications for Water Quality Issues	Thesis	Sediment P	TP	604	ppm	Mean	2016		Lakewide	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan et al. 2018	3	Medium	High	
Abu Hmeidan 2017 thesis	Abu Hmeidan	2017	Characterizing Current and Geologic Phosphorus in Utah Lake Sediment Using Field Samples, Laboratory Methods, and Statistical Analysis: Implications for Water Quality Issues	Thesis	Sediment P	TP	631	ppm	Mean	2015-2016		Middle Upper Quadrant	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan et al. 2018	3	Medium	High	
Abu Hmeidan 2017 thesis	Abu Hmeidan	2017	Characterizing Current and Geologic Phosphorus in Utah Lake Sediment Using Field Samples, Laboratory Methods, and Statistical Analysis: Implications for Water Quality Issues	Thesis	Sediment P	TP	660	ppm	Mean	2015-2016		Upper Quadrant	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan et al. 2018	3	Medium	High	
Abu Hmeidan 2017 thesis	Abu Hmeidan	2017	Characterizing Current and Geologic Phosphorus in Utah Lake Sediment Using Field Samples, Laboratory Methods, and Statistical Analysis: Implications for Water Quality Issues	Thesis	Sediment P	TP	666	ppm	Mean	2015-2016		Lakewide	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan et al. 2018	3	Medium	High	
Abu Hmeidan 2017 thesis	Abu Hmeidan	2017	Characterizing Current and Geologic Phosphorus in Utah Lake Sediment Using Field Samples, Laboratory Methods, and Statistical Analysis: Implications for Water Quality Issues	Thesis	Sediment P	TP	668	ppm	Mean	2015-2016		Middle Lower Quadrant	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan et al. 2018	3	Medium	High	
Abu Hmeidan 2017 thesis	Abu Hmeidan	2017	Characterizing Current and Geologic Phosphorus in Utah Lake Sediment Using Field Samples, Laboratory Methods, and Statistical Analysis: Implications for Water Quality Issues	Thesis	Sediment P	TP	714	ppm	Mean	2015-2016		Lower Quadrant	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan et al. 2018	3	Medium	High	
Abu Hmeidan 2017 thesis	Abu Hmeidan	2017	Characterizing Current and Geologic Phosphorus in Utah Lake Sediment Using Field Samples, Laboratory Methods, and Statistical Analysis: Implications for Water Quality Issues	Thesis	Sediment P	TP	719	ppm	Mean	2015		Lakewide	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan et al. 2018	3	Medium	High	
Abu Hmeidan 2017 thesis	Abu Hmeidan	2017	Characterizing Current and Geologic Phosphorus in Utah Lake Sediment Using Field Samples, Laboratory Methods, and Statistical Analysis: Implications for Water Quality Issues	Thesis	Sediment P	TP	1710	ppm	Maximum	2015-2016		Lakewide	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan et al. 2018	3	Medium	High	
Abu Hmeidan 2017 thesis	Abu Hmeidan	2017	Characterizing Current and Geologic Phosphorus in Utah Lake Sediment Using Field Samples, Laboratory Methods, and Statistical Analysis: Implications for Water Quality Issues	Thesis	Sediment P	TP	1710	ppm	Maximum	2015-2016		Provo Bay	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan et al. 2018	3	Medium	High	
Abu Hmeidan et al. 2018	Abu Hmeidan et al.	2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article	Sediment P	TP	465	ppm	Minimum	2015-2016		Provo Bay	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan 2017	3	Medium	High	
Abu Hmeidan et al. 2018	Abu Hmeidan et al.	2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article	Sediment P	TP	118	ppm	SD	2015-2016		Lower Quadrant	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan 2017	3	Medium	High	
Abu Hmeidan et al. 2018	Abu Hmeidan et al.	2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article	Sediment P	TP	150	ppm	SD	2015-2016		Upper Quadrant	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan 2017	3	Medium	High	
Abu Hmeidan et al. 2018	Abu Hmeidan et al.	2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article	Sediment P	TP	174	ppm	SD	2015-2016		Middle Upper Quadrant	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan 2017	3	Medium	High	
Abu Hmeidan et al. 2018	Abu Hmeidan et al.	2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article	Sediment P	TP	280	ppm	Minimum	2015-2016		Lakewide	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan 2017	3	Medium	High	
Abu Hmeidan et al. 2018	Abu Hmeidan et al.	2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article	Sediment P	TP	304	ppm	SD	2015-2016		Middle Lower Quadrant	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan 2017	3	Medium	High	

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Abu Hmeidan et al. 2018	Abu Hmeidan et al.	2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article	Sediment P	TP	604	ppm	Mean	2016		Lakewide	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan 2017	3	Medium	High	
Abu Hmeidan et al. 2018	Abu Hmeidan et al.	2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article	Sediment P	TP	631	ppm	Mean	2015-2016		Middle Upper Quadrant	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan 2017	3	Medium	High	
Abu Hmeidan et al. 2018	Abu Hmeidan et al.	2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article	Sediment P	TP	660	ppm	Mean	2015-2016		Upper Quadrant	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan 2017	3	Medium	High	
Abu Hmeidan et al. 2018	Abu Hmeidan et al.	2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article	Sediment P	TP	666	ppm	Mean	2015-2016		Lakewide	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan 2017	3	Medium	High	
Abu Hmeidan et al. 2018	Abu Hmeidan et al.	2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article	Sediment P	TP	668	ppm	Mean	2015-2016		Middle Lower Quadrant	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan 2017	3	Medium	High	
Abu Hmeidan et al. 2018	Abu Hmeidan et al.	2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article	Sediment P	TP	714	ppm	Mean	2015-2016		Lower Quadrant	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan 2017	3	Medium	High	
Abu Hmeidan et al. 2018	Abu Hmeidan et al.	2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article	Sediment P	TP	719	ppm	Mean	2015		Lakewide	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan 2017	3	Medium	High	
Abu Hmeidan et al. 2018	Abu Hmeidan et al.	2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article	Sediment P	TP	1710	ppm	Maximum	2015-2016		Lakewide	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan 2017	3	Medium	High	
Abu Hmeidan et al. 2018	Abu Hmeidan et al.	2018	Characterizing Total Phosphorus in Current and Geologic Utah Lake Sediments: Implications for Water Quality Management Issues	Journal Article	Sediment P	TP	1710	ppm	Maximum	2015-2016		Provo Bay	Measured	Microwave Digestion and ICP-OES	Same results as Abu Hmeidan 2017	3	Medium	High	
Allert et al. 2006	Allert et al.	2006	Using On-Site Bioassays to Determine Selenium Risk to Propagated Endangered Fishes	Journal Article	Water column N	NH3	0.4	mg/L	SD	NA		Provo Bay	Measured	APHA 1998		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Allert et al. 2006	Allert et al.	2006	Using On-Site Bioassays to Determine Selenium Risk to Propagated Endangered Fishes	Journal Article	Water column C	POC	26	mg/L	Mean	NA		Provo Bay	Measured	APHA 1998		1	NA	Medium	
Allert et al. 2006	Allert et al.	2006	Using On-Site Bioassays to Determine Selenium Risk to Propagated Endangered Fishes	Journal Article	Water column C	POC	19	mg/L	SD	NA		Provo Bay	Measured	APHA 1998		1	NA	Medium	
Allert et al. 2006	Allert et al.	2006	Using On-Site Bioassays to Determine Selenium Risk to Propagated Endangered Fishes	Journal Article	Water column N	NH3	0.24	mg/L	Mean	NA		Provo Bay	Measured	APHA 1998		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column C	HCO3	214	mg/L	Minimum	1971	May	Provo Bay	Measured	APHA 1971		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column C	HCO3	259	mg/L	Maximum	1971	May	Provo Bay	Measured	APHA 1971		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column C	HCO3	232	mg/L	Mean	1971	May	Provo Bay	Measured	APHA 1971		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column C	HCO3	266	mg/L	Mean	1970	May	Center	Measured	APHA 1971		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column C	HCO3	226	mg/L	Minimum	1971	January	Provo Bay	Measured	APHA 1971		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column C	HCO3	282	mg/L	Maximum	1971	January	Provo Bay	Measured	APHA 1971		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column C	HCO3	262	mg/L	Mean	1971	January	Provo Bay	Measured	APHA 1971		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column P	PO4	0.09	mg/L	Minimum	1971	May	Provo Bay	Measured	APHA 1971		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column N	NO3	0.06	mg/L	Minimum	1971	May	Provo Bay	Measured	APHA 1971		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column P	PO4	0.26	mg/L	Mean	1970	May	Center	Measured	APHA 1971		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column N	NH3	0.11	mg/L	Minimum	1971	May	Provo Bay	Measured	APHA 1971		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column N	NH3	0.44	mg/L	Mean	1971	June	Provo Bay	Measured	APHA 1971		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column N	NO3	0.1	mg/L	Minimum	1971	January	Provo Bay	Measured	APHA 1971		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column N	NO3	0.17	mg/L	Mean	1971	May	Provo Bay	Measured	APHA 1971		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column N	NO3	0.29	mg/L	Mean	1971	January	Provo Bay	Measured	APHA 1971		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column N	NO3	0.32	mg/L	Mean	1970	May	Center	Measured	APHA 1971		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column P	PO4	0.4	mg/L	Minimum	1971	January	Provo Bay	Measured	APHA 1971		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column P	PO4	0.85	mg/L	Mean	1970	May	Provo Bay	Measured	APHA 1971		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column N	NO3	0.34	mg/L	Maximum	1971	May	Provo Bay	Measured	APHA 1971		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column P	PO4	2.52	mg/L	Mean	1971	January	Provo Bay	Measured	APHA 1971		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column P	PO4	2.62	mg/L	Maximum	1971	May	Provo Bay	Measured	APHA 1971		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column P	PO4	4	mg/L	Maximum	1971	January	Provo Bay	Measured	APHA 1971		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column N	NO3	0.55	mg/L	Maximum	1971	January	Provo Bay	Measured	APHA 1971		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column N	NH3	0.83	mg/L	Minimum	1971	January	Provo Bay	Measured	APHA 1971		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column N	NH3	1.08	mg/L	Maximum	1971	May	Provo Bay	Measured	APHA 1971		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column N	NH3	1.90	mg/L	Mean	1971	January	Provo Bay	Measured	APHA 1971		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Bradshaw et al. 1973	Bradshaw et al.	1973	Chemical Response of Utah Lake to Nutrient Inflow	Journal Article	Water column N	NH3	2.67	mg/L	Maximum	1971	January	Provo Bay	Measured	APHA 1971		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	TP	189.6	mg/m2/y	Mean	2016-2018		Provo	Cited	Carling G pers. Comm.		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	TP	178.3	mg/m2/y	Mean	2016-2018		Salt Lake City	Cited	Carling G pers. Comm.		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	TP	88.9	mg/m2/y	Mean	2016-2018		Logan	Cited	Carling G pers. Comm.		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	TP	152.3	mg/m2/y	Mean	2016-2018		Utah Urban	Cited	Carling G pers. Comm.		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	TP	93.6	mg/m2/y	Mean	2016-2018		Utah Urban	Estimated	average concentrations of P in urban dusts from multiple regions applied to the average urban dust deposition rate determined for northern Utah.		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	Leachable P	69.7	mg/m2/y	Minimum	2016-2018		Utah Urban	Estimated	50-75% of TP		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final

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Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	Leachable P	104.5	mg/m2/y	Maximum	2016-2018		Utah Urban	Estimated	50-75% of TP		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	TP	0.78	mg/m2/y	Minimum			Regional	Estimated	Asssumption of regional dust deposition rates and P concentrations as measured in regional dust deposition		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	TP	17.9	mg/m2/y	Maximum			Regional	Estimated	Asssumption of regional dust deposition rates and P concentrations as measured in regional dust deposition		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	TP	4.8	mg/m2/y	Mean			Regional	Estimated	Asssumption of regional dust deposition rates and P concentrations as measured in regional dust deposition		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	Water Soluble P	0.02	mg/m2/y	Minimum			Regional	Estimated	2.7% of TP		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	Water Soluble P	0.48	mg/m2/y	Maximum			Regional	Estimated	2.7% of TP		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	Water Soluble P	0.13	mg/m2/y	Mean			Regional	Estimated	2.7% of TP		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	Bioavailable P	0.27	mg/m2/y	Minimum			Regional	Estimated	31% of TP		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	Bioavailable P	6.09	mg/m2/y	Maximum			Regional	Estimated	31% of TP		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (dry)	Bioavailable P	1.63	mg/m2/y	Mean			Regional	Estimated	31% of TP		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (wet)	TP	4.7	mg/m2/y	Mean			Utah Urban/Agricultural	Cited	NADP		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (wet)	TP	5	mg/m2/y	Minimum			Utah Urban	Estimated	Scaling of population density		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final

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Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (wet)	TP	15	mg/m2/y	Maximum			Utah Urban	Estimated	Scaling of population density		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (wet)	TP	2.9	mg/m2/y	Mean	2015-2019		Regional	Estimated	Averaging of four NADP sites around Utah		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (wet)	TP	5	tons	Mean	2015-2019		Utah Lake	Estimated	First order decay equation and bootstrapping		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (wet)	TP	3.1	tons	SD	2015-2019		Utah Lake	Estimated	First order decay equation and bootstrapping		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (wet)	Bioavailable P	2.5	tons	Mean	2015-2019		Utah Lake	Estimated	First order decay equation and bootstrapping		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric P deposition (wet)	Bioavailable P	1.5	tons	SD	2015-2019		Utah Lake	Estimated	First order decay equation and bootstrapping		5	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric N deposition (total)	TN	461	mg/m2/y	Mean	2017		Utah Lake	Estimated	CMAQ model		2	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric N deposition (wet)	NO3	65	mg/m2/y	Mean	2017		Utah Lake	Estimated	CMAQ model		2	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric N deposition (dry)	NO3	10	mg/m2/y	Mean	2017		Utah Lake	Estimated	CMAQ model		2	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric N deposition (wet)	NH3	120	mg/m2/y	Mean	2017		Utah Lake	Estimated	CMAQ model		2	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric N deposition (dry)	NH3	7	mg/m2/y	Mean	2017		Utah Lake	Estimated	CMAQ model		2	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric N deposition (total)	TN	170	tons	Mean	2017		Utah Lake	Estimated	CMAQ model		2	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric N deposition (wet)	NO3	24.2	tons	Mean	2017		Utah Lake	Estimated	CMAQ model		2	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric N deposition (dry)	NO3	3.8	tons	Mean	2017		Utah Lake	Estimated	CMAQ model		2	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric N deposition (wet)	NH3	44.2	tons	Mean	2017		Utah Lake	Estimated	CMAQ model		2	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final

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Brahney 2019	Brahney	2019	Estimating total and bioavailable nutrient loading to Utah Lake from the atmosphere	Report	Atmospheric N deposition (dry)	NH3	2.6	tons	Mean	2017		Utah Lake	Estimated	CMAQ model		2	Low	High	Recommended as preferred approach and values by the Science Panel in ULWQS SP AD Loading Recommendation - Approved – Final
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	External P loading	TP	152	tons/yr	Total	2009-2013		Utah Lake	Estimated	Re-analysis of Merritt and Miller 2016		6	Medium	Medium	
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	External P loading	TP	92	tons/yr	Total	2009-2013		WWTP	Estimated	Re-analysis of Merritt and Miller 2016		6	Medium-Low	Medium	
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	External P loading	TP	341	ug/L	Mean	2009-2013		Utah Lake	Estimated	Re-analysis of Merritt and Miller 2016		5	Medium-Low	Medium	
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	External P loading	TP	183	ug/L	Mean	2009-2013		Utah Lake	Estimated	Re-analysis of Merritt and Miller 2016		5	Medium-Low	Medium	
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	External P loading	TP	254	tons/yr	Total	2009-2013		Utah Lake	Estimated	Re-analysis of Merritt and Miller 2016, with data from Scott Daly		6	Medium	Medium	
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	External P loading	TP	294	ug/L	Mean	2009-2013		Utah Lake	Estimated	Re-analysis of Merritt and Miller 2016, with data from Scott Daly		5	Medium-Low	Medium	
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	External N loading	TN	2432	ug/L	Mean	2009-2013		Utah Lake	Estimated	Re-analysis of Merritt and Miller 2016		4	High	High	
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	External N loading	TN	675	tons/yr	Total	2009-2013		WWTP	Estimated	Re-analysis of Merritt and Miller 2016		3	Medium	Medium	
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	P outflow	TP	23.4	tons/yr	Total	2009-2013		Jordan River	Estimated	Re-analysis of Merritt and Miller 2016		4	Medium-Low	Medium	
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	P outflow	TP	64.2	ug/L	Mean	2009-2013		Jordan River	Estimated	Re-analysis of Merritt and Miller 2016		4	Medium-Low	Medium	
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	External N loading	TN	2947	ug/L	Mean	2009-2013		Utah Lake	Estimated	Re-analysis of Merritt and Miller 2016, with data from Scott Daly		4	High	High	
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	External P loading	TP	193	tons/yr	Total	2009-2013		WWTP	Estimated	Re-analysis of Merritt and Miller 2016, with data from Scott Daly		6	Medium-Low	Medium	
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	External N loading	TN	1194	tons/yr	Total	2009-2013		WWTP	Estimated	Re-analysis of Merritt and Miller 2016, with data from Scott Daly		3	Medium	Medium	
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	P outflow	TP	24.7	tons/yr	Total	2009-2013		Jordan River	Estimated	Re-analysis of Merritt and Miller 2016, with data from Scott Daly		4	Medium-Low	Medium	

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Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	P outflow	TP	63.5	ug/L	Mean	2009-2013		Jordan River	Estimated	Re-analysis of Merritt and Miller 2016, with data from Scott Daly		4	Medium-Low	Medium	
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	External N loading	TN	2022	tons/yr	Total	2009-2013		Utah Lake	Estimated	Re-analysis of Merritt and Miller 2016		4	High	High	
Brett 2019a Letter	Brett	2019	Analysis of the Merritt and Miller 2016 "Nutrient Loadings to Utah Lake" report	Letter	External N loading	TN	2542	tons/yr	Total	2009-2013		Utah Lake	Estimated	Re-analysis of Merritt and Miller 2016, with data from Scott Daly		4	High	High	
Brett 2019b Letter	Brett	2019	Response to LaVere Merritt June 12, 2019 memo	Letter	External P loading	TP	50	ug/L	Mean	2009-2013		Stream inflow (no WWTP)	Estimated	Re-analysis of Merritt and Miller 2016		2	High	Medium	
Brett 2019b Letter	Brett	2019	Response to LaVere Merritt June 12, 2019 memo	Letter	External P loading	TP	56	ug/L	Mean	2009-2013		Provo River and Spanish River	Estimated	Re-analysis of Merritt and Miller 2016		1	NA	Medium	
Brett 2019b Letter	Brett	2019	Response to LaVere Merritt June 12, 2019 memo	Letter	Atmospheric P deposition	TP	4	ug/L	Minimum	2009-2013		Utah Lake	Estimated	Re-analysis of Merritt and Miller 2016		5	Low	Medium	
Brett 2019b Letter	Brett	2019	Response to LaVere Merritt June 12, 2019 memo	Letter	Atmospheric P deposition	TP	20	ug/L	Maximum	2009-2013		Utah Lake	Estimated	Re-analysis of Merritt and Miller 2016		5	Low	Medium	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External P loading	TP	91.8	tons/yr	Total	2009-2013		WWTP	Estimated	Re-analysis of Merritt and Miller 2016		6	Medium-Low	Medium	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External P loading	TP	34.8	tons/yr	Total	2009-2013		Drains	Estimated	Re-analysis of Merritt and Miller 2016		2	Low	Low	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External P loading	TP	24.4	tons/yr	Total	2009-2013		Stream inflow (no WWTP)	Estimated	Re-analysis of Merritt and Miller 2016		2	High	High	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External P loading	TP	1.43	tons/yr	Total	2009-2013		Precipitation	Estimated	Re-analysis of Merritt and Miller 2016		2	Low	Low	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External P loading	TP	152.4	tons/yr	Total	2009-2013		Utah Lake	Estimated	Re-analysis of Merritt and Miller 2016		6	Medium	Medium	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External P loading	TP	2665	ug/L	Total	2009-2013		WWTP	Estimated	Re-analysis of Merritt and Miller 2016		5	Medium-High	Medium	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External P loading	TP	202	ug/L	Total	2009-2013		Drains	Estimated	Re-analysis of Merritt and Miller 2016		2	Low	Low	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External P loading	TP	49	ug/L	Total	2009-2013		Stream inflow (no WWTP)	Estimated	Re-analysis of Merritt and Miller 2016		2	High	High	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External P loading	TP	11	ug/L	Total	2009-2013		Precipitation	Estimated	Re-analysis of Merritt and Miller 2016		2	Low	Low	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External P loading	TP	183	ug/L	Total	2009-2013		Utah Lake	Estimated	Re-analysis of Merritt and Miller 2016		5	Medium-Low	Medium	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External N loading	TN	675	tons/yr	Total	2009-2013		WWTP	Estimated	Re-analysis of Merritt and Miller 2016		3	Medium	Medium	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External N loading	TN	422	tons/yr	Total	2009-2013		Drains	Estimated	Re-analysis of Merritt and Miller 2016		1	NA	Low	

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Brett 2019c Letter	Brett	2019	Untitled	Letter	External N loading	TN	774	tons/yr	Total	2009-2013		Stream inflow (no WWTP)	Estimated	Re-analysis of Merritt and Miller 2016		1	NA	Low	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External N loading	TN	151	tons/yr	Total	2009-2013		Precipitation	Estimated	Re-analysis of Merritt and Miller 2016		2	Medium-Low	Medium	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External N loading	TN	19594	ug/L	Total	2009-2013		WWTP	Estimated	Re-analysis of Merritt and Miller 2016		3	Medium	Medium	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External N loading	TN	2452	ug/L	Total	2009-2013		Drains	Estimated	Re-analysis of Merritt and Miller 2016		1	NA	Low	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External N loading	TN	1550	ug/L	Total	2009-2013		Stream inflow (no WWTP)	Estimated	Re-analysis of Merritt and Miller 2016		1	NA	Low	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External N loading	TN	1205	ug/L	Total	2009-2013		Precipitation	Estimated	Re-analysis of Merritt and Miller 2016		2	Medium-Low	Medium	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External N loading	TN	2432	ug/L	Total	2009-2013		Utah Lake	Estimated	Re-analysis of Merritt and Miller 2016		4	High	High	
Brett 2019c Letter	Brett	2019	Untitled	Letter	External N loading	TN	2022	tons/yr	Total	2009-2013		Utah Lake	Estimated	Re-analysis of Merritt and Miller 2016		4	High	High	
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	SRP	0.016	mg/L	Mean	2017	May-October	Mouth of Goshen Bay	Measured	Ascorbic acid method (ref)		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	SRP	0.016	mg/L	Mean	2017	May-October	Saratoga Marina	Measured	Ascorbic acid method (ref)		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	SRP	0.017	mg/L	Mean	2017	May-October	Vineyard Marina	Measured	Ascorbic acid method (ref)		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NO3	0.05	mg/L	Mean	2017	May-October	Mouth of Provo Bay	Measured	Flow injection analysis on a rapid flow analyzer; cadmium reduction method		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	SRP	0.019	mg/L	Mean	2017	May-October	Bird Island	Measured	Ascorbic acid method (ref)		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	SRP	0.019	mg/L	Mean	2017	May-October	Provo Bay	Measured	Ascorbic acid method (ref)		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	TP	0.008	mg/L	SEM	2017	May-October	Bird Island	Measured	Microwave Digestion and ICP-OES		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	TP	0.011	mg/L	SEM	2017	May-October	Lindon Marina	Measured	Microwave Digestion and ICP-OES		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	TP	0.0065	mg/L	SEM	2017	May-October	Mouth of Goshen Bay	Measured	Microwave Digestion and ICP-OES		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	TP	0.023	mg/L	SEM	2017	May-October	Mouth of Provo Bay	Measured	Microwave Digestion and ICP-OES		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	TP	0.001	mg/L	SEM	2017	May-October	Provo Bay	Measured	Microwave Digestion and ICP-OES		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	TP	0.007	mg/L	SEM	2017	May-October	Saratoga Marina	Measured	Microwave Digestion and ICP-OES		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	TP	0.009	mg/L	SEM	2017	May-October	Vineyard Marina	Measured	Microwave Digestion and ICP-OES		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	SRP	0.022	mg/L	Mean	2017	May-October	Lindon Marina	Measured	Ascorbic acid method (ref)		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	SRP	0.025	mg/L	Mean	2017	May-October	Mouth of Provo Bay	Measured	Ascorbic acid method (ref)		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	SRP	0.003	mg/L	SEM	2017	May-October	Bird Island	Measured	Ascorbic acid method (ref)		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	SRP	0.004	mg/L	SEM	2017	May-October	Lindon Marina	Measured	Ascorbic acid method (ref)		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	SRP	0.003	mg/L	SEM	2017	May-October	Mouth of Goshen Bay	Measured	Ascorbic acid method (ref)		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	SRP	0.005	mg/L	SEM	2017	May-October	Mouth of Provo Bay	Measured	Ascorbic acid method (ref)		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	SRP	0.004	mg/L	SEM	2017	May-October	Provo Bay	Measured	Ascorbic acid method (ref)		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	SRP	0.003	mg/L	SEM	2017	May-October	Saratoga Marina	Measured	Ascorbic acid method (ref)		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	SRP	0.003	mg/L	SEM	2017	May-October	Vineyard Marina	Measured	Ascorbic acid method (ref)		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	PP	0.007	mg/L	SEM	2017	May-October	Mouth of Goshen Bay	Measured	TP - TDP		1	NA	Medium	

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Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	PP	0.008	mg/L	SEM	2017	May-October	Bird Island	Measured	TP - TDP		1	NA	Medium	
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	PP	0.008	mg/L	SEM	2017	May-October	Provo Bay	Measured	TP - TDP		1	NA	Medium	
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	PP	0.008	mg/L	SEM	2017	May-October	Saratoga Marina	Measured	TP - TDP		1	NA	Medium	
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	PP	0.011	mg/L	SEM	2017	May-October	Vineyard Marina	Measured	TP - TDP		1	NA	Medium	
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	PP	0.016	mg/L	SEM	2017	May-October	Lindon Marina	Measured	TP - TDP		1	NA	Medium	
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	PP	0.023	mg/L	SEM	2017	May-October	Mouth of Provo Bay	Measured	TP - TDP		1	NA	Medium	
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	PP	0.051	mg/L	Mean	2017	May-October	Vineyard Marina	Measured	TP - TDP		1	NA	Medium	
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	PP	0.056	mg/L	Mean	2017	May-October	Bird Island	Measured	TP - TDP		1	NA	Medium	
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	PP	0.065	mg/L	Mean	2017	May-October	Saratoga Marina	Measured	TP - TDP		1	NA	Medium	
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	PP	0.066	mg/L	Mean	2017	May-October	Mouth of Goshen Bay	Measured	TP - TDP		1	NA	Medium	
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	PP	0.07	mg/L	Mean	2017	May-October	Provo Bay	Measured	TP - TDP		1	NA	Medium	
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	PP	0.089	mg/L	Mean	2017	May-October	Lindon Marina	Measured	TP - TDP		1	NA	Medium	
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	PP	0.16	mg/L	Mean	2017	May-October	Mouth of Provo Bay	Measured	TP - TDP		1	NA	Medium	
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	TDN	0.08	mg/L	SEM	2017	May-October	Mouth of Goshen Bay	Measured	Catalytic thermal decomposition/chemiluminescence method on a Shimadzu TOC analyzer		3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	TDN	0.09	mg/L	SEM	2017	May-October	Bird Island	Measured	Catalytic thermal decomposition/chemiluminescence method on a Shimadzu TOC analyzer		3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	TDN	0.1	mg/L	SEM	2017	May-October	Mouth of Provo Bay	Measured	Catalytic thermal decomposition/chemiluminescence method on a Shimadzu TOC analyzer		3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	TDN	0.1	mg/L	SEM	2017	May-October	Provo Marina	Measured	Catalytic thermal decomposition/chemiluminescence method on a Shimadzu TOC analyzer		3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	TDN	0.12	mg/L	SEM	2017	May-October	Saratoga Marina	Measured	Catalytic thermal decomposition/chemiluminescence method on a Shimadzu TOC analyzer		3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	TDN	0.14	mg/L	SEM	2017	May-October	Vineyard Marina	Measured	Catalytic thermal decomposition/chemiluminescence method on a Shimadzu TOC analyzer		3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	TDN	0.19	mg/L	SEM	2017	May-October	Lindon Marina	Measured	Catalytic thermal decomposition/chemiluminescence method on a Shimadzu TOC analyzer		3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	TDN	0.93	mg/L	Mean	2017	May-October	Mouth of Goshen Bay	Measured	Catalytic thermal decomposition/chemiluminescence method on a Shimadzu TOC analyzer		3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	TDN	0.97	mg/L	Mean	2017	May-October	Bird Island	Measured	Catalytic thermal decomposition/chemiluminescence method on a Shimadzu TOC analyzer		3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	TDN	1.1	mg/L	Mean	2017	May-October	Mouth of Provo Bay	Measured	Catalytic thermal decomposition/chemiluminescence method on a Shimadzu TOC analyzer		3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	TDN	1.1	mg/L	Mean	2017	May-October	Provo Marina	Measured	Catalytic thermal decomposition/chemiluminescence method on a Shimadzu TOC analyzer		3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
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Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NO3	0.027	mg/L	SEM	2017	May-October	Bird Island	Measured	Flow injection analysis on a rapid flow analyzer; cadmium reduction method		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NO3	0.051	mg/L	SEM	2017	May-October	Lindon Marina	Measured	Flow injection analysis on a rapid flow analyzer; cadmium reduction method		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NO3	0.022	mg/L	SEM	2017	May-October	Mouth of Goshen Bay	Measured	Flow injection analysis on a rapid flow analyzer; cadmium reduction method		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NO3	0.007	mg/L	SEM	2017	May-October	Mouth of Provo Bay	Measured	Flow injection analysis on a rapid flow analyzer; cadmium reduction method		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NO3	0.022	mg/L	SEM	2017	May-October	Provo Marina	Measured	Flow injection analysis on a rapid flow analyzer; cadmium reduction method		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NO3	0.017	mg/L	SEM	2017	May-October	Saratoga Marina	Measured	Flow injection analysis on a rapid flow analyzer; cadmium reduction method		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NO3	0.022	mg/L	SEM	2017	May-October	Vineyard Marina	Measured	Flow injection analysis on a rapid flow analyzer; cadmium reduction method		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NH4	0.029	mg/L	Mean	2017	May-October	Mouth of Goshen Bay	Measured	Flow injection analysis on a rapid flow analyzer; sodium salicylate-sodium nitroprusside method		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NH4	0.03	mg/L	Mean	2017	May-October	Lindon Marina	Measured	Flow injection analysis on a rapid flow analyzer; sodium salicylate-sodium nitroprusside method		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NH4	0.033	mg/L	Mean	2017	May-October	Mouth of Provo Bay	Measured	Flow injection analysis on a rapid flow analyzer; sodium salicylate-sodium nitroprusside method		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NH4	0.033	mg/L	Mean	2017	May-October	Saratoga Marina	Measured	Flow injection analysis on a rapid flow analyzer; sodium salicylate-sodium nitroprusside method		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NH4	0.037	mg/L	Mean	2017	May-October	Vineyard Marina	Measured	Flow injection analysis on a rapid flow analyzer; sodium salicylate-sodium nitroprusside method		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NH4	0.007	mg/L	SEM	2017	May-October	Bird Island	Measured	Flow injection analysis on a rapid flow analyzer; sodium salicylate-sodium nitroprusside method		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NH4	0.003	mg/L	SEM	2017	May-October	Lindon Marina	Measured	Flow injection analysis on a rapid flow analyzer; sodium salicylate-sodium nitroprusside method		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NH4	0.004	mg/L	SEM	2017	May-October	Mouth of Goshen Bay	Measured	Flow injection analysis on a rapid flow analyzer; sodium salicylate-sodium nitroprusside method		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NH4	0.007	mg/L	SEM	2017	May-October	Mouth of Provo Bay	Measured	Flow injection analysis on a rapid flow analyzer; sodium salicylate-sodium nitroprusside method		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NH4	0.022	mg/L	SEM	2017	May-October	Provo Marina	Measured	Flow injection analysis on a rapid flow analyzer; sodium salicylate-sodium nitroprusside method		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NH4	0.006	mg/L	SEM	2017	May-October	Saratoga Marina	Measured	Flow injection analysis on a rapid flow analyzer; sodium salicylate-sodium nitroprusside method		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NH4	0.006	mg/L	SEM	2017	May-October	Vineyard Marina	Measured	Flow injection analysis on a rapid flow analyzer; sodium salicylate-sodium nitroprusside method		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	TP	0.103	mg/L	Mean	2017	May-October	Provo Bay	Measured	Microwave Digestion and ICP-OES		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NH4	0.038	mg/L	Mean	2017	May-October	Bird Island	Measured	Flow injection analysis on a rapid flow analyzer; sodium salicylate-sodium nitroprusside method		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NH4	0.057	mg/L	Mean	2017	May-October	Provo Marina	Measured	Flow injection analysis on a rapid flow analyzer; sodium salicylate-sodium nitroprusside method		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	TDN	1.3	mg/L	Mean	2017	May-October	Vineyard Marina	Measured	Catalytic thermal decomposition/chemiluminescence method on a Shimadzu TOC analyzer		3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	TDN	1.4	mg/L	Mean	2017	May-October	Lindon Marina	Measured	Catalytic thermal decomposition/chemiluminescence method on a Shimadzu TOC analyzer		3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NO3	0.12	mg/L	Mean	2017	May-October	Saratoga Marina	Measured	Flow injection analysis on a rapid flow analyzer; cadmium reduction method		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NO3	0.13	mg/L	Mean	2017	May-October	Provo Marina	Measured	Flow injection analysis on a rapid flow analyzer; cadmium reduction method		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	TP	0.077	mg/L	Mean	2017	May-October	Bird Island	Measured	Microwave Digestion and ICP-OES	For each sample date and location, three composite water samples were collected consisting of 3 1 L subsamples from the surface to a depth of 30 cm	8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	TP	0.084	mg/L	Mean	2017	May-October	Vineyard Marina	Measured	Microwave Digestion and ICP-OES		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	TP	0.089	mg/L	Mean	2017	May-October	Mouth of Goshen Bay	Measured	Microwave Digestion and ICP-OES		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	TP	0.09	mg/L	Mean	2017	May-October	Saratoga Marina	Measured	Microwave Digestion and ICP-OES		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NO3	0.14	mg/L	Mean	2017	May-October	Mouth of Goshen Bay	Measured	Flow injection analysis on a rapid flow analyzer; cadmium reduction method		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NO3	0.15	mg/L	Mean	2017	May-October	Vineyard Marina	Measured	Flow injection analysis on a rapid flow analyzer; cadmium reduction method		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NO3	0.16	mg/L	Mean	2017	May-October	Bird Island	Measured	Flow injection analysis on a rapid flow analyzer; cadmium reduction method		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water column N	NO3	0.23	mg/L	Mean	2017	May-October	Lindon Marina	Measured	Flow injection analysis on a rapid flow analyzer; cadmium reduction method		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	TP	0.132	mg/L	Mean	2017	May-October	Lindon Marina	Measured	Microwave Digestion and ICP-OES		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Collins 2019 Thesis	Collins	2019	Bottom-Up Controls (Micronutrients and N and P Species) Better Predict Cyanobacterial Abundances in Harmful Algal Blooms than Top-Down Controls (Grazers)	Thesis	Water Column P	TP	0.189	mg/L	Mean	2017	May-October	Mouth of Provo Bay	Measured	Microwave Digestion and ICP-OES		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Gaeta and Landom 2016a	Gaeta and Landom	2016	A whole-ecosystem response of a shallow lake to drought and an invasive carp removal, with an emphasis on endangered fish conservation	Report	Water Column P	TP	0.06	mg/L	Mean	2002-2014	June-Sept	4 m site depth; Lakewide mean	Measured	Linear Mixed Model Grand Mean (across all strata)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Gaeta and Landom 2016a	Gaeta and Landom	2016	A whole-ecosystem response of a shallow lake to drought and an invasive carp removal, with an emphasis on endangered fish conservation	Report	Water Column P	TP	0.07	mg/L	Mean	2002-2014	June-Sept	3 m site depth; Lakewide mean	Measured	Linear Mixed Model Grand Mean (across all strata)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Gaeta and Landom 2016a	Gaeta and Landom	2016	A whole-ecosystem response of a shallow lake to drought and an invasive carp removal, with an emphasis on endangered fish conservation	Report	Water Column P	TP	0.08	mg/L	Mean	2002-2014	June-Sept	2 m site depth; Lakewide mean	Measured	Linear Mixed Model Grand Mean (across all strata)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Gaeta and Landom 2016a	Gaeta and Landom	2016	A whole-ecosystem response of a shallow lake to drought and an invasive carp removal, with an emphasis on endangered fish conservation	Report	Water Column P	TP	0.1	mg/L	Mean	2002-2014	June-Sept	1 m site depth; Lakewide mean	Measured	Linear Mixed Model Grand Mean (across all strata)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Gaeta and Landom 2016a	Gaeta and Landom	2016	A whole-ecosystem response of a shallow lake to drought and an invasive carp removal, with an emphasis on endangered fish conservation	Report	Water Column P	TP	1	mg/L	Maximum	2002-2014	June-Sept	Provo Bay	Measured	Near-surface grab samples; Phosphate-phosphorus as P	The phosphorus portion of the study was to test whether total phosphates (mg/L) are related to site-specific lake depth (m). Observations showed TP significantly increased with reduced sample site	4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Gaeta and Landom 2016b	Gaeta and Landom	2010	Final environmental assessment for removal and control of nonnative carp in Utah Lake to support june sucker recovery	Report	Water Column P	TP	0.0467	mg/L	Mean	2004-2005		Utah Lake	Cited	Valdez et al. 2006; DEQ 2004	Attributes 76.5% of the total phosphorus load in Utah Lake to point sources like WWTPs. Other source is the common carp due to digestive activity and sediment resuspension	8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Water Column N	NH4	0.015	mg/L	Minimum	2018	Summer	State Park Buoy	Measured	Hach TNT 830 Ammonia Kit		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Water Column N	NH4	0.015	mg/L	Minimum	2018	Summer	Provo Bay	Measured	Hach TNT 830 Ammonia Kit		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Water Column P	SRP	0.02	mg/L	Minimum	2018	Summer	State Park Buoy	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Water Column P	SRP	0.04	mg/L	Maximum	2018	Summer	State Park Buoy	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Water Column P	TDP	0.05	mg/L	Minimum	2018	Summer	State Park Buoy	Measured	ICP-OES	The Buoy site is representative of the relatively deep, eutrophic open water of the lake	6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Water Column P	SRP	0.22	mg/L	Minimum	2018	Summer	Provo Bay	Measured	Ion chromatography		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Water Column P	SRP	0.28	mg/L	Maximum	2018	Summe r	Provo Bay	Measured	Ion chromatography		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	TDP	5.04	mg/m2/d	Mean	2018	Summe r	Provo Bay	Measured	Sediment core incubations		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	TDP	10.38	mg/m2/d	SD	2018	Summe r	Provo Bay	Measured	Sediment core incubations		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	TDP	1937	kg/d	Mean	2018	Summe r	Provo Bay	Measured	Sediment core incubations, assumes total lake area of 384.4 km2		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	TDP	3992	kg/d	SD	2018	Summe r	Provo Bay	Measured	Sediment core incubations, assumes total lake area of 384.4 km2		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	TDP	4.32	mg/m2/d	Mean	2018	Summe r	State Park Buoy	Measured	Sediment core incubations		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	TDP	1.92	mg/m2/d	SD	2018	Summe r	State Park Buoy	Measured	Sediment core incubations		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	TDP	1661	kg/d	Mean	2018	Summe r	State Park Buoy	Measured	Sediment core incubations, assumes total lake area of 384.4 km2		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	TDP	732	kg/d	SD	2018	Summe r	State Park Buoy	Measured	Sediment core incubations, assumes total lake area of 384.4 km2		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	SRP	-12	mg/m2/d	Mean	2018	Summe r	Provo Bay	Measured	Sediment core incubations		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	SRP	9.72	mg/m2/d	SD	2018	Summe r	Provo Bay	Measured	Sediment core incubations		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	SRP	-4613	kg/d	Mean	2018	Summe r	Provo Bay	Measured	Sediment core incubations, assumes total lake area of 384.4 km2		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	SRP	3737	kg/d	SD	2018	Summe r	Provo Bay	Measured	Sediment core incubations, assumes total lake area of 384.4 km2		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	SRP	-2.4	mg/m2/d	Mean	2018	Summe r	State Park Buoy	Measured	Sediment core incubations		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	SRP	0.42	mg/m2/d	SD	2018	Summe r	State Park Buoy	Measured	Sediment core incubations		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	SRP	-923	kg/d	Mean	2018	Summe r	State Park Buoy	Measured	Sediment core incubations, assumes total lake area of 384.4 km2		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment P Flux	SRP	160	kg/d	SD	2018	Summe r	State Park Buoy	Measured	Sediment core incubations, assumes total lake area of 384.4 km2		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment N Flux	NH4	-17.28	mg/m2/d	Mean	2018	Summe r	Provo Bay	Measured	Sediment core incubations		2	Low	Low	Large variability among replicates and time points

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Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment N Flux	NH4	9.9	mg/m2/d	SD	2018	Summer	Provo Bay	Measured	Sediment core incubations		2	Low	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment N Flux	NH4	-6642	kg/d	Mean	2018	Summer	Provo Bay	Measured	Sediment core incubations, assumes total lake area of 384.4 km2		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment N Flux	NH4	3805	kg/d	SD	2018	Summer	Provo Bay	Measured	Sediment core incubations, assumes total lake area of 384.4 km2		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment N Flux	NH4	-9.84	mg/m2/d	Mean	2018	Summer	State Park Buoy	Measured	Sediment core incubations		2	Low	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment N Flux	NH4	1.66	mg/m2/d	SD	2018	Summer	State Park Buoy	Measured	Sediment core incubations		2	Low	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment N Flux	NH4	-3782	kg/d	Mean	2018	Summer	State Park Buoy	Measured	Sediment core incubations, assumes total lake area of 384.4 km2		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Sediment N Flux	NH4	639	kg/d	SD	2018	Summer	State Park Buoy	Measured	Sediment core incubations, assumes total lake area of 384.4 km2		1	NA	Low	Large variability among replicates and time points
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Water Column P	TDP	0.1	mg/L	Maximum	2018	Summer	State Park Buoy	Measured	ICP-OES	This paper describes a sediment nutrient flux experiment conducted in a lab with aerobic and anaerobic conditions. Flux not measured in-habitat. Include this measured data as well?	6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Water Column P	TDP	0.38	mg/L	Minimum	2018	Summer	Provo Bay	Measured	ICP-OES	Water samples were analyzed for ammonium-N, nitrate-N, nitrite-N, soluble reactive phosphorus (SRP), and TDP	4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Water Column N	NH4	0.266	mg/L	Maximum	2018	Summer	State Park Buoy	Measured	Hach TNT 830 Ammonia Kit		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Water Column N	NH4	0.658	mg/L	Maximum	2018	Summer	Provo Bay	Measured	Hach TNT 830 Ammonia Kit		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Water Column N	NO3	0.239	mg/L	Maximum	2018	Summer	Provo Bay OR State Park Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Goel et al. 2020	Goel et al.	2020	Utah Lake Sediment–Water Nutrient Interactions	Report	Water Column P	TDP	0.51	mg/L	Maximum	2018	Summer	Provo Bay	Measured	ICP-OES	The Provo Bay site is representative of the shallow, hypereutrophic bay on the east side of Utah Lake	4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Greaves and Hirst 1919	Greaves and Hirst	1919	THE PHOSPHORUS, POTASSIUM, AND NITROGEN CONTENT OF THE WATERS OF THE INTERMOUNTAIN REGION	Journal Article	Water Column P	TP	0.1	ppm	Mean	1916-1917		Utah Lake, sampled at Pumping Station	Measured	Mentions "standard methods"		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column N	TDN	0.3653	µg/L	Minimum	2008	Spring/Summer	Lakewide	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab	Noted as ug/L but should be mg/L	3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column N	TDN	0.7741	µg/L	Median	2008	Spring/Summer	Lakewide	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab	Noted as ug/L but should be mg/L	3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column P	TDP	0.003	µg/L	Minimum	2008	Spring/Summer	Stream	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column P	TDP	0.0086	µg/L	Minimum	2008	Spring/Summer	Utah Lake	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab	Suspect this is mg/L, not ug/L	6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column P	TDP	0.0202	µg/L	Median	2008	Spring/Summer	Stream	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab	Likely mg/L, not ug/L	6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column C	DOC	3.615	mg/L	Median	2008	Spring/Summer	Lakewide	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab		2	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column C	DOC	2.5598	mg/L	Minimum	2008	Spring/Summer	Lakewide	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab		2	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column C	DOC	5.936	mg/L	Maximum	2008	Spring/Summer	Lakewide	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab		2	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column C	DOC	2.51	mg/L	Median	2008	Spring/Summer	Stream	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab		2	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column C	DOC	1.192	mg/L	Minimum	2008	Spring/ Summer	Stream	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab		2	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column C	DOC	9.2115	mg/L	Maximum	2008	Spring/ Summer	Stream	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab		2	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column N	TDN	1.6352	µg/L	Maximum	2008	Spring/ Summer	Lakewide	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab	Noted as ug/L but should be mg/L	3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column N	TDN	1.4844	µg/L	Median	2008	Spring/ Summer	Stream	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab	Noted as ug/L but should be mg/L	3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column N	TDN	0.2246	µg/L	Minimum	2008	Spring/ Summer	Stream	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab	Noted as ug/L but should be mg/L	3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column N	TDN	5.2719	µg/L	Maximum	2008	Spring/ Summer	Stream	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab	Noted as ug/L but should be mg/L	3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column P	TDP	0.0594	µg/L	Median	2008	Spring/ Summer	Utah Lake	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab	Suspect this is mg/L, not ug/L	6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column P	TDP	0.1636	µg/L	Maximum	2008	Spring/ Summer	Utah Lake	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab	Suspect this is mg/L, not ug/L	6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hines 2011 Thesis	Hines	2011	RELATIVE IMPORTANCE OF ENVIRONMENTAL VARIABLES FOR SPAWNING CUES AND TRIBUTARY USE BY AN ADFLUVIAL LAKE SUCKER	Thesis	Water Column P	TDP	0.377	µg/L	Maximum	2008	Spring/ Summer	Stream	Measured	Analzyed by Utah State University's Aquatic Biochemistry Lab		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NO3	0	mg/L		2013	Late Summer	0.5 mile W of Geneva Steel	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NO3	0	mg/L		2013	Late Summer	Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NH4	0.02	mg/L		2013	Late Summer	Entrance of Provo Bay	Measured	Hach TNT 830 Ammonia Kit		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NH4	0.02	mg/L		2013	Late Summer	1 mile W of Provo Harbor	Measured	Hach TNT 830 Ammonia Kit		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NO3	0.05	mg/L		2013	Late Summer	Entrance of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NO3	0.05	mg/L		2013	Late Summer	1 mile W of Provo Harbor	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NH4	0.02	mg/L		2013	Late Summer	Goshen Bay	Measured	Hach TNT 830 Ammonia Kit		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NH4	0.02	mg/L		2013	Late Summer	2 miles E of Saratoga Springs	Measured	Hach TNT 830 Ammonia Kit		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NH4	0.02	mg/L		2013	Late Summer	1 mile E of Pelican Point	Measured	Hach TNT 830 Ammonia Kit		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NO3	0.05	mg/L		2013	Late Summer	Goshen Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NO3	0.05	mg/L		2013	Late Summer	1 mile E of Pelican Point	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NO3	0.06	mg/L		2013	Late Summer	2 miles E of Saratoga Springs	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NO3	0.06	mg/L		2013	Late Summer	3 miles WNW of Lincoln Beach	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NH4	0.02	mg/L		2013	Late Summer	3 miles WNW of Lincoln Beach	Measured	Hach TNT 830 Ammonia Kit		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NH4	0.03	mg/L		2013	Late Summer	0.5 mile W of Geneva Steel	Measured	Hach TNT 830 Ammonia Kit		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	NH4	0.31	mg/L		2013	Late Summer	Provo Bay	Measured	Hach TNT 830 Ammonia Kit		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	DIN	0.03	mg/L		2013	Late Summer	0.5 mile W of Geneva Steel	Measured	NH4-N + NO3-N		1	NA	High	Only study to report DIN, but many measurements of
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	DIN	0.07	mg/L		2013	Late Summer	Entrance of Provo Bay	Measured	NH4-N + NO3-N		1	NA	High	Only study to report DIN, but many measurements of

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Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	DIN	0.07	mg/L		2013	Late Summer	1 mile W of Provo Harbor	Measured	NH4-N + NO3-N		1	NA	High	Only study to report DIN, but many measurements of
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	DIN	0.07	mg/L		2013	Late Summer	Goshen Bay	Measured	NH4-N + NO3-N		1	NA	High	Only study to report DIN, but many measurements of
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	DIN	0.07	mg/L		2013	Late Summer	1 mile E of Pelican Point	Measured	NH4-N + NO3-N		1	NA	High	Only study to report DIN, but many measurements of
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	DIN	0.08	mg/L		2013	Late Summer	2 miles E of Saratoga Springs	Measured	NH4-N + NO3-N		1	NA	High	Only study to report DIN, but many measurements of
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	DIN	0.08	mg/L		2013	Late Summer	3 miles WNW of Lincoln Beach	Measured	NH4-N + NO3-N		1	NA	High	Only study to report DIN, but many measurements of
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N	DIN	0.31	mg/L		2013	Late Summer	Provo Bay	Measured	NH4-N + NO3-N		1	NA	High	Only study to report DIN, but many measurements of
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P	PO4	0.07	mg/L		2013	Late Summer	Provo Bay	Measured	Ion chromatography		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P	PO4	0.04	mg/L		2013	Late Summer	Entrance of Provo Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P	PO4	0.05	mg/L		2013	Late Summer	1 mile W of Provo Harbor	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P	PO4	0.08	mg/L		2013	Late Summer	0.5 mile W of Geneva Steel	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P	PO4	0	mg/L		2013	Late Summer	Goshen Bay	Measured	Ion chromatography		2	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P	PO4	0.04	mg/L		2013	Late Summer	2 miles E of Saratoga Springs	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P	PO4	0.03	mg/L		2013	Late Summer	1 mile E of Pelican Point	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P	PO4	0.03	mg/L		2013	Late Summer	3 miles WNW of Lincoln Beach	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column C	NPTOC	6.1	mg/L		2013	Late Summer	Entrance of Provo Bay	Measured	Shimadzu TOC analyzer (SSM-5000A)		1	NA	Medium	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column C	NPTOC	6.3	mg/L		2013	Late Summer	1 mile W of Provo Harbor	Measured	Shimadzu TOC analyzer (SSM-5000A)		1	NA	Medium	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column C	NPTOC	6.3	mg/L		2013	Late Summer	Goshen Bay	Measured	Shimadzu TOC analyzer (SSM-5000A)		1	NA	Medium	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column C	NPTOC	5.3	mg/L		2013	Late Summer	1 mile E of Pelican Point	Measured	Shimadzu TOC analyzer (SSM-5000A)		1	NA	Medium	

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Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column C	NPTOC	5.1	mg/L		2013	Late Summer	3 miles WNW of Lincoln Beach	Measured	Shimadzu TOC analyzer (SSM-5000A)		1	NA	Medium	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH4	1.442	g/m2-d	Mean	2013	Late Summer	Provo Bay	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A	Sediment nutrient fluxes and water column rates were measured in the SOD chambers over a 3-h time period. A submersible pump was installed and immersed in each chamber for the purpose of internal water cycling and	2	Low	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH4	0.023	g/m2-d	Mean	2013	Late Summer	Entrance of Provo Bay	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		2	Low	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH4	-0.033	g/m2-d	Mean	2013	Late Summer	1 mile W of Provo Harbor	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		2	Low	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH4	0.141	g/m2-d	Mean	2013	Late Summer	0.5 mile W of Geneva Steel	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		2	Low	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH4	0.027	g/m2-d	Mean	2013	Late Summer	Goshen Bay	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		2	Low	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH4	-0.001	g/m2-d	Mean	2013	Late Summer	2 miles E of Saratoga Springs	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		2	Low	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH4	0.093	g/m2-d	Mean	2013	Late Summer	1 mile E of Pelican Point	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		2	Low	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH4	0.027	g/m2-d	Mean	2013	Late Summer	3 miles WNW of Lincoln Beach	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		2	Low	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH3	0	g/m2-d	Mean	2013	Late Summer	Provo Bay	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		2	Low	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH3	0.005	g/m2-d	Mean	2013	Late Summer	Entrance of Provo Bay	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		2	Low	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH3	0.021	g/m2-d	Mean	2013	Late Summer	1 mile W of Provo Harbor	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		2	Low	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH3	0	g/m2-d	Mean	2013	Late Summer	0.5 mile W of Geneva Steel	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		2	Low	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH3	0.012	g/m2-d	Mean	2013	Late Summer	Goshen Bay	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		2	Low	Low	

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Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH3	0.004	g/m2-d	Mean	2013	Late Summer	2 miles E of Saratoga Springs	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		2	Low	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH3	0.008	g/m2-d	Mean	2013	Late Summer	1 mile E of Pelican Point	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		2	Low	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	NH3	0.08	g/m2-d	Mean	2013	Late Summer	3 miles WNW of Lincoln Beach	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		2	Low	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	TIN	1.442	g/m2-d	Mean	2013	Late Summer	Provo Bay	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	TIN	0.03	g/m2-d	Mean	2013	Late Summer	Entrance of Provo Bay	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	TIN	-0.01	g/m2-d	Mean	2013	Late Summer	1 mile W of Provo Harbor	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	TIN	0.141	g/m2-d	Mean	2013	Late Summer	0.5 mile W of Geneva Steel	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	TIN	0.04	g/m2-d	Mean	2013	Late Summer	Goshen Bay	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	TIN	0	g/m2-d	Mean	2013	Late Summer	2 miles E of Saratoga Springs	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	TIN	0.09	g/m2-d	Mean	2013	Late Summer	1 mile E of Pelican Point	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment N Flux	TIN	0.11	g/m2-d	Mean	2013	Late Summer	3 miles WNW of Lincoln Beach	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment P Flux	P04	0.01	g/m2-d	Mean	2013	Late Summer	Provo Bay	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment P Flux	P04	0.071	g/m2-d	Mean	2013	Late Summer	Entrance of Provo Bay	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment P Flux	P04	0	g/m2-d	Mean	2013	Late Summer	1 mile W of Provo Harbor	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment P Flux	P04	0.031	g/m2-d	Mean	2013	Late Summer	0.5 mile W of Geneva Steel	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	

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Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment P Flux	P04	0	g/m2-d	Mean	2013	Late Summer	Goshen Bay	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment P Flux	P04	0.01	g/m2-d	Mean	2013	Late Summer	2 miles E of Saratoga Springs	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment P Flux	P04	-0.004	g/m2-d	Mean	2013	Late Summer	1 mile E of Pelican Point	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Sediment P Flux	P04	0.001	g/m2-d	Mean	2013	Late Summer	3 miles WNW of Lincoln Beach	Measured	Nutrient flux g/m2/d = (dCe/dt - WC) * V/A		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH4	1.279	g/m3-d	Mean	2013	Late Summer	Provo Bay	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH4	-0.132	g/m3-d	Mean	2013	Late Summer	Entrance of Provo Bay	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH4	-0.048	g/m3-d	Mean	2013	Late Summer	1 mile W of Provo Harbor	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH4	-0.283	g/m3-d	Mean	2013	Late Summer	0.5 mile W of Geneva Steel	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH4	0.06	g/m3-d	Mean	2013	Late Summer	Goshen Bay	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH4	-0.091	g/m3-d	Mean	2013	Late Summer	2 miles E of Saratoga Springs	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH4	-0.444	g/m3-d	Mean	2013	Late Summer	1 mile E of Pelican Point	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH4	0.06	g/m3-d	Mean	2013	Late Summer	3 miles WNW of Lincoln Beach	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH3	0	g/m3-d	Mean	2013	Late Summer	Provo Bay	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH3	-0.012	g/m3-d	Mean	2013	Late Summer	Entrance of Provo Bay	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH3	-0.048	g/m3-d	Mean	2013	Late Summer	1 mile W of Provo Harbor	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH3	0	g/m3-d	Mean	2013	Late Summer	0.5 mile W of Geneva Steel	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH3	-0.024	g/m3-d	Mean	2013	Late Summer	Goshen Bay	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH3	0.007	g/m3-d	Mean	2013	Late Summer	2 miles E of Saratoga Springs	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH3	-0.012	g/m3-d	Mean	2013	Late Summer	1 mile E of Pelican Point	Measured	WC = dCc/dt		1	NA	Low	

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Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	NH3	-0.348	g/m3-d	Mean	2013	Late Summer	3 miles WNW of Lincoln Beach	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	TIN	1.27	g/m3-d	Mean	2013	Late Summer	Provo Bay	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	TIN	-0.144	g/m3-d	Mean	2013	Late Summer	Entrance of Provo Bay	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	TIN	-0.1	g/m3-d	Mean	2013	Late Summer	1 mile W of Provo Harbor	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	TIN	-0.283	g/m3-d	Mean	2013	Late Summer	0.5 mile W of Geneva Steel	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	TIN	0.036	g/m3-d	Mean	2013	Late Summer	Goshen Bay	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	TIN	-0.084	g/m3-d	Mean	2013	Late Summer	2 miles E of Saratoga Springs	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	TIN	-0.456	g/m3-d	Mean	2013	Late Summer	1 mile E of Pelican Point	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column N Rate	TIN	-0.288	g/m3-d	Mean	2013	Late Summer	3 miles WNW of Lincoln Beach	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P Rate	P04	-0.08	g/m3-d	Mean	2013	Late Summer	Provo Bay	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P Rate	P04	-0.288	g/m3-d	Mean	2013	Late Summer	Entrance of Provo Bay	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P Rate	P04	0	g/m3-d	Mean	2013	Late Summer	1 mile W of Provo Harbor	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P Rate	P04	-0.07	g/m3-d	Mean	2013	Late Summer	0.5 mile W of Geneva Steel	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P Rate	P04	0	g/m3-d	Mean	2013	Late Summer	Goshen Bay	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P Rate	P04	-0.014	g/m3-d	Mean	2013	Late Summer	2 miles E of Saratoga Springs	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P Rate	P04	0	g/m3-d	Mean	2013	Late Summer	1 mile E of Pelican Point	Measured	WC = dCc/dt		1	NA	Low	
Hogsett et al. 2019	Hogsett et al.	2018	The Role of Internal Nutrient Cycling in a Freshwater Shallow Alkaline Lake	Journal Article	Water Column P Rate	P04	0	g/m3-d	Mean	2013	Late Summer	3 miles WNW of Lincoln Beach	Measured	WC = dCc/dt		1	NA	Low	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.05	mg/L	Minimum	1990-1999		Provo Bay	Cited	Central Utah Water Conservancy District (2004a)		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.04	mg/L	Minimum	1990-1999		4 miles W of Provo Airport 4 miles N of Lincoln Point	Cited	Central Utah Water Conservancy District (2004a)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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FileName	**Author(s)**	**Year**	**Title**	**ArticleType**	**Process or Pool**	**Fraction**	**Rate or Amount**	**Units**	**Aggregation**	**Year**	**Month**	**Location**	**Measured or Estimated?**	**Approach**	**Notes**	**Evidence amount (number of studies)**	**Agreement**	**Confidence**	**Comments**
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.04	mg/L	Minimum	1990-1999		2.5 miles NE of Lincoln Point	Cited	Central Utah Water Conservancy District (2004a)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.04	mg/L	Minimum	1990-1999		1 mile NE of Lincoln Point	Cited	Central Utah Water Conservancy District (2004a)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.05	mg/L	Minimum	1990-1999		E of Provo Boat Harbor, 6 miles N of Lincoln Beach	Cited	Central Utah Water Conservancy District (2004a)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	External P loading	TP	0.06	mg/L	Mean	1990-1999		Provo River	Cited	Central Utah Water Conservancy District (2004a)		2	Medium-High	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	External P loading	TP	0.09	mg/L	Mean	1990-1999		Spanish Fork River	Cited	Central Utah Water Conservancy District (2004a)		2	Medium	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	External P loading	TP	0.04	mg/L	Mean	1990-1999		Hobble Creek	Cited	Central Utah Water Conservancy District (2004a)		2	Medium-High	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	External P loading	TP	3	mg/L	Mean	1990-1999		WWTP Discharges	Cited	Central Utah Water Conservancy District (2004a)		5	Medium-High	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	External P loading	TP	0.11	mg/L	Mean	1990-1999		Other Tributary Inflows	Cited	Central Utah Water Conservancy District (2004a)		2	Medium-High	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	External P loading	TP	11	tons/y	Mean	1990-1999		Provo River	Cited	Central Utah Water Conservancy District (2004a)		2	Medium-High	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	External P loading	TP	12	tons/y	Mean	1990-1999		Spanish Fork River	Cited	Central Utah Water Conservancy District (2004a)		2	Medium	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	External P loading	TP	1	tons/y	Mean	1990-1999		Hobble Creek	Cited	Central Utah Water Conservancy District (2004a)		2	Medium-High	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	External P loading	TP	225.6	tons/y	Mean	1990-1999		WWTP Discharges	Cited	Central Utah Water Conservancy District (2004a)		6	Medium-Low	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	External P loading	TP	42	tons/y	Mean	1990-1999		Other Tributary Inflows	Cited	Central Utah Water Conservancy District (2004a)		2	Medium-High	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	External P loading	TP	292	tons/y	Mean	1990-1999		Utah Lake	Cited	Central Utah Water Conservancy District (2004a)		6	Medium	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.07	mg/L	Mean	1990-1999		4 miles W of Provo Airport 4 miles N of Lincoln Point	Cited	Central Utah Water Conservancy District (2004a)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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FileName	Author(s)	Year	Title	ArticleType	Process or Pool	Fraction	Rate or Amount	Units	Aggregation	Year	Month	Location	Measured or Estimated?	Approach	Notes	Evidence amount (number of studies)	Agreement	Confidence	Comments
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.08	mg/L	Minimum	1990-1999		1.5 mile NW of Provo Boat Harbor	Cited	Central Utah Water Conservancy District (2004a)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.17	mg/L	Mean	1990-1999		Provo Bay	Cited	Central Utah Water Conservancy District (2004a)		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.08	mg/L	Mean	1990-1999		1 mile NE of Lincoln Point	Cited	Central Utah Water Conservancy District (2004a)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.09	mg/L	Mean	1990-1999		2.5 miles NE of Lincoln Point	Cited	Central Utah Water Conservancy District (2004a)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column C	HCO3	194	mg/L	Mean	1970-1973		Provo River	Cited	Fuhriman and others (1981)		4	Medium	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column C	HCO3	220	mg/L	Maximum	1970-1973		Provo River	Cited	Fuhriman and others (1981)		4	Medium	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column C	HCO3	172	mg/L	Minimum	1970-1973		Provo River	Cited	Fuhriman and others (1981)		4	Medium	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column C	HCO3	222	mg/L	Mean	1970-1973		Hobble Creek	Cited	Fuhriman and others (1981)		4	Medium	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column C	HCO3	314	mg/L	Maximum	1970-1973		Hobble Creek	Cited	Fuhriman and others (1981)		4	Medium	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column C	HCO3	158	mg/L	Minimum	1970-1973		Hobble Creek	Cited	Fuhriman and others (1981)		4	Medium	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column C	HCO3	327	mg/L	Mean	1970-1973		Spanish Fork River	Cited	Fuhriman and others (1981)		4	Medium	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column C	HCO3	462	mg/L	Maximum	1970-1973		Spanish Fork River	Cited	Fuhriman and others (1981)		4	Medium	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column C	HCO3	290	mg/L	Minimum	1970-1973		Spanish Fork River	Cited	Fuhriman and others (1981)		4	Medium	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column C	HCO3	317	mg/L	Mean	1970-1973		Lakewide	Cited	Fuhriman and others (1981)		4	Medium	Medium	
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.1	mg/L	Mean	1990-1999		1.5 mile NW of Provo Boat Harbor	Cited	Central Utah Water Conservancy District (2004a)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.12	mg/L	Maximum	1990-1999		1.5 mile NW of Provo Boat Harbor	Cited	Central Utah Water Conservancy District (2004a)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.13	mg/L	Mean	1990-1999		E of Provo Boat Harbor, 6 miles N of Lincoln Beach	Cited	Central Utah Water Conservancy District (2004a)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.17	mg/L	Maximum	1990-1999		1 mile NE of Lincoln Point	Cited	Central Utah Water Conservancy District (2004a)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.21	mg/L	Maximum	1990-1999		4 miles W of Provo Airport 4 miles N of Lincoln Point	Cited	Central Utah Water Conservancy District (2004a)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.25	mg/L	Maximum	1990-1999		2.5 miles NE of Lincoln Point	Cited	Central Utah Water Conservancy District (2004a)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.36	mg/L	Maximum	1990-1999		E of Provo Boat Harbor, 6 miles N of Lincoln Beach	Cited	Central Utah Water Conservancy District (2004a)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column P	TP	0.84	mg/L	Maximum	1990-1999		Provo Bay	Cited	Central Utah Water Conservancy District (2004a)		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Horns 2005	Horns	2005	Utah Lake Comprehensive Management Plan Resource Document	Report	Water Column N	NO3	1	mg/L	Mean	1970-1973		Lakewide	Cited	Fuhriman and others (1981)		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Kelso and Baker 2020	Kelso and Baker	2020	Organic Matter is a Mixtur ganic Matter is a Mixture of Terrestrial, A estrial, Autochthonous, and ochthonous, and Wastewater Effluent in an Urban River	Journal Article	Water Column N	TDN	20.4	mg/L	Maximum			Utah Lake	Measured	Catalytic thermal combustion method on a Shimadzu TOC analyzer	Main body of paper discusses stable C, N, and H isotopes found in organic matter (OM) in Jordan River, which begins in Utah Lake, and their possible sources analyzed by Bayesian models	3	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	0.6	µg/L	SD	2016	20-Jul	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	0.5	µg/L	SD	2016	20-Jul	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	0.6	µg/L	SD	2016	20-Jul	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	0.5	µg/L	Mean	2017	11-Jul	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	2.8	µg/L	SD	2016	26-Jul	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	10.4	µg/L	SD	2016	26-Jul	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	31	µg/L	SD	2016	26-Jul	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	1	µg/L	Mean	2017	15-Jun	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	1.5	µg/L	Mean	2016	4-Aug	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	2	µg/L	Mean	2016	4-Aug	Mouth of Goshen Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	2	µg/L	Mean	2017	11-Jul	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	0.7	µg/L	SD	2016	4-Aug	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	0.6	µg/L	SD	2016	4-Aug	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	3.7	µg/L	SD	2016	4-Aug	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	3	µg/L	Mean	2017	11-Jul	Bird Island Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	5	µg/L	Unknown	2016	25-May	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	5	µg/L	Unknown	2016	30-Jun	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO2	108.1	µg/L	SD	2016	20-Jul	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO2	10.4	µg/L	SD	2016	20-Jul	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO2	37.8	µg/L	SD	2016	20-Jul	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	6	µg/L	Mean	2016	20-Jul	Mouth of Goshen Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	6	µg/L	Mean	2017	3-Aug	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO2	45.2	µg/L	SD	2016	26-Jul	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO2	1160	µg/L	SD	2016	26-Jul	Mouth of Goshen Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO2	0.6	µg/L	SD	2016	26-Jul	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	0.5	µg/L	Mean	2017	1-Jun	Mouth of Goshen Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	2.3	µg/L	SD	2016	20-Jul	Mouth of Provo Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	1	µg/L	SD	2016	20-Jul	Mouth of Goshen Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	3.2	µg/L	SD	2016	20-Jul	Lindon Marina	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	2.3	µg/L	SD	2016	20-Jul	Saratoga Spring	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	1.7	µg/L	SD	2016	26-Jul	Mouth of Goshen Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	1.5	µg/L	Mean	2017	1-Jun	Provo Bay	Measured	Ion chromatography		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	2.5	µg/L	Mean	2017	11-Jul	Provo Bay	Measured	Ion chromatography		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	0.6	µg/L	SD	2016	4-Aug	Mouth of Provo Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	1.4	µg/L	SD	2016	4-Aug	Mouth of Goshen Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	3.8	µg/L	SD	2016	4-Aug	Lindon Marina	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	1	µg/L	SD	2016	4-Aug	Saratoga Spring	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	6.5	µg/L	Mean	2017	5-May	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	7	µg/L	Unknown	2016	30-Jun	Mouth of Goshen Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	9.5	µg/L	Mean	2016	4-Aug	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	164.5	µg/L	Mean	2017	5-May	Provo Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	11	µg/L	Mean	2017	11-Jul	Vineyard Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	12	µg/L	Unknown	2016	30-Jun	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	13.3	µg/L	Mean	2016	20-Jul	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	12	µg/L	SD	2017	5-May	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	4.9	µg/L	SD	2017	5-May	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	10.6	µg/L	SD	2017	5-May	Vineyard Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	2.1	µg/L	SD	2017	5-May	Provo Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	6.4	µg/L	SD	2017	5-May	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	0.7	µg/L	SD	2017	5-May	Bird Island Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	17	µg/L	SD	2017	5-May	Mouth of Goshen Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	29.5	µg/L	Mean	2017	1-Jun	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	34.5	µg/L	Mean	2017	3-Aug	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	50	µg/L	Mean	2016	26-Jul	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	53.5	µg/L	Mean	2017	3-Aug	Bird Island Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	58	µg/L	Mean	2017	3-Aug	Vineyard Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	86	µg/L	Mean	2017	1-Jun	Provo Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	3.5	µg/L	SD	2017	1-Jun	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	1.4	µg/L	SD	2017	1-Jun	Vineyard Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	0	µg/L	SD	2017	1-Jun	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	1.4	µg/L	SD	2017	1-Jun	Mouth of Goshen Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	2.1	µg/L	SD	2017	1-Jun	Bird Island Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	3.5	µg/L	SD	2017	1-Jun	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	1.4	µg/L	SD	2017	1-Jun	Provo Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	65.3	µg/L	Mean	2016	26-Jul	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO2	65.3	µg/L	Mean	2016	20-Jul	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	66.5	µg/L	Mean	2016	4-Aug	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	72.5	µg/L	Mean	2017	3-Aug	Mouth of Goshen Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	183.5	µg/L	Mean	2017	15-Jun	Provo Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	15.6	µg/L	SD	2017	15-Jun	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	2.8	µg/L	SD	2017	15-Jun	Vineyard Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	4.2	µg/L	SD	2017	15-Jun	Bird Island Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	1.4	µg/L	SD	2017	15-Jun	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	2.1	µg/L	SD	2017	15-Jun	Provo Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	81	µg/L	Mean	2017	1-Jun	Mouth of Goshen Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	92	µg/L	Unknown	2016	25-May	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	102	µg/L	Mean	2017	1-Jun	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO2	108.5	µg/L	Mean	2016	26-Jul	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	2.8	µg/L	SD	2017	11-Jul	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	0.7	µg/L	SD	2017	11-Jul	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	4.2	µg/L	SD	2017	11-Jul	Bird Island Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	109	µg/L	Mean	2016	20-Jul	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	113	µg/L	Mean	2017	5-May	Mouth of Goshen Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	120.5	µg/L	Mean	2017	5-May	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	121.5	µg/L	Mean	2017	1-Jun	Bird Island Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	127.5	µg/L	Mean	2016	20-Jul	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	39	µg/L	Mean	2017	3-Aug	Provo Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	8.5	µg/L	SD	2017	3-Aug	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	1.4	µg/L	SD	2017	3-Aug	Vineyard Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	0.7	µg/L	SD	2017	3-Aug	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	0.7	µg/L	SD	2017	3-Aug	Mouth of Goshen Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
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Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	1.4	µg/L	SD	2017	3-Aug	Provo Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	3	µg/L	Mean	2016	20-Jul	Mouth of Goshen Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	3	µg/L	Mean	2016	26-Jul	Mouth of Goshen Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	4.9	µg/L	SD	2017	5-May	Lindon Marina	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	2.8	µg/L	SD	2017	5-May	Vineyard Buoy	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	1.4	µg/L	SD	2017	5-May	Mouth of Provo Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	4	µg/L	Mean	2017	5-May	Vineyard Buoy	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	4	µg/L	Mean	2017	5-May	Provo Bay	Measured	Ion chromatography		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
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Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	4	µg/L	Mean	2017	5-May	Mouth of Goshen Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	4.5	µg/L	Mean	2016	4-Aug	Mouth of Provo Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	4.5	µg/L	Mean	2017	1-Jun	Saratoga Spring	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	46.7	µg/L	SD	2017	1-Jun	Lindon Marina	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	0	µg/L	SD	2017	1-Jun	Vineyard Buoy	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	0.7	µg/L	SD	2017	1-Jun	Saratoga Spring	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
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Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	0	µg/L	SD	2017	1-Jun	Mouth of Provo Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	0.7	µg/L	SD	2017	1-Jun	Provo Bay	Measured	Ion chromatography		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	5	µg/L	Mean	2016	4-Aug	Mouth of Goshen Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	5.5	µg/L	Mean	2016	4-Aug	Saratoga Spring	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	5.5	µg/L	Mean	2017	11-Jul	Mouth of Goshen Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	6.5	µg/L	Mean	2017	15-Jun	Vineyard Buoy	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	11.3	µg/L	SD	2017	15-Jun	Lindon Marina	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	3.5	µg/L	SD	2017	15-Jun	Vineyard Buoy	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	2.1	µg/L	SD	2017	15-Jun	Bird Island Buoy	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	2.1	µg/L	SD	2017	15-Jun	Mouth of Provo Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	9.9	µg/L	SD	2017	15-Jun	Provo Bay	Measured	Ion chromatography		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	7	µg/L	Mean	2017	1-Jun	Vineyard Buoy	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
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Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	7	µg/L	Mean	2017	15-Jun	Provo Bay	Measured	Ion chromatography		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	7.5	µg/L	Mean	2017	5-May	Lindon Marina	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	7.5	µg/L	Mean	2017	11-Jul	Mouth of Provo Bay		Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	10.5	µg/L	Mean	2017	15-Jun	Bird Island Buoy	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	6.4	µg/L	SD	2017	11-Jul	Lindon Marina	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	18.4	µg/L	SD	2017	11-Jul	Vineyard Buoy	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	0.7	µg/L	SD	2017	11-Jul	Saratoga Spring	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	2.1	µg/L	SD	2017	11-Jul	Mouth of Goshen Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	2.1	µg/L	SD	2017	11-Jul	Bird Island Buoy	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	0.7	µg/L	SD	2017	11-Jul	Mouth of Provo Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	0.7	µg/L	SD	2017	11-Jul	Provo Bay	Measured	Ion chromatography		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	11	µg/L	Mean	2017	3-Aug	Bird Island Buoy	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	15.6	µg/L	SD	2017	3-Aug	Bird Island Buoy	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	3.41	mg/L	Unknown	2017	1-Jun	Lindon Marina		Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	3.4	mg/L	Unknown	2017	1-Jun	Mouth of Goshen Bay		Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	5.49	mg/L	Unknown	2017	1-Jun	Mouth of Provo Bay		Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	3.07	mg/L	Unknown	2017	15-Jun	Lindon Marina	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	

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Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	2.65	mg/L	Unknown	2017	15-Jun	Vineyard Buoy	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	2.44	mg/L	Unknown	2017	15-Jun	Bird Island Buoy	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	13.94	mg/L	Unknown	2017	15-Jun	Mouth of Provo Bay	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	3.39	mg/L	Unknown	2017	15-Jun	Provo Buoy	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	10.07	mg/L	Unknown	2017	11-Jul	Lindon Marina	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	7.89	mg/L	Unknown	2017	11-Jul	Vineyard Buoy	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	5.24	mg/L	Unknown	2017	11-Jul	Saratoga Spring	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	17.69	mg/L	Unknown	2017	11-Jul	Mouth of Goshen Bay	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	

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Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	10.11	mg/L	Unknown	2017	11-Jul	Bird Island Buoy	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	15.46	mg/L	Unknown	2017	11-Jul	Mouth of Provo Bay	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	10.06	mg/L	Unknown	2017	11-Jul	Provo Buoy	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	2.91	mg/L	Unknown	2017	3-Aug	Lindon Marina	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	1.77	mg/L	Unknown	2017	3-Aug	Vineyard Buoy	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	2.12	mg/L	Unknown	2017	3-Aug	Saratoga Spring	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	2.92	mg/L	Unknown	2017	3-Aug	Mouth of Goshen Bay	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	1.89	mg/L	Unknown	2017	3-Aug	Bird Island Buoy	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	

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FileName	Author(s)	Year	Title	ArticleType	Process or Pool	Fraction	Rate or Amount	Units	Aggregation	Year	Month	Location	Measured or Estimated?	Approach	Notes	Evidence amount (number of studies)	Agreement	Confidence	Comments
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	5.13	mg/L	Unknown	2017	3-Aug	Mouth of Provo Bay	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column C	DOC/cBOD	2.93	mg/L	Unknown	2017	3-Aug	Provo Buoy	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	132.5	µg/L	Mean	2016	26-Jul	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO2	133.3	µg/L	Mean	2016	20-Jul	Saratoga Spring	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	134.5	µg/L	Mean	2017	5-May	Bird Island Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	149	µg/L	Mean	2017	1-Jun	Vineyard Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	149	µg/L	Mean	2017	15-Jun	Vineyard Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	157	µg/L	Mean	2017	15-Jun	Bird Island Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	158	µg/L	Unknown	2016	25-May	Mouth of Goshen Bay	Measured	Ion chromatography	Water quality parameter data for Li et al. 2019 paper provided in supplemental tables S1 for 2016 and S2 for 2017 (added to Finished folder)	7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	158.5	µg/L	Mean	2017	5-May	Vineyard Buoy	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	189.5	µg/L	Mean	2017	5-May	Lindon Marina	Measured	Ion chromatography	Water quality parameter data for Li et al. 2019 paper provided in supplemental tables S1 for 2016 and S2 for 2017 (added to Finished folder)	7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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FileName	Author(s)	Year	Title	ArticleType	Process or Pool	Fraction	Rate or Amount	Units	Aggregation	Year	Month	Location	Measured or Estimated?	Approach	Notes	Evidence amount (number of studies)	Agreement	Confidence	Comments
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	209.5	µg/L	Mean	2017	1-Jun	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	12.5	µg/L	Mean	2017	11-Jul	Saratoga Spring	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	15	µg/L	Mean	2016	4-Aug	Lindon Marina	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	15.8	µg/L	Mean	2016	20-Jul	Mouth of Provo Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	15.8	µg/L	Mean	2016	20-Jul	Saratoga Spring	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	17.5	µg/L	Mean	2017	11-Jul	Lindon Marina	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	23.5	µg/L	Mean	2017	15-Jun	Mouth of Provo Bay	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO3	298	µg/L	Mean	2017	15-Jun	Lindon Marina	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO2	511	µg/L	Mean	2016	20-Jul	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	32	µg/L	Mean	2017	11-Jul	Vineyard Buoy	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	37	µg/L	Mean	2016	20-Jul	Lindon Marina	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO2	929	µg/L	Mean	2016	26-Jul	Mouth of Provo Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column N	NO2	1889.5	µg/L	Mean	2016	26-Jul	Mouth of Goshen Bay	Measured	Ion chromatography		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	58	µg/L	Mean	2017	15-Jun	Lindon Marina	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2019	Li et al.	2019	High-throughput DNA sequencing reveals the dominance of pico- and other filamentous cyanobacteria in an urban freshwater Lake	Journal Article	Water Column P	PO4	61	µg/L	Mean	2017	1-Jun	Lindon Marina	Measured	Ion chromatography		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.29	mg/L	Unknown	2018	19-Sep	Provo Bay	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.31	mg/L	Unknown	2018	12-Jun	Provo Bay	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.31	mg/L	Unknown	2018	9-Aug	Provo Bay	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.27	mg/L	Unknown	2018	19-Sep	VB(S7)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.29	mg/L	Unknown	2018	27-Jun	BIB (S2)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.29	mg/L	Unknown	2018	9-Aug	MGB(S1)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.29	mg/L	Unknown	2018	19-Sep	SS(S5)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.3	mg/L	Unknown	2018	16-May	BIB (S2)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.32	mg/L	Unknown	2018	27-Jun	Provo Bay	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.3	mg/L	Unknown	2018	9-Aug	VB(S7)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.31	mg/L	Unknown	2018	16-May	GD(S6)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.32	mg/L	Unknown	2018	9-Aug	BIB (S2)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.33	mg/L	Unknown	2018	16-May	MGB(S1)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)	Water quality parameter data for Li et al. 2020 paper provided in supplemental table S1 in mmc1 document (added to Finished folder)	8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.33	mg/L	Unknown	2018	27-Jun	MGB(S1)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.33	mg/L	Unknown	2018	27-Jun	EPB(S3)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.35	mg/L	Unknown	2018	16-May	Provo Bay	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.33	mg/L	Unknown	2018	9-Aug	GD(S6)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.35	mg/L	Unknown	2018	16-May	EPB(S3)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.35	mg/L	Unknown	2018	16-May	SS(S5)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.35	mg/L	Unknown	2018	12-Jun	EPB(S3)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.35	mg/L	Unknown	2018	27-Jun	VB(S7)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.36	mg/L	Unknown	2018	9-Aug	SS(S5)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.36	mg/L	Unknown	2018	19-Sep	EPB(S3)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.37	mg/L	Unknown	2018	16-May	VB(S7)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.37	mg/L	Unknown	2018	11-Jul	VB(S7)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.37	mg/L	Unknown	2018	19-Sep	BIB (S2)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.38	mg/L	Unknown	2018	12-Jun	VB(S7)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.73	mg/L	Unknown	2018	11-Jul	Provo Bay	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.38	mg/L	Unknown	2018	27-Jun	GD(S6)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.39	mg/L	Unknown	2018	11-Jul	BIB (S2)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.4	mg/L	Unknown	2018	11-Jul	EPB(S3)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	0.17	mg/L	Unknown	2018	19-Sep	VB(S7)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	0.43	mg/L	Unknown	2018	19-Sep	GD(S6)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	1.1	mg/L	Unknown	2018	9-Aug	VB(S7)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	1.17	mg/L	Unknown	2018	27-Jun	BIB (S2)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	1.27	mg/L	Unknown	2018	12-Jun	MGB(S1)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	1.33	mg/L	Unknown	2018	11-Jul	EPB(S3)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	1.37	mg/L	Unknown	2018	11-Jul	MGB(S1)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	1.5	mg/L	Unknown	2018	12-Jun	PB(S4)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	1.53	mg/L	Unknown	2018	11-Jul	SS(S5)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	1.53	mg/L	Unknown	2018	9-Aug	PB(S4)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	1.6	mg/L	Unknown	2018	27-Jun	GD(S6)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	1.63	mg/L	Unknown	2018	27-Jun	MGB(S1)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	1.63	mg/L	Unknown	2018	27-Jun	PB(S4)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	1.77	mg/L	Unknown	2018	9-Aug	GD(S6)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	1.87	mg/L	Unknown	2018	27-Jun	VB(S7)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	2.03	mg/L	Unknown	2018	16-May	BIB (S2)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	2.03	mg/L	Unknown	2018	12-Jun	SS(S5)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	2.07	mg/L	Unknown	2018	11-Jul	BIB (S2)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	

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FileName	Author(s)	Year	Title	ArticleType	Process or Pool	Fraction	Rate or Amount	Units	Aggregation	Year	Month	Location	Measured or Estimated?	Approach	Notes	Evidence amount (number of studies)	Agreement	Confidence	Comments
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	2.13	mg/L	Unknown	2018	19-Sep	MGB(S1)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	2.17	mg/L	Unknown	2018	9-Aug	EPB(S3)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	2.2	mg/L	Unknown	2018	9-Aug	SS(S5)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	2.33	mg/L	Unknown	2018	12-Jun	GD(S6)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	2.33	mg/L	Unknown	2018	27-Jun	EPB(S3)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	2.43	mg/L	Unknown	2018	16-May	EPB(S3)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	2.53	mg/L	Unknown	2018	11-Jul	GD(S6)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	2.9	mg/L	Unknown	2018	16-May	PB(S4)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	3.1	mg/L	Unknown	2018	16-May	VB(S7)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	3.23	mg/L	Unknown	2018	16-May	MGB(S1)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	3.5	mg/L	Unknown	2018	12-Jun	VB(S7)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	3.5	mg/L	Unknown	2018	11-Jul	VB(S7)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	3.53	mg/L	Unknown	2018	16-May	GD(S6)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	3.7	mg/L	Unknown	2018	19-Sep	PB(S4)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	4.13	mg/L	Unknown	2018	12-Jun	BIB (S2)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	4.2	mg/L	Unknown	2018	19-Sep	SS(S5)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	4.53	mg/L	Unknown	2018	11-Jul	PB(S4)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	4.73	mg/L	Unknown	2018	16-May	SS(S5)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	4.77	mg/L	Unknown	2018	9-Aug	MGB(S1)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	4.8	mg/L	Unknown	2018	12-Jun	EPB(S3)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	

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FileName	Author(s)	Year	Title	ArticleType	Process or Pool	Fraction	Rate or Amount	Units	Aggregation	Year	Month	Location	Measured or Estimated?	Approach	Notes	Evidence amount (number of studies)	Agreement	Confidence	Comments
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	5.23	mg/L	Unknown	2018	9-Aug	BIB (S2)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	6.83	mg/L	Unknown	2018	19-Sep	BIB (S2)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column N	TN	7.07	mg/L	Unknown	2018	19-Sep	EPB(S3)	Measured	Total Nitrogen TNT Reagent Set (LR, Hach)		1	NA	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	4.5	mg/L	Unknown	2018	16-May	MGB(S1)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	4.44	mg/L	Unknown	2018	16-May	BIB (S2)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	13.2	mg/L	Unknown	2018	16-May	EPB(S3)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	4.77	mg/L	Unknown	2018	16-May	PB(S4)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	5.16	mg/L	Unknown	2018	16-May	SS(S5)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	4.65	mg/L	Unknown	2018	16-May	GD(S6)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	5.46	mg/L	Unknown	2018	16-May	VB(S7)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	

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FileName	Author(s)	Year	Title	ArticleType	Process or Pool	Fraction	Rate or Amount	Units	Aggregation	Year	Month	Location	Measured or Estimated?	Approach	Notes	Evidence amount (number of studies)	Agreement	Confidence	Comments
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	6.04	mg/L	Unknown	2018	12-Jun	MGB(S1)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	2.25	mg/L	Unknown	2018	12-Jun	BIB (S2)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	12.42	mg/L	Unknown	2018	12-Jun	EPB(S3)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	2.25	mg/L	Unknown	2018	12-Jun	PB(S4)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	3.64	mg/L	Unknown	2018	12-Jun	SS(S5)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	3.35	mg/L	Unknown	2018	12-Jun	GD(S6)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	2.28	mg/L	Unknown	2018	12-Jun	VB(S7)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	1.3	mg/L	Unknown	2018	27-Jun	MGB(S1)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	

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FileName	Author(s)	Year	Title	ArticleType	Process or Pool	Fraction	Rate or Amount	Units	Aggregation	Year	Month	Location	Measured or Estimated?	Approach	Notes	Evidence amount (number of studies)	Agreement	Confidence	Comments
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	0	mg/L	Unknown	2018	27-Jun	BIB (S2)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	9.86	mg/L	Unknown	2018	27-Jun	EPB(S3)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	2.3	mg/L	Unknown	2018	27-Jun	PB(S4)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	1.12	mg/L	Unknown	2018	27-Jun	SS(S5)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	0.73	mg/L	Unknown	2018	27-Jun	GD(S6)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	0	mg/L	Unknown	2018	27-Jun	VB(S7)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	5.8	mg/L	Unknown	2018	11-Jul	MGB(S1)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	5.81	mg/L	Unknown	2018	11-Jul	BIB (S2)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	

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FileName	Author(s)	Year	Title	ArticleType	Process or Pool	Fraction	Rate or Amount	Units	Aggregation	Year	Month	Location	Measured or Estimated?	Approach	Notes	Evidence amount (number of studies)	Agreement	Confidence	Comments
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	7.08	mg/L	Unknown	2018	11-Jul	EPB(S3)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	7.12	mg/L	Unknown	2018	11-Jul	PB(S4)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	3.43	mg/L	Unknown	2018	11-Jul	SS(S5)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	4.35	mg/L	Unknown	2018	11-Jul	GD(S6)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	7.7	mg/L	Unknown	2018	11-Jul	VB(S7)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	7.78	mg/L	Unknown	2018	9-Aug	MGB(S1)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	5.18	mg/L	Unknown	2018	9-Aug	BIB (S2)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	14.78	mg/L	Unknown	2018	9-Aug	EPB(S3)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	

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FileName	Author(s)	Year	Title	ArticleType	Process or Pool	Fraction	Rate or Amount	Units	Aggregation	Year	Month	Location	Measured or Estimated?	Approach	Notes	Evidence amount (number of studies)	Agreement	Confidence	Comments
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	8.24	mg/L	Unknown	2018	9-Aug	PB(S4)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	6.92	mg/L	Unknown	2018	9-Aug	SS(S5)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	13.82	mg/L	Unknown	2018	9-Aug	GD(S6)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	22.4	mg/L	Unknown	2018	9-Aug	VB(S7)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	6.55	mg/L	Unknown	2018	19-Sep	MGB(S1)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	7.87	mg/L	Unknown	2018	19-Sep	BIB (S2)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	14.16	mg/L	Unknown	2018	19-Sep	EPB(S3)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	11.03	mg/L	Unknown	2018	19-Sep	PB(S4)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	

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Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	8.73	mg/L	Unknown	2018	19-Sep	SS(S5)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	14.06	mg/L	Unknown	2018	19-Sep	GD(S6)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column C	DOC/cBOD	14.3	mg/L	Unknown	2018	19-Sep	VB(S7)	Measured	Standard carbonaceous biochemical oxygen demand (cBOD5) bottle test (Method EPA 450.1)		2	Medium-Low	Medium	
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.4	mg/L	Unknown	2018	9-Aug	EPB(S3)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.41	mg/L	Unknown	2018	11-Jul	SS(S5)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.41	mg/L	Unknown	2018	19-Sep	MGB(S1)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.45	mg/L	Unknown	2018	19-Sep	GD(S6)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.46	mg/L	Unknown	2018	11-Jul	MGB(S1)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.47	mg/L	Unknown	2018	12-Jun	MGB(S1)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.48	mg/L	Unknown	2018	12-Jun	GD(S6)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.53	mg/L	Unknown	2018	12-Jun	BIB (S2)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.56	mg/L	Unknown	2018	11-Jul	GD(S6)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	0.59	mg/L	Unknown	2018	12-Jun	SS(S5)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Li et al. 2020	Li et al.	2020	Microbial community successions and their dynamic functions during harmful cyanobacterial blooms in a freshwater lake	Journal Article	Water Column P	TP	1.04	mg/L	Unknown	2018	27-Jun	SS(S5)	Measured	Total Phosphorus TNT Regent Set (LR, Hach)		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Merrell 2015 Thesis	Merrell	2015	Utah Lake Sediment Phosphorus Analysis	Thesis	Sediment P	TP	306	ppm	Minimum	2015	August-November	Lakewide	Measured	Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	Preliminary analysis on the general condition of the sediments of Utah Lake, providing data for total P, iron (Fe), pH, and turbidity and their potential effects on phosphorus release from the sediment	3	Medium	Medium	
Merrell 2015 Thesis	Merrell	2015	Utah Lake Sediment Phosphorus Analysis	Thesis	Sediment P	TP	699	ppm	Mean	2015	August-November	Shoreline	Measured	Inductively Coupled Plasma Mass Spectrometry (ICP-MS)		3	Medium	Medium	
Merrell 2015 Thesis	Merrell	2015	Utah Lake Sediment Phosphorus Analysis	Thesis	Sediment P	TP	711	ppm	Mean	2015	August-November	Lakewide	Measured	Inductively Coupled Plasma Mass Spectrometry (ICP-MS)		3	Medium	Medium	
Merrell 2015 Thesis	Merrell	2015	Utah Lake Sediment Phosphorus Analysis	Thesis	Sediment P	TP	744	ppm	Mean	2015	August-November	Center	Measured	Inductively Coupled Plasma Mass Spectrometry (ICP-MS)		3	Medium	Medium	
Merrell 2015 Thesis	Merrell	2015	Utah Lake Sediment Phosphorus Analysis	Thesis	Sediment P	TP	786	ppm	Mean	2015	August-November	Land Samples	Measured	Inductively Coupled Plasma Mass Spectrometry (ICP-MS)		3	Medium	Medium	
Merrell 2015 Thesis	Merrell	2015	Utah Lake Sediment Phosphorus Analysis	Thesis	Sediment P	TP	1710	ppm	Maximum	2015	August-November	Lakewide	Measured	Inductively Coupled Plasma Mass Spectrometry (ICP-MS)		3	Medium	Medium	
Merritt 2017 Letter	Merritt	2017	Utah Lake: A Few Considerations	White Paper	Atmospheric P deposition (total)	TP	1600	ton/yr	Total	2017	May-September	Utah Lake	Unknown	Methods not provided. Citation not provided		5	Low	Very low	Methods not described
Merritt 2017 Letter	Merritt	2017	Utah Lake: A Few Considerations	White Paper	External P loading	TP	215	ton/yr	Total	2009-2013		WWTP	Unknown	Methods not provided. Citation not provided		6	Medium-Low	Low	Unable to verify methods or source of data
Merritt 2017 Letter	Merritt	2017	Utah Lake: A Few Considerations	White Paper	External P loading	TP	55	ton/yr	Total	2009-2013		Inflows	Unknown	Methods not provided. Citation not provided		1	NA	Low	Unable to verify methods or source of data
Merritt 2017 Letter	Merritt	2017	Utah Lake: A Few Considerations	White Paper	P outflow	TP	27	ton/yr	Total	2009-2013		Jordan River	Unknown	Methods not provided. Citation not provided		4	Medium-Low	Low	Unable to verify methods or source of data
Merritt 2017 Letter	Merritt	2017	Utah Lake: A Few Considerations	White Paper	Water column P	TP	40	ug/L	Minimum			Utah Lake	Unknown	Methods not provided. Citation not provided		8	Medium-Low	Low	Unable to verify methods or source of data

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Merritt 2017 Letter	Merritt	2017	Utah Lake: A Few Considerations	White Paper	Water column P	TP	60	ug/L	Maximum			Utah Lake	Unknown	Methods not provided. Citation not provided		8	Medium-Low	Low	Unable to verify methods or source of data
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	TP	19	tons/yr	Total	2009-2013		Mountain streams	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 4	1	NA	Low	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	DP	311	tons/yr	Total	2009-2013		Mountain streams	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 5	1	NA	Low	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	DP	10	tons/yr	Total	2009-2013		Mountain streams	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 6	1	NA	Low	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	TP	215	tons/yr	Total	2009-2013		WWTP	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 7	6	Medium-Low	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External N loading	DN	1174	tons/yr	Total	2009-2013		WWTP	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 8	3	Medium	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	DP	196	tons/yr	Total	2009-2013		WWTP	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 9	6	Medium-Low	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	TP	21	tons/yr	Total	2009-2013		Main Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 10	1	NA	Low	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External N loading	DN	375	tons/yr	Total	2009-2013		Main Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 11	1	NA	Low	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	DP	14	tons/yr	Total	2009-2013		Main Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 12	1	NA	Low	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	TP	4	tons/yr	Total	2009-2013		Provo Bay	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 13	1	NA	Low	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External N loading	DN	118	tons/yr	Total	2009-2013		Provo Bay	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 14	1	NA	Low	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	DP	3	tons/yr	Total	2009-2013		Provo Bay	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 15	1	NA	Low	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	TP	4	tons/yr	Total	2009-2013		Goshen Bay	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 16	1	NA	Low	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External N loading	DN	50	tons/yr	Total	2009-2013		Goshen Bay	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 17	1	NA	Low	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	DP	3	tons/yr	Total	2009-2013		Goshen Bay	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 18	1	NA	Low	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	TP	272	tons/yr	Total	2009-2013		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 19	6	Medium	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	DP	229	tons/yr	Total	2009-2013		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 21	5	Medium	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	TP	1	tons/yr	Total	2009-2013		Groundwater, fresh	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 22	2	Medium-Low	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External N loading	DN	51	tons/yr	Total	2009-2013		Groundwater, fresh	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 23	1	NA	Low	

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Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	DP	1	tons/yr	Total	2009-2013		Groundwater, fresh	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 24	2	Medium-Low	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	TP	1	tons/yr	Total	2009-2013		Groundwater, thermal/mineral	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 25	2	Medium-Low	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External N loading	DN	2	tons/yr	Total	2009-2013		Groundwater, thermal/mineral	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 26	1	NA	Low	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	DP	2	tons/yr	Total	2009-2013		Groundwater, thermal/mineral	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 27	2	Medium-Low	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	TP	6	tons/yr	Total	2009-2013		Precipitation	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 28	2	Low	Low	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External N loading	DN	64	tons/yr	Total	2009-2013		Precipitation	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 29	2	Medium-Low	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	DP	1	tons/yr	Total	2009-2013		Precipitation	Estimated	LKSIM model simulation		2	Low	Low	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	P outflow	TP	26	tons/yr	Total	2009-2013		Jordan River	Estimated	LKSIM model simulation		4	Medium-Low	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	N outflow	TDN	367	tons/yr	Total	2009-2013		Jordan River	Estimated	LKSIM model simulation		2	Medium-High	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	P outflow	DP	22	tons/yr	Total	2009-2013		Jordan River	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 33	4	Medium-Low	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	TP	277	tons/yr	Total	2009		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 34	5	Medium	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	DP	232	tons/yr	Total	2009		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 36	5	Medium	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	TP	257	tons/yr	Total	2010		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 37	5	Medium	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	DP	219	tons/yr	Total	2010		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 39	5	Medium	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	TP	327	tons/yr	Total	2011		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 40	5	Medium	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External N loading	DN	1812	tons/yr	Total	2012		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 44	4	High	High	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	DP	267	tons/yr	Total	2011		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 42	5	Medium	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	TP	247	tons/yr	Total	2012		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 43	5	Medium	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External N loading	DN	1813	tons/yr	Total	2010		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 38	4	High	High	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	DP	211	tons/yr	Total	2012		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 45	5	Medium	Medium	

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Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	TP	252	tons/yr	Total	2013		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 46	5	Medium	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	DP	216	tons/yr	Total	2013		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 48	5	Medium	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External P loading	TP	634	ug/L	Mean	2009-2013		Utah Lake	Estimated	LKSIM model simulation	Flagged in Brett 2019a Letter - should be 341. Individual inflows >0.5% of load detailed in table 48	5	Medium-Low	Medium	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External N loading	DN	1816	tons/yr	Total	2013		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 47	4	High	High	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External N loading	DN	2145	tons/yr	Total	2009-2013		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 20	4	High	High	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External N loading	DN	2235	tons/yr	Total	2009		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 35	4	High	High	
Merritt and Miller 2016	Merritt and Miller	2016	Interim Report on Nutrient Loadings to Utah Lake	Report	External N loading	DN	2872	tons/yr	Total	2011		Utah Lake	Estimated	LKSIM model simulation	Individual inflows >0.5% of load detailed in table 41	4	High	High	
Miller 2020	Miller	2020	Updated Interim Report on Nutrients in Precipitation on Utah Lake	Report	Atmospheric P deposition	TP	77.1	tons/yr	total	2016-2020	All months	Utah Lake	Estimated	Conversion of mg/L in sampler to US tons/yr based on 12 in precipitation and 83,800 acres lake area	Note: units are in tons/yr, not metric tons/yr	5	Low	Medium	
Miller 2020	Miller	2020	Updated Interim Report on Nutrients in Precipitation on Utah Lake	Report	Atmospheric P deposition	TP	54.4	tons/yr	total	2016-2020	April-September	Utah Lake	Estimated	Conversion of mg/L in sampler to US tons/yr based on 12 in precipitation and 83,800 acres lake area	Note: units are in tons/yr, not metric tons/yr	5	Low	Medium	
Miller 2020	Miller	2020	Updated Interim Report on Nutrients in Precipitation on Utah Lake	Report	Atmospheric P deposition	TP	18.5	tons/yr	total	2016-2020	October-March	Utah Lake	Estimated	Conversion of mg/L in sampler to US tons/yr based on 12 in precipitation and 83,800 acres lake area	Note: units are in tons/yr, not metric tons/yr	5	Low	Medium	
Miller 2020	Miller	2020	Updated Interim Report on Nutrients in Precipitation on Utah Lake	Report	Atmospheric P deposition	PO4	24.9	tons/yr	total	2016-2020	All months	Utah Lake	Estimated	Conversion of mg/L in sampler to US tons/yr based on 12 in precipitation and 83,800 acres lake area	Note: units are in tons/yr, not metric tons/yr	5	Low	Medium	

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Miller 2020	Miller	2020	Updated Interim Report on Nutrients in Precipitation on Utah Lake	Report	Atmospheric P deposition	PO4	17.3	tons/yr	total	2016-2020	April-September	Utah Lake	Estimated	Conversion of mg/L in sampler to US tons/yr based on 12 in precipitation and 83,800 acres lake area	Note: units are in tons/yr, not metric tons/yr	5	Low	Medium	
Miller 2020	Miller	2020	Updated Interim Report on Nutrients in Precipitation on Utah Lake	Report	Atmospheric P deposition	PO4	5.2	tons/yr	total	2016-2020	October-March	Utah Lake	Estimated	Conversion of mg/L in sampler to US tons/yr based on 12 in precipitation and 83,800 acres lake area	Note: units are in tons/yr, not metric tons/yr	5	Low	Medium	
Miller 2020	Miller	2020	Updated Interim Report on Nutrients in Precipitation on Utah Lake	Report	Atmospheric N deposition	TN	316	tons/yr	total	2016-2020	All months	Utah Lake	Estimated	Conversion of mg/L in sampler to US tons/yr based on 12 in precipitation and 83,800 acres lake area	Note: units are in tons/yr, not metric tons/yr	2	Low	Medium	
Miller 2020	Miller	2020	Updated Interim Report on Nutrients in Precipitation on Utah Lake	Report	Atmospheric N deposition	TN	179.5	tons/yr	total	2016-2020	April-September	Utah Lake	Estimated	Conversion of mg/L in sampler to US tons/yr based on 12 in precipitation and 83,800 acres lake area	Note: units are in tons/yr, not metric tons/yr	2	Low	Medium	
Miller 2020	Miller	2020	Updated Interim Report on Nutrients in Precipitation on Utah Lake	Report	Atmospheric N deposition	TN	129.7	tons/yr	total	2016-2020	October-March	Utah Lake	Estimated	Conversion of mg/L in sampler to US tons/yr based on 12 in precipitation and 83,800 acres lake area	Note: units are in tons/yr, not metric tons/yr	2	Low	Medium	
Miller and Provenza 2007	Miller and Provenza	2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article	Macrophyte C	TC	34.8	%	Mean	2003	Summer	Utah Lake	Measured	Leko CHN analyzer	Stuckenia pectinata	1	NA	Medium	
Miller and Provenza 2007	Miller and Provenza	2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article	Macrophyte C	TC	0.29	%	SE	2003	Summer	Utah Lake	Measured	Leko CHN analyzer	Stuckenia pectinata	1	NA	Medium	
Miller and Provenza 2007	Miller and Provenza	2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article	Macrophyte N	TN	1.3	%	Mean	2003	Summer	Utah Lake	Measured	Leko CHN analyzer	Stuckenia pectinata	1	NA	Medium	
Miller and Provenza 2007	Miller and Provenza	2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article	Macrophyte N	TN	0.11	%	SE	2003	Summer	Utah Lake	Measured	Leko CHN analyzer	Stuckenia pectinata	1	NA	Medium	
Miller and Provenza 2007	Miller and Provenza	2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article	Macrophyte C/N	C/N	27	unitless	Mean	2003	Summer	Utah Lake	Measured	Leko CHN analyzer	Stuckenia pectinata	1	NA	Medium	
Miller and Provenza 2007	Miller and Provenza	2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article	Macrophyte C	TC	38.6	%	Mean	2003	Summer	Utah Lake	Measured	Leko CHN analyzer	Scirpus validus	1	NA	Medium	
Miller and Provenza 2007	Miller and Provenza	2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article	Macrophyte C	TC	0.33	%	SE	2003	Summer	Utah Lake	Measured	Leko CHN analyzer	Scirpus validus	1	NA	Medium	

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Miller and Provenza 2007	Miller and Provenza	2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article	Macrophyte N	TN	1.3	%	Mean	2003	Summer	Utah Lake	Measured	Leko CHN analyzer	Scirpus validus	1	NA	Medium	
Miller and Provenza 2007	Miller and Provenza	2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article	Macrophyte N	TN	0.11	%	SE	2003	Summer	Utah Lake	Measured	Leko CHN analyzer	Scirpus validus	1	NA	Medium	
Miller and Provenza 2007	Miller and Provenza	2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article	Macrophyte C/N	C/N	28.9	unitless	Mean	2003	Summer	Utah Lake	Measured	Leko CHN analyzer	Scirpus validus	1	NA	Medium	
Miller and Provenza 2007	Miller and Provenza	2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article	Macrophyte C	TC	38.9	%	Mean	2003	Summer	Utah Lake	Measured	Leko CHN analyzer	Typha latifolia	1	NA	Medium	
Miller and Provenza 2007	Miller and Provenza	2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article	Macrophyte C	TC	0.29	%	SE	2003	Summer	Utah Lake	Measured	Leko CHN analyzer	Typha latifolia	1	NA	Medium	
Miller and Provenza 2007	Miller and Provenza	2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article	Macrophyte N	TN	0.8	%	Mean	2003	Summer	Utah Lake	Measured	Leko CHN analyzer	Typha latifolia	1	NA	Medium	
Miller and Provenza 2007	Miller and Provenza	2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article	Macrophyte N	TN	0.11	%	SE	2003	Summer	Utah Lake	Measured	Leko CHN analyzer	Typha latifolia	1	NA	Medium	
Miller and Provenza 2007	Miller and Provenza	2007	Mechanisms of resistance of freshwater macrophytes to herbivory by invasive juvenile common carp	Journal Article	Macrophyte C/N	C/N	47	unitless	Mean	2003	Summer	Utah Lake	Measured	Leko CHN analyzer	Typha latifolia	1	NA	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External N loading	DIN	1446	tons/yr	Total	2016		Utah Lake	Estimated	LKSIM model	Includes reduction in loading from Orem and Timpanogas WWTPs	4	High	High	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External N loading	DIN	1476	tons/yr	Total	2018		Utah Lake	Estimated	LKSIM model	Includes reduction in loading from Orem and Timpanogas WWTPs	4	High	High	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External N loading	DIN	1551	tons/yr	Total	2015		Utah Lake	Estimated	LKSIM model	Includes reduction in loading from Orem and Timpanogas WWTPs	4	High	High	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External N loading	DIN	1663	tons/yr	Total	2014		Utah Lake	Estimated	LKSIM model		4	High	High	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External N loading	DIN	1715	tons/yr	Total	2013		Utah Lake	Estimated	LKSIM model		4	High	High	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External N loading	DIN	1719	tons/yr	Total	2012		Utah Lake	Estimated	LKSIM model		4	High	High	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External N loading	DIN	1815	tons/yr	Total	2009-2018		Utah Lake	Estimated	LKSIM model		4	High	High	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	TP	264	tons/yr	total	2009		Utah Lake	Estimated	LKSIM model		5	Medium	Medium	

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Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	TP	246	tons/yr	total	2010		Utah Lake	Estimated	LKSIM model		5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	TP	309	tons/yr	total	2011		Utah Lake	Estimated	LKSIM model		5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	TP	237	tons/yr	total	2012		Utah Lake	Estimated	LKSIM model		5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	TP	240	tons/yr	total	2013		Utah Lake	Estimated	LKSIM model		5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	TP	232	tons/yr	total	2014		Utah Lake	Estimated	LKSIM model		5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	TP	227	tons/yr	total	2015		Utah Lake	Estimated	LKSIM model	Includes reduction in loading from Orem and Timpanogas WWTPs	5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	TP	165	tons/yr	total	2016		Utah Lake	Estimated	LKSIM model	Includes reduction in loading from Orem and Timpanogas WWTPs	5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	TP	199	tons/yr	total	2017		Utah Lake	Estimated	LKSIM model	Includes reduction in loading from Orem and Timpanogas WWTPs	5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	TP	169	tons/yr	total	2018		Utah Lake	Estimated	LKSIM model	Includes reduction in loading from Orem and Timpanogas WWTPs	5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	TP	229	tons/yr	Mean	2009-2018		Utah Lake	Estimated	LKSIM model		6	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	SRP	222	tons/yr	total	2009		Utah Lake	Estimated	LKSIM model		5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	SRP	210	tons/yr	total	2010		Utah Lake	Estimated	LKSIM model		5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	SRP	256	tons/yr	total	2011		Utah Lake	Estimated	LKSIM model		5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	SRP	202	tons/yr	total	2012		Utah Lake	Estimated	LKSIM model		5	Medium	Medium	

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Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	SRP	206	tons/yr	total	2013		Utah Lake	Estimated	LKSIM model		5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	SRP	198	tons/yr	total	2014		Utah Lake	Estimated	LKSIM model		5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	SRP	196	tons/yr	total	2015		Utah Lake	Estimated	LKSIM model	Includes reduction in loading from Orem and Timpanogas WWTPs	5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	SRP	132	tons/yr	total	2016		Utah Lake	Estimated	LKSIM model	Includes reduction in loading from Orem and Timpanogas WWTPs	5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	SRP	157	tons/yr	total	2017		Utah Lake	Estimated	LKSIM model	Includes reduction in loading from Orem and Timpanogas WWTPs	5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	SRP	135	tons/yr	total	2018		Utah Lake	Estimated	LKSIM model	Includes reduction in loading from Orem and Timpanogas WWTPs	5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External P loading	SRP	191	tons/yr	Mean	2009-2018		Utah Lake	Estimated	LKSIM model		5	Medium	Medium	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External N loading	DIN	1886	tons/yr	Total	2010		Utah Lake	Estimated	LKSIM model		4	High	High	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External N loading	DIN	1889	tons/yr	Total	2017		Utah Lake	Estimated	LKSIM model	Includes reduction in loading from Orem and Timpanogas WWTPs	4	High	High	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External N loading	DIN	2116	tons/yr	Total	2009		Utah Lake	Estimated	LKSIM model		4	High	High	
Miller and Richards 2020 Summary Report	Miller and Richards	2020	Executive Summary of recent Utah Lake Reports: (Richards and Miller 2019, Richards, 2019, Williams 2019, Miller 2019 and Merritt 2019)	Report	External N loading	DIN	2710	tons/yr	Total	2011		Utah Lake	Estimated	LKSIM model		4	High	High	
Narteh 2011	Narteh	2011	Mapping and Modeling Chlorophyll-a Concentrations in Utah Lake Using Landsat 7 ETM+ Imagery	Thesis	Water Column P	TP	0.05	mg/L	Minimum	2011	July & September	Utah Lake	Estimated (from correlation chart)		Developed correlation between model estimates for chlorophyll-a concentrations and field measured phosphorus concentrations	8	Medium-Low	Medium	

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Narteh 2011	Narteh	2011	Mapping and Modeling Chlorophyll-a Concentrations in Utah Lake Using Landsat 7 ETM+ Imagery	Thesis	Water Column P	TP	1	mg/L	Maximum	2011	July & September	Utah Lake	Estimated (from correlation chart)		Developed correlation between model estimates for chlorophyll-a concentrations and field measured phosphorus concentrations	8	Medium-Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	1.33	mg/m2/d	Mean	2017	May-December	Lake Shore	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	5	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	2.77	mg/m2/d	Mean	2017	May-December	Mosida	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	5	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	31.38	mg/m2/d	Mean	2017	May-December	Saratoga Springs	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	5	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	3.78	mg/m2/d	Mean	2017	May-December	Pump Station	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	5	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	1.26	mg/m2/d	Mean	2017	May-December	Orem WWTP	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	5	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	1.02	mg/m2/d	Mean	2017	May-December	Central Davis	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	5	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	7.93	mg/m2/d	Mean	2017	May-December	Regional (all sites)	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	5	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	1.95	mg/m2/d	SD	2017	May-December	Lake Shore	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	5	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	5.63	mg/m2/d	SD	2017	May-December	Mosida	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	5	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	88.73	mg/m2/d	SD	2017	May-December	Saratoga Springs	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	5	Low	Medium	

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Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	20.14	mg/m2/d	SD	2017	May-December	Pump Station	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	5	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	2.65	mg/m2/d	SD	2017	May-December	Orem WWTP	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	5	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	2.6	mg/m2/d	SD	2017	May-December	Central Davis	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	5	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	41.87	mg/m2/d	SD	2017	May-December	Regional (all sites)	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	5	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	4.09	mg/m2/d	Mean	2017	May-December	Lake Shore	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	2	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	4.17	mg/m2/d	Mean	2017	May-December	Mosida	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	2	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	36.06	mg/m2/d	Mean	2017	May-December	Saratoga Springs	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	2	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	1.59	mg/m2/d	Mean	2017	May-December	Pump Station	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	2	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	5.23	mg/m2/d	Mean	2017	May-December	Orem WWTP	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	2	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	5.27	mg/m2/d	Mean	2017	May-December	Central Davis	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	2	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	10.35	mg/m2/d	Mean	2017	May-December	Regional (all sites)	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	2	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	4.06	mg/m2/d	SD	2017	May-December	Lake Shore	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	2	Low	Medium	

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Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	4.74	mg/m2/d	SD	2017	May-December	Mosida	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	2	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	124.62	mg/m2/d	SD	2017	May-December	Saratoga Springs	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	2	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	2.33	mg/m2/d	SD	2017	May-December	Pump Station	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	2	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	4.6	mg/m2/d	SD	2017	May-December	Orem WWTP	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	2	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	5.8	mg/m2/d	SD	2017	May-December	Central Davis	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	2	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	56.72	mg/m2/d	SD	2017	May-December	Regional (all sites)	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen et al. 2018.	2	Low	Medium	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	353.71	tons/31 weeks	Total, all samples	2017	May-December	Utah Lake	Estimated	Spatial interpolation by GMS	Loading estimates also available for 31 individual weeks from May to December 2020. Same results as Olsen et al. 2018.	5	Low	Very low	Included insect contamination
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric P deposition (total)	TP	8.01	tons/24 weeks	Total, uncontaminated samples	2017	May-December	Utah Lake	Estimated	Spatial interpolation by GMS	Loading estimates also available for 31 individual weeks from May to December 2020. Same results as Olsen et al. 2018.	5	Low	Low	
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	459.71	tons/31 weeks	Total, all samples	2017	May-December	Utah Lake	Estimated	Spatial interpolation by GMS	Loading estimates also available for 31 individual weeks from May to December 2020. Same results as Olsen et al. 2018.	2	Low	Very low	Included insect contamination
Olsen 2018 Thesis	Olsen	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings on Utah Lake Using Field Samples, Laboratory Methods, and Statistical Analysis: Implication for Water Quality Issues	Thesis	Atmospheric N deposition (total)	DIN	46.22	tons/24 weeks	Total, uncontaminated samples	2017	May-December	Utah Lake	Estimated	Spatial interpolation by GMS	Loading estimates also available for 31 individual weeks from May to December 2020. Same results as Olsen et al. 2018.	2	Low	Low	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric P deposition (total)	TP	1.33	mg/m2/d	Mean	2017	May-December	Lake Shore	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	5	Low	Medium	

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Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric P deposition (total)	TP	2.77	mg/m2/d	Mean	2017	May-December	Mosida	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	5	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric P deposition (total)	TP	31.38	mg/m2/d	Mean	2017	May-December	Saratoga Springs	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	5	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric P deposition (total)	TP	3.78	mg/m2/d	Mean	2017	May-December	Pump Station	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	5	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric P deposition (total)	TP	1.26	mg/m2/d	Mean	2017	May-December	Orem WWTP	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	5	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric P deposition (total)	TP	8.1	mg/m2/d	Mean	2017	May-December	Regional (all sites)	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	5	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric P deposition (total)	TP	1.95	mg/m2/d	SD	2017	May-December	Lake Shore	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	5	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric P deposition (total)	TP	5.63	mg/m2/d	SD	2017	May-December	Mosida	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	5	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric P deposition (total)	TP	88.73	mg/m2/d	SD	2017	May-December	Saratoga Springs	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	5	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric P deposition (total)	TP	20.14	mg/m2/d	SD	2017	May-December	Pump Station	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	5	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric P deposition (total)	TP	2.65	mg/m2/d	SD	2017	May-December	Orem WWTP	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	5	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric P deposition (total)	TP	23.82	mg/m2/d	SD	2017	May-December	Regional (all sites)	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	5	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric N deposition (total)	DIN	4.09	mg/m2/d	Mean	2017	May-December	Lake Shore	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	2	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric N deposition (total)	DIN	4.17	mg/m2/d	Mean	2017	May-December	Mosida	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	2	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric N deposition (total)	DIN	36.06	mg/m2/d	Mean	2017	May-December	Saratoga Springs	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	2	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric N deposition (total)	DIN	1.59	mg/m2/d	Mean	2017	May-December	Pump Station	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	2	Low	Medium	

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Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric N deposition (total)	DIN	5.23	mg/m2/d	Mean	2017	May-December	Orem WWTP	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	2	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric N deposition (total)	DIN	10.23	mg/m2/d	Mean	2017	May-December	Regional (all sites)	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	2	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric N deposition (total)	DIN	4.06	mg/m2/d	SD	2017	May-December	Lake Shore	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	2	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric N deposition (total)	DIN	4.74	mg/m2/d	SD	2017	May-December	Mosida	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	2	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric N deposition (total)	DIN	124.62	mg/m2/d	SD	2017	May-December	Saratoga Springs	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	2	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric N deposition (total)	DIN	2.33	mg/m2/d	SD	2017	May-December	Pump Station	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	2	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric N deposition (total)	DIN	4.6	mg/m2/d	SD	2017	May-December	Orem WWTP	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	2	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric N deposition (total)	DIN	28.07	mg/m2/d	SD	2017	May-December	Regional (all sites)	Measured	Atmospheric sampler, some NADP protocols followed	Same results as Olsen 2018 Thesis	2	Low	Medium	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric P deposition (total)	TP	350	Mg/8 mo	Total, all samples	2017	May-December	Utah Lake	Estimated	Spatial interpolation via simple krigins with an exponential variogram	Same results as Olsen 2018 Thesis	5	Low	Very low	Included insect contamination
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric P deposition (total)	TP	8	Mg/8 mo	Total, uncontaminated samples	2017	May-December	Utah Lake	Estimated	Spatial interpolation via simple krigins with an exponential variogram	Same results as Olsen 2018 Thesis	5	Low	Low	
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric N deposition (total)	DIN	460	Mg/8 mo	Total, all samples	2017	May-December	Utah Lake	Estimated	Spatial interpolation via simple krigins with an exponential variogram	Same results as Olsen 2018 Thesis	2	Low	Very low	Included insect contamination
Olsen et al. 2018	Olsen et al.	2018	Measuring and Calculating Current Atmospheric Phosphorous and Nitrogen Loadings to Utah Lake Using Field Samples and Geostatistical Analysis	Journal Article	Atmospheric N deposition (total)	DIN	46	Mg/8 mo	Total, uncontaminated samples	2017	May-December	Utah Lake	Estimated	Spatial interpolation via simple krigins with an exponential variogram	Same results as Olsen 2018 Thesis	2	Low	Low	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	3.1	tons/yr	Total	1980-2003		Powell Slough	Estimated	Assumed 0.15 mg/L		1	NA	Low	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	79.3	tons/yr	Total	1980-2003		Orem WWTP	Estimated	WWTP records and STORET		4	Medium-Low	Medium	

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PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	7.9	tons/yr	Total	1980-2003		Provo River	Estimated	Concentration from STORET. If a month was not available, average of previous and next month taken. Assume unknown addition or removal is negligible.		2	Medium-High	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	0.2	tons/yr	Total	1980-2003		Dry Creek (Lehi)	Estimated	Assumed 0.15 mg/L		1	NA	Low	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	0	tons/yr	Total	1980-2003		Little Dry Creek	Estimated	Assumed 0.15 mg/L		1	NA	Low	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	1.2	tons/yr	Total	1980-2003		Big Dry Creek	Estimated	Assumed 0.15 mg/L		1	NA	Low	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	1.4	tons/yr	Total	1980-2003		Mill Race Creek	Estimated	Concentration from STORET. If a month was not available, average of previous and next month taken. Assume unknown addition or removal is negligible.		1	NA	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	71.6	tons/yr	Total	1980-2003		Provo WWTP	Estimated	WWTP records and STORET		4	Medium-Low	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	1.4	tons/yr	Total	1980-2003		Drains	Estimated	Concentration from STORET. If a month was not available, average of previous and next month taken. Assume unknown addition or removal is negligible. Flows		2	Low	Low	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	0.7	tons/yr	Total	1980-2003		Spring Creek	Estimated	Concentration from STORET. If a month was not available, average of previous and next month taken. Assume unknown addition or removal is negligible.		1	NA	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	13.7	tons/yr	Total	1980-2003		Springville WWTP	Estimated	WWTP records and STORET		4	Medium-Low	Medium	

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PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	1.4	tons/yr	Total	1980-2003		Hobble Creek	Estimated	Concentration from STORET. If a month was not available, average of previous and next month taken. Assume unknown addition or removal is negligible.		2	Medium-High	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	2.2	tons/yr	Total	1980-2003		Dry Creek (South of Provo Bay)	Estimated	Concentration from STORET. If a month was not available, average of previous and next month taken. Assume unknown addition or removal is negligible.		1	NA	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	11.7	tons/yr	Total	1980-2003		Spanish Fork WWTP	Estimated	WWTP records and STORET		4	Medium-Low	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	21.2	tons/yr	Total	1980-2003		Spanish Fork River	Estimated	Concentration from STORET. If a month was not available, average of previous and next month taken. Assume unknown addition or removal is negligible.		2	Medium	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	4.1	tons/yr	Total	1980-2003		Benjamin Slough	Estimated	Concentration from STORET. If a month was not available, average of previous and next month taken. Assume unknown addition or removal is negligible.		1	NA	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	4.1	tons/yr	Total	1980-2003		Salem WWTP	Estimated	WWTP records and STORET		4	Medium-Low	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	8.4	tons/yr	Total	1980-2003		Payson WWTP	Estimated	WWTP records and STORET		4	Medium-Low	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	0.7	tons/yr	Total	1980-2003		White Lake Overflow to Goshen Bay	Estimated	Assumed 0.10 mg/L		1	NA	Low	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	1.1	tons/yr	Total	1980-2003		Minnie Creek	Estimated	Assumed 0.15 mg/L		1	NA	Low	

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PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	1.2	tons/yr	Total	1980-2003		Mill Pond	Estimated	Assumed 0.10 mg/L		1	NA	Low	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	61.7	tons/yr	Total	1980-2003		Natural flows/drains, all	Estimated	Assumed 0.15 mg/L		2	Medium-High	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	188.8	tons/yr	Total	1980-2003		WWTPs, all except Timpanogos	Estimated	Sum of all WWTPS except Timponogos		6	Medium-Low	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	0	tons/yr	Total	1980-2003		Springs	Estimated	0		1	NA	Low	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	3.5	tons/yr	Total	1980-2003		Groundwater	Estimated	Assumed 0.02 mg/L		2	Medium-Low	Low	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	39	tons/yr	Total	1980-2003		Timpanogos WWTP	Estimated	WWTP records and STORET		4	Medium-Low	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	4.6	tons/yr	Total	1980-2003		Other surface	Estimated	Miscellaneous		1	NA	Low	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	External P loading	TP	297.6	tons/yr	Total	1980-2003		Utah Lake	Estimated	Sum of all external loading		6	Medium	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	P outflow	TP	81.7	tons/yr	Total	1980-2003		Jordan River	Estimated	Concentration from STORET. If a month was not available, average of previous and next month taken. Assume unknown addition or removal is negligible.		4	Medium-Low	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	P outflow	TP	1.8	tons/yr	Total	1980-2003		Other outflow	Estimated	Miscellaneous		1	NA	Medium	
PSOMAS and SWCA 2007	PSOMAS and SWCA	2007	Utah Lake TMDL: Pollutant Loading Assessment & Designated Beneficial Use Impariment Assessment	Report	P outflow	TP	83.5	tons/yr	Total	1980-2003		Total outflow	Estimated	Sum of all outflows		4	Medium-Low	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	593	ppm		2016	May	Provo Bay	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	614	ppm		2016	August	Provo Bay	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	323	ppm		2016	May	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	549	ppm		2016	May	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	566	ppm		2016	August	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	595	ppm		2016	May	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	599	ppm		2016	May	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	

Utah Lake CNP Data																				
FileName	Author(s)	Year	Title	ArticleType	Process or Pool	Fraction	Rate or Amount	Units	Aggregation	Year	Month	Location	Measured or Estimated?	Approach	Notes	Evidence amount (number of studies)	Agreement	Confidence	Comments
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	607	ppm		2016	May	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	631	ppm		2016	May	Provo Bay	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	615	ppm		2016	May	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	679	ppm		2016	November	Provo Bay	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	634	ppm		2016	May	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	635	ppm		2016	November	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	643	ppm		2016	November	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	644	ppm		2016	August	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	656	ppm		2016	August	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	656	ppm		2016	November	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	659	ppm		2015	October	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	659	ppm		2016	August	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	676	ppm		2016	May	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	707	ppm		2016	May	Provo Bay	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	751	ppm		2016	May	Provo Bay	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	710	ppm		2015	October	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	755	ppm		2016	August	Provo Bay	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	820	ppm		2016	November	Provo Bay	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	

Utah Lake CNP Data																			
FileName	**Author(s)**	**Year**	**Title**	**ArticleType**	**Process or Pool**	**Fraction**	**Rate or Amount**	**Units**	**Aggregation**	**Year**	**Month**	**Location**	**Measured or Estimated?**	**Approach**	**Notes**	**Evidence amount (number of studies)**	**Agreement**	**Confidence**	**Comments**
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	764	ppm		2016	May	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	768	ppm		2016	May	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	781	ppm		2016	May	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	812	ppm		2016	May	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	818	ppm		2016	May	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	820	ppm		2015	October	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	1001	ppm		2016	November	Provo Bay	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	838	ppm		2016	November	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	842	ppm		2016	August	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	842	ppm		2016	November	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	847	ppm		2015	October	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	851	ppm		2016	August	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	859	ppm		2016	November	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	895	ppm		2016	November	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	925	ppm		2016	August	Center	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	973	ppm		2016	May	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	

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Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	1022	ppm		2015	October	Provo Bay	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	1090	ppm		2016	August	Provo Bay	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	1137	ppm		2016	November	Provo Bay	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	1091	ppm		2016	November	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	1183	ppm		2015	October	Provo Bay	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	1165	ppm		2016	August	Center	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	1253	ppm		2016	November	Provo Bay	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	1321	ppm		2016	May	Provo Bay	Measured	Total digestion, US EPA method 3052		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	1388	ppm		2016	August	Provo Bay	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	1711	ppm		2016	May	Provo Bay	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall 2017 Thesis	Randall	2017	Characterizing the Fate and Mobility of Phosphorus in Utah Lake Sediments	Thesis	Sediment P	TP	1894	ppm		2016	November	Provo Bay	Measured	ICP-OES and X-ray fluorescence (XRF)		3	Medium	Medium	
Randall et al. 2019	Randall et al.	2019	Sediment potentially controls in-lake phosphorus cycling and harmful cyanobacteria in shallow, eutrophic Utah Lake	Journal Article	Water Column P	TDP	0.05	mg/L	Mean	2015-2016		West Side of Utah Lake	Measured	ICP-OES		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Randall et al. 2019	Randall et al.	2019	Sediment potentially controls in-lake phosphorus cycling and harmful cyanobacteria in shallow, eutrophic Utah Lake	Journal Article	Sediment P	TP	614	mg/kg	Minimum	2015-2016		Provo Bay	Measured	USEPA Method 3052		3	Medium	Medium	
Randall et al. 2019	Randall et al.	2019	Sediment potentially controls in-lake phosphorus cycling and harmful cyanobacteria in shallow, eutrophic Utah Lake	Journal Article	Sediment P	TP	1321	mg/kg	Maximum	2015-2016		Provo Bay	Measured	USEPA Method 3052		3	Medium	Medium	
Randall et al. 2019	Randall et al.	2019	Sediment potentially controls in-lake phosphorus cycling and harmful cyanobacteria in shallow, eutrophic Utah Lake	Journal Article	Sediment P	TP	323	mg/kg	Minimum	2015-2016		Main Lake	Measured	USEPA Method 3052		3	Medium	Medium	
Randall et al. 2019	Randall et al.	2019	Sediment potentially controls in-lake phosphorus cycling and harmful cyanobacteria in shallow, eutrophic Utah Lake	Journal Article	Sediment P	TP	925	mg/kg	Maximum	2015-2016		Main Lake	Measured	USEPA Method 3052		3	Medium	Medium	
Randall et al. 2019	Randall et al.	2019	Sediment potentially controls in-lake phosphorus cycling and harmful cyanobacteria in shallow, eutrophic Utah Lake	Journal Article	Porewater P	TDP	3.85	mg/L	Mean	2015-2016		Provo Bay	Measured			1	NA	Medium	
Randall et al. 2019	Randall et al.	2019	Sediment potentially controls in-lake phosphorus cycling and harmful cyanobacteria in shallow, eutrophic Utah Lake	Journal Article	Porewater P	TDP	0.26	mg/L	Minimum	2015-2016		Provo Bay	Measured			1	NA	Medium	

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Randall et al. 2019	Randall et al.	2019	Sediment potentially controls in-lake phosphorus cycling and harmful cyanobacteria in shallow, eutrophic Utah Lake	Journal Article	Porewater P	TDP	10.82	mg/L	Maximum	2015-2016		Provo Bay	Measured			1	NA	Medium	
Randall et al. 2019	Randall et al.	2019	Sediment potentially controls in-lake phosphorus cycling and harmful cyanobacteria in shallow, eutrophic Utah Lake	Journal Article	Porewater P	TDP	1.48	mg/L	Mean	2015-2016		Main Lake	Measured			1	NA	Medium	
Randall et al. 2019	Randall et al.	2019	Sediment potentially controls in-lake phosphorus cycling and harmful cyanobacteria in shallow, eutrophic Utah Lake	Journal Article	Porewater P	TDP	0.40	mg/L	Minimum	2015-2016		Main Lake	Measured			1	NA	Medium	
Randall et al. 2019	Randall et al.	2019	Sediment potentially controls in-lake phosphorus cycling and harmful cyanobacteria in shallow, eutrophic Utah Lake	Journal Article	Porewater P	TDP	6.78	mg/L	Maximum	2015-2016		Main Lake	Measured			1	NA	Medium	
Randall et al. 2019	Randall et al.	2019	Sediment potentially controls in-lake phosphorus cycling and harmful cyanobacteria in shallow, eutrophic Utah Lake	Journal Article	Water Column P	TDP	0.43	mg/L	Mean	2015-2016		East Side of Utah Lake	Measured	ICP-OES		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Randall et al. 2019	Randall et al.	2019	Sediment potentially controls in-lake phosphorus cycling and harmful cyanobacteria in shallow, eutrophic Utah Lake	Journal Article	Water Column P	TDP	0.14	mg/L	SD	2015-2016		East Side of Utah Lake	Measured	ICP-OES		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Randall et al. 2019	Randall et al.	2019	Sediment potentially controls in-lake phosphorus cycling and harmful cyanobacteria in shallow, eutrophic Utah Lake	Journal Article	Water Column P	TDP	0.01	mg/L	SD	2015-2016		West Side of Utah Lake	Measured	ICP-OES		6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Reidhead 2019 Thesis	Reidhead	2019	Significance of the Rates of Atmospheric Deposition Around Utah Lake and Phosphorus-Fractionation of Local Soils	Thesis	Sediment P	Separate Soil TP	684	mg/kg	Minimum	2018		Lakewide	Estimated	ICP-OES Plant Method		3	Medium	Medium	
Reidhead 2019 Thesis	Reidhead	2019	Significance of the Rates of Atmospheric Deposition Around Utah Lake and Phosphorus-Fractionation of Local Soils	Thesis	Sediment P	Fractionation TP	1014	mg/kg	Minimum	2018		Lakewide	Estimated	ICP-OES Plant Method	Skipped atmospheric deposition portion of study	3	Medium	Medium	
Reidhead 2019 Thesis	Reidhead	2019	Significance of the Rates of Atmospheric Deposition Around Utah Lake and Phosphorus-Fractionation of Local Soils	Thesis	Sediment P	Separate Soil TP	1119	mg/kg	Maximum	2018		Lakewide	Estimated	ICP-OES Plant Method		3	Medium	Medium	
Reidhead 2019 Thesis	Reidhead	2019	Significance of the Rates of Atmospheric Deposition Around Utah Lake and Phosphorus-Fractionation of Local Soils	Thesis	Sediment P	Fractionation TP	1730	mg/kg	Maximum	2018		Lakewide	Estimated	ICP-OES Plant Method		3	Medium	Medium	
Shah et al. 2017	Shah et al.	2017	Nitrogen sources and transformations within the Jordan River, Utah and Microbial community response to energy and nutrient availability in the Jordan River, Utah	Report	N outflow	TDN	150	kg/day	Minimum	2016	Spring	Jordan River	Measured	Unknown		2	Medium-High	Medium	
Shah et al. 2017	Shah et al.	2017	Nitrogen sources and transformations within the Jordan River, Utah and Microbial community response to energy and nutrient availability in the Jordan River, Utah	Report	N outflow	TDN	4734	kg/day	Maximum	2016	Spring	Jordan River	Measured	Unknown		2	Medium-High	Medium	
Shah et al. 2017	Shah et al.	2017	Nitrogen sources and transformations within the Jordan River, Utah and Microbial community response to energy and nutrient availability in the Jordan River, Utah	Report	N outflow	TDN	512	kg/day	Minimum	2016	Summer	Jordan River	Measured	Unknown		2	Medium-High	Medium	
Shah et al. 2017	Shah et al.	2017	Nitrogen sources and transformations within the Jordan River, Utah and Microbial community response to energy and nutrient availability in the Jordan River, Utah	Report	N outflow	TDN	6847	kg/day	Maximum	2016	Summer	Jordan River	Measured	Unknown		2	Medium-High	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.03	mg/L		1979	March	Outer Bay	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.014	mg/L		1979	March	Goshen Bay	Measured	Unknown		1	NA	Low	Low confidence only because this is the only study in Goshen Bay. May draw from main basin samples to assess agreement

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Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.015	mg/L		1979	March	Goshen Bay	Measured	Unknown		1	NA	Low	Low confidence only because this is the only study in Goshen Bay. May draw from main basin samples to assess agreement
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.015	mg/L		1979	March	Utah Lake	Measured	Unknown		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.03	mg/L		1979	March	Utah Lake	Measured	Unknown		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.05	mg/L		1979	March	Midbay	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.07	mg/L		1979	March	Inner Bay	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.04	mg/L		1979	March	Goshen Bay	Measured	Unknown		1	NA	Low	Low confidence only because this is the only study in Goshen Bay. May draw from main basin samples to assess agreement
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.09	mg/L		1979	March	Main Lake	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.12	mg/L	Mean	1977-1980		Provo Bay	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.13	mg/L		1979	March	Main Lake	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.06	mg/L	Mean	1977-1980		Goshen Bay	Measured	Unknown		1	NA	Low	Low confidence only because this is the only study in Goshen Bay. May draw from main basin samples to assess agreement
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.07	mg/L	Mean	1977-1980		Goshen Bay	Measured	Unknown		1	NA	Low	Low confidence only because this is the only study in Goshen Bay. May draw from main basin samples to assess agreement
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.07	mg/L	Mean	1977-1980		Goshen Bay	Measured	Unknown		1	NA	Low	Low confidence only because this is the only study in Goshen Bay. May draw from main basin samples to assess agreement
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.07	mg/L	Mean	1977-1980		Utah Lake	Measured	Unknown		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.23	mg/L	Mean	1977-1980		Provo Bay	Measured	Unknown		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.08	mg/L	Mean	1977-1980		Utah Lake	Measured	Unknown		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.16	mg/L	Mean	1977-1980		Inner Bay	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.17	mg/L	Mean	1977-1980		Main Lake	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.18	mg/L	Mean	1977-1980		Midbay	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.18	mg/L	Mean	1977-1980		Outer Bay	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.19	mg/L	Mean	1977-1980		Main Lake	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.35	mg/L		1979	March	Provo Bay	Measured	Unknown		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	251	mg/L	Mean	1977-1980		Inner Bay	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	34	mg/L	SD	1977-1980		Inner Bay	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	257	mg/L	Mean	1977-1980		Midbay	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	30	mg/L	SD	1977-1980		Midbay	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	246	mg/L	Mean	1977-1980		Outer Bay	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	30	mg/L	SD	1977-1980		Outer Bay	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	247	mg/L	Mean	1977-1980		Main Lake	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	32	mg/L	SD	1977-1980		Main Lake	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	252	mg/L	Mean	1977-1980		Main Lake	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	32	mg/L	SD	1977-1980		Main Lake	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	234	mg/L	Mean	1977-1980		Provo Bay	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	31	mg/L	SD	1977-1980		Provo Bay	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	294	mg/L		1979	March	Inner Bay	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	272	mg/L		1979	March	Midbay	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	268	mg/L		1979	March	Outer Bay	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	266	mg/L		1979	March	Main Lake	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	259	mg/L		1979	March	Main Lake	Measured	Unknown		4	Medium	Medium	
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column C	HCO3	270	mg/L		1979	March	Provo Bay	Measured	Unknown		4	Medium	Medium	

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Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.14	mg/L	SD	1977-1980		Inner Bay	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.18	mg/L	SD	1977-1980		Midbay	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.18	mg/L	SD	1977-1980		Outer Bay	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.18	mg/L	SD	1977-1980		Main Lake	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.16	mg/L	SD	1977-1980		Main Lake	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.48	mg/L		1979	March	Provo Bay	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column N	NO3	0.14	mg/L	SD	1977-1980		Provo Bay	Measured	Unknown		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.04	mg/L	SD	1977-1980		Goshen Bay	Measured	Unknown		1	NA	Low	Low confidence only because this is the only study in Goshen Bay. May draw from main basin samples to assess agreement
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.05	mg/L	SD	1977-1980		Goshen Bay	Measured	Unknown		1	NA	Low	Low confidence only because this is the only study in Goshen Bay. May draw from main basin samples to assess agreement
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.07	mg/L	SD	1977-1980		Goshen Bay	Measured	Unknown		1	NA	Low	Low confidence only because this is the only study in Goshen Bay. May draw from main basin samples to assess agreement
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.05	mg/L	SD	1977-1980		Utah Lake	Measured	Unknown		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.07	mg/L	SD	1977-1980		Utah Lake	Measured	Unknown		8	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Squires and Rushforth 1986	Squires and Rushforth	1986	Winter phytoplankton communities of Utah Lake, Utah, USA	Journal Article	Water Column P	TP	0.16	mg/L	SD	1977-1980		Provo Bay	Measured	Unknown		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NO3	0.02	mg/L	Mean	1970	June-August	Provo Bay S2	Measured	Standard Methods (American Public Health Association, 1965)		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column P	PO4	0.15	mg/L	Mean	1970	June-August	Provo Bay	Measured	Standard Methods (American Public Health Association, 1965)		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NO3	0.08	mg/L	Mean	1970	June-August	Provo Bay S8	Measured	Standard Methods (American Public Health Association, 1965)		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NH4	0.09	mg/L	Mean	1970	June-August	Provo Bay S11	Measured	Distillation procedure per Standard Methods (American Public Health Association, 1965)		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NH4	0.28	mg/L	Mean	1970	June-August	Provo Bay S10	Measured	Distillation procedure per Standard Methods (American Public Health Association, 1965)		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NH4	0.29	mg/L	Mean	1970	June-August	Provo Bay S8	Measured	Distillation procedure per Standard Methods (American Public Health Association, 1965)		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NH4	0.41	mg/L	Mean	1970	June-August	Provo Bay S2	Measured	Distillation procedure per Standard Methods (American Public Health Association, 1965)		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NO3	0.09	mg/L	Mean	1970	June-August	Provo Bay S4	Measured	Standard Methods (American Public Health Association, 1965)		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NO3	0.12	mg/L	Mean	1970	June-August	Provo Bay S10	Measured	Standard Methods (American Public Health Association, 1965)		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column P	PO4	0.88	mg/L	Mean	1970	June-August	Provo Bay	Measured	Standard Methods (American Public Health Association, 1965)		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column P	PO4	0.94	mg/L	Mean	1970	June-August	Provo Bay	Measured	Standard Methods (American Public Health Association, 1965)		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column P	PO4	1.5	mg/L	Mean	1970	June-August	Provo Bay	Measured	Standard Methods (American Public Health Association, 1965)		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column P	PO4	2	mg/L	Mean	1970	June-August	Provo Bay	Measured	Standard Methods (American Public Health Association, 1965)		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column P	PO4	3.62	mg/L	Mean	1970	June-August	Provo Bay	Measured	Standard Methods (American Public Health Association, 1965)		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	38	mg/L	Mean	1970	June-August	Provo Bay S1, Surface	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	49	mg/L	Mean	1970	June-August	Provo Bay S1, Bottom	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	21	mg/L	Mean	1970	June-August	Provo Bay S2, Surface	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	38	mg/L	Mean	1970	June-August	Provo Bay S2, Bottom	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	3	mg/L	Mean	1970	June-August	Provo Bay S4, Surface	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	7	mg/L	Mean	1970	June-August	Provo Bay S4, Bottom	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	6	mg/L	Mean	1970	June-August	Provo Bay S8, Bottom	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	3	mg/L	Mean	1970	June-August	Provo Bay S10, Surface	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	3	mg/L	Mean	1970	June-August	Provo Bay S10, Bottom	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	6	mg/L	Mean	1970	June-August	Provo Bay S11, Surface	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	5	mg/L	Mean	1970	June-August	Provo Bay S11, Bottom	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	25	mg/L	SD	1970	June-August	Provo Bay S1, Surface	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	26	mg/L	SD	1970	June-August	Provo Bay S1, Bottom	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	24	mg/L	SD	1970	June-August	Provo Bay S2, Surface	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	27	mg/L	SD	1970	June-August	Provo Bay S2, Bottom	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	5	mg/L	SD	1970	June-August	Provo Bay S4, Surface	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	11	mg/L	SD	1970	June-August	Provo Bay S4, Bottom	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	11	mg/L	SD	1970	June-August	Provo Bay S8, Bottom	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	8	mg/L	SD	1970	June-August	Provo Bay S10, Surface	Measured	Hach method		1	NA	Medium	

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Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	5	mg/L	SD	1970	June-August	Provo Bay S10, Bottom	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	8	mg/L	SD	1970	June-August	Provo Bay S11, Surface	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column C	CO2	6	mg/L	SD	1970	June-August	Provo Bay S11, Bottom	Measured	Hach method		1	NA	Medium	
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NO3	1.01	mg/L	SD	1970	June-August	Provo Bay S1	Measured	Standard Methods (American Public Health Association, 1965)		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NO3	0.71	mg/L	Mean	1970	June-August	Provo Bay S1	Measured	Standard Methods (American Public Health Association, 1965)		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NO3	0.03	mg/L	SD	1970	June-August	Provo Bay S2	Measured	Standard Methods (American Public Health Association, 1965)		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NO3	0.09	mg/L	SD	1970	June-August	Provo Bay S4	Measured	Standard Methods (American Public Health Association, 1965)		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NO3	0.09	mg/L	SD	1970	June-August	Provo Bay S8	Measured	Standard Methods (American Public Health Association, 1965)		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NO3	0.2	mg/L	SD	1970	June-August	Provo Bay S10	Measured	Standard Methods (American Public Health Association, 1965)		7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column P	PO4	1.26	mg/L	SD	1970	June-August	Provo Bay	Measured	Standard Methods (American Public Health Association, 1965)		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column P	PO4	0.7	mg/L	SD	1970	June-August	Provo Bay	Measured	Standard Methods (American Public Health Association, 1965)		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column P	PO4	1.08	mg/L	SD	1970	June-August	Provo Bay	Measured	Standard Methods (American Public Health Association, 1965)		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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FileName	Author(s)	Year	Title	ArticleType	Process or Pool	Fraction	Rate or Amount	Units	Aggregation	Year	Month	Location	Measured or Estimated?	Approach	Notes	Evidence amount (number of studies)	Agreement	Confidence	Comments
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column P	PO4	0.15	mg/L	SD	1970	June-August	Provo Bay	Measured	Standard Methods (American Public Health Association, 1965)		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column P	PO4	0.6	mg/L	SD	1970	June-August	Provo Bay	Measured	Standard Methods (American Public Health Association, 1965)		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column P	PO4	0.1	mg/L	SD	1970	June-August	Provo Bay	Measured	Standard Methods (American Public Health Association, 1965)		4	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NH4	0.41	mg/L	SD	1970	June-August	Provo Bay S1	Measured	Distillation procedure per Standard Methods (American Public Health Association, 1965)		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NH4	0.24	mg/L	SD	1970	June-August	Provo Bay S2	Measured	Distillation procedure per Standard Methods (American Public Health Association, 1965)		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NH4	1.41	mg/L	Mean	1970	June-August	Provo Bay S1	Measured	Distillation procedure per Standard Methods (American Public Health Association, 1965)		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NH4	1.36	mg/L	SD	1970	June-August	Mill Race	Measured	Distillation procedure per Standard Methods (American Public Health Association, 1965)		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NH4	0.24	mg/L	SD	1970	June-August	Provo Bay S8	Measured	Distillation procedure per Standard Methods (American Public Health Association, 1965)		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies

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Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NH4	0.24	mg/L	SD	1970	June-August	Provo Bay S10	Measured	Distillation procedure per Standard Methods (American Public Health Association, 1965)		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NH4	2.93	mg/L	Mean	1970	June-August	Mill Race	Measured	Distillation procedure per Standard Methods (American Public Health Association, 1965)		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Sundrud 1971 Thesis	Sundrud	1971	The biochemical response of Provo Bay to nutrient inflow	Thesis	Water Column N	NH4	0.07	mg/L	SD	1970	June-August	Provo Bay S11	Measured	Distillation procedure per Standard Methods (American Public Health Association, 1965)		5	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Toole 1974 Thesis	Toole	1974	The benthic communities of the eastern rocky shore areas of Goshen Bay, Utah Lake	Thesis	Water column P	PO4	0	mg/L	Mean	1972	October	Spring water	Measured	Hach chemical water chemistry kit		1	NA	Medium	
Toole 1974 Thesis	Toole	1974	The benthic communities of the eastern rocky shore areas of Goshen Bay, Utah Lake	Thesis	Water column P	PO4	0.33	mg/L	Mean	1972	October	Goshen Bay	Measured	Hach chemical water chemistry kit		2	Medium-Low	Medium	
Toole 1974 Thesis	Toole	1974	The benthic communities of the eastern rocky shore areas of Goshen Bay, Utah Lake	Thesis	Water column N	NO3	6	mg/L	Mean	1972	October	Spring water	Measured	Hach chemical water chemistry kit	Suspect this is mg/L, not ug/L	7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Toole 1974 Thesis	Toole	1974	The benthic communities of the eastern rocky shore areas of Goshen Bay, Utah Lake	Thesis	Water column N	NO3	18	mg/L	Mean	1972	October	Goshen Bay	Measured	Hach chemical water chemistry kit	Suspect this is mg/L, not ug/L	7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Toole 1974 Thesis	Toole	1974	The benthic communities of the eastern rocky shore areas of Goshen Bay, Utah Lake	Thesis	Water column C	CO2	230	mg/L	Mean	1972	October	Spring water	Measured	Hach chemical water chemistry kit		1	NA	Medium	
Toole 1974 Thesis	Toole	1974	The benthic communities of the eastern rocky shore areas of Goshen Bay, Utah Lake	Thesis	Water column C	CO2	6	mg/L	Mean	1972	October	Goshen Bay	Measured	Hach chemical water chemistry kit		1	NA	Medium	
Toole 1974 Thesis	Toole	1974	The benthic communities of the eastern rocky shore areas of Goshen Bay, Utah Lake	Thesis	Water column C	HCO3	870	mg/L	Mean	1972	October	Spring water	Measured	Hach chemical water chemistry kit		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Toole 1974 Thesis	Toole	1974	The benthic communities of the eastern rocky shore areas of Goshen Bay, Utah Lake	Thesis	Water column C	HCO3	310	mg/L	Mean	1972	October	Goshen Bay	Measured	Hach chemical water chemistry kit		4	Medium	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Wang et al. 2017	Wang et al.	2017	THE HISTORICAL RECORDS OF STABLE ISOTOPES (13C AND 15N) AND TRACE METALS ALONG UTAH LAKE – JORDAN RIVER TRANSITION ZONE, UTAH (USA)	Guidebook chapter	Sediment C/N	C/N	8.25	unitless	Minimum			Utah Lake near Jordan River outlet	Measured	EA-IRMS (carbonates removed via HCl extraction)	Isotope values for C and N in sediment, phragmites, and fish were measured as well	1	NA	Medium	

Utah Lake CNP Data																			
FileName	Author(s)	Year	Title	ArticleType	Process or Pool	Fraction	Rate or Amount	Units	Aggregation	Year	Month	Location	Measured or Estimated?	Approach	Notes	Evidence amount (number of studies)	Agreement	Confidence	Comments
Wang et al. 2017	Wang et al.	2017	THE HISTORICAL RECORDS OF STABLE ISOTOPES (13C AND 15N) AND TRACE METALS ALONG UTAH LAKE – JORDAN RIVER TRANSITION ZONE, UTAH (USA)	Guidebook chapter	Sediment C/N	C/N	18.4	unitless	Maximum			Utah Lake near Jordan River outlet	Measured	EA-IRMS (carbonates removed via HCl extraction)	Isotope values for C and N in sediment, phragmites, and fish were measured as well	1	NA	Medium	
Wang et al. 2017	Wang et al.	2017	THE HISTORICAL RECORDS OF STABLE ISOTOPES (13C AND 15N) AND TRACE METALS ALONG UTAH LAKE – JORDAN RIVER TRANSITION ZONE, UTAH (USA)	Guidebook chapter	Sediment C/N	C/N	13	unitless	Mean			Utah Lake near Jordan River outlet	Measured	EA-IRMS (carbonates removed via HCl extraction)	Isotope values for C and N in sediment, phragmites, and fish were measured as well	1	NA	Medium	
Wang et al. 2017	Wang et al.	2017	THE HISTORICAL RECORDS OF STABLE ISOTOPES (13C AND 15N) AND TRACE METALS ALONG UTAH LAKE – JORDAN RIVER TRANSITION ZONE, UTAH (USA)	Guidebook chapter	Sediment C	TOC	0.5	%	Minimum			Utah Lake near Jordan River outlet	Measured	EA-IRMS (carbonates removed via HCl extraction)	Isotope values for C and N in sediment, phragmites, and fish were measured as well	1	NA	Medium	
Wang et al. 2017	Wang et al.	2017	THE HISTORICAL RECORDS OF STABLE ISOTOPES (13C AND 15N) AND TRACE METALS ALONG UTAH LAKE – JORDAN RIVER TRANSITION ZONE, UTAH (USA)	Guidebook chapter	Sediment C	TOC	3.2	%	Maximum			Utah Lake near Jordan River outlet	Measured	EA-IRMS (carbonates removed via HCl extraction)	Isotope values for C and N in sediment, phragmites, and fish were measured as well	1	NA	Medium	
Wang et al. 2017	Wang et al.	2017	THE HISTORICAL RECORDS OF STABLE ISOTOPES (13C AND 15N) AND TRACE METALS ALONG UTAH LAKE – JORDAN RIVER TRANSITION ZONE, UTAH (USA)	Guidebook chapter	Sediment N	TN	0	%	Minimum			Utah Lake near Jordan River outlet	Measured	EA-IRMS (carbonates removed via HCl extraction)	Isotope values for C and N in sediment, phragmites, and fish were measured as well	1	NA	Medium	
Wang et al. 2017	Wang et al.	2017	THE HISTORICAL RECORDS OF STABLE ISOTOPES (13C AND 15N) AND TRACE METALS ALONG UTAH LAKE – JORDAN RIVER TRANSITION ZONE, UTAH (USA)	Guidebook chapter	Sediment N	TN	0.3	%	Maximum			Utah Lake near Jordan River outlet	Measured	EA-IRMS (carbonates removed via HCl extraction)	Isotope values for C and N in sediment, phragmites, and fish were measured as well	1	NA	Medium	
Whiting et al. 1978	Whiting et al.	1978	ENVIRONMENTAL INTERACTION IN SUMMER ALGAL COMMUNITIES OF UTAH LAKE	Journal Article	Water column P	PO4	0.04	mg/L	Minimum	1974	June-August	Utah Lake	Measured	Standard Methods (Taras 1971)	Phytoplankton biomass also sampled	6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Whiting et al. 1978	Whiting et al.	1978	ENVIRONMENTAL INTERACTION IN SUMMER ALGAL COMMUNITIES OF UTAH LAKE	Journal Article	Water column P	PO4	0.13	mg/L	Maximum	1974	June-August	Utah Lake	Measured	Standard Methods (Taras 1971)	Phytoplankton biomass also sampled	6	Medium-Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Whiting et al. 1978	Whiting et al.	1978	ENVIRONMENTAL INTERACTION IN SUMMER ALGAL COMMUNITIES OF UTAH LAKE	Journal Article	Water column N	NO3	0.3	mg/L	Minimum	1974	June-August	Utah Lake	Measured	Standard Methods (Taras 1971)	Phytoplankton biomass also sampled	7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Whiting et al. 1978	Whiting et al.	1978	ENVIRONMENTAL INTERACTION IN SUMMER ALGAL COMMUNITIES OF UTAH LAKE	Journal Article	Water column N	NO3	0.5	mg/L	Maximum	1974	June-August	Utah Lake	Measured	Standard Methods (Taras 1971)	Phytoplankton biomass also sampled	7	Low	High	Low agreement arises from variable concentrations across time and space, not inconsistency among studies
Whiting et al. 1978	Whiting et al.	1978	ENVIRONMENTAL INTERACTION IN SUMMER ALGAL COMMUNITIES OF UTAH LAKE	Journal Article	Water Column C	CO2	0	mg/L	Minimum	1974	June-August	Utah Lake	Measured	Hach DR/EL-2 Direct Reading Engineer's Lab	Phytoplankton biomass also sampled	1	NA	Medium	
Whiting et al. 1978	Whiting et al.	1978	ENVIRONMENTAL INTERACTION IN SUMMER ALGAL COMMUNITIES OF UTAH LAKE	Journal Article	Water Column C	CO2	2.5	mg/L	Maximum	1974	June-August	Utah Lake	Measured	Hach DR/EL-2 Direct Reading Engineer's Lab	Phytoplankton biomass also sampled	1	NA	Medium	