Nearshore fish community assessment of the upper and lower Niagara River, 2015-2017

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In 1987, fish populations in the Niagara River watershed were considered to be impaired as part of the designation of the Niagara River as an “Area of Concern” (AOC) under the authority of the Great Lakes Water Quality Agreement. To better understand the composition and relative abundance of the nearshore Niagara River fish community as part of an updated assessment of the AOC, Fisheries and Oceans Canada conducted a multi-year (2015-2017), multi-season (spring, summer, fall) fish community assessment of the nearshore upper and lower river. Boat electrofishing and aquatic habitat measurements were conducted at 10 index stations (n = 6 upper; n = 4 lower). Total boat electrofishing effort was 499,949 shocking seconds, resulting in the capture of 41,365 fishes representing 65 species. Average CPUE was generally higher in the upper section than in the lower section, lowest in the spring, and highest in the fall. Total catch was highest in 2015 and 2016, with a total of 15,698 and 15,695 fishes captured, respectively, but dropped in 2017 when only 9,972 fishes were captured. Two individual Grass Pickerel (*Esox americanus vermiculatus,* SARA Special Concern; 178 mm and 215 mm TL) were captured near the mouth of Ussher’s Creek in fall of 2015, while a total of 29 American Eel (*Anguilla rostrata*, assessed as Threatened by COSEWIC; 436-974 mm TL) were captured in the lower Niagara River, with individuals captured at each station during almost every sampling effort (excluding spring 2015 and fall 2017). Three species made up 60% of total abundance across all sampling events (White Sucker 26.47% of total catch; Emerald Shiner, 21.07%; Yellow Perch, 12.42%). Emerald Shiner was the most abundant species captured during spring sampling, comprising 30% of the total catch across years (combined across river sections). More Emerald Shiner were captured in the upper section of the Niagara River (87% of total Emerald Shiner catch) than the lower section. In spring 2016, Emerald Shiner was at its highest relative abundance when it made up 44% of the overall catch. The 2015-2017 boat electrofishing program represents the largest standardized sampling effort for fishes in the Canadian waters of the Niagara River and provides a comprehensive dataset to better understand the status of nearshore fish communities in the Niagara River.

RÉSUMÉ

Gáspárdy, R.C., Barnucz, J., and Drake, D.A.R. 2020. Nearshore fish community assessment of the upper and lower Niagara River, 2015-2017. Can. Data Rep. Fish. Aquat. Sci. 1304: vi + 75 p.

En 1987, les populations de poissons dans le bassin hydrographique de la rivière Niagara ont été jugées compromises dans le cadre de la désignation de la rivière Niagara comme « secteur préoccupant » en vertu de l'Accord relatif à la qualité de l'eau dans les Grands Lacs. Afin de mieux comprendre la composition et l'abondance relative de la communauté de poissons de la rivière Niagara dans le cadre d'une évaluation actualisée du secteur préoccupant, Pêches et Océans Canada a réalisé une évaluation pluriannuelle (de 2015 à 2017) et multisaisionnière (printemps, été et automne) de la communauté côtière de poissons dans les cours supérieur et inférieur de la rivière Niagara. De la pêche à l'électricité à partir d'embarcations et des mesures de l'habitat aquatique ont été effectuées à dix stations d'indice (n = 6 dans le cours supérieur; n = 4 dans le cours inférieur). Au total, l'effort d'électrocution s'est étendu sur 499 949 secondes et s'est soldé par la capture de 41 365 poissons représentant 65 espèces. Les CPUE moyennes étaient généralement plus élevées dans le cours supérieur que dans le cours inférieur, la plus faible au printemps et la plus élevée à l'automne. Les prises totales ont été les plus élevées en 2015 et 2016, avec 15 698 et 15 695 poissons capturés, respectivement, mais ont chuté à 9 972 poissons capturés en 2017. Deux individus de brochet vermiculé (*Esox americanus vermiculatus*, espèce préoccupante en vertu de la *Loi sur les espèces en péril*; longueur totale de 178 mm et de 215 mm) ont été capturés près de l'embouchure du ruisseau Usshers à l'automne 2015, et un total de 29 anguilles d'Amérique (*Anguilla rostrata*, espèce évaluée comme étant menacée par le Comité sur la situation des espèces en péril au Canada; longueur totale allant de 436 à 974 mm) ont été capturées dans le cours inférieur de la rivière Niagara, avec des individus capturés à chaque station pendant presque tous les efforts d'échantillonnage (sauf au printemps 2015 et à l'automne 2017). Trois espèces représentaient 60 % de l'abondance totale pour l'ensemble des échantillonnages (le meunier noir, représentant 26,47 % des prises totales, le méné émeraude, 21,07 %, et la perchaude,12,42 %). Le méné émeraude était l'espèce la plus abondante capturée au cours de l'échantillonnage de printemps, représentant 30 % des prises totales au fil des ans (prises combinées sur l'ensemble des sections de rivière). Un nombre plus élevé de ménés émeraude ont été capturés dans la partie supérieure de la rivière Niagara (87 % des prises totales de ménés émeraude) que dans la partie inférieure. Au printemps 2016, le méné émeraude était à son abondance relative la plus élevée et représentait alors 44 % des prises totales. Le programme de pêche à l'électricité à partir d'embarcations mené de 2015 à 2017 constitue le plus grand effort d'échantillonnage normalisé des poissons dans les eaux canadiennes de la rivière Niagara et fournit un ensemble de données approfondi permettant de mieux comprendre l'état des communautés côtières de poissons dans la rivière Niagara.

INTRODUCTION

The Niagara River is a 58 km flowing channel in the Great Lakes basin that connects Lake Erie with Lake Ontario. In 1987, the Niagara River was designated as an Area of Concern (AOC) by the International Joint Commission under the authority of the Great Lakes Water Quality Agreement. The designation of the Niagara River as an AOC focused on 14 possible degraded components of the ecosystem and (or) related ecosystem services ("Beneficial Use Impairments" - BUIs), which included the degradation of fish populations (NRRAP 1993). In 1993, rationale for the Fish Populations BUI included evidence of degraded fish populations in the Welland River and a reduction of Lake Sturgeon *Ascipencer fulvescens*, Emerald Shiner *Notropis atherinoides*, and Northern Pike *Esox lucius* in the upper river. Factors implicated in impairment included habitat degradation, salmonid stocking, chronic/acute toxicity from spills, and changes in thermal regime owing to the operation of the ice boom near Niagara Falls (NRRAP 1993).

Evaluating the response of the Niagara River fish community to remedial actions – a core component of the Remedial Action Plan program - requires an updated assessment of the composition and relative abundance of fishes in the upper and lower river. However, despite the Niagara River's importance as a bi-national Great Lakes fishery resource, fish community data to support the AOC designation and the response to remedial actions is sparse owing to a challenging sampling environment. High river velocity and narrow chutes, particularly in the lower river between Niagara Falls and Queenston, make sampling difficult with conventional methods. Deepwater sampling is also difficult throughout the upper and lower river due to swift flows and irregular bathymetry. Despite these challenges, in 2004 the Ontario Ministry of Natural Resources and Forestry (OMNRF) sampled five stations in the lower river between Queenston and Niagara-on-the-Lake with boat electrofishing methods to establish baseline community data and support an evaluation of the Fish Population BUI. Sampling was also conducted by OMNRF in the upper river in 1999, 2004, and 2008 (Yagi and Blott 2012).

In 2015, 2016, and 2017, Fisheries and Oceans Canada conducted a multi-season fish community survey of the nearshore upper and lower Niagara River in support of an updated assessment of the Fish Populations BUI. The goal of the survey was to re-sample areas fished by OMNRF in 2004 and 2008, focusing on the composition (occurrence, relative abundance) of fishes susceptible to boat electrofishing capture methods, including seasonal (spring, summer, fall) differences. This data report presents an overview of fish and habitat data collected as part of the multi-year survey.

METHODS

SITE SELECTION

Fish community sampling was conducted at 10 stations on the Canadian side of the Niagara River during the spring, summer, and fall of 2015, 2016, and 2017. Stations were chosen based on previous boat electrofishing surveys conducted by OMNRF (Yagi and Blott, 2012). The OMNRF sampling locations included four stations in the lower Niagara River and six in the upper river, where approximately 500 m of shoreline was sampled at each location by boat electrofishing. The DFO sampling stations were positioned as close to the OMNRF stations as possible, though station dimensions differed from the OMNRF sampling to ensure comparability to DFO boat electrofishing methods employed in other Great Lakes Connecting Channel AOCs. As such, DFO sampling stations were 1000 m in length, divided into two 500 m transects end-

to-end (Figure 1, Table 1). Due to space constraints in the lower river and the additional 500 m at each sampling location, only four of the five OMNRF sampling locations were used for the 2015-2017 sampling program. In the upper Niagara River, sampling stations selected by the OMNRF were in the vicinity of the influence of the tributary creeks, as well as around Navy Island (Yagi and Blott, 2012). DFO sampled each of these 10 sampling stations once in the spring, summer, and fall of 2015, 2016, and 2017 (Appendix 1).

FISH COMMUNITY SAMPLING

Boat Electrofishing

All fish community sampling was conducted during the day using a Smith-Root Electrofishing Boat (primarily a 20 ft., 7.5 GPP, dual boom vessel, but a 14 ft., 5.0 GPP, dual boom vessel was used on one sampling occasion due to equipment malfunction). Two trained field crew members were tasked as 'netters' and stationed on the bow of the electrofishing boat to capture stunned fishes with long-handled nets. Three repeat passes were performed along a 500 m transect, travelling parallel to the shoreline along the 2 m depth contour in the same direction as the current at a speed of approximately 2 km/h. During sampling, the bow of the vessel was pointed downstream. Sampling speed was increased in areas of higher water velocities to enable netters to capture stunned fishes before they were carried downstream ahead of the boat. Once netted, fishes were placed in a large aerated live-well of recirculating river water where they were held until the sampling pass was completed. A total of approximately 6000 seconds per station (approximately 3000 seconds per transect) were sampled during each sampling event. Power output during sampling was standardized at approximately 1800 W with voltage and percent power adjustments made to account for differences in temperature and conductivity throughout each sampling pass (Appendix 2). Numerous articles have been written about capture bias associated with boat electrofishing; the boat electrofishing methods employed in the survey were most effective at capturing fishes occupying shallow waters (e.g., < 4 m in depth) in the nearshore zone of the upper and lower river.

Enumeration of Fishes

Fishes were processed separately at the end of each pass of each transect in a location offshore and downstream of the station. This allowed species composition and abundance to be partitioned into the first, second, or third pass of each transect and also ensured that released fishes would not immediately return to the station prior to subsequent electrofishing passes. Captured fishes were identified to species level (when possible), enumerated, and the minimum and maximum total lengths (TL; mm) were measured for each species and pass. In addition, individual TL measurements were taken for any species listed under Canada's *Species at Risk Act*. At least one representative specimen of each species at each station and transect was retained as a voucher, which involved preservation in a 10% formalin solution or digital photographs of key identification features for subsequent species identification in the laboratory. As well, individuals unable to be identified to the species level *in situ* (e.g., juveniles) were retained and preserved for laboratory identification.

HABITAT SAMPLING

Habitat parameters were measured after fish sampling was completed. Occasionally, habitat parameters were assessed prior to sampling due to situations encountered in the field such as weather or boat traffic. Three depth and water velocity measurements were taken at the upstream, center, and downstream points of each transect. Depth was measured using either a

Laylin Speedtech SM-5 Depthmate portable depth sounder or an on-board depth-sounder and GPS unit. Water velocity was measured at approximately 1 m below the water surface using a Swoffer 2100 Current Velocity Meter. At the midpoint of each transect, surface water temperature (°C), conductivity (µS), turbidity (NTU), and dissolved oxygen (mg/L) were measured at approximately 0.2-0.5 m beneath the water's surface using a YSI EX02 Multiparameter Sonde, which was deployed and allowed to stabilize for approximately 1 minute before measurements were recorded. Air temperature (°C) was measured using a Kestrel 3000 Wind Meter.

Due to high water clarity, the boat operator and crew visually assessed aquatic macrophyte and substrate composition during sampling of the station. The visual assessment of aquatic macrophytes involved identifying the percent composition of the following vegetation classes within the transect sample area to a total of 100%: open water, emergent vegetation, submerged vegetation, and floating vegetation. The dominant species of vegetation was identified and recorded at each transect, as well as all other vegetation species present within the transect. Riparian vegetation was assessed visually at each transect by determining the percent composition of vegetation types (deciduous, coniferous, herbaceous, shrubs, or none) occurring in the riparian zone directly adjacent to each transect.

A coarse evaluation of substrate composition within the transect was analyzed using a combination of visual assessment and a Petite Ponar dredge sample at each transect. The single Petite Ponar grab at the center of each transect was used to measure the composition and presence of smaller particle substrate types. The percent composition of each substrate type was based on the median particle diameters derived from Bain's (1999) modified Wentworth substrate classification: clay (<0.005 mm), silt (0.005–0.05 mm), sand (0.05–2 mm), gravel (2–65 mm), cobble (65–250 mm), boulder (250-4000 mm), bedrock (>4000 mm, solid unweathered rock), hardpan (compacted layer of soil), rubble (broken manmade material), and organic (plant and animal material, excluding mussels).

Distance from shore (m) was measured at the midpoint of the transect, perpendicular to the bank, using a Nikon Laser 1200S Waterproof Laser Range Finder. Station location (latitude, longitude) was determined using a Garmin Montana 600 handheld GPS unit using a Backroads Mapbook Ontario GPS chip or on-board Humminbird with Navionics chip.

SAMPLING PERMITS AND DATA ARCHIVING

Boat electrofishing activities were conducted under Animal Use Protocol AUP 1322-A and Standard Operating Protocol GWACC-111. All sampling activities were approved by the Environment and Climate Change Canada and DFO Animal Care Committee (operated under the approval of the Canadian Coincil on Animal Care). approved by the DFO and Environment and Climate Change Canada Animal Care Committee (operated under approval of the Canadian Council on Animal Care). Data associated with the collections in this report are housed under the project codes "2015-GLAP-NR", "2016-GLAP-NR", and "2017-GLAP-NR" in the Biodiversity Science database within the Great Lakes Laboratory for Fisheries and Aquatic Sciences. Every effort has been made to ensure the accuracy of data contained in this report; however, species identities and other sampling results may be revised as part of a long-term data archiving process conducted in partnership with the Royal Ontario Museum. Data associated with this report may be obtained by contacting the Great Lakes Laboratory for Fisheries and Aquatic Sciences.

RESULTS

FISH ASSEMBLAGE SAMPLING

The 2015-2017 boat electrofishing program represents the largest standardized sampling effort of fishes in the Canadian waters of the Niagara River to date. In total, 499,949 shocking seconds were performed resulting in the capture of 41,365 fishes representing 65 species (Table 2, Appendix 3). In total, the average catch per unit effort (CPUE) for all sampling was 0.081 fishes per shocking second. The average CPUE was generally higher in the upper section than in the lower section, lowest in the spring, and highest in the fall. Total catch was highest in 2015 and 2016, with a total of 15,698 and 15,695 fishes captured, respectively, but dropped in 2017 when only 9,972 fishes were captured. A caveat to this decline in total catch is that 2.5 stations in the upper section were not sampled in spring 2017 due to the use of the smaller electrofishing vessel and resulting safety concerns of sampling upstream of Niagara Falls.

Two species of conservation concern were captured during this survey. Two individual Grass Pickerel (*Esox americanus vermiculatus,* SARA Special Concern; 178 mm and 215 mm TL) were captured near the mouth of Ussher's Creek in Fall of 2015. A total of 29 American Eel (*Anguilla rostrata*, assessed as Threatened by COSEWIC; 436-974 mm TL) were captured in the lower Niagara River, with individuals captured at each station during almost every sampling effort (excluding spring 2015 and fall 2017).

While 65 species in total were captured across the duration of the sampling program, the number of species captured varied by season, year, and river section. Several species were only captured once or during a single sampling period; for example, a single Channel Catfish (*Ictalurus punctatus*) was captured in the summer of 2015 near Frenchman's Creek, one large adult Atlantic Salmon (*Salmo salar*) was captured upstream of Niagara-on-the-Lake in fall 2015, and one adult Sea Lamprey (*Petromyzon marinus*) was captured in the spring of 2017 in the lower section of the Niagara River while parasitizing a captured redhorse (*Moxostoma* sp.). A single Tiger Trout (*Salmo trutta* X *Salvelinus fontinalis*) was potentially captured in the lower section during the spring of 2015, however, the specimen was not kept for verification and the digital photographs did not adequately show features required for positive identification. Eight species were only captured in the lower section of the Niagara River, including Silver Redhorse (*Moxostoma anisurum*), American Eel, Sea Lamprey, and several salmonid species: Coho Salmon (*Oncorhynchus kisutch*), Chinook Salmon (*Oncorhynchus tshawytscha*), Atlantic Salmon, and Lake Trout (*Salvelinus namaycush*). Species detected only in the upper River (10 species) included White Crappie (*Pomoxis annularis*), American Brook Lamprey (*Lethenteron appendix*), Trout-Perch (*Percopsis omiscomaycus*) and darter species such as Rainbow Darter (*Etheostoma caeruleum*) and Johnny Darter (*Etheostoma nigrum*).

Three species made up 60% of the total catch across all sampling events: White Sucker (*Catostomus commersonii*, 26.47%), Emerald Shiner (*Notropis atherinoides*, 21.07%), and Yellow Perch (*Perca flavescens*, 12.42%; Table 3); however, there was variation in the relative abundance of these species annually, seasonally, and between river sections. For example, in spring 2015, White Sucker was in low relative abundance while Smallmouth Bass (*Micropterus dolomieu*) and Greater Redhorse (*Moxostoma valenciennesi*) made up 15% and 11% of the catch, respectively (combined upper and lower sections). In the lower section of the Niagara River in 2017, both Emerald Shiner and White Sucker were at lower relative abundance, making up only 17% of the catch, while Gizzard Shad (*Dorosoma cepedianum*) and Yellow Perch were at higher relative abundance making up 48% of the catch (combined across seasons).

During the spring sampling events, Emerald Shiner was the most abundant species captured, comprising 30% of the total catch across years (combined across sections). More Emerald Shiner were captured in the upper section of the Niagara River (87% of total Emerald Shiner catch) than the lower section. In spring 2016, Emerald Shiner was at its highest relative abundance when it made up 44% of the overall catch.

All fish families (with the exception of Eels, Gars, and Trout-Perches in the lower section) were represented in the upper and lower sections of the river; however, the relative abundance of the families differed (Table 4). In the upper section, the Cyprinidae family made up 42% of the catch across seasons, while Cyprinidae comprised 19% of the total catch in the lower section across seasons. A total of 15 Cyprinidae species were captured in the upper river section and 13 in the lower river section. Creek Chub (*Semotilus atromaculatus*) and Fathead Minnow (*Pimephales promelas*) were not captured in the lower Niagara River, but were only represented by a single individual in the upper section. Bluntnose Minnow (*Pimephales notatus*) and Spottail Shiner (*Notropis husdonius*) were the two most abundant species of Cyprinidae after Emerald Shiner.

HABITAT SAMPLING

The water quality data is summarized in Table 5 and provided in its entirety in Appendix 4. The Niagara River is known for its clear water, and on average, measured turbidity was 3.61 ntu. Average water temperature across years during three sampling seasons was 22.8, 25.2, and 11.6 °C in spring, summer, and fall sampling, respectively. Conductivity measurements averaged 322.8 µS across all sampling events. Some seasonal variation was observed, with averages of 300.3 µS in spring, 368.8 µS in summer, and 297.4 µS in fall. Conductivity was similar between the upper and lower river sections. Most often, conductivity was below 300 µS, however, conductivity spiked above 400 µS in 29% of samples, most notably in summer of 2016 when conductivity averaged 558.6 µS. Average dissolved oxygen across all sampling events was 9.35 mg/L with some seasonal variation observed (8.91, 8.54, and 10.58 on average in spring, summer, and fall sampling, respectively). Average measured pH across seasons, sections, and years was 8.77, with higher pH measured in the summer and fall of 2016 (9.27 and 9.40, respectively).

The sampling protocol followed the 2 m depth contour along each transect and across all sampling events. In both the upper and lower sections of the Niagara River, there was often a steep drop-off along the 2 m contour that coincided with a current break. To keep the electrofishing boat positioned within the slower flowing water (required for maintaining optimal speed) and to effectively sample the 2 m contour, the boat was kept just inside the 2 m contour where the nearshore (port-side) anode was sometimes in shallower water than the offshore (starboard-side) anode, with anodes set approximately 3-4 m apart. As a result, depth varied along each transect, which is reflected by the minimum depth of 0.5 m and maximum depth of 4.9 m sampled, where the deepest point along any transect sampled was near the south-east side of Navy-Island (Table 6, Appendix 4).

Average water velocity in sampled nearshore area across all sampling events was 0.18 m/s. Average water velocity at sites in the upper river was slightly faster than water velocity at sites sampled in the lower river (0.20 m/s and 0.18 m/s, respectively; Table 6). Similar to the variation in depth, the stations covered a gradient of water velocity, with the fastest velocity measured at 0.93 m/s in the upper Niagara River (at the same point alongside Navy Island) and 0.80 m/s in the lower section. Backwater habitats with little to no flow at the time of sampling were also

sampled in both the upper and lower river. Depth and flow was highly variable between and within stations, and some variation can be observed between seasons and years (Appendix 4).

The substrate assessment during the study involved visual methods spanning a large physical area, making accurate assessments challenging. Variation in dominant substrate (Table 7) and percent composition (Appendix 5) were observed during the different sampling events. Overall, smaller substrates (silt to cobble) were most commonly noted as dominant, though larger substrates (e.g., boulder and hardpan) were present and dominant in some areas. Furthermore, substrate varied greatly within each 1 km long station (two 500 m transects) with areas of fast-flowing water dominated by larger substrate types and areas with slower flows dominated by smaller substrates. It should be noted that the petite Ponar dredge is most efficient in shallow, slow-flowing water and was unable to scoop substrates larger than small cobble.

The dominant aquatic vegetation was most commonly classified as submerged or open water across all stations and sampling events (Table 8), with Wild Celery (*Vallisneria americana*) the most common species (Table 9, Appendix 6). Open water was observed most commonly in the spring and fall, whereas submerged aquatic vegetation became more dominant during the summer. Similar to substrate, aquatic vegetation composition varied among sampling station; deep areas with high water velocity generally had little vegetation, whereas shallow areas with slower flows had large beds of Wild Celery and other submergent species. The lower section of the river typically did not support emergent or floating vegetation.

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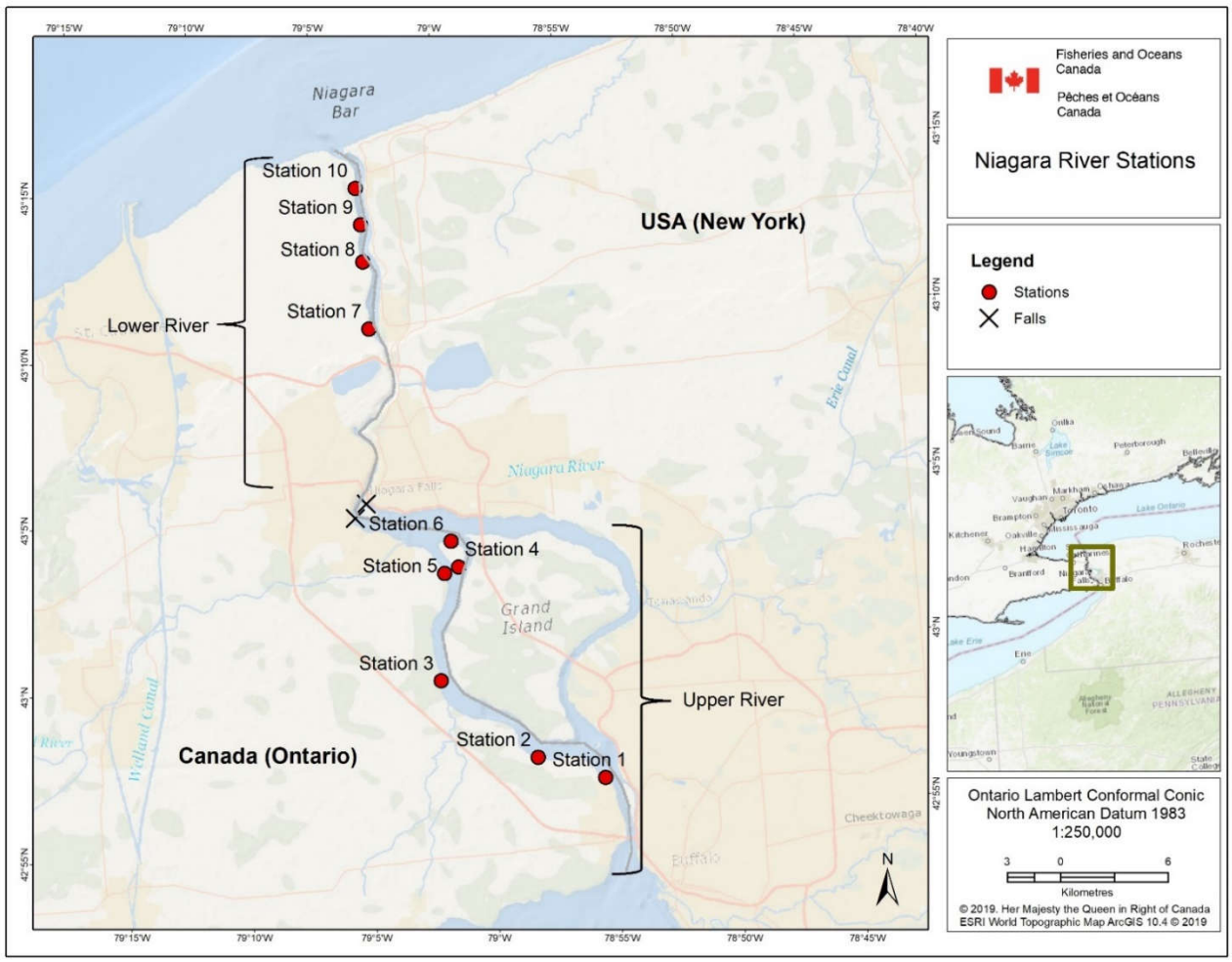

Figure 1. *Niagara River stations sampled by DFO in 2015-2017.*

Table 1. *Location of DFO sampling stations in the Niagara River, 2015-2017. Ten stations were sampled seasonally, where each station was split into two 500 m transects (an upstream and a downstream transect). Last 3 digits of Transect code (XXY) reflects location: XX = station number, Y = transect placement where 1 = upstream, 2 = downstream; transect code used in all field numbers (Appendix 1) to indicate date and location of sample.*

Station Number	River section	Station locality / landmark	Transect placement	Transect code	Start latitude	Start longitude	Stop latitude	Stop longitude
1	Upper	Frenchman's Creek	Upstream	GLAP-NR-011	42.93806	-78.91957	42.94123	-78.92434
			Downstream	GLAP-NR-012	42.94123	-78.92434	42.94436	-78.92866
2	Upper	Miller's Creek	Upstream	GLAP-NR-021	42.95077	-78.96437	42.95266	-78.96989
			Downstream	GLAP-NR-022	42.95385	-78.97224	42.95729	-78.97263
3	Upper	Boyer's Creek	Upstream	GLAP-NR-031	42.99281	-79.02642	42.99754	-79.02752
			Downstream	GLAP-NR-032	42.99754	-79.02752	43.00195	-79.02891
4	Upper	Navy Island South	Upstream	GLAP-NR-041	43.04903	-79.00829	43.05263	-79.00451
			Downstream	GLAP-NR-042	43.05263	-79.00451	43.05703	-79.00420
5	Upper	Ussher's Creek	Upstream	GLAP-NR-051	43.04627	-79.01818	43.05026	-79.02074
			Downstream	GLAP-NR-052	43.05026	-79.02074	43.05397	-79.02431
6	Upper	Navy Island North	Upstream	GLAP-NR-061	43.06213	-79.01226	43.06255	-79.01846
			Downstream	GLAP-NR-062	43.06255	-79.01846	43.06265	-79.02489
7	Lower	Queenston	Upstream	GLAP-NR-071	43.17192	-79.0568	43.17643	-79.05659
			Downstream	GLAP-NR-072	43.17643	-79.05659	43.18084	-79.05638
8	Lower	North of Queenston	Upstream	GLAP-NR-081	43.20575	-79.05744	43.20989	-79.05959
			Downstream	GLAP-NR-082	43.20989	-79.05959	43.21438	-79.05985
9	Lower	South of Niagara on the Lake	Upstream	GLAP-NR-091	43.22437	-79.05698	43.22873	-79.05854
			Downstream	GLAP-NR-092	43.22873	-79.05854	43.23321	-79.05947
10	Lower	Niagara on the Lake	Upstream	GLAP-NR-101	43.24280	-79.05869	43.24721	-79.05809
			Downstream	GLAP-NR-102	43.24721	-79.05809	43.25178	-79.05839

Table 2. *Summary of sampling effort and resulting catch for boat electrofishing sampling at ten stations in the Niagara River, 2015-2017.*

		2015			2016			2017			ALL YEARS		
		Upper	**Lower**	**Total**	**Upper**	**Lower**	**Total**	**Upper**	**Lower**	**Total**	**Upper**	**Lower**	**Total**
Sampling Stations	**All**	6	4	**10**	6	4	**10**	6	4	**10**	6	4	**10**
Stations Sampled	Spring	6	4	**10**	6	4	**10**	6	4	**10**	18	12	**30**
	Summer	6	4	**10**	6	4	**10**	6	4	**10**	18	12	**30**
	Fall	6	4	**10**	6	4	**10**	3.5	4	**7.5**	15.5	12	**27.5**
	Combined	**18**	**12**	**30**	**18**	**12**	**30**	**15.5**	**12**	**87.5**	**52.5**	**36**	**87.5**
Total fishes captured	Spring	848	687	**1535**	2653	1648	**4301**	1878	1471	**3349**	5379	3806	**9185**
	Summer	3517	491	**4008**	4093	664	**4757**	4075	290	**4365**	11685	1445	**13130**
	Fall	8562	1593	**10155**	4964	1673	**6637**	1444	814	**2258**	14970	4080	**19050**
	Combined	**12927**	**2771**	**15698**	**11710**	**3985**	**15695**	**7397**	**2575**	**9972**	**32034**	**9331**	**41365**
Species Detected	Spring	25	29	**38**	28	33	**40**	39	35	**49**	45	41	**53**
	Summer	35	24	**40**	41	30	**45**	39	26	**43**	46	39	**52**
	Fall	41	41	**52**	42	41	**43**	32	38	**46**	47	52	**59**
	Combined	**49**	**44**	**58**	**48**	**47**	**56**	**46**	**45**	**56**	**57**	**55**	**65**
Fish SAR* Species Detected	Spring	0	0	**0**	0	1	**1**	0	1	**1**	0	1	**1**
	Summer	0	1	**1**	0	1	**1**	0	1	**1**	0	1	**1**
	Fall	1	1	**2**	0	1	**1**	0	0	**0**	1	1	**2**
	Combined	**1**	**1**	**2**	**0**	**1**	**1**	**0**	**1**	**1**	**1**	**1**	**2**
Total Effort (Seconds)	Spring	27352	22973	**50325**	34649	24180	**58829**	20873	24397	**45270**	82874	71550	**154424**
	Summer	36145	23776	**59921**	35118	23841	**58959**	34510	31820	**56330**	105773	69437	**175210**
	Fall	34613	23546	**58159**	35841	23712	**56330**	30871	31277	**52148**	101325	68535	**169860**
	Combined	**98110**	**70295**	**168405**	**105608**	**71733**	**177341**	**86254**	**67494**	**153748**	**289972**	**209522**	**499494**
Mean Effort/Station (Seconds)	Spring	2279	2872	**2516**	2887	3023	**2941**	2982	3050	**3018**	2673	2981	**2808**
	Summer	3012	2972	**2996**	2927	2980	**2948**	2876	2728	**2817**	2938	2893	**2920**
	Fall	2884	2943	**2908**	2987	2964	**2978**	2573	2660	**2607**	2815	2856	**2831**
	Combined	**2725**	**2929**	**2807**	**2934**	**2989**	**2956**	**2782**	**2812**	**2795**	**2815**	**2910**	**2854**
Mean CPUE/Station (fishes per second)	Spring	0.030	0.030	**0.03**	0.075	0.068	**0.073**	0.089	0.06	**0.073**	0.061	0.053	**0.057**
	Summer	0.098	0.020	**0.067**	0.117	0.028	**0.082**	0.117	0.014	**0.075**	0.11	0.021	**0.075**
	Fall	0.245	0.068	**0.174**	0.138	0.07	**0.011**	0.046	0.037	**0.043**	0.143	0.058	**0.109**
	Combined	**0.124**	**0.039**	**0.09**	**0.11**	**0.056**	**0.088**	**0.083**	**0.037**	**0.063**	**0.107**	**0.044**	**0.081**

**SARA-listed or COSEWIC-assessed species*

Table 3. *Summary of relative abundance (expressed as percentage of total catch, per column) for each species captured by year, season, and river section. *SARA-listed or COSEWIC-assessed species, **non-native species*

	2015						2016					
Species	**UPPER**	**LOWER**	**SPRING**	**SUMMER**	**FALL**	**TOTAL**	**UPPER**	**LOWER**	**SPRING**	**SUMMER**	**FALL**	**TOTAL**
Amia calva	0.02%	0.90%	0.46%	0.35%	0.06%	**0.17%**	0.17%	0.58%	0.09%	0.48%	0.24%	**0.27%**
Ameiurus melas	1.90%	1.80%	2.48%	4.79%	0.65%	**1.89%**	1.35%	0.80%	0.09%	1.62%	1.64%	**1.21%**
Ameiurus natalis	0.05%	0.43%	0.39%	0.00%	0.12%	**0.11%**	0.12%	0.00%	0.00%	0.00%	0.21%	**0.09%**
Ameiurus nebulosus	0.98%	0.69%	0.91%	1.50%	0.71%	**0.93%**	0.22%	1.05%	0.70%	0.21%	0.42%	**0.43%**
Ictalurus punctatus	0.01%	0.00%	0.00%	0.02%	0.00%	**0.01%**	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
Aplodinotus grunniens	0.09%	0.43%	0.78%	0.25%	0.01%	**0.15%**	0.04%	0.20%	0.12%	0.13%	0.03%	**0.08%**
*Anguilla rostrata**	0.00%	0.36%	0.00%	0.12%	0.05%	**0.06%**	0.00%	0.28%	0.07%	0.15%	0.02%	**0.07%**
Lepisosteus osseus	0.00%	1.55%	2.35%	0.15%	0.01%	**0.27%**	0.00%	0.73%	0.23%	0.38%	0.02%	**0.18%**
*Neogobius melanostomus***	0.67%	1.37%	0.46%	0.62%	0.91%	**0.79%**	0.77%	1.58%	1.12%	0.42%	1.28%	**0.97%**
*Alosa pseudoharengus***	0.39%	1.01%	1.69%	0.00%	0.51%	**0.50%**	0.28%	1.93%	1.42%	0.71%	0.23%	**0.70%**
Dorosoma cepedianum	0.01%	2.78%	1.30%	1.37%	0.03%	**0.50%**	0.72%	6.47%	5.44%	1.62%	0.47%	**2.18%**
Fundulus diaphanus	0.12%	0.04%	0.00%	0.05%	0.15%	**0.11%**	0.13%	0.08%	0.02%	0.13%	0.17%	**0.11%**
Lethenteron appendix	0.04%	0.00%	0.13%	0.00%	0.03%	**0.03%**	0.07%	0.00%	0.16%	0.00%	0.02%	**0.05%**
*Petromyzon marinus***	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
*Carassius auratus***	0.29%	0.29%	0.13%	0.37%	0.28%	**0.29%**	0.45%	0.03%	0.00%	0.65%	0.35%	**0.34%**
Cyprinella spiloptera	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.12%	0.00%	0.05%	0.25%	0.00%	**0.09%**
*Cyprinus carpio***	1.72%	3.10%	2.80%	4.89%	0.68%	**1.96%**	1.41%	0.80%	0.51%	2.33%	0.96%	**1.26%**
Labidesthes sicculus	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.47%	1.61%	0.00%	0.21%	1.64%	**0.76%**
Luxilus chrysocephalus	0.06%	0.00%	0.07%	0.15%	0.01%	**0.05%**	0.50%	0.18%	0.28%	0.80%	0.24%	**0.42%**
Luxilus cornutus	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.05%	0.03%	0.00%	0.15%	0.00%	**0.04%**
Nocomis biguttatus	1.14%	0.40%	0.07%	1.20%	1.07%	**1.01%**	1.26%	0.28%	0.07%	1.22%	1.46%	**1.01%**
Notemigonus crysoleucas	0.31%	0.00%	0.00%	0.52%	0.19%	**0.25%**	0.61%	0.23%	0.00%	1.22%	0.35%	**0.52%**
Notropis atherinoides	24.89%	12.81%	33.49%	14.62%	24.34%	**22.75%**	19.91%	12.05%	47.31%	8.07%	5.91%	**17.91%**
Notropis hudsonius	7.57%	0.69%	1.30%	11.10%	5.25%	**6.36%**	6.29%	2.13%	5.42%	6.05%	4.54%	**5.24%**
Notropis volucellus	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.01%	0.13%	0.00%	0.08%	0.03%	**0.04%**
Pimephales notatus	4.70%	0.83%	0.00%	3.32%	4.89%	**4.01%**	5.18%	0.53%	0.84%	6.05%	4.58%	**4.00%**
Pimephales promelas	0.01%	0.00%	0.07%	0.00%	0.00%	**0.01%**	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
Scardinius erythrophthalmus	0.20%	0.32%	0.13%	0.47%	0.14%	**0.22%**	0.27%	0.23%	0.05%	0.29%	0.38%	**0.26%**
Semotilus atromaculatus	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.01%	0.00%	0.00%	0.02%	0.00%	**0.01%**
Etheostoma caeruleum	0.19%	0.00%	0.07%	0.30%	0.12%	**0.16%**	0.07%	0.00%	0.00%	0.11%	0.05%	**0.05%**
Etheostoma flabellare	0.02%	0.00%	0.00%	0.05%	0.01%	**0.02%**	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
Etheostoma nigrum	0.02%	0.00%	0.00%	0.00%	0.02%	**0.01%**	0.01%	0.00%	0.02%	0.00%	0.00%	**0.01%**
Perca flavescens	7.33%	12.09%	1.95%	7.66%	9.32%	**8.17%**	11.30%	24.89%	10.30%	19.68%	14.10%	**14.75%**
Percina caprodes	0.26%	0.07%	0.33%	0.67%	0.04%	**0.23%**	0.20%	0.05%	0.09%	0.27%	0.12%	**0.16%**
Sander vitreus	0.01%	0.04%	0.00%	0.05%	0.00%	**0.01%**	0.43%	0.08%	0.00%	0.67%	0.32%	**0.34%**
*Esox americanus vermiculatus**	0.02%	0.00%	0.00%	0.00%	0.02%	**0.01%**	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
Esox lucius	0.05%	0.22%	0.52%	0.00%	0.05%	**0.08%**	0.03%	0.15%	0.09%	0.06%	0.05%	**0.06%**

	2015						2016					
Species	**UPPER**	**LOWER**	**SPRING**	**SUMMER**	**FALL**	**TOTAL**	**UPPER**	**LOWER**	**SPRING**	**SUMMER**	**FALL**	**TOTAL**
Esox masquinongy	0.15%	0.18%	0.72%	0.12%	0.08%	**0.15%**	0.22%	0.08%	0.35%	0.04%	0.18%	**0.18%**
Esox masquinongy X Esox lucius	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.00%	0.03%	0.00%	0.02%	0.00%	**0.01%**
Umbra limi	0.01%	0.00%	0.00%	0.00%	0.01%	**0.01%**	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
Cottus bairdii	0.03%	0.04%	0.00%	0.05%	0.03%	**0.03%**	0.02%	0.00%	0.00%	0.02%	0.02%	**0.01%**
Osmerus mordax	6.39%	5.59%	4.30%	0.97%	8.63%	**6.25%**	1.66%	0.35%	4.37%	0.00%	0.30%	**1.33%**
Carpiodes cyprinus	0.02%	0.00%	0.13%	0.00%	0.00%	**0.01%**	0.00%	0.08%	0.07%	0.00%	0.00%	**0.02%**
Catostomus commersonii	32.14%	26.74%	8.14%	36.65%	32.52%	**31.19%**	33.98%	23.16%	10.16%	32.27%	44.15%	**31.23%**
Hypentelium nigricans	0.13%	0.00%	0.07%	0.12%	0.11%	**0.11%**	0.15%	0.03%	0.14%	0.17%	0.08%	**0.12%**
Moxostoma anisurum	0.00%	0.14%	0.26%	0.00%	0.00%	**0.03%**	0.00%	0.05%	0.05%	0.00%	0.00%	**0.01%**
Moxostoma erythrurum	0.04%	0.40%	0.65%	0.12%	0.01%	**0.10%**	0.02%	0.05%	0.00%	0.04%	0.03%	**0.03%**
Moxostoma macrolepidotum	0.63%	1.77%	0.85%	0.30%	1.03%	**0.83%**	0.80%	1.76%	0.91%	1.37%	0.90%	**1.04%**
Moxostoma sp.	0.02%	0.29%	0.07%	0.02%	0.08%	**0.06%**	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
Moxostoma valenciennesi	3.78%	2.67%	11.53%	2.59%	2.78%	**3.59%**	4.82%	3.71%	3.12%	2.90%	6.64%	**4.54%**
Ambloplites rupestris	0.52%	0.18%	0.07%	0.67%	0.43%	**0.46%**	0.88%	0.50%	0.16%	0.67%	1.27%	**0.78%**
Lepomis cyanellus	0.00%	0.04%	0.00%	0.00%	0.01%	**0.01%**	0.00%	0.03%	0.00%	0.00%	0.02%	**0.01%**
Lepomis gibbosus	0.19%	0.11%	0.00%	0.10%	0.23%	**0.17%**	0.36%	0.00%	0.00%	0.50%	0.27%	**0.27%**
Lepomis macrochirus	0.31%	0.29%	0.00%	0.05%	0.45%	**0.31%**	0.27%	0.23%	0.00%	0.19%	0.48%	**0.26%**
Lepomis sp.	0.02%	0.00%	0.00%	0.05%	0.00%	**0.01%**	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
Micropterus dolomieu	1.32%	9.82%	15.83%	2.22%	1.08%	**2.82%**	1.15%	5.14%	3.63%	2.35%	1.08%	**2.17%**
Micropterus salmoides	0.89%	3.18%	0.26%	1.15%	1.51%	**1.29%**	2.63%	3.31%	0.14%	5.00%	2.95%	**2.80%**
Pomoxis annularis	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
Pomoxis nigromaculatus	0.02%	0.04%	0.00%	0.00%	0.03%	**0.02%**	0.10%	0.00%	0.00%	0.08%	0.12%	**0.08%**
Morone americana	0.28%	2.42%	0.00%	0.10%	0.97%	**0.66%**	0.36%	1.30%	0.05%	0.04%	1.36%	**0.60%**
Morone chrysops	0.07%	0.00%	0.46%	0.05%	0.00%	**0.06%**	0.09%	0.13%	0.07%	0.23%	0.03%	**0.10%**
*Oncorhynchus kisutch***	0.00%	0.29%	0.00%	0.00%	0.08%	**0.05%**	0.00%	0.18%	0.07%	0.00%	0.06%	**0.04%**
*Oncorhynchus mykiss***	0.02%	0.61%	0.26%	0.00%	0.16%	**0.13%**	0.02%	0.25%	0.12%	0.00%	0.11%	**0.08%**
*Oncorhynchus tshawytscha***	0.00%	2.49%	4.04%	0.02%	0.06%	**0.44%**	0.00%	2.03%	1.65%	0.00%	0.15%	**0.52%**
Salmo salar	0.00%	0.04%	0.00%	0.00%	0.01%	**0.01%**	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
*Salmo trutta***	0.00%	0.36%	0.46%	0.00%	0.03%	**0.06%**	0.01%	0.53%	0.47%	0.04%	0.00%	**0.14%**
Salmo trutta X Salvelinus fontinalis	0.00%	0.04%	0.07%	0.00%	0.00%	**0.01%**	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
Salvelinus namaycush	0.00%	0.07%	0.00%	0.00%	0.02%	**0.01%**	0.00%	0.03%	0.00%	0.00%	0.02%	**0.01%**
Percopsis omiscomaycus	0.01%	0.00%	0.00%	0.00%	0.01%	**0.01%**	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**

Table 3. *(continued). Summary of relative abundance (expressed as percentage of total catch, per column) for each species captured by year, season, and river section. *SARA-listed or COSEWIC-assessed species, **non-native species*

	2017						All years					
Species	**UPPER**	**LOWER**	**SPRING**	**SUMMER**	**FALL**	**TOTAL**	**UPPER**	**LOWER**	**SPRING**	**SUMMER**	**FALL**	**TOTAL**
Amia calva	0.19%	0.70%	0.18%	0.50%	0.18%	**0.32%**	0.11%	0.71%	0.19%	0.45%	0.14%	**0.25%**
Ameiurus melas	0.88%	0.43%	1.28%	0.46%	0.58%	**0.76%**	1.46%	1.00%	0.93%	2.20%	0.99%	**1.36%**
Ameiurus natalis	0.16%	0.00%	0.00%	0.27%	0.00%	**0.12%**	0.10%	0.13%	0.07%	0.09%	0.14%	**0.11%**
Ameiurus nebulosus	1.39%	0.23%	1.34%	0.80%	1.28%	**1.09%**	0.80%	0.72%	0.97%	0.80%	0.68%	**0.78%**
Ictalurus punctatus	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.00%	0.00%	0.00%	0.01%	0.00%	**0.00%**
Aplodinotus grunniens	0.15%	0.39%	0.51%	0.07%	0.04%	**0.21%**	0.08%	0.32%	0.37%	0.14%	0.02%	**0.14%**
*Anguilla rostrata**	0.00%	0.31%	0.18%	0.05%	0.00%	**0.08%**	0.00%	0.31%	0.10%	0.11%	0.03%	**0.07%**
Lepisosteus osseus	0.00%	1.13%	0.75%	0.07%	0.04%	**0.29%**	0.00%	1.08%	0.77%	0.21%	0.02%	**0.24%**
*Neogobius melanostomus***	0.20%	0.12%	0.18%	0.07%	0.40%	**0.18%**	0.60%	1.11%	0.66%	0.37%	0.98%	**0.71%**
*Alosa pseudoharengus **	0.93%	1.01%	0.03%	2.13%	0.04%	**0.95%**	0.47%	1.40%	0.96%	0.97%	0.36%	**0.68%**
Dorosoma cepedianum	1.01%	27.50%	19.23%	0.73%	4.74%	**7.85%**	0.50%	11.18%	9.78%	1.25%	0.74%	**2.91%**
Fundulus diaphanus	0.04%	0.04%	0.00%	0.09%	0.00%	**0.04%**	0.11%	0.05%	0.01%	0.09%	0.14%	**0.09%**
Lethenteron appendix	0.16%	0.00%	0.06%	0.00%	0.44%	**0.12%**	0.08%	0.00%	0.12%	0.00%	0.07%	**0.06%**
*Petromyzon marinus***	0.00%	0.04%	0.03%	0.00%	0.00%	**0.01%**	0.00%	0.01%	0.01%	0.00%	0.00%	**0.00%**
*Carassius auratus***	0.27%	0.08%	0.24%	0.25%	0.13%	**0.22%**	0.34%	0.12%	0.11%	0.43%	0.28%	**0.29%**
Cyprinella spiloptera	0.53%	0.08%	0.57%	0.48%	0.04%	**0.41%**	0.17%	0.02%	0.23%	0.25%	0.01%	**0.13%**
*Cyprinus carpio***	1.66%	1.90%	1.76%	2.06%	1.02%	**1.72%**	1.59%	1.79%	1.35%	3.02%	0.82%	**1.64%**
Labidesthes sicculus	0.97%	2.95%	0.33%	0.73%	4.65%	**1.48%**	0.40%	1.50%	0.12%	0.32%	1.12%	**0.65%**
Luxilus chrysocephalus	1.50%	0.00%	1.79%	1.15%	0.04%	**1.11%**	0.56%	0.08%	0.79%	0.72%	0.09%	**0.45%**
Luxilus cornutus	0.05%	0.00%	0.00%	0.09%	0.00%	**0.04%**	0.03%	0.01%	0.00%	0.08%	0.00%	**0.03%**
Nocomis biguttatus	2.04%	0.31%	1.46%	2.06%	0.89%	**1.59%**	1.39%	0.32%	0.58%	1.49%	1.19%	**1.15%**
Notemigonus crysoleucas	0.22%	0.04%	0.21%	0.23%	0.00%	**0.17%**	0.40%	0.11%	0.08%	0.68%	0.22%	**0.33%**
Notropis atherinoides	27.75%	10.83%	6.96%	34.11%	27.02%	**23.39%**	23.73%	11.94%	30.29%	18.73%	18.24%	**21.07%**
Notropis hudsonius	11.96%	2.99%	8.33%	13.45%	4.25%	**9.65%**	8.12%	1.94%	5.79%	10.05%	4.88%	**6.73%**
Notropis volucellus	0.01%	0.00%	0.00%	0.00%	0.04%	**0.01%**	0.01%	0.05%	0.00%	0.03%	0.02%	**0.02%**
Pimephales notatus	8.33%	0.27%	11.76%	4.28%	1.86%	**6.25%**	5.71%	0.55%	4.68%	4.63%	4.43%	**4.55%**
Pimephales promelas	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.00%	0.00%	0.01%	0.00%	0.00%	**0.00%**
Scardinius erythrophthalmus	0.64%	0.66%	0.54%	1.01%	0.09%	**0.64%**	0.33%	0.38%	0.24%	0.59%	0.22%	**0.34%**
Semotilus atromaculatus	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.00%	0.00%	0.00%	0.01%	0.00%	**0.00%**
Etheostoma caeruleum	0.04%	0.00%	0.09%	0.00%	0.00%	**0.03%**	0.11%	0.00%	0.04%	0.13%	0.08%	**0.09%**
Etheostoma flabellare	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.01%	0.00%	0.00%	0.02%	0.01%	**0.01%**
Etheostoma nigrum	0.01%	0.04%	0.03%	0.00%	0.04%	**0.02%**	0.01%	0.01%	0.02%	0.00%	0.02%	**0.01%**
Perca flavescens	13.60%	20.66%	9.76%	15.42%	23.83%	**15.42%**	10.23%	19.92%	8.71%	14.59%	12.70%	**12.42%**
Percina caprodes	0.37%	0.00%	0.69%	0.07%	0.04%	**0.27%**	0.26%	0.04%	0.35%	0.33%	0.07%	**0.21%**
Sander vitreus	0.12%	0.16%	0.00%	0.21%	0.18%	**0.13%**	0.19%	0.09%	0.00%	0.33%	0.13%	**0.16%**

	2017						All years					
Species	**UPPER**	**LOWER**	**SPRING**	**SUMMER**	**FALL**	**TOTAL**	**UPPER**	**LOWER**	**SPRING**	**SUMMER**	**FALL**	**TOTAL**
*Esox americanus vermiculatus**	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.01%	0.00%	0.00%	0.00%	0.01%	**0.00%**
Esox lucius	0.03%	0.23%	0.09%	0.02%	0.18%	**0.08%**	0.04%	0.19%	0.16%	0.03%	0.06%	**0.07%**
Esox masquinongy	0.19%	0.16%	0.15%	0.07%	0.44%	**0.18%**	0.18%	0.13%	0.34%	0.08%	0.16%	**0.17%**
Esox masquinongy X Esox lucius	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.00%	0.01%	0.00%	0.01%	0.00%	**0.00%**
Umbra limi	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.00%	0.00%	0.00%	0.00%	0.01%	**0.00%**
Cottus bairdii	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.02%	0.01%	0.00%	0.02%	0.02%	**0.02%**
Osmerus mordax	2.04%	0.97%	0.27%	0.00%	7.40%	**1.76%**	3.66%	2.08%	2.86%	0.30%	5.58%	**3.30%**
Carpiodes cyprinus	0.00%	0.08%	0.03%	0.00%	0.04%	**0.02%**	0.01%	0.05%	0.07%	0.00%	0.01%	**0.02%**
Catostomus commersonii	13.46%	6.02%	15.95%	9.46%	9.03%	**11.54%**	28.50%	19.49%	11.93%	26.02%	33.78%	**26.47%**
Hypentelium nigricans	0.19%	0.00%	0.27%	0.09%	0.04%	**0.14%**	0.15%	0.01%	0.17%	0.13%	0.09%	**0.12%**
Moxostoma anisurum	0.00%	0.70%	0.36%	0.09%	0.09%	**0.18%**	0.00%	0.26%	0.20%	0.03%	0.01%	**0.06%**
Moxostoma erythrurum	0.00%	0.54%	0.09%	0.11%	0.27%	**0.14%**	0.02%	0.29%	0.14%	0.09%	0.05%	**0.08%**
Moxostoma macrolepidotum	0.54%	0.62%	0.57%	0.60%	0.49%	**0.56%**	0.67%	1.45%	0.77%	0.78%	0.92%	**0.85%**
Moxostoma sp.	0.03%	0.00%	0.00%	0.05%	0.00%	**0.02%**	0.01%	0.09%	0.01%	0.02%	0.04%	**0.03%**
Moxostoma valenciennesi	3.07%	3.15%	4.30%	2.20%	3.01%	**3.09%**	4.00%	3.25%	4.95%	2.57%	4.15%	**3.83%**
Ambloplites rupestris	0.62%	0.12%	0.15%	0.94%	0.13%	**0.49%**	0.67%	0.30%	0.14%	0.76%	0.69%	**0.59%**
Lepomis cyanellus	0.03%	0.00%	0.03%	0.02%	0.00%	**0.02%**	0.01%	0.02%	0.01%	0.01%	0.01%	**0.01%**
Lepomis gibbosus	0.54%	0.12%	0.51%	0.50%	0.18%	**0.43%**	0.33%	0.06%	0.19%	0.38%	0.24%	**0.27%**
Lepomis macrochirus	0.66%	0.04%	0.06%	0.89%	0.40%	**0.50%**	0.38%	0.19%	0.02%	0.38%	0.46%	**0.34%**
Lepomis sp.	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.01%	0.00%	0.00%	0.02%	0.00%	**0.00%**
Micropterus dolomieu	0.51%	4.62%	3.52%	0.48%	0.80%	**1.57%**	1.07%	6.39%	5.63%	1.69%	1.05%	**2.27%**
Micropterus salmoides	2.37%	1.20%	1.34%	3.25%	0.84%	**2.07%**	1.87%	2.69%	0.60%	3.24%	1.93%	**2.05%**
Pomoxis annularis	0.01%	0.00%	0.03%	0.00%	0.00%	**0.01%**	0.00%	0.00%	0.01%	0.00%	0.00%	**0.00%**
Pomoxis nigromaculatus	0.05%	0.00%	0.03%	0.05%	0.04%	**0.04%**	0.06%	0.01%	0.01%	0.05%	0.06%	**0.05%**
Morone americana	0.34%	0.23%	0.12%	0.27%	0.66%	**0.31%**	0.32%	1.34%	0.07%	0.14%	1.07%	**0.55%**
Morone chrysops	0.07%	0.43%	0.42%	0.05%	0.00%	**0.16%**	0.08%	0.17%	0.26%	0.11%	0.01%	**0.10%**
*Oncorhynchus kisutch***	0.00%	0.39%	0.00%	0.00%	0.44%	**0.10%**	0.00%	0.27%	0.03%	0.00%	0.12%	**0.06%**
*Oncorhynchus mykiss***	0.04%	2.95%	0.81%	0.00%	2.30%	**0.79%**	0.02%	1.10%	0.39%	0.00%	0.39%	**0.27%**
*Oncorhynchus tshawytscha***	0.00%	2.99%	2.15%	0.00%	0.22%	**0.77%**	0.00%	2.43%	2.23%	0.01%	0.11%	**0.55%**
Salmo salar	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.01%	**0.00%**
*Salmo trutta***	0.00%	1.28%	0.48%	0.00%	0.75%	**0.33%**	0.00%	0.69%	0.47%	0.02%	0.10%	**0.16%**
Salmo trutta X Salvelinus fontinalis	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.00%	0.01%	0.01%	0.00%	0.00%	**0.00%**
Salvelinus namaycush	0.00%	0.31%	0.00%	0.00%	0.35%	**0.08%**	0.00%	0.12%	0.00%	0.00%	0.06%	**0.03%**
Percopsis omiscomaycus	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	0.00%	0.00%	0.00%	0.00%	0.01%	**0.00%**

Table 4. *Relative abundance of fishes (expressed as percentage of total catch, per column), by family, during combined 2015-2017 sampling.*

Family	Upper	Lower	Spring	Summer	Fall	Total
Bowfin	0.11%	0.71%	0.19%	0.45%	0.14%	0.25%
Catfish	2.37%	1.84%	1.96%	3.10%	1.80%	2.25%
Drum	0.08%	0.32%	0.37%	0.14%	0.02%	0.14%
Eel	0.00%	0.31%	0.10%	0.11%	0.03%	0.07%
Gar	0.00%	1.08%	0.77%	0.21%	0.02%	0.24%
Goby	0.60%	1.11%	0.66%	0.37%	0.98%	0.71%
Herring	0.97%	12.58%	10.73%	2.22%	1.10%	3.59%
Killifish	0.11%	0.05%	0.01%	0.09%	0.14%	0.09%
Lamprey	0.08%	0.01%	0.13%	0.00%	0.07%	0.06%
Minnow	42.77%	18.80%	44.27%	41.04%	31.51%	37.36%
Perch	10.81%	20.06%	9.12%	15.39%	13.00%	12.90%
Pike	0.23%	0.33%	0.50%	0.11%	0.24%	0.26%
Sculpin	0.02%	0.01%	0.00%	0.02%	0.02%	0.02%
Smelt	3.66%	2.08%	2.86%	0.30%	5.58%	3.30%
Sucker	33.36%	24.88%	18.25%	29.66%	39.06%	31.45%
Sunfish	4.39%	9.67%	6.61%	6.53%	4.44%	5.58%
Temperate Basses	0.40%	1.51%	0.33%	0.25%	1.08%	0.65%
Trout	0.03%	4.63%	3.14%	0.02%	0.79%	1.07%
Trout-Perch	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%

Table 5. *Summary of abiotic habitat: average water quality parameter measures during sampling at each station on the Niagara River, 2015-2017.*

		2015			2016			2017			All years		
Measure	**Season**	**Upper**	**Lower**	**Total**	**Upper**	**Lower**	**Total**	**Upper**	**Lower**	**Total**	**Upper**	**Lower**	**Total**
Air Temperature (°C)	Spring	24.3	22.2	**23.4**	24.6	18.1	**22.0**	24.8	21.4	**22.8**	24.5	20.6	**22.8**
	Summer	23.7	25.7	**24.5**	25.3	27.3	**26.1**	23.1	28.0	**25.0**	24.0	27.0	**25.2**
	Fall	16.7	15.1	**16.1**	12.8	10.8	**12.0**	5.0	7.7	**6.2**	11.9	11.2	**11.6**
	Combined	**21.6**	**21.0**	**21.3**	**20.9**	**18.7**	**20.0**	**17.0**	**19.0**	**17.9**	**20.0**	**19.6**	**19.8**
Water Temperature (°C)	Spring	15.49	17.29	**16.21**	15.36	17.38	**16.18**	21.58	20.68	**21.10**	16.82	18.45	**17.53**
	Summer	23.00	23.15	**23.06**	25.06	25.20	**25.12**	22.58	24.01	**23.15**	23.55	24.12	**23.78**
	Fall	15.59	14.69	**15.23**	14.17	13.93	**14.08**	9.20	11.13	**9.97**	12.99	13.25	**13.09**
	Combined	**18.03**	**18.37**	**18.17**	**18.20**	**18.84**	**18.46**	**17.18**	**18.61**	**17.80**	**17.83**	**18.61**	**18.15**
Conductivity (µS)	Spring	230.0	245.0	**236.6**	349.0	462.5	**394.4**	261.6	258.9	**230.2**	283.2	322.4	**300.3**
	Summer	271.1	273.9	**272.3**	558.5	558.7	**558.6**	272.5	279.8	**275.4**	367.4	370.8	**368.8**
	Fall	454.8	445.2	**451.0**	237.4	230.4	**234.6**	206.6	206.8	**206.7**	299.6	294.2	**297.4**
	Combined	**318.7**	**321.6**	**319.8**	**381.6**	**417.2**	**395.9**	**244.5**	**248.5**	**246.3**	**318.3**	**329.1**	**322.8**
Dissolved Oxygen (mg/L)	Spring	10.78	10.52	**10.68**	4.55	10.10	**6.77**	9.02	9.76	**9.42**	7.97	10.13	**8.91**
	Summer	8.54	8.94	**8.70**	7.60	8.76	**8.07**	8.64	9.16	**8.85**	8.26	8.95	**8.54**
	Fall	9.83	10.63	**10.15**	9.98	10.98	**10.38**	10.88	11.68	**11.20**	10.23	11.10	**10.58**
	Combined	**9.72**	**10.03**	**9.84**	**7.38**	**9.95**	**8.41**	**9.59**	**10.20**	**9.86**	**8.86**	**10.06**	**9.35**
pH	Spring	8.40	8.32	**8.37**	8.92	8.95	**8.93**	8.41	8.30	**8.35**	8.60	8.52	**8.57**
	Summer	8.63	8.54	**8.59**	9.33	9.17	**9.27**	8.56	8.44	**8.51**	8.84	8.72	**8.79**
	Fall	8.65	8.58	**8.62**	9.37	9.43	**9.40**	8.76	8.80	**8.78**	8.93	8.94	**8.93**
	Combined	**8.56**	**8.48**	**8.53**	**9.21**	**9.19**	**9.20**	**8.60**	**8.51**	**8.56**	**8.80**	**8.73**	**8.77**
Turbidity (ntu)	Spring	1.91	2.94	**2.32**	1.72	2.57	**2.06**	1.79	3.74	**2.83**	1.81	3.09	**2.36**
	Summer	1.78	1.39	**1.62**	2.55	1.41	**2.10**	1.47	1.74	**1.58**	1.93	1.51	**1.76**
	Fall	1.40	4.26	**2.54**	3.05	1.95	**2.61**	19.83	6.76	**14.60**	8.09	4.32	**6.58**
	Combined	**1.69**	**2.86**	**2.16**	**2.44**	**1.98**	**2.26**	**8.65**	**4.08**	**6.66**	**4.05**	**2.97**	**3.61**

Table 6. *Average water depth and velocity measures during sampling at each station on the Niagara River, 2015-2017.*

		2015			2016			2017			All Years		
Measure	**Season**	**Upper**	**Lower**	**Total**	**Upper**	**Lower**	**Total**	**Upper**	**Lower**	**Total**	**Upper**	**Lower**	**Total**
Average depth (m)	Spring	1.9	1.5	**1.7**	1.7	1.9	**1.8**	1.6	2.2	**1.9**	1.7	1.9	**1.8**
	Summer	1.5	1.4	**1.5**	1.7	1.9	**1.7**	2.0	2.1	**2.0**	1.7	1.8	**1.7**
	Fall	1.2	1.2	**1.2**	1.7	1.9	**1.8**	1.8	2.0	**1.9**	1.6	1.7	**1.6**
	Combined	**1.5**	**1.4**	**1.5**	**1.7**	**1.9**	**1.8**	**1.8**	**2.1**	**1.9**	**1.7**	**1.8**	**1.7**
Maximum depth (m)	Spring	4.9	2.2	**4.9**	3.5	2.4	**3.5**	2.1	2.7	**2.7**	4.9	2.7	**4.9**
	Summer	3.5	2.3	**3.5**	3.3	2.3	**3.3**	3.0	2.8	**3.0**	3.5	2.8	**3.8**
	Fall	2.3	1.9	**2.3**	2.8	2.4	**2.8**	2.2	2.4	**2.4**	2.8	2.4	**2.8**
	Combined	**4.9**	**2.3**	**4.9**	**3.5**	**2.4**	**2.3**	**3.0**	**2.8**	**3.0**	**4.9**	**2.8**	**4.9**
Minimum depth (m)	Spring	0.5	0.7	**0.5**	1.1	1.4	**1.1**	1.4	1.7	**1.4**	0.5	0.7	**0.5**
	Summer	0.7	0.9	**0.7**	1.1	1.3	**1.1**	1.3	1.6	**1.3**	0.7	0.9	**0.7**
	Fall	0.5	0.5	**0.5**	1.2	1.4	**1.2**	1.3	1.2	**1.2**	0.5	0.5	**0.5**
	Combined	**0.5**	**0.5**	**0.5**	**1.1**	**1.3**	**1.1**	**1.3**	**1.3**	**1.3**	**0.5**	**0.5**	**0.5**
Average water velocity (m/s)	Spring	0.34	0.20	**0.28**	0.30	0.19	**0.26**	0.16	0.13	**0.14**	0.29	0.18	**0.24**
	Summer	0.14	0.10	**0.13**	0.13	0.11	**0.12**	0.14	0.13	**0.13**	0.14	0.11	**0.13**
	Fall	0.16	0.14	**0.15**	0.21	0.11	**0.17**	0.18	0.20	**0.18**	0.18	0.15	**0.17**
	Combined	**0.21**	**0.15**	**0.18**	**0.21**	**0.14**	**0.18**	**0.16**	**0.15**	**0.15**	**0.20**	**0.15**	**0.18**
Maximum water velocity (m/s)	Spring	0.93	0.44	**0.93**	0.59	0.66	**0.66**	0.49	0.47	**0.49**	0.93	0.66	**0.93**
	Summer	0.51	0.25	**0.51**	0.32	0.43	**0.43**	0.47	0.35	**0.47**	0.51	0.43	**0.51**
	Fall	0.48	0.55	**0.55**	0.68	0.34	**0.68**	0.55	0.80	**0.80**	0.68	0.80	**0.80**
	Combined	**0.93**	**0.55**	**0.93**	**0.68**	**0.66**	**0.68**	**0.55**	**0.80**	**0.80**	**0.93**	**0.80**	**0.93**
Minimum water velocity (m/s)	Spring	0.04	0.02	**0.02**	0.02	0.05	**0.02**	0.02	0.00	**0.00**	0.02	0.00	**0.00**
	Summer	0.01	0.02	**0.01**	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00	**0.00**
	Fall	0.01	0.01	**0.01**	0.01	0.00	**0.00**	0.01	0.00	**0.00**	0.01	0.00	**0.00**
	Combined	**0.01**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Table 7. *Summary of the most frequently occurring dominant substrate type recorded during all sampling events in the Niagara River, 2015-2017.*

Year	Section	Spring	Summer	Fall	Combined
2015	Upper	Clay	Sand	Silt	Sand
	Lower	Clay	Sand	Silt	Sand
	Total	Clay	Sand	Silt	Sand
2016	Upper	Silt	Sand	Silt	Silt
	Lower	Silt	Silt	Silt	Silt
	Total	Silt	Silt	Silt	Silt
2017	Upper	Sand	Silt	Sand	Cobble
	Lower	Cobble	Cobble	Silt	Cobble
	Total	Cobble	Silt	Cobble	Cobble
All years	Upper	Sand	Silt	Silt	Silt
	Lower	Silt	Sand	Silt	Silt
	Total	Sand	Sand	Silt	Silt

Table 8. *Most frequently occurring dominant aquatic and riparian vegetation type at sampling stations across seasons and years in the Niagara River, 2015-2017.*

		Dominant Aquatic Vegetation Type				**Dominant Riparian Vegetation Type**			
Year	**Section**	Spring	Summer	Fall	**Combined**	Spring	Summer	Fall	**Combined**
2015	**Upper**	Open Water	Submerged	Submerged	**Submerged**	Deciduous	Herbaceous	Deciduous	**Deciduous**
	Lower	Open Water	Submerged	Open Water	**Submerged**	Deciduous	Deciduous	Deciduous	**Deciduous**
	Total	**Open Water**	**Submerged**	**Submerged**	**Submerged**	**Deciduous**	**Deciduous**	**Deciduous**	**Deciduous**
2016	**Upper**	Open Water	Submerged	Submerged	**Submerged**	Deciduous	None	None	**None**
	Lower	Open Water	Submerged	Open Water	**Open Water**	Deciduous	Deciduous	None	**None**
	Total	**Open Water**	**Submerged**	**Open Water**	**Open Water**	**Deciduous**	**None**	**None**	**None**
2017	**Upper**	Submerged	Submerged	Open Water	**Submerged**	Deciduous	Deciduous	None	**Deciduous**
	Lower	Submerged	Open Water	Open Water	**Open Water**	Deciduous	Deciduous	None	**Deciduous**
	Total	**Submerged**	**Submerged**	**Open Water**	**Open Water**	**Deciduous**	**Deciduous**	**None**	**Deciduous**
All years	**Upper**	Open Water	Submerged	Submerged	**Submerged**	Deciduous	Deciduous	None	**Deciduous**
	Lower	Open Water	Submerged	Open Water	**Open Water**	Deciduous	Deciduous	None	**Deciduous**
	Total	**Open Water**	**Submerged**	**Open Water**	**Submerged**	**Deciduous**	**Deciduous**	**None**	**Deciduous**

Table 9. *List of aquatic vegetation species identified at sampling stations throughout all sampling events. Wild Celery, Vallisneria americana, was most commonly the dominant species of aquatic vegetation when aquatic vegetation present.*

Species Name	**Common Name**
Vallisneria americana	Wild Celery
Ceratophyllum demersum	Coontail
Myriophyllum sp.	Milfoil sp.
Stuckenia pectinatus	Sago pondweed
Elodea canadensis	Canadian waterweed
Potamogeton crispus	Curly-leaf pondweed
Potamogeton richardsonii	Richardson's pondweed
filamentous algae	Filamentous algae
Phragmites australis	European Common Reed
Typha sp.	Cattail sp.
Lemna sp.	Duckweed sp.
Poaceae	Grass sp.

APPENDICES

Appendix 1. *Unique field number and date for seasonal sampling events at each of the 10 stations.*

Station code	Season	Field number	Date sampled
GLAP-NR-011	SPRING	2015-GLAP-NR-120615-011A	12-Jun-2015
GLAP-NR-011	SPRING	2016-GLAP-NR-250516-011A	25-May-2016
GLAP-NR-011	SPRING	2017-GLAP-NR-050717-011A	5-Jul-2017
GLAP-NR-011	SUMMER	2015-GLAP-NR-180815-011A	18-Aug-2015
GLAP-NR-011	SUMMER	2016-GLAP-NR-150816-011A	15-Aug-2016
GLAP-NR-011	SUMMER	2017-GLAP-NR-280817-011A	28-Aug-2017
GLAP-NR-011	FALL	2015-GLAP-NR-071015-011A	7-Oct-2015
GLAP-NR-011	FALL	2016-GLAP-NR-171016-011A	17-Oct-2016
GLAP-NR-011	FALL	2017-GLAP-NR-221117-011A	22-Nov-2017
GLAP-NR-012	SPRING	2015-GLAP-NR-120615-012A	12-Jun-2015
GLAP-NR-012	SPRING	2016-GLAP-NR-250516-012A	25-May-2016
GLAP-NR-012	SPRING	2017-GLAP-NR-060717-012A	6-Jul-2017
GLAP-NR-012	SUMMER	2015-GLAP-NR-180815-012A	18-Aug-2015
GLAP-NR-012	SUMMER	2016-GLAP-NR-150816-012A	15-Aug-2016
GLAP-NR-012	SUMMER	2017-GLAP-NR-280817-012A	28-Aug-2017
GLAP-NR-012	FALL	2015-GLAP-NR-071015-012A	7-Oct-2015
GLAP-NR-012	FALL	2016-GLAP-NR-171016-012A	17-Oct-2016
GLAP-NR-012	FALL	2017-GLAP-NR-221117-012A	22-Nov-2017
GLAP-NR-021	SPRING	2015-GLAP-NR-110615-021A	11-Jun-2015
GLAP-NR-021	SPRING	2016-GLAP-NR-260516-021A	26-May-2016
GLAP-NR-021	SPRING	2017-GLAP-NR-040717-021A	4-Jul-2017
GLAP-NR-021	SUMMER	2015-GLAP-NR-110815-021A	11-Aug-2015
GLAP-NR-021	SUMMER	2016-GLAP-NR-180816-021A	18-Aug-2016
GLAP-NR-021	SUMMER	2017-GLAP-NR-300817-021A	30-Aug-2017
GLAP-NR-021	FALL	2015-GLAP-NR-061015-021A	6-Oct-2015
GLAP-NR-021	FALL	2016-GLAP-NR-241016-021A	24-Oct-2016
GLAP-NR-021	FALL	2017-GLAP-NR-231117-021A	23-Nov-2017
GLAP-NR-022	SPRING	2015-GLAP-NR-110615-022A	11-Jun-2015
GLAP-NR-022	SPRING	2016-GLAP-NR-260516-022A	26-May-2016
GLAP-NR-022	SPRING	2017-GLAP-NR-040717-022A	4-Jul-2017
GLAP-NR-022	SUMMER	2015-GLAP-NR-110815-022A	11-Aug-2015
GLAP-NR-022	SUMMER	2016-GLAP-NR-180816-022A	18-Aug-2016
GLAP-NR-022	SUMMER	2017-GLAP-NR-300817-022A	30-Aug-2017
GLAP-NR-022	FALL	2015-GLAP-NR-061015-022A	6-Oct-2015
GLAP-NR-022	FALL	2016-GLAP-NR-261016-022A	26-Oct-2016
GLAP-NR-022	FALL	2017-GLAP-NR-231117-022A	23-Nov-2017
GLAP-NR-031	SPRING	2015-GLAP-NR-110615-031A	11-Jun-2015
GLAP-NR-031	SPRING	2016-GLAP-NR-270516-031A	27-May-2016
GLAP-NR-031	SPRING	2017-GLAP-NR-060717-031A	6-Jul-2017
GLAP-NR-031	SUMMER	2015-GLAP-NR-100815-031A	10-Aug-2015
GLAP-NR-031	SUMMER	2016-GLAP-NR-170816-031A	17-Aug-2016
GLAP-NR-031	SUMMER	2017-GLAP-NR-290817-031A	29-Aug-2017
GLAP-NR-031	FALL	2015-GLAP-NR-141015-031A	14-Oct-2015
GLAP-NR-031	FALL	2016-GLAP-NR-261016-031A	26-Oct-2016
GLAP-NR-031	FALL	2017-GLAP-NR-231117-031A	23-Nov-2017
GLAP-NR-032	SPRING	2015-GLAP-NR-110615-032A	11-Jun-2015
GLAP-NR-032	SPRING	2016-GLAP-NR-270516-032A	27-May-2016

Station code	Season	Field number	Date sampled
GLAP-NR-032	SPRING	2017-GLAP-NR-070717-032A	7-Jul-2017
GLAP-NR-032	SUMMER	2015-GLAP-NR-100815-032A	10-Aug-2015
GLAP-NR-032	SUMMER	2016-GLAP-NR-170816-032A	17-Aug-2016
GLAP-NR-032	SUMMER	2017-GLAP-NR-290817-032A	29-Aug-2017
GLAP-NR-032	FALL	2015-GLAP-NR-141015-032A	14-Oct-2015
GLAP-NR-032	FALL	2016-GLAP-NR-261016-032A	26-Oct-2016
GLAP-NR-032	FALL	2017-GLAP-NR-231117-032A	23-Nov-2017
GLAP-NR-041	SPRING	2015-GLAP-NR-100615-041A	10-Jun-2015
GLAP-NR-041	SPRING	2016-GLAP-NR-070616-041A	7-Jun-2016
GLAP-NR-041	SPRING	2017 Not Sampled	-
GLAP-NR-041	SUMMER	2015-GLAP-NR-250815-041A	25-Aug-2015
GLAP-NR-041	SUMMER	2016-GLAP-NR-080816-041A	8-Aug-2016
GLAP-NR-041	SUMMER	2017-GLAP-NR-310717-041A	31-Jul-2017
GLAP-NR-041	FALL	2015-GLAP-NR-051015-041A	5-Oct-2015
GLAP-NR-041	FALL	2016-GLAP-NR-021116-041A	2-Nov-2016
GLAP-NR-041	FALL	2017-GLAP-NR-151117-041A	15-Nov-2017
GLAP-NR-042	SPRING	2015-GLAP-NR-100615-042A	10-Jun-2015
GLAP-NR-042	SPRING	2016-GLAP-NR-070616-042A	7-Jun-2016
GLAP-NR-042	SPRING	2017 Not Sampled	-
GLAP-NR-042	SUMMER	2015-GLAP-NR-250815-042A	25-Aug-2015
GLAP-NR-042	SUMMER	2016-GLAP-NR-080816-042A	8-Aug-2016
GLAP-NR-042	SUMMER	2017-GLAP-NR-310717-042A	31-Jul-2017
GLAP-NR-042	FALL	2015-GLAP-NR-051015-042A	5-Oct-2015
GLAP-NR-042	FALL	2016-GLAP-NR-021116-042A	2-Nov-2016
GLAP-NR-042	FALL	2017-GLAP-NR-151117-042A	15-Nov-2017
GLAP-NR-051	SPRING	2015-GLAP-NR-100615-051A	10-Jun-2015
GLAP-NR-051	SPRING	2016-GLAP-NR-060616-051A	6-Jun-2016
GLAP-NR-051	SPRING	2017 Not Sampled	-
GLAP-NR-051	SUMMER	2015-GLAP-NR-210815-051A	21-Aug-2015
GLAP-NR-051	SUMMER	2016-GLAP-NR-100816-051A	10-Aug-2016
GLAP-NR-051	SUMMER	2017-GLAP-NR-010817-051A	1-Aug-2017
GLAP-NR-051	FALL	2015-GLAP-NR-151015-051A	15-Oct-2015
GLAP-NR-051	FALL	2016-GLAP-NR-251016-051A	25-Oct-2016
GLAP-NR-051	FALL	2017-GLAP-NR-061117-051A	6-Nov-2017
GLAP-NR-052	SPRING	2015-GLAP-NR-100615-052A	10-Jun-2015
GLAP-NR-052	SPRING	2016-GLAP-NR-060616-052A	6-Jun-2016
GLAP-NR-052	SPRING	2017-GLAP-NR-070717-052A	7-Jul-2017
GLAP-NR-052	SUMMER	2015-GLAP-NR-210815-052A	21-Aug-2015
GLAP-NR-052	SUMMER	2016-GLAP-NR-100816-052A	10-Aug-2016
GLAP-NR-052	SUMMER	2017-GLAP-NR-010817-052A	1-Aug-2017
GLAP-NR-052	FALL	2015-GLAP-NR-151015-052A	15-Oct-2015
GLAP-NR-052	FALL	2016-GLAP-NR-251016-052A	25-Oct-2016
GLAP-NR-052	FALL	2017-GLAP-NR-061117-052A	6-Nov-2017
GLAP-NR-061	SPRING	2015-GLAP-NR-090615-061A	9-Jun-2015
GLAP-NR-061	SPRING	2016-GLAP-NR-240516-061A	24-May-2016
GLAP-NR-061	SPRING	2017 Not Sampled	-
GLAP-NR-061	SUMMER	2015-GLAP-NR-240815-061A	24-Aug-2015
GLAP-NR-061	SUMMER	2016-GLAP-NR-090816-061A	9-Aug-2016
GLAP-NR-061	SUMMER	2017-GLAP-NR-310717-061A	31-Jul-2017
GLAP-NR-061	FALL	2015-GLAP-NR-081015-061A	8-Oct-2015
GLAP-NR-061	FALL	2016-GLAP-NR-011116-061A	1-Nov-2016
GLAP-NR-061	FALL	2017-GLAP-NR-151117-061A	15-Nov-2017
GLAP-NR-062	SPRING	2015-GLAP-NR-090615-062A	9-Jun-2015
GLAP-NR-062	SPRING	2016-GLAP-NR-240516-062A	24-May-2016
GLAP-NR-062	SPRING	Not Sampled	-

Station code	Season	Field number	Date sampled
GLAP-NR-062	SUMMER	2015-GLAP-NR-240815-062A	24-Aug-2015
GLAP-NR-062	SUMMER	2016-GLAP-NR-090816-062A	9-Aug-2016
GLAP-NR-062	SUMMER	2017-GLAP-NR-010817-062A	1-Aug-2017
GLAP-NR-062	FALL	2015-GLAP-NR-081015-062A	8-Oct-2015
GLAP-NR-062	FALL	2016-GLAP-NR-011116-062A	1-Nov-2016
GLAP-NR-062	FALL	2017-GLAP-NR-151117-062A	15-Nov-2017
GLAP-NR-071	SPRING	2015-GLAP-NR-170615-071A	17-Jun-2015
GLAP-NR-071	SPRING	2016-GLAP-NR-080616-071A	8-Jun-2016
GLAP-NR-071	SPRING	2017-GLAP-NR-260617-071A	26-Jun-2017
GLAP-NR-071	SUMMER	2015-GLAP-NR-200815-071A	20-Aug-2015
GLAP-NR-071	SUMMER	2016-GLAP-NR-020816-071A	2-Aug-2016
GLAP-NR-071	SUMMER	2017-GLAP-NR-040817-071A	4-Aug-2017
GLAP-NR-071	FALL	2015-GLAP-NR-131015-071A	13-Oct-2015
GLAP-NR-071	FALL	2016-GLAP-NR-181016-071A	18-Oct-2016
GLAP-NR-071	FALL	2017-GLAP-NR-081117-071A	8-Nov-2017
GLAP-NR-072	SPRING	2015-GLAP-NR-170615-072A	17-Jun-2015
GLAP-NR-072	SPRING	2016-GLAP-NR-080616-072A	8-Jun-2016
GLAP-NR-072	SPRING	2017-GLAP-NR-270617-072A	27-Jun-2017
GLAP-NR-072	SUMMER	2015-GLAP-NR-200815-072A	20-Aug-2015
GLAP-NR-072	SUMMER	2016-GLAP-NR-020816-072A	2-Aug-2016
GLAP-NR-072	SUMMER	2017-GLAP-NR-040817-072A	4-Aug-2017
GLAP-NR-072	FALL	2015-GLAP-NR-131015-072A	13-Oct-2015
GLAP-NR-072	FALL	2016-GLAP-NR-181016-072A	18-Oct-2016
GLAP-NR-072	FALL	2017-GLAP-NR-081117-072A	8-Nov-2017
GLAP-NR-081	SPRING	2015-GLAP-NR-190615-081A	19-Jun-2015
GLAP-NR-081	SPRING	2016-GLAP-NR-090616-081A	9-Jun-2016
GLAP-NR-081	SPRING	2017-GLAP-NR-270617-081A	27-Jun-2017
GLAP-NR-081	SUMMER	2015-GLAP-NR-120815-081A	12-Aug-2015
GLAP-NR-081	SUMMER	2016-GLAP-NR-030816-081A	3-Aug-2016
GLAP-NR-081	SUMMER	2017-GLAP-NR-030817-081A	3-Aug-2017
GLAP-NR-081	FALL	2015-GLAP-NR-161015-081A	16-Oct-2015
GLAP-NR-081	FALL	2016-GLAP-NR-281016-081A	28-Oct-2016
GLAP-NR-081	FALL	2017-GLAP-NR-091117-081A	9-Nov-2017
GLAP-NR-082	SPRING	2015-GLAP-NR-190615-082A	19-Jun-2015
GLAP-NR-082	SPRING	2016-GLAP-NR-090616-082A	9-Jun-2016
GLAP-NR-082	SPRING	2017-GLAP-NR-270617-082A	27-Jun-2017
GLAP-NR-082	SUMMER	2015-GLAP-NR-120815-082A	12-Aug-2015
GLAP-NR-082	SUMMER	2016-GLAP-NR-030816-082A	3-Aug-2016
GLAP-NR-082	SUMMER	2017-GLAP-NR-030817-082A	3-Aug-2017
GLAP-NR-082	FALL	2015-GLAP-NR-161015-082A	16-Oct-2015
GLAP-NR-082	FALL	2016-GLAP-NR-281016-082A	28-Oct-2016
GLAP-NR-082	FALL	2017-GLAP-NR-091117-082A	9-Nov-2017
GLAP-NR-091	SPRING	2015-GLAP-NR-190615-091A	19-Jun-2015
GLAP-NR-091	SPRING	2016-GLAP-NR-090616-091A	9-Jun-2016
GLAP-NR-091	SPRING	2017-GLAP-NR-290617-091A	29-Jun-2017
GLAP-NR-091	SUMMER	2015-GLAP-NR-190815-091A	19-Aug-2015
GLAP-NR-091	SUMMER	2016-GLAP-NR-110816-091A	11-Aug-2016
GLAP-NR-091	SUMMER	2017-GLAP-NR-030817-091A	3-Aug-2017
GLAP-NR-091	FALL	2015-GLAP-NR-221015-091A	22-Oct-2015
GLAP-NR-091	FALL	2016-GLAP-NR-041116-091A	4-Nov-2016
GLAP-NR-091	FALL	2017-GLAP-NR-161117-091A	16-Nov-2017
GLAP-NR-092	SPRING	2015-GLAP-NR-180615-092A	18-Jun-2015
GLAP-NR-092	SPRING	2016-GLAP-NR-100616-092A	10-Jun-2016
GLAP-NR-092	SPRING	2017-GLAP-NR-290617-092A	29-Jun-2017
GLAP-NR-092	SUMMER	2015-GLAP-NR-190815-092A	19-Aug-2015

Station code	Season	Field number	Date sampled
GLAP-NR-092	SUMMER	2016-GLAP-NR-110816-092A	11-Aug-2016
GLAP-NR-092	SUMMER	2017-GLAP-NR-020817-092A	2-Aug-2017
GLAP-NR-092	FALL	2015-GLAP-NR-221015-092A	22-Oct-2015
GLAP-NR-092	FALL	2016-GLAP-NR-041116-092A	4-Nov-2016
GLAP-NR-092	FALL	2017-GLAP-NR-161117-092A	16-Nov-2017
GLAP-NR-101	SPRING	2015-GLAP-NR-180615-101A	18-Jun-2015
GLAP-NR-101	SPRING	2016-GLAP-NR-100616-101A	10-Jun-2016
GLAP-NR-101	SPRING	2017-GLAP-NR-300617-101A	30-Jun-2017
GLAP-NR-101	SUMMER	2015-GLAP-NR-130815-101A	13-Aug-2015
GLAP-NR-101	SUMMER	2016-GLAP-NR-040816-101A	4-Aug-2016
GLAP-NR-101	SUMMER	2017-GLAP-NR-020817-101A	2-Aug-2017
GLAP-NR-101	FALL	2015-GLAP-NR-231015-101A	23-Oct-2015
GLAP-NR-101	FALL	2016-GLAP-NR-311016-101A	31-Oct-2016
GLAP-NR-101	FALL	2017-GLAP-NR-161117-101A	16-Nov-2017
GLAP-NR-102	SPRING	2015-GLAP-NR-180615-102A	18-Jun-2015
GLAP-NR-102	SPRING	2016-GLAP-NR-100616-102A	10-Jun-2016
GLAP-NR-102	SPRING	2017-GLAP-NR-300617-102A	30-Jun-2017
GLAP-NR-102	SUMMER	2015-GLAP-NR-130815-102A	13-Aug-2015
GLAP-NR-102	SUMMER	2016-GLAP-NR-040816-102A	4-Aug-2016
GLAP-NR-102	SUMMER	2017-GLAP-NR-080817-102A	8-Aug-2017
GLAP-NR-102	FALL	2015-GLAP-NR-231015-102A	23-Oct-2015
GLAP-NR-102	FALL	2016-GLAP-NR311016-102A	31-Oct-2016
GLAP-NR-102	FALL	2017-GLAP-NR-161117-102A	16-Nov-2017

Appendix 2. *Sampling effort (electrofishing settings and shocking seconds per pass) for each sampling event at each station.*

Station Code	Year	Season	Pass 1 Effort (s)	Pass 2 Effort (s)	Pass 3 Effort (s)	Total Effort (s)	Amps (A)	Volts (V)	Power (%)	Pulse/sec (Hz)	Watts (W)
GLAP-NR-011	2015	SPRING	899	824	858	2581	10.5	340	50	60	1400
GLAP-NR-011	2016	SPRING	1058	1039	1034	3131	11.9	340	60	60	1775
GLAP-NR-011	2017	SPRING	1076	1145	1164	3385	9.9	164	50	60	1725
GLAP-NR-011	2015	SUMMER	1000	1052	1054	3106	13.5	340	60	60	1800
GLAP-NR-011	2016	SUMMER	1039	1001	989	3029	13.6	340	55	60	1765
GLAP-NR-011	2017	SUMMER	994	950	881	2825	12.2	148	65	60	1800
GLAP-NR-011	2015	FALL	1027	952	1030	3009	12.0	340	60	60	1600
GLAP-NR-011	2016	FALL	989	975	896	2860	12.5	340	70	60	1830
GLAP-NR-011	2017	FALL	909	854	772	2535	11.4	340	80	60	1800
GLAP-NR-012	2015	SPRING	922	982	923	2827	11.0	340	50	60	1450
GLAP-NR-012	2016	SPRING	1018	968	1000	2986	12.3	340	65	60	1800
GLAP-NR-012	2017	SPRING	1068	979	1055	3102	9.1	187	50	60	1775
GLAP-NR-012	2015	SUMMER	1071	1046	1045	3162	13.5	340	60	60	1850
GLAP-NR-012	2016	SUMMER	965	979	985	2929	13.8	340	55	60	1775
GLAP-NR-012	2017	SUMMER	1028	979	1047	3054	12.3	149	70	60	1825
GLAP-NR-012	2015	FALL	966	922	1000	2888	12.0	340	60	60	1600
GLAP-NR-012	2016	FALL	1053	1021	968	3042	13.2	340	60	60	1800
GLAP-NR-012	2017	FALL	951	882	992	2825	12.2	340	75	60	1800
GLAP-NR-021	2015	SPRING	831	745	724	2300	11.0	340	60	60	1600
GLAP-NR-021	2016	SPRING	891	1000	1039	2930	12.4	340	60	60	1800
GLAP-NR-021	2017	SPRING	1006	856	938	2800	9.8	176	50	60	1700
GLAP-NR-021	2015	SUMMER	1076	989	996	3061	13.0	340	50	60	1650
GLAP-NR-021	2016	SUMMER	954	992	963	2909	13.4	340	60	60	1775
GLAP-NR-021	2017	SUMMER	983	931	948	2862	12.2	340	65	60	1775
GLAP-NR-021	2015	FALL	973	969	1070	3012	12.0	340	55	60	1600
GLAP-NR-021	2016	FALL	1053	1020	1060	3133	12.5	340	80	60	1850
GLAP-NR-021	2017	FALL	885	861	848	2594	11.5	340	80	60	1750
GLAP-NR-022	2015	SPRING	709	706	709	2124	11.0	340	60	60	1700
GLAP-NR-022	2016	SPRING	931	1002	977	2910	13.0	340	55	60	1750
GLAP-NR-022	2017	SPRING	989	1000	991	2980	9.7	180	50	60	1750
GLAP-NR-022	2015	SUMMER	1031	993	1067	3091	13.0	340	50	60	1650
GLAP-NR-022	2016	SUMMER	936	995	973	2904	13.9	340	60	60	1830
GLAP-NR-022	2017	SUMMER	993	956	958	2907	12.6	340	60	60	1825
GLAP-NR-022	2015	FALL	997	920	1000	2917	12.0	340	55	60	1600
GLAP-NR-022	2016	FALL	911	1019	965	2895	12.5	340	80	60	1850
GLAP-NR-022	2017	FALL	841	863	898	2602	11.0	340	80	60	1700
GLAP-NR-031	2015	SPRING	736	837	857	2430	10.6	340	55	60	1475
GLAP-NR-031	2016	SPRING	935	914	904	2753	12.6	340	60	60	1750
GLAP-NR-031	2017	SPRING	1029	1040	1034	3103	11.0	160	45	60	1775
GLAP-NR-031	2015	SUMMER	978	1027	987	2992	13.0	340	50	60	2400
GLAP-NR-031	2016	SUMMER	905	947	929	2781	14.0	340	60	60	1800
GLAP-NR-031	2017	SUMMER	932	1033	917	2882	13.4	340	55	60	1800
GLAP-NR-031	2015	FALL	951	910	996	2857	12.4	340	55	60	1650
GLAP-NR-031	2016	FALL	1018	928	1000	2946	12.4	340	70	60	1825
GLAP-NR-031	2017	FALL	866	844	854	2564	11.0	340	80	60	1700
GLAP-NR-032	2015	SPRING	826	916	915	2657	11.5	340	60	60	1650
GLAP-NR-032	2016	SPRING	996	912	891	2799	12.1	340	65	60	1775
GLAP-NR-032	2017	SPRING	948	897	993	2838	10.2	175	50	60	1800
GLAP-NR-032	2015	SUMMER	1000	1013	1004	3017	13.0	340	50	60	1600
GLAP-NR-032	2016	SUMMER	940	967	945	2852	13.8	340	55	60	1825
GLAP-NR-032	2017	SUMMER	985	1055	975	3015	13.2	340	55	60	1750
GLAP-NR-032	2015	FALL	1083	1009	995	3087	12.0	340	55	60	1650
GLAP-NR-032	2016	FALL	972	1022	1022	3016	12.0	340	80	60	1825
GLAP-NR-032	2017	FALL	924	954	971	2849	12.0	340	80	60	1800
GLAP-NR-041	2015	SPRING	526	623	636	1785	12.9	340	60	60	1800
GLAP-NR-041	2016	SPRING	987	970	993	2950	12.4	340	60	60	1725
GLAP-NR-041	2017	SPRING	-	-	-	-	-	-	-	-	-
GLAP-NR-041	2015	SUMMER	894	1026	986	2906	13.5	340	60	60	1800
GLAP-NR-041	2016	SUMMER	978	1016	965	2959	13.8	340	60	60	1750
GLAP-NR-041	2017	SUMMER	907	908	882	2697	12.7	340	60	60	1810

Station Code	Year	Season	Pass 1 Effort (s)	Pass 2 Effort (s)	Pass 3 Effort (s)	Total Effort (s)	Amps (A)	Volts (V)	Power (%)	Pulse/sec (Hz)	Watts (W)
GLAP-NR-041	2015	FALL	955	984	954	2893	12.5	340	50	60	1650
GLAP-NR-041	2016	FALL	958	1030	1001	2989	12.6	340	70	60	1825
GLAP-NR-041	2017	FALL	635	785	727	2147	11.5	340	80	60	1700
GLAP-NR-042	2015	SPRING	653	716	646	2015	11.5	340	70	60	1800
GLAP-NR-042	2016	SPRING	900	900	1015	2815	12.8	340	65	60	1775
GLAP-NR-042	2017	SPRING	-	-	-	-	-	-	-	-	-
GLAP-NR-042	2015	SUMMER	953	1062	944	2959	13.5	340	60	60	1800
GLAP-NR-042	2016	SUMMER	1114	984	1030	3128	13.7	340	60	60	1800
GLAP-NR-042	2017	SUMMER	961	946	919	2826	12.7	340	60	60	1800
GLAP-NR-042	2015	FALL	1061	1015	1038	3114	12.0	340	50	60	1600
GLAP-NR-042	2016	FALL	952	1054	1114	3120	12.3	340	70	60	1850
GLAP-NR-042	2017	FALL	822	821	795	2438	11.0	340	80	60	1700
GLAP-NR-051	2015	SPRING	636	555	817	2008	13.0	340	60	60	1800
GLAP-NR-051	2016	SPRING	885	829	921	2635	12.8	340	55	60	1775
GLAP-NR-051	2017	SPRING	-	-	-	-	-	-	-	-	-
GLAP-NR-051	2015	SUMMER	955	1023	978	2956	14.0	340	60	60	1800
GLAP-NR-051	2016	SUMMER	1001	896	905	2802	14.0	340	60	60	1775
GLAP-NR-051	2017	SUMMER	922	891	889	2702	13.3	340	60	60	1800
GLAP-NR-051	2015	FALL	780	830	804	2414	11.8	340	60	60	1625
GLAP-NR-051	2016	FALL	949	918	938	2805	12.0	340	75	60	1850
GLAP-NR-051	2017	FALL	975	832	720	2527	10.0	340	80	60	1700
GLAP-NR-052	2015	SPRING	665	614	634	1913	11.5	340	50	60	1550
GLAP-NR-052	2016	SPRING	1010	953	959	2922	12.8	340	60	60	1775
GLAP-NR-052	2017	SPRING	902	873	890	2665	9.5	180	50	60	1775
GLAP-NR-052	2015	SUMMER	1030	1028	993	3051	14.0	340	50	60	1800
GLAP-NR-052	2016	SUMMER	1028	1014	964	3006	13.9	340	60	60	1800
GLAP-NR-052	2017	SUMMER	1052	944	888	2884	13.3	340	60	60	1800
GLAP-NR-052	2015	FALL	884	851	950	2685	11.5	340	60	60	1600
GLAP-NR-052	2016	FALL	1067	1021	1064	3152	11.6	340	75	60	1800
GLAP-NR-052	2017	FALL	865	782	743	2390	11.5	340	80	60	1750
GLAP-NR-061	2015	SPRING	745	691	810	2246	11.4	340	80	60	1800
GLAP-NR-061	2016	SPRING	952	1015	978	2945	12.0	340	65	60	1750
GLAP-NR-061	2017	SPRING	-	-	-	-	-	-	-	-	-
GLAP-NR-061	2015	SUMMER	1067	978	954	2999	13.5	340	60	60	1850
GLAP-NR-061	2016	SUMMER	1005	1064	1014	3083	13.4	340	55	60	1810
GLAP-NR-061	2017	SUMMER	963	972	1000	2935	12.4	340	70	60	1815
GLAP-NR-061	2015	FALL	945	1000	1010	2955	11.0	340	60	60	1500
GLAP-NR-061	2016	FALL	1016	1038	1040	3094	12.6	340	70	60	1850
GLAP-NR-061	2017	FALL	884	888	874	2646	10.5	340	80	60	1650
GLAP-NR-062	2015	SPRING	840	691	935	2466	11.5	340	80	60	1800
GLAP-NR-062	2016	SPRING	937	969	967	2873	12.0	340	70	60	1750
GLAP-NR-062	2017	SPRING	-	-	-	-	-	-	-	-	-
GLAP-NR-062	2015	SUMMER	925	995	925	2845	13.5	340	60	60	1850
GLAP-NR-062	2016	SUMMER	905	948	883	2736	14.2	340	50	60	1815
GLAP-NR-062	2017	SUMMER	956	990	975	2921	13.1	340	60	60	1800
GLAP-NR-062	2015	FALL	907	965	910	2782	11.0	340	60	60	1500
GLAP-NR-062	2016	FALL	966	910	913	2789	12.3	340	70	60	1850
GLAP-NR-062	2017	FALL	895	942	917	2754	11.0	340	80	60	1700
GLAP-NR-071	2015	SPRING	936	1199	1000	3135	10.5	340	90	60	1400
GLAP-NR-071	2016	SPRING	1038	1030	1033	3101	12.5	340	65	60	1750
GLAP-NR-071	2017	SPRING	1008	1103	977	3088	12.6	340	60	60	1800
GLAP-NR-071	2015	SUMMER	931	1020	973	2924	13.5	340	60	60	1850
GLAP-NR-071	2016	SUMMER	1072	1060	1024	3156	13.7	340	55	60	1775
GLAP-NR-071	2017	SUMMER	900	1011	903	2814	13.0	340	60	60	1825
GLAP-NR-071	2015	FALL	939	957	865	2761	12.0	340	55	60	1600
GLAP-NR-071	2016	FALL	1043	1027	986	3056	12.8	340	60	60	1850
GLAP-NR-071	2017	FALL	941	930	943	2814	12.4	340	65	60	1825
GLAP-NR-072	2015	SPRING	836	781	827	2444	10.5	340	90	60	1450
GLAP-NR-072	2016	SPRING	1004	953	1006	2963	12.6	340	60	60	1775
GLAP-NR-072	2017	SPRING	933	965	843	2741	13.3	340	60	60	1800
GLAP-NR-072	2015	SUMMER	968	951	1019	2938	13.5	340	60	60	1800
GLAP-NR-072	2016	SUMMER	1041	993	962	2996	13.4	340	60	60	1775
GLAP-NR-072	2017	SUMMER	938	904	188	2030	13.3	340	60	60	1825
GLAP-NR-072	2015	FALL	875	950	900	2725	11.2	340	55	60	1500

Station Code	Year	Season	Pass 1 Effort (s)	Pass 2 Effort (s)	Pass 3 Effort (s)	Total Effort (s)	Amps (A)	Volts (V)	Power (%)	Pulse/sec (Hz)	Watts (W)
GLAP-NR-072	2016	FALL	818	856	809	2483	13.2	340	60	60	1850
GLAP-NR-072	2017	FALL	900	820	907	2627	12.2	340	70	60	1800
GLAP-NR-081	2015	SPRING	1151	1023	959	3133	9.5	340	100	60	1400
GLAP-NR-081	2016	SPRING	1140	1010	1023	3173	11.8	340	65	60	1775
GLAP-NR-081	2017	SPRING	1119	1056	1070	3245	12.9	340	60	60	1800
GLAP-NR-081	2015	SUMMER	1045	883	911	2839	13.0	340	50	60	1600
GLAP-NR-081	2016	SUMMER	1013	967	1006	2986	13.2	340	60	60	1815
GLAP-NR-081	2017	SUMMER	1060	966	890	2916	12.5	340	65	60	1815
GLAP-NR-081	2015	FALL	977	966	1045	2988	11.5	340	60	60	1625
GLAP-NR-081	2016	FALL	1096	1020	948	3064	11.7	340	80	60	1840
GLAP-NR-081	2017	FALL	1034	992	954	2980	11.5	340	80	60	1800
GLAP-NR-082	2015	SPRING	1067	1123	990	3180	9.0	340	100	60	1300
GLAP-NR-082	2016	SPRING	948	1014	1011	2973	12.0	340	65	60	1750
GLAP-NR-082	2017	SPRING	974	1000	1106	3080	12.9	340	60	60	1800
GLAP-NR-082	2015	SUMMER	1092	1112	1101	3305	13.0	340	50	60	1700
GLAP-NR-082	2016	SUMMER	934	955	1003	2892	13.4	340	55	60	1800
GLAP-NR-082	2017	SUMMER	939	962	910	2811	12.8	340	60	60	1800
GLAP-NR-082	2015	FALL	960	1057	897	2914	11.8	340	60	60	1600
GLAP-NR-082	2016	FALL	1100	945	999	3044	11.9	340	80	60	1850
GLAP-NR-082	2017	FALL	901	1114	934	2949	11.5	340	80	60	1800
GLAP-NR-091	2015	SPRING	1046	1016	1016	3078	9.0	340	100	60	1350
GLAP-NR-091	2016	SPRING	1098	939	1019	3056	12.0	340	60	60	1750
GLAP-NR-091	2017	SPRING	1023	1041	1009	3073	13.3	340	60	60	1825
GLAP-NR-091	2015	SUMMER	1064	1066	978	3108	13.0	340	60	60	1800
GLAP-NR-091	2016	SUMMER	1012	1041	1026	3079	13.6	340	60	60	1825
GLAP-NR-091	2017	SUMMER	1094	1064	1032	3190	12.1	340	70	60	1800
GLAP-NR-091	2015	FALL	1009	1006	1000	3015	11.9	340	55	60	1650
GLAP-NR-091	2016	FALL	925	998	943	2866	11.6	340	100	60	1825
GLAP-NR-091	2017	FALL	878	848	864	2590	11.0	340	80	60	1650
GLAP-NR-092	2015	SPRING	861	861	852	2574	10.0	340	100	60	1450
GLAP-NR-092	2016	SPRING	933	993	933	2859	12.0	340	60	60	1750
GLAP-NR-092	2017	SPRING	1039	1015	973	3027	13.2	340	60	60	1825
GLAP-NR-092	2015	SUMMER	966	974	1102	3042	13.0	340	60	60	1800
GLAP-NR-092	2016	SUMMER	1088	1014	954	3056	13.4	340	60	60	1850
GLAP-NR-092	2017	SUMMER	1063	1079	933	3075	12.8	340	70	60	1825
GLAP-NR-092	2015	FALL	1069	1010	1088	3167	11.1	340	75	60	1700
GLAP-NR-092	2016	FALL	935	1049	948	2932	11.5	340	100	60	1850
GLAP-NR-092	2017	FALL	839	839	783	2461	11.5	340	80	60	1700
GLAP-NR-101	2015	SPRING	924	983	869	2776	10.4	340	100	60	1450
GLAP-NR-101	2016	SPRING	1086	1033	1007	3126	11.8	340	75	60	1750
GLAP-NR-101	2017	SPRING	1052	963	1043	3058	12.7	340	60	60	1775
GLAP-NR-101	2015	SUMMER	971	1000	947	2918	12.5	340	60	60	1700
GLAP-NR-101	2016	SUMMER	1026	1001	887	2914	13.5	340	60	60	1800
GLAP-NR-101	2017	SUMMER	942	1000	946	2888	12.3	340	65	60	1800
GLAP-NR-101	2015	FALL	961	1060	1000	3021	11.0	340	75	60	1675
GLAP-NR-101	2016	FALL	1107	1090	1031	3228	11.4	340	100	60	1800
GLAP-NR-101	2017	FALL	849	781	781	2411	11.0	340	80	60	1700
GLAP-NR-102	2015	SPRING	912	861	880	2653	10.3	340	95	60	1450
GLAP-NR-102	2016	SPRING	1001	984	944	2929	11.9	340	75	60	1725
GLAP-NR-102	2017	SPRING	1032	1026	1027	3085	13.0	340	60	60	1850
GLAP-NR-102	2015	SUMMER	747	968	987	2702	13.0	340	60	60	1700
GLAP-NR-102	2016	SUMMER	1035	893	834	2762	13.5	340	60	60	1775
GLAP-NR-102	2017	SUMMER	690	693	713	2096	13.0	340	70	60	1800
GLAP-NR-102	2015	FALL	1000	980	975	2955	10.9	340	70	60	1650
GLAP-NR-102	2016	FALL	1037	957	1045	3039	11.5	340	100	60	1800
GLAP-NR-102	2017	FALL	781	832	832	2445	11.0	340	80	60	1650

Appendix 3. *Number of fishes captured and identified to species in each of three passes during each sampling event at each station in spring, summer, and fall of 2015, 2016, and 2017.*

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2015-GLAP-NR-120615-011A	1	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
2015-GLAP-NR-120615-011A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120615-011A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180815-011A	1	0	0	10	0	0	0	0	0	1	0	23	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180815-011A	2	0	0	7	0	0	0	0	0	0	0	26	0	0	2	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
2015-GLAP-NR-180815-011A	3	0	0	5	0	0	0	0	0	0	0	10	0	0	8	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-071015-011A	1	0	0	4	0	0	0	0	0	5	0	250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
2015-GLAP-NR-071015-011A	2	0	1	1	0	2	0	0	0	0	0	203	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0
2015-GLAP-NR-071015-011A	3	0	1	0	0	0	0	0	0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2016-GLAP-NR-250516-011A	1	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-250516-011A	2	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-250516-011A	3	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-150816-011A	1	20	3	2	0	0	0	0	0	0	0	47	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
2016-GLAP-NR-150816-011A	2	0	1	2	0	0	0	0	1	0	0	23	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
2016-GLAP-NR-150816-011A	3	0	0	1	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-171016-011A	1	0	1	2	14	3	0	0	0	2	0	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2016-GLAP-NR-171016-011A	2	0	1	3	0	0	0	0	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
2016-GLAP-NR-171016-011A	3	0	1	0	0	0	0	0	0	1	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-050717-011A	1	0	1	2	0	5	1	0	0	0	0	27	0	3	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0
2017-GLAP-NR-050717-011A	2	0	0	1	0	1	0	0	1	0	0	9	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
2017-GLAP-NR-050717-011A	3	0	2	1	0	2	1	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
2017-GLAP-NR-280817-011A	1	5	0	2	0	0	0	0	0	2	0	13	0	0	3	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	1	0
2017-GLAP-NR-280817-011A	2	0	0	0	0	1	0	0	0	0	0	13	0	1	0	0	0	0	0	0	0	0	0	1	0	0	3	0	0	1	0	0	0	0
2017-GLAP-NR-280817-011A	3	0	0	0	0	1	1	0	0	1	0	8	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0
2017-GLAP-NR-221117-011A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-221117-011A	2	0	0	0	0	2	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0
2017-GLAP-NR-221117-011A	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120615-012A	1	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120615-012A	2	0	0	2	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2015-GLAP-NR-120615-012A	3	0	0	0	6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180815-012A	1	0	0	15	0	1	0	0	0	0	0	52	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180815-012A	2	0	0	4	0	0	0	0	0	1	0	44	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2015-GLAP-NR-180815-012A	3	0	3	8	0	0	0	0	0	0	0	11	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-071015-012A	1	0	2	0	0	6	0	0	0	2	0	129	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6	0	0	0	0
2015-GLAP-NR-071015-012A	2	0	0	0	0	3	0	0	0	0	0	73	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0
2015-GLAP-NR-071015-012A	3	0	2	1	0	6	0	0	0	0	0	36	0	0	3	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	3	0	0	0	0
2016-GLAP-NR-250516-012A	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-250516-012A	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-250516-012A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-150816-012A	1	0	3	3	0	4	1	0	0	4	0	56	0	3	2	1	0	0	0	0	0	0	0	0	0	0	1	0	0	4	1	0	0	0	0
2016-GLAP-NR-150816-012A	2	4	0	4	0	0	0	0	0	12	0	38	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-150816-012A	3	0	1	3	0	0	0	0	0	1	0	52	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
2016-GLAP-NR-171016-012A	1	0	4	5	0	0	0	0	0	2	0	98	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2016-GLAP-NR-171016-012A	2	0	0	10	0	0	0	0	0	2	0	64	0	0	4	0	0	0	0	0	0	0	0	0	0	0	6	0	0	4	3	0	0	0	0
2016-GLAP-NR-171016-012A	3	0	1	6	0	1	1	0	0	1	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	2	0	0	0	0
2017-GLAP-NR-060717-012A	1	0	0	6	0	3	0	0	1	0	0	9	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-060717-012A	2	0	0	3	0	2	0	0	0	1	0	3	0	4	3	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
2017-GLAP-NR-060717-012A	3	0	0	2	0	1	0	0	0	0	0	2	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
2017-GLAP-NR-280817-012A	1	15	1	0	0	0	2	0	1	0	0	15	0	0	10	1	0	0	0	0	0	0	0	0	0	0	3	0	0	1	2	0	0	0	0
2017-GLAP-NR-280817-012A	2	10	1	0	0	3	2	0	0	0	0	4	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1
2017-GLAP-NR-280817-012A	3	14	0	0	0	2	1	0	0	0	0	18	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	2	0
2017-GLAP-NR-221117-012A	1	0	0	1	0	0	0	0	0	0	0	3	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-221117-012A	2	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
2017-GLAP-NR-221117-012A	3	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-021A	1	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-021A	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-021A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110815-021A	1	0	3	19	0	9	0	0	0	0	0	26	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110815-021A	2	0	3	29	0	10	0	0	0	0	0	36	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110815-021A	3	0	0	9	0	4	0	0	0	1	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-061015-021A	1	42	5	15	0	0	0	0	0	3	0	130	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	7	0	0	0	0

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2015-GLAP-NR-061015-021A	2	2	2	4	0	13	1	0	0	3	0	117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-061015-021A	3	0	3	6	0	10	0	0	0	1	0	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0
2016-GLAP-NR-260516-021A	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-260516-021A	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-260516-021A	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-180816-021A	1	1	2	3	0	0	0	0	0	0	0	13	0	0	0	17	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0
2016-GLAP-NR-180816-021A	2	2	0	7	0	0	0	0	1	0	0	59	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
2016-GLAP-NR-180816-021A	3	2	1	2	0	2	2	0	0	0	0	74	0	0	0	7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
2016-GLAP-NR-241016-021A	1	0	2	6	0	0	3	0	0	2	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	0	0	0	0
2016-GLAP-NR-241016-021A	2	0	2	2	0	0	0	0	0	0	0	37	0	0	1	0	0	0	0	0	0	0	0	1	0	0	11	0	0	1	0	0	0	0	0
2016-GLAP-NR-241016-021A	3	1	2	3	0	0	2	0	0	0	0	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	1	0
2017-GLAP-NR-040717-021A	1	0	0	4	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2017-GLAP-NR-040717-021A	2	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-040717-021A	3	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-300817-021A	1	0	7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	9	0	0	0	1
2017-GLAP-NR-300817-021A	2	0	1	0	0	2	1	0	0	2	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0
2017-GLAP-NR-300817-021A	3	0	5	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	2	0	0	0	0
2017-GLAP-NR-231117-021A	1	0	0	4	0	9	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-231117-021A	2	0	0	1	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2017-GLAP-NR-231117-021A	3	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-022A	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-022A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-022A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110815-022A	1	0	4	18	0	14	0	0	0	2	0	36	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
2015-GLAP-NR-110815-022A	2	0	1	20	0	6	0	0	0	2	0	51	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110815-022A	3	0	0	13	0	0	0	0	0	1	0	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-061015-022A	1	1	0	10	0	0	0	0	0	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2015-GLAP-NR-061015-022A	2	0	1	11	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
2015-GLAP-NR-061015-022A	3	1	0	3	0	2	0	0	0	1	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
2016-GLAP-NR-260516-022A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-260516-022A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-260516-022A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2016-GLAP-NR-180816-022A	1	0	1	14	0	0	1	0	0	2	0	18	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
2016-GLAP-NR-180816-022A	2	0	0	5	0	0	0	0	0	2	0	10	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2016-GLAP-NR-180816-022A	3	0	0	12	0	0	1	0	0	0	0	51	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0	0	0
2016-GLAP-NR-261016-022A	1	0	4	5	0	0	0	0	0	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	1	0
2016-GLAP-NR-261016-022A	2	0	17	11	0	0	2	0	0	1	0	26	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0	0	0	5	0	0	0	0
2016-GLAP-NR-261016-022A	3	0	6	6	0	1	0	0	0	0	0	29	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0
2017-GLAP-NR-040717-022A	1	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-040717-022A	2	0	0	3	0	1	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-040717-022A	3	0	0	9	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-300817-022A	1	1	12	6	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0
2017-GLAP-NR-300817-022A	2	1	1	0	0	4	0	0	0	1	0	2	0	3	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	2	0	0	1	1
2017-GLAP-NR-300817-022A	3	0	2	0	0	8	1	0	0	0	0	5	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	4	0
2017-GLAP-NR-231117-022A	1	0	0	1	0	1	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
2017-GLAP-NR-231117-022A	2	0	0	0	0	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-231117-022A	3	0	0	0	0	0	0	0	0	0	0	21	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-031A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-031A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-110615-031A	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100815-031A	1	0	0	8	0	2	0	0	0	0	0	10	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100815-031A	2	0	0	0	0	2	0	0	1	0	0	20	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2015-GLAP-NR-100815-031A	3	0	4	0	0	5	0	0	0	0	0	72	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-141015-031A	1	0	2	1	0	5	0	0	0	0	0	250	0	0	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0
2015-GLAP-NR-141015-031A	2	3	1	0	0	1	0	0	0	0	0	117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2015-GLAP-NR-141015-031A	3	0	0	0	0	1	0	0	0	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2016-GLAP-NR-270516-031A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-270516-031A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2016-GLAP-NR-270516-031A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2016-GLAP-NR-170816-031A	1	0	1	6	0	0	0	0	0	0	0	147	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	3	0
2016-GLAP-NR-170816-031A	2	0	1	5	0	1	0	0	0	0	0	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
2016-GLAP-NR-170816-031A	3	0	1	2	0	0	0	0	0	0	0	95	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0
2016-GLAP-NR-261016-031A	1	0	1	0	0	2	0	0	0	0	0	87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-261016-031A	2	0	0	2	0	1	0	0	0	0	0	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2016-GLAP-NR-261016-031A	3	0	0	3	0	0	1	0	0	0	0	88	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-060717-031A	1	0	0	1	0	2	0	0	0	0	0	125	0	1	0	1	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0	20	0
2017-GLAP-NR-060717-031A	2	0	0	1	0	1	0	0	0	1	0	75	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	2	0	1	8	0
2017-GLAP-NR-060717-031A	3	0	0	0	0	0	0	0	1	0	0	86	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	11	0
2017-GLAP-NR-290817-031A	1	0	2	4	0	0	0	0	0	0	0	49	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	1
2017-GLAP-NR-290817-031A	2	1	0	0	0	2	0	0	0	1	0	13	0	0	3	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	5	0
2017-GLAP-NR-290817-031A	3	1	0	0	12	1	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0
2017-GLAP-NR-231117-031A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0
2017-GLAP-NR-231117-031A	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2017-GLAP-NR-231117-031A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-032A	1	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-032A	2	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-032A	3	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-100815-032A	1	0	0	0	0	0	0	0	1	0	0	7	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100815-032A	2	0	0	1	0	2	0	0	1	0	0	18	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100815-032A	3	0	1	1	0	2	0	0	0	0	0	16	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
2015-GLAP-NR-141015-032A	1	0	2	0	0	5	0	0	0	1	0	139	0	0	12	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2015-GLAP-NR-141015-032A	2	0	2	0	0	1	0	0	0	5	0	84	0	0	7	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0
2015-GLAP-NR-141015-032A	3	0	2	0	0	0	1	0	0	3	0	81	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
2016-GLAP-NR-270516-032A	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-270516-032A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-270516-032A	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-170816-032A	1	0	0	0	0	0	0	0	0	1	0	15	0	0	15	1	0	0	1	0	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0
2016-GLAP-NR-170816-032A	2	0	4	0	0	0	0	0	0	1	0	15	0	0	14	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2	2	0	0	0	0
2016-GLAP-NR-170816-032A	3	0	0	0	0	0	0	0	0	2	0	43	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0
2016-GLAP-NR-261016-032A	1	0	1	5	0	0	1	0	0	0	0	102	0	0	8	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
2016-GLAP-NR-261016-032A	2	0	2	5	0	2	1	0	0	0	0	85	0	0	6	0	0	1	2	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
2016-GLAP-NR-261016-032A	3	0	0	2	0	0	1	0	0	0	0	58	0	0	2	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
2017-GLAP-NR-070717-032A	1	0	0	0	0	4	1	0	2	3	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0
2017-GLAP-NR-070717-032A	2	0	0	0	0	2	0	0	0	1	0	28	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0
2017-GLAP-NR-070717-032A	3	0	1	0	0	7	0	0	2	2	0	18	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0
2017-GLAP-NR-290817-032A	1	1	0	1	0	0	0	0	0	0	0	1	0	3	6	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	3	0	0	0	0

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2017-GLAP-NR-290817-032A	2	1	0	0	0	0	0	0	0	0	0	1	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-290817-032A	3	2	1	0	0	0	0	0	0	0	0	1	0	1	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-231117-032A	1	0	0	3	0	0	0	0	0	1	0	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0
2017-GLAP-NR-231117-032A	2	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
2017-GLAP-NR-231117-032A	3	0	0	0	0	0	0	0	0	0	0	3	0	0	2	0	0	0	7	0	0	0	0	0	0	0	6	0	0	0	0	3	0	0
2015-GLAP-NR-100615-041A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-041A	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-041A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-250815-041A	1	0	0	0	0	0	0	0	0	0	0	81	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-250815-041A	2	0	0	0	0	0	0	0	1	0	0	122	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-250815-041A	3	0	0	0	0	0	0	0	0	0	0	56	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-051015-041A	1	0	5	0	0	0	0	0	0	0	0	178	0	0	1	0	0	0	0	0	3	1	0	1	2	0	0	0	0	1	0	0	0	0
2015-GLAP-NR-051015-041A	2	1	6	0	0	0	0	0	0	0	0	80	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0
2015-GLAP-NR-051015-041A	3	0	0	0	0	0	0	0	0	0	0	60	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	0	0	1	0	0	0	0
2016-GLAP-NR-070616-041A	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-070616-041A	2	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-070616-041A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080816-041A	1	0	1	0	0	0	0	0	0	0	0	20	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080816-041A	2	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080816-041A	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-021116-041A	1	0	5	0	0	0	0	0	0	0	0	134	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0
2016-GLAP-NR-021116-041A	2	0	10	0	0	0	0	0	0	0	0	59	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	1	0	0	0	0
2016-GLAP-NR-021116-041A	3	0	3	0	0	0	0	0	0	0	0	44	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-041A	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-041A	2	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-041A	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2017-GLAP-NR-151117-041A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-041A	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
2017-GLAP-NR-151117-041A	3	0	0	0	0	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-042A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-042A	2	0	0	0	0	0	0	0	0	0	0	4	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-042A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2015-GLAP-NR-250815-042A	1	0	4	0	0	0	0	0	0	0	0	20	0	0	13	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-250815-042A	2	0	0	0	0	0	0	0	0	0	0	16	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-250815-042A	3	0	1	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-051015-042A	1	0	1	0	0	0	0	0	0	0	0	44	0	0	1	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-051015-042A	2	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-051015-042A	3	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	1	0	0	0
2016-GLAP-NR-070616-042A	1	0	0	0	0	0	0	0	0	0	0	1	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-070616-042A	2	0	0	0	0	0	0	0	0	0	0	2	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-070616-042A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080816-042A	1	0	0	0	0	0	0	0	0	0	0	5	0	0	8	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080816-042A	2	0	0	0	0	0	0	0	0	0	0	6	0	0	5	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080816-042A	3	0	0	0	0	0	0	0	0	0	0	14	0	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-021116-042A	1	0	4	0	0	0	0	0	0	0	0	80	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-021116-042A	2	0	3	0	0	0	1	0	0	0	0	28	0	0	1	4	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
2016-GLAP-NR-021116-042A	3	0	2	0	0	0	0	0	0	0	0	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-042A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-042A	2	2	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-042A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-042A	1	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
2017-GLAP-NR-151117-042A	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-042A	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0
2015-GLAP-NR-100615-051A	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-051A	2	0	0	0	0	0	0	0	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-051A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-210815-051A	1	0	0	0	0	0	0	0	2	0	0	20	0	0	11	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-210815-051A	2	0	0	0	0	2	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
2015-GLAP-NR-210815-051A	3	0	0	0	0	0	0	0	0	0	0	28	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-151015-051A	1	0	0	0	0	0	0	0	0	0	0	39	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-151015-051A	2	0	0	0	0	0	0	0	0	0	0	18	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
2015-GLAP-NR-151015-051A	3	0	0	0	0	2	0	0	0	0	0	13	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-060616-051A	1	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
2016-GLAP-NR-060616-051A	2	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2016-GLAP-NR-060616-051A	3	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0
2016-GLAP-NR-100816-051A	1	0	0	0	0	0	0	0	0	0	0	15	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
2016-GLAP-NR-100816-051A	2	0	3	1	0	0	0	0	0	1	0	13	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
2016-GLAP-NR-100816-051A	3	0	0	0	0	0	0	0	1	1	0	12	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
2016-GLAP-NR-251016-051A	1	0	0	0	0	0	0	0	0	0	0	13	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0
2016-GLAP-NR-251016-051A	2	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-251016-051A	3	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
2017-GLAP-NR-010817-051A	1	0	1	2	0	0	0	0	0	0	0	9	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
2017-GLAP-NR-010817-051A	2	0	0	0	0	3	0	0	0	0	0	15	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	1	0
2017-GLAP-NR-010817-051A	3	2	1	0	0	1	0	0	0	0	0	12	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0
2017-GLAP-NR-061117-051A	1	0	0	0	0	0	0	0	0	0	0	2	0	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
2017-GLAP-NR-061117-051A	2	0	0	0	0	0	0	0	0	0	0	3	0	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0
2017-GLAP-NR-061117-051A	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-052A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-052A	2	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-052A	3	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-210815-052A	1	0	1	4	0	0	0	0	0	0	0	52	0	0	10	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-210815-052A	2	0	0	1	0	1	0	0	0	0	0	60	0	0	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-210815-052A	3	0	0	2	0	0	0	0	1	0	0	32	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-151015-052A	1	0	0	2	0	0	0	0	0	0	0	36	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-151015-052A	2	0	0	0	0	0	0	0	0	0	0	40	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-151015-052A	3	0	0	0	0	0	0	0	0	0	0	40	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-060616-052A	1	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-060616-052A	2	1	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0	0
2016-GLAP-NR-060616-052A	3	0	0	0	0	0	0	0	0	0	0	11	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-100816-052A	1	0	0	1	0	0	0	0	0	0	0	42	0	0	12	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	2	0	0
2016-GLAP-NR-100816-052A	2	0	0	1	0	0	0	0	1	1	0	33	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100816-052A	3	2	0	0	0	0	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	6
2016-GLAP-NR-251016-052A	1	0	1	3	0	0	0	0	0	5	0	35	0	0	7	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
2016-GLAP-NR-251016-052A	2	0	0	1	0	1	0	0	0	1	0	16	0	0	1	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2016-GLAP-NR-251016-052A	3	0	0	0	0	0	0	0	0	1	0	13	0	0	1	2	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0
2017-GLAP-NR-070717-052A	1	0	0	2	0	0	0	0	0	0	0	12	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2017-GLAP-NR-070717-052A	2	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-070717-052A	3	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-010817-052A	1	1	0	1	0	0	0	0	1	0	0	14	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2017-GLAP-NR-010817-052A	2	2	0	0	0	2	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	3	0	0	8	0
2017-GLAP-NR-010817-052A	3	0	0	0	0	1	0	0	0	0	0	8	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	3	0	0	0	4	0
2017-GLAP-NR-061117-052A	1	0	0	0	0	0	0	0	0	0	0	8	0	0	2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2017-GLAP-NR-061117-052A	2	0	0	0	0	0	0	0	0	0	0	3	0	0	0	22	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-061117-052A	3	0	0	0	0	0	0	0	0	0	0	4	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2015-GLAP-NR-090615-061A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-090615-061A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-090615-061A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-240815-061A	1	0	0	0	0	0	0	0	0	0	0	82	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-240815-061A	2	0	0	0	0	0	0	0	0	1	0	76	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-240815-061A	3	0	0	0	0	0	0	0	0	0	0	92	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2015-GLAP-NR-081015-061A	1	0	2	0	0	0	0	0	0	0	0	114	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0
2015-GLAP-NR-081015-061A	2	0	2	0	0	2	0	0	0	0	0	56	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-081015-061A	3	0	0	0	0	1	0	0	0	0	0	19	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-240516-061A	1	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-240516-061A	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-240516-061A	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090816-061A	1	0	0	0	0	0	0	0	0	0	0	69	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090816-061A	2	0	0	0	0	0	0	0	0	1	0	86	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090816-061A	3	0	0	0	0	0	0	0	0	1	0	64	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-011116-061A	1	0	1	1	0	0	0	0	0	1	0	222	0	0	8	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-011116-061A	2	0	0	0	0	0	0	0	0	0	0	154	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-011116-061A	3	0	1	0	0	0	0	0	0	0	0	143	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-061A	1	2	0	0	0	0	0	0	0	0	0	12	0	0	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-061A	2	1	0	0	0	0	0	0	0	0	0	3	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-061A	3	0	0	0	0	1	0	0	0	0	0	25	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-061A	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0
2017-GLAP-NR-151117-061A	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-061A	3	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2015-GLAP-NR-090615-062A	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-090615-062A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-090615-062A	3	0	0	0	0	0	0	0	0	0	0	11	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-240815-062A	1	0	0	0	0	0	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
2015-GLAP-NR-240815-062A	2	0	0	0	0	0	0	0	0	1	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-240815-062A	3	0	0	0	0	0	0	0	0	1	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-081015-062A	1	0	0	0	0	0	0	0	0	1	0	25	0	0	2	0	0	0	1	0	0	0	0	3	0	0	0	0	0	0	1	0	0	0
2015-GLAP-NR-081015-062A	2	0	0	0	0	0	0	0	0	1	0	14	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2015-GLAP-NR-081015-062A	3	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-240516-062A	1	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-240516-062A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-240516-062A	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090816-062A	1	0	3	0	0	0	0	0	0	0	0	51	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090816-062A	2	0	1	0	0	0	1	0	0	0	0	74	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090816-062A	3	0	0	0	0	1	0	0	0	1	0	28	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-011116-062A	1	0	1	0	0	0	1	0	0	2	0	86	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-011116-062A	2	0	0	1	0	0	0	0	0	1	0	119	0	0	3	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-011116-062A	3	0	0	2	0	0	0	0	0	0	0	64	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2017-GLAP-NR-010817-062A	1	1	2	0	0	0	0	0	0	2	0	13	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-010817-062A	2	1	1	0	0	0	0	0	0	1	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-010817-062A	3	0	2	1	0	0	0	0	0	0	0	61	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-062A	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-062A	2	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-062A	3	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2015-GLAP-NR-170615-071A	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-170615-071A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
2015-GLAP-NR-170615-071A	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-200815-071A	1	0	0	1	0	0	4	1	0	0	0	3	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-200815-071A	2	0	0	1	0	0	0	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-200815-071A	3	0	0	1	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-131015-071A	1	0	0	6	0	0	3	0	0	0	0	23	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0
2015-GLAP-NR-131015-071A	2	0	0	0	0	2	0	1	0	0	0	31	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2015-GLAP-NR-131015-071A	3	0	0	0	0	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2016-GLAP-NR-080616-071A	1	0	0	1	0	0	0	0	0	0	1	0	0	0	1	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080616-071A	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080616-071A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-020816-071A	1	0	0	0	0	0	1	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2016-GLAP-NR-020816-071A	2	0	0	1	0	1	0	1	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-020816-071A	3	0	0	0	0	0	2	0	0	0	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
2016-GLAP-NR-181016-071A	1	0	0	2	0	0	1	0	0	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	1	0	0	1	0
2016-GLAP-NR-181016-071A	2	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	15	0	0	0	0	0	0	0	0
2016-GLAP-NR-181016-071A	3	0	0	0	0	4	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	1	0	0	7	0	0	0	1	0	0	0	0
2017-GLAP-NR-260617-071A	1	0	0	1	0	0	1	1	0	0	0	2	0	0	0	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2017-GLAP-NR-260617-071A	2	0	0	0	0	0	0	0	0	0	0	5	0	0	1	12	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
2017-GLAP-NR-260617-071A	3	0	1	1	0	0	0	0	0	0	0	1	0	1	0	9	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
2017-GLAP-NR-040817-071A	1	0	0	3	0	0	4	0	0	0	0	1	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-040817-071A	2	0	0	0	0	0	3	1	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2017-GLAP-NR-040817-071A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-081117-071A	1	0	0	0	0	1	0	0	0	0	0	2	0	0	0	4	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
2017-GLAP-NR-081117-071A	2	0	0	0	0	0	0	0	0	0	0	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
2017-GLAP-NR-081117-071A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
2015-GLAP-NR-170615-072A	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0
2015-GLAP-NR-170615-072A	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0
2015-GLAP-NR-170615-072A	3	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
2015-GLAP-NR-200815-072A	1	0	0	0	0	0	1	0	0	0	0	2	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
2015-GLAP-NR-200815-072A	2	0	1	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
2015-GLAP-NR-200815-072A	3	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-131015-072A	1	0	0	0	0	1	0	1	0	0	0	10	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-131015-072A	2	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-131015-072A	3	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080616-072A	1	0	1	0	0	0	0	0	0	0	2	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0
2016-GLAP-NR-080616-072A	2	0	0	0	0	0	0	0	1	0	0	1	0	0	2	28	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
2016-GLAP-NR-080616-072A	3	0	0	0	0	0	0	0	1	0	0	1	0	0	1	29	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
2016-GLAP-NR-020816-072A	1	0	0	0	0	0	1	0	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	1

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2016-GLAP-NR-020816-072A	2	0	0	0	0	0	0	1	0	0	0	3	0	0	2	17	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0
2016-GLAP-NR-020816-072A	3	0	0	0	0	0	0	0	1	0	0	2	0	0	1	2	0	0	0	1	0	0	0	0	0	0	1	4	0	0	0	0	0	0
2016-GLAP-NR-181016-072A	1	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	0	0
2016-GLAP-NR-181016-072A	2	0	0	0	0	0	0	0	1	0	0	2	0	0	1	0	0	0	0	0	0	0	0	1	0	0	8	0	0	0	0	0	0	0
2016-GLAP-NR-181016-072A	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	1	0	0	0
2017-GLAP-NR-270617-072A	1	0	0	0	0	0	0	0	0	0	0	1	0	0	5	3	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0
2017-GLAP-NR-270617-072A	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	1	7	0	0	0	0	0	0
2017-GLAP-NR-270617-072A	3	0	0	0	0	0	0	0	1	0	0	0	0	0	3	6	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
2017-GLAP-NR-040817-072A	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
2017-GLAP-NR-040817-072A	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-040817-072A	3	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-081117-072A	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0
2017-GLAP-NR-081117-072A	2	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
2017-GLAP-NR-081117-072A	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
2015-GLAP-NR-190615-081A	1	0	0	19	0	0	3	0	0	1	0	11	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2015-GLAP-NR-190615-081A	2	0	0	0	0	2	0	0	0	0	0	10	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
2015-GLAP-NR-190615-081A	3	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2015-GLAP-NR-120815-081A	1	0	0	4	0	0	0	0	0	1	0	3	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120815-081A	2	0	0	2	0	0	1	0	0	0	0	14	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120815-081A	3	0	0	1	0	0	0	0	0	0	0	3	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-161015-081A	1	0	0	2	0	0	0	0	0	1	0	119	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-161015-081A	2	1	0	0	12	0	0	0	0	0	0	60	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-161015-081A	3	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-081A	1	42	0	1	0	8	2	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-081A	2	15	0	0	0	4	1	0	0	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-081A	3	3	0	0	0	3	1	0	0	0	0	17	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-030816-081A	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-030816-081A	2	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-030816-081A	3	0	0	0	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-281016-081A	1	0	0	1	0	2	1	0	0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-281016-081A	2	2	2	6	0	0	0	0	0	0	0	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
2016-GLAP-NR-281016-081A	3	0	1	3	0	1	0	0	0	0	0	47	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2017-GLAP-NR-270617-081A	1	0	0	0	0	0	1	0	0	0	0	6	0	0	1	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-270617-081A	2	0	0	2	0	0	0	0	0	0	0	7	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-270617-081A	3	0	0	0	0	0	0	0	0	0	0	9	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-030817-081A	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-030817-081A	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-030817-081A	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-091117-081A	1	0	0	0	0	1	0	0	0	1	0	6	0	0	0	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-091117-081A	2	0	0	0	0	0	0	0	0	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
2017-GLAP-NR-091117-081A	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	11	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
2015-GLAP-NR-190615-082A	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190615-082A	2	0	0	0	0	2	2	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2015-GLAP-NR-190615-082A	3	0	0	0	0	1	2	0	0	1	0	7	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2015-GLAP-NR-120815-082A	1	0	0	2	0	0	3	2	0	0	0	11	0	0	12	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120815-082A	2	0	0	2	0	0	1	2	0	1	0	10	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120815-082A	3	0	1	2	0	0	2	0	0	0	0	12	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-161015-082A	1	0	0	0	0	1	0	0	1	0	0	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2015-GLAP-NR-161015-082A	2	0	2	0	0	0	0	0	0	0	0	57	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
2015-GLAP-NR-161015-082A	3	0	0	0	0	2	1	0	0	1	0	21	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2016-GLAP-NR-090616-082A	1	0	0	2	0	0	0	0	0	0	0	39	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-082A	2	0	0	0	0	2	0	0	0	0	0	20	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-082A	3	0	0	0	0	2	0	0	0	0	0	13	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-030816-082A	1	0	1	0	0	1	2	1	0	0	0	6	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-030816-082A	2	2	0	0	0	0	2	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2016-GLAP-NR-030816-082A	3	0	0	1	0	0	1	1	0	0	0	6	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-281016-082A	1	3	1	2	0	3	0	1	0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
2016-GLAP-NR-281016-082A	2	9	0	5	0	0	0	0	0	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	3	0
2016-GLAP-NR-281016-082A	3	0	0	5	0	0	0	0	0	0	0	27	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-270617-082A	1	1	0	1	0	0	0	2	0	0	0	6	0	0	1	103	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-270617-082A	2	0	0	0	0	0	0	1	0	0	0	5	0	0	2	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-270617-082A	3	0	0	1	0	0	0	0	0	0	0	8	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-030817-082A	1	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-030817-082A	2	10	0	0	0	0	2	0	0	1	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2017-GLAP-NR-030817-082A	3	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-091117-082A	1	0	0	0	0	1	0	0	0	0	0	14	0	0	0	4	0	1	0	0	0	0	0	0	0	0	7	0	0	1	0	0	0	0
2017-GLAP-NR-091117-082A	2	0	0	0	0	1	0	0	0	0	0	9	0	0	0	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
2017-GLAP-NR-091117-082A	3	0	0	0	0	1	0	0	0	0	0	12	0	0	0	5	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0
2015-GLAP-NR-190615-091A	1	0	0	1	0	0	0	0	0	0	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2015-GLAP-NR-190615-091A	2	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2015-GLAP-NR-190615-091A	3	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190815-091A	1	0	0	2	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190815-091A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190815-091A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-221015-091A	1	0	0	0	0	3	0	3	0	0	0	32	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2015-GLAP-NR-221015-091A	2	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-221015-091A	3	1	0	0	0	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-091A	1	0	0	0	0	3	0	1	0	0	0	6	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-091A	2	0	1	0	0	1	0	2	0	0	0	10	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-091A	3	0	1	0	0	0	0	0	0	0	0	8	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-110816-091A	1	0	0	1	0	0	3	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-110816-091A	2	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-110816-091A	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
2016-GLAP-NR-041116-091A	1	0	1	0	0	2	0	0	0	0	0	29	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
2016-GLAP-NR-041116-091A	2	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2016-GLAP-NR-041116-091A	3	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-290617-091A	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-290617-091A	2	0	0	0	0	0	1	1	1	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
2017-GLAP-NR-290617-091A	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-030817-091A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-030817-091A	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
2017-GLAP-NR-030817-091A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-091A	1	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
2017-GLAP-NR-161117-091A	2	0	0	1	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0
2017-GLAP-NR-161117-091A	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0
2015-GLAP-NR-180615-092A	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2015-GLAP-NR-180615-092A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2015-GLAP-NR-180615-092A	3	7	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190815-092A	1	0	0	0	0	0	0	0	0	0	0	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190815-092A	2	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190815-092A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-221015-092A	1	0	0	0	0	0	0	0	0	0	0	24	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-221015-092A	2	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-221015-092A	3	0	0	0	0	0	0	0	0	0	0	17	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100616-092A	1	0	2	0	0	0	0	0	0	0	0	60	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100616-092A	2	0	1	0	0	0	0	0	0	0	0	45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100616-092A	3	0	1	0	0	0	0	0	0	0	0	11	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
2016-GLAP-NR-110816-092A	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-110816-092A	2	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-110816-092A	3	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-041116-092A	1	0	0	0	0	2	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-041116-092A	2	0	0	0	0	2	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-041116-092A	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-290617-092A	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-290617-092A	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0
2017-GLAP-NR-290617-092A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-020817-092A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-020817-092A	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-020817-092A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-092A	1	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-092A	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0
2017-GLAP-NR-161117-092A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180615-101A	1	0	0	0	0	0	0	0	0	0	0	5	0	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180615-101A	2	16	0	0	0	0	0	0	1	0	0	2	0	0	4	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180615-101A	3	2	0	0	0	0	0	0	1	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-130815-101A	1	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-130815-101A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-130815-101A	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2015-GLAP-NR-231015-101A	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-231015-101A	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-231015-101A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2016-GLAP-NR-100616-101A	1	0	0	0	0	0	0	0	2	0	0	17	0	0	0	21	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100616-101A	2	0	0	0	0	0	0	0	0	0	0	13	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100616-101A	3	0	0	0	0	0	0	0	0	0	0	9	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-040816-101A	1	0	1	0	0	0	1	0	0	0	0	7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-040816-101A	2	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2016-GLAP-NR-040816-101A	3	0	1	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-311016-101A	1	0	2	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-311016-101A	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2016-GLAP-NR-311016-101A	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
2017-GLAP-NR-300617-101A	1	0	0	0	0	0	0	0	1	0	0	5	0	0	2	370	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-300617-101A	2	0	0	1	0	0	0	0	1	0	0	3	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-300617-101A	3	0	0	0	0	0	0	0	1	0	0	3	0	0	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-020817-101A	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-020817-101A	2	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-020817-101A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-101A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-101A	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-101A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180615-102A	1	0	0	0	0	0	0	0	2	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180615-102A	2	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180615-102A	3	1	0	1	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-130815-102A	1	0	0	0	0	0	0	0	0	0	0	6	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-130815-102A	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-130815-102A	3	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-231015-102A	1	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2015-GLAP-NR-231015-102A	2	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
2015-GLAP-NR-231015-102A	3	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100616-102A	1	0	0	0	0	0	0	0	0	0	0	27	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100616-102A	2	0	0	0	0	0	0	0	0	0	0	14	0	0	0	4	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Alosa pseudoharengus*	*Ambloplites rupestris*	*Ameiurus melas*	*Ameiurus natalis*	*Ameiurus nebulosus*	*Amia calva*	*Anguilla rostrata*	*Aplodinotus grunniens*	*Carassius auratus*	*Carpiodes cyprinus*	*Catostomus commersonii*	*Cottus bairdii*	*Cyprinella spiloptera*	*Cyprinus carpio*	*Dorosoma cepedianum*	*Esox americanus vermiculatus*	*Esox lucius*	*Esox masquinongy*	*Esox masquinongy X Esox lucius*	*Etheostoma caeruleum*	*Etheostoma flabellare*	*Etheostoma nigrum*	*Fundulus diaphanus*	*Hypentelium nigricans*	*Ictalurus punctatus*	*Labidesthes sicculus*	*Lepisosteus osseus*	*Lepomis cyanellus*	*Lepomis gibbosus*	*Lepomis macrochirus*	*Lepomis* sp.	*Lethenteron appendix*	*Luxilus chrysocephalus*	*Luxilus cornutus*
2016-GLAP-NR-100616-102A	3	0	0	0	0	0	0	0	0	0	0	9	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-040816-102A	1	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-040816-102A	2	0	1	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2016-GLAP-NR-040816-102A	3	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR311016-102A	1	0	1	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
2016-GLAP-NR311016-102A	2	0	0	1	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
2016-GLAP-NR311016-102A	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0
2017-GLAP-NR-300617-102A	1	0	0	0	0	0	0	0	1	0	0	8	0	0	0	30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-300617-102A	2	0	0	0	0	0	0	0	0	0	0	3	0	0	6	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-300617-102A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	31	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
2017-GLAP-NR-080817-102A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-080817-102A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-080817-102A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-102A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-102A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-102A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix 3. *(continued). Number of fishes captured and identified to species in each of three passes during each sampling event at each station in spring, summer, and fall of 2015, 2016, and 2017.*

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2015-GLAP-NR-120615-011A	1	1	0	0	0	0	0	1	0	4	0	0	0	24	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120615-011A	2	5	0	0	0	0	0	0	0	6	0	0	0	11	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120615-011A	3	2	0	0	0	0	0	1	0	0	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180815-011A	1	0	0	0	0	0	1	0	0	0	0	1	0	0	3	0	0	0	0	32	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180815-011A	2	0	1	0	0	0	1	0	0	0	0	1	0	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180815-011A	3	0	1	0	0	0	0	0	0	1	0	0	0	18	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-071015-011A	1	2	4	4	0	0	0	2	0	4	0	13	0	39	34	0	0	0	0	29	18	0	0	0	30	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-071015-011A	2	0	3	1	0	0	0	0	0	3	0	10	0	75	10	0	0	0	0	0	19	0	0	0	23	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-071015-011A	3	1	0	6	0	0	0	0	0	3	0	4	0	66	4	0	0	0	0	0	8	0	0	0	7	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-250516-011A	1	0	0	0	0	0	0	0	0	12	1	0	0	229	1	0	0	0	0	28	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-250516-011A	2	1	0	0	0	0	0	0	0	6	1	0	0	250	3	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-250516-011A	3	0	0	0	1	0	0	0	0	12	3	0	0	123	0	0	0	0	0	1	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-150816-011A	1	1	8	0	0	0	0	2	0	0	0	5	0	4	19	0	0	0	0	0	20	1	0	0	4	0	0	0	0	0	0	0	2	0	0
2016-GLAP-NR-150816-011A	2	1	1	0	0	0	0	6	0	0	0	1	3	1	5	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	2	0	0
2016-GLAP-NR-150816-011A	3	0	2	0	1	0	0	0	0	0	0	1	0	16	3	0	0	0	0	0	11	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-171016-011A	1	1	0	0	0	0	0	0	0	0	1	3	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-171016-011A	2	1	0	0	0	0	0	0	0	2	0	4	0	3	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-171016-011A	3	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2017-GLAP-NR-050717-011A	1	10	2	0	0	0	0	0	0	1	0	0	0	19	5	0	0	0	0	0	36	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2017-GLAP-NR-050717-011A	2	2	0	0	0	0	0	0	0	1	0	2	0	6	2	0	0	0	0	0	22	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-050717-011A	3	1	0	0	0	0	0	1	0	0	0	2	0	12	5	0	0	0	0	1	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-280817-011A	1	0	8	0	0	0	0	0	0	1	0	2	0	0	15	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
2017-GLAP-NR-280817-011A	2	0	5	0	0	0	0	0	0	2	0	3	1	0	8	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2017-GLAP-NR-280817-011A	3	1	3	0	0	0	0	0	0	2	0	1	1	0	7	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-221117-011A	1	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-221117-011A	2	0	1	1	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-221117-011A	3	0	0	0	0	0	0	3	0	0	0	0	0	8	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120615-012A	1	3	0	0	2	0	0	0	0	15	0	0	0	3	0	0	0	0	0	3	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120615-012A	2	0	0	0	0	0	0	0	0	28	0	0	0	116	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2015-GLAP-NR-120615-012A	3	4	0	0	0	0	0	0	0	18	0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180815-012A	1	0	2	0	0	0	0	0	0	0	0	1	0	8	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180815-012A	2	0	3	0	0	0	0	0	0	0	0	1	0	2	2	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180815-012A	3	1	0	0	0	0	0	0	0	2	0	0	0	32	3	0	0	0	0	0	7	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-071015-012A	1	0	18	1	0	0	0	0	0	4	1	2	0	250	27	0	0	0	0	0	9	55	0	0	0	6	0	0	0	0	0	0	0	2	0	0
2015-GLAP-NR-071015-012A	2	0	13	4	0	0	0	0	0	6	0	2	0	250	4	0	0	1	0	1	37	0	0	0	2	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-071015-012A	3	1	6	0	0	0	0	0	0	2	0	3	0	83	1	0	0	1	0	4	20	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-250516-012A	1	0	0	0	0	0	0	0	0	4	0	0	0	169	3	0	0	0	0	1	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-250516-012A	2	0	0	0	0	0	0	0	0	4	0	0	0	183	0	0	0	0	0	0	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-250516-012A	3	0	0	0	0	0	0	0	0	7	0	0	0	116	1	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-150816-012A	1	0	7	0	0	0	0	0	0	2	0	4	0	2	6	0	0	0	0	0	38	0	0	0	3	0	0	0	0	0	0	0	1	3	1	0
2016-GLAP-NR-150816-012A	2	4	11	0	1	0	0	0	0	4	1	4	0	2	11	0	0	0	0	0	52	0	0	0	3	0	0	0	0	0	0	0	2	1	0	0
2016-GLAP-NR-150816-012A	3	4	13	0	0	0	0	0	0	4	0	2	0	2	2	0	0	0	0	0	60	0	0	0	2	0	0	2	0	0	0	0	0	1	0	0
2016-GLAP-NR-171016-012A	1	0	13	2	0	0	0	1	0	10	0	1	0	14	2	0	0	0	0	0	22	0	0	0	1	0	0	1	0	0	0	0	8	1	0	0
2016-GLAP-NR-171016-012A	2	0	4	1	0	0	0	3	0	8	1	2	0	43	2	0	0	0	0	0	32	0	0	0	3	0	0	4	0	0	0	0	6	4	0	0
2016-GLAP-NR-171016-012A	3	1	4	2	0	0	0	3	0	5	0	4	0	36	3	0	0	0	0	0	30	1	0	0	3	0	0	0	0	0	0	0	0	5	0	0
2017-GLAP-NR-060717-012A	1	0	0	0	1	0	0	0	0	3	0	1	0	1	1	0	0	0	0	0	20	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-060717-012A	2	0	5	0	0	0	0	0	0	1	0	0	0	1	2	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-060717-012A	3	1	0	0	0	0	0	0	0	1	0	0	0	8	0	0	0	0	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-280817-012A	1	1	25	0	0	0	0	0	0	3	0	2	1	6	5	0	0	0	0	0	43	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2017-GLAP-NR-280817-012A	2	1	12	2	0	0	0	2	0	3	0	4	0	35	9	0	0	0	0	0	45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2017-GLAP-NR-280817-012A	3	0	8	0	0	0	0	1	0	1	0	3	0	2	25	0	0	0	0	0	48	0	0	0	4	0	0	1	0	0	0	0	1	1	0	0
2017-GLAP-NR-221117-012A	1	0	0	0	0	0	0	0	0	0	0	0	0	7	3	0	0	1	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-221117-012A	2	0	1	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-221117-012A	3	0	0	0	0	0	0	0	0	0	0	0	0	106	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-021A	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-021A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-021A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110815-021A	1	1	1	0	0	0	0	0	0	4	0	0	0	8	10	0	0	0	0	0	12	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110815-021A	2	0	0	0	0	0	0	1	0	3	0	2	0	1	10	0	0	0	0	0	13	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110815-021A	3	0	2	0	0	0	0	0	0	4	0	1	0	0	2	0	0	0	0	0	16	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2015-GLAP-NR-061015-021A	1	0	13	4	0	0	0	1	0	28	0	3	0	182	7	0	0	0	0	1	69	0	0	0	4	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-061015-021A	2	1	7	0	0	0	0	0	0	3	0	1	0	164	1	0	0	0	0	0	52	0	0	0	3	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-061015-021A	3	2	2	0	0	0	0	0	0	9	0	1	0	100	3	0	0	0	0	0	35	0	0	0	4	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-260516-021A	1	0	0	0	0	0	0	0	0	0	2	0	0	16	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-260516-021A	2	0	0	0	0	0	0	0	0	0	3	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-260516-021A	3	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-180816-021A	1	0	5	0	1	0	0	0	0	2	0	0	0	2	1	0	0	0	0	0	38	0	0	0	17	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-180816-021A	2	1	14	1	2	0	0	0	0	8	0	0	1	3	7	0	0	0	0	0	34	0	0	0	23	0	0	1	0	0	0	3	0	0	0
2016-GLAP-NR-180816-021A	3	1	12	0	0	0	0	0	0	1	0	0	0	2	4	0	0	0	0	0	39	0	0	0	16	0	0	0	0	0	0	1	0	0	0
2016-GLAP-NR-241016-021A	1	0	12	4	0	0	0	1	0	8	0	0	0	23	2	0	0	0	0	1	17	0	0	0	20	0	0	0	0	0	0	0	2	0	0
2016-GLAP-NR-241016-021A	2	0	4	1	0	0	0	0	0	3	0	2	0	9	3	0	0	0	0	0	9	0	0	0	14	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-241016-021A	3	0	4	8	1	0	0	0	0	3	0	2	0	61	1	0	0	0	0	3	14	0	0	0	14	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-040717-021A	1	0	0	0	0	0	0	0	0	2	0	0	0	0	3	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-040717-021A	2	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-040717-021A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-300817-021A	1	0	3	1	0	0	0	2	0	3	0	1	0	17	6	0	0	0	0	0	57	0	0	0	15	0	0	0	0	0	0	1	3	0	0
2017-GLAP-NR-300817-021A	2	0	6	3	0	0	0	0	0	1	0	2	1	57	18	0	0	0	0	0	45	0	0	0	8	0	0	0	0	0	0	1	0	0	0
2017-GLAP-NR-300817-021A	3	1	3	0	0	0	0	1	0	0	0	0	0	136	7	0	0	0	0	0	44	0	0	0	6	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-231117-021A	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-231117-021A	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-231117-021A	3	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-022A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-022A	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-022A	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110815-022A	1	1	0	0	0	0	0	2	0	2	0	9	3	28	1	0	0	0	0	0	9	0	0	0	8	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110815-022A	2	0	0	0	0	1	1	0	0	1	0	6	0	7	3	0	0	0	0	0	7	0	0	0	4	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110815-022A	3	0	0	0	0	0	1	0	0	1	0	4	0	21	3	0	0	0	0	0	9	0	0	0	7	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-061015-022A	1	0	3	0	0	0	0	3	0	3	0	4	0	86	1	0	0	0	0	24	6	0	0	0	8	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-061015-022A	2	0	0	0	0	0	0	1	0	1	0	0	0	24	1	0	0	0	0	9	6	0	0	0	8	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-061015-022A	3	0	1	0	0	0	0	2	0	1	0	0	0	181	0	0	0	0	0	13	8	0	0	0	11	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-260516-022A	1	0	0	0	0	0	0	0	0	0	1	0	0	10	4	0	0	0	0	7	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2016-GLAP-NR-260516-022A	2	0	0	1	0	0	0	0	0	1	0	0	0	28	9	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-260516-022A	3	1	0	0	0	0	0	0	0	0	0	0	0	23	8	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-180816-022A	1	3	6	0	0	0	0	0	0	2	0	4	0	1	18	0	0	0	0	0	42	0	0	0	12	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-180816-022A	2	1	4	1	0	0	0	0	0	0	0	2	0	1	2	0	0	0	0	0	20	0	0	0	12	0	0	1	0	0	0	0	1	0	0
2016-GLAP-NR-180816-022A	3	0	8	0	0	0	0	0	0	3	0	1	0	1	1	0	0	0	0	0	18	0	0	0	26	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-261016-022A	1	2	3	0	0	0	0	0	0	2	0	5	0	8	3	0	0	1	0	0	3	0	0	0	8	0	0	1	0	0	0	0	0	0	0
2016-GLAP-NR-261016-022A	2	0	5	1	0	0	0	1	0	1	1	10	0	17	0	0	0	0	0	0	17	0	0	0	39	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-261016-022A	3	0	1	1	0	0	0	1	0	5	0	3	0	19	0	0	0	0	0	0	4	0	0	0	25	0	0	0	0	0	0	0	1	1	0	0
2017-GLAP-NR-040717-022A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2017-GLAP-NR-040717-022A	2	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-040717-022A	3	1	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-300817-022A	1	0	6	6	0	0	0	1	0	2	0	1	0	101	8	0	0	0	0	0	35	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-300817-022A	2	0	3	0	0	0	0	1	0	2	0	0	0	109	9	0	0	0	0	0	24	0	0	0	11	0	0	0	0	0	0	0	1	0	0	0
2017-GLAP-NR-300817-022A	3	0	2	0	0	0	0	6	0	3	0	1	0	114	23	0	0	0	0	0	26	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-231117-022A	1	0	1	1	0	0	0	1	0	6	0	2	0	2	11	0	0	0	0	0	34	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-231117-022A	2	1	1	0	0	0	0	0	0	9	0	0	0	3	1	0	0	0	0	0	10	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-231117-022A	3	0	0	0	0	0	0	0	0	8	0	5	0	2	9	0	0	0	0	1	22	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-031A	1	3	0	0	0	0	0	1	0	6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-031A	2	1	0	0	0	0	0	1	0	10	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-031A	3	0	0	0	0	0	0	1	0	9	0	0	0	0	0	0	0	0	0	6	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100815-031A	1	1	0	0	0	0	0	0	0	1	1	0	0	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100815-031A	2	0	0	0	0	0	0	0	0	5	0	1	0	13	4	0	0	0	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-100815-031A	3	1	0	0	2	0	0	0	1	6	0	5	0	7	20	0	0	0	0	0	5	10	0	0	10	0	0	0	0	0	0	0	1	0	0	0
2015-GLAP-NR-141015-031A	1	4	0	2	0	0	0	2	0	47	3	16	0	116	13	0	0	0	0	23	45	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-141015-031A	2	1	1	2	0	0	0	5	0	17	1	10	1	53	3	0	0	0	0	6	29	0	0	0	46	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-141015-031A	3	2	0	0	0	0	0	1	0	4	2	2	1	67	4	0	0	0	0	33	23	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-270516-031A	1	0	0	0	0	0	0	1	0	27	0	0	0	4	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-270516-031A	2	0	0	1	0	0	0	0	0	12	0	0	0	17	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-270516-031A	3	1	0	0	0	0	0	0	0	4	0	0	0	5	1	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-170816-031A	1	0	11	0	0	0	0	9	0	14	0	11	11	1	25	0	0	0	0	0	19	1	0	0	58	0	0	0	0	0	0	0	3	0	0	0
2016-GLAP-NR-170816-031A	2	0	16	0	0	0	0	6	0	10	0	4	4	0	10	0	0	0	0	0	5	2	0	0	13	0	0	0	0	0	0	0	5	0	0	0

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2016-GLAP-NR-170816-031A	3	1	9	0	0	0	0	4	0	11	0	4	3	0	14	0	0	0	0	0	17	2	0	0	15	0	0	0	0	0	0	0	2	0	0	0
2016-GLAP-NR-261016-031A	1	7	3	0	0	0	0	0	0	33	0	14	0	0	0	0	0	0	0	1	22	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-261016-031A	2	1	0	1	0	0	0	0	0	11	1	9	0	1	6	0	0	0	0	1	15	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-261016-031A	3	2	0	0	0	0	0	0	0	22	2	13	0	0	1	0	0	0	0	0	15	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-060717-031A	1	2	2	0	0	0	0	3	0	19	1	10	1	0	30	0	0	0	0	0	26	3	0	0	71	0	0	1	0	0	0	0	0	0	0	0
2017-GLAP-NR-060717-031A	2	3	10	0	0	0	0	2	0	8	0	5	5	0	4	0	0	0	0	0	15	8	0	0	86	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-060717-031A	3	4	4	2	0	0	0	1	0	11	1	8	0	2	68	0	0	0	0	0	22	5	0	0	63	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-290817-031A	1	0	8	0	0	0	0	0	0	5	0	11	3	59	60	0	0	0	0	0	12	1	0	0	32	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-290817-031A	2	1	2	0	0	0	0	0	0	0	0	13	1	151	46	0	0	0	0	0	7	0	0	0	13	0	0	0	0	0	0	0	0	1	0	0
2017-GLAP-NR-290817-031A	3	0	2	0	0	0	0	0	0	2	0	6	0	64	31	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	2	0	0
2017-GLAP-NR-231117-031A	1	0	0	0	0	0	0	1	0	0	0	0	0	38	0	0	0	1	0	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-231117-031A	2	1	0	1	0	0	0	0	0	3	0	0	0	23	1	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-231117-031A	3	0	0	0	0	0	0	0	0	2	0	0	0	16	3	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-032A	1	2	0	0	4	0	0	0	0	9	0	0	0	37	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-110615-032A	2	2	0	0	0	0	0	1	0	11	0	0	0	2	5	0	0	0	0	11	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-110615-032A	3	0	0	0	0	0	0	0	0	10	0	0	0	2	0	0	0	0	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100815-032A	1	0	0	0	0	0	0	1	0	2	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0
2015-GLAP-NR-100815-032A	2	0	0	0	0	0	1	1	0	1	0	0	2	0	18	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0	2	0	0
2015-GLAP-NR-100815-032A	3	0	0	0	0	0	0	0	0	3	0	0	1	0	24	0	0	0	0	0	8	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-141015-032A	1	2	10	1	0	0	0	0	0	30	1	0	4	72	3	0	0	0	0	28	43	0	1	0	54	0	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-141015-032A	2	0	4	1	0	0	0	1	0	14	0	0	8	155	6	0	0	0	0	45	56	0	0	0	95	0	0	0	0	0	0	0	0	2	0	0
2015-GLAP-NR-141015-032A	3	0	1	1	0	0	0	2	0	15	0	0	5	104	1	0	0	0	0	21	20	0	0	0	49	0	0	1	0	0	0	0	0	2	0	1
2016-GLAP-NR-270516-032A	1	0	0	0	0	0	0	0	0	5	0	0	0	64	0	0	0	0	0	35	6	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
2016-GLAP-NR-270516-032A	2	0	0	0	0	0	0	0	0	2	0	0	0	25	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-270516-032A	3	0	1	0	0	0	0	0	0	4	0	0	0	43	2	0	0	0	0	52	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-170816-032A	1	0	2	0	0	0	0	0	0	0	0	0	5	2	7	0	0	0	0	0	26	0	0	0	14	0	0	0	0	0	0	0	3	2	0	0
2016-GLAP-NR-170816-032A	2	0	3	0	0	0	0	4	0	4	0	0	10	3	10	0	0	0	0	0	31	1	0	0	8	0	0	0	0	0	0	0	2	0	0	0
2016-GLAP-NR-170816-032A	3	0	5	0	0	0	0	1	0	8	0	0	2	2	3	0	0	0	0	0	48	0	0	0	3	0	0	0	0	0	0	0	3	0	0	0
2016-GLAP-NR-261016-032A	1	0	14	1	0	0	0	0	0	44	1	2	4	0	11	0	0	0	0	0	13	1	0	0	17	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-261016-032A	2	1	9	2	0	0	1	2	0	24	0	5	10	0	0	0	0	0	0	3	10	0	0	0	21	0	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-261016-032A	3	1	7	1	0	0	0	0	0	30	1	4	4	1	1	0	0	0	0	1	9	0	0	0	5	0	0	0	0	0	0	0	0	1	0	0

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2017-GLAP-NR-070717-032A	1	0	7	0	2	0	0	3	0	8	0	5	0	1	35	0	0	0	0	0	14	1	0	0	66	0	0	0	0	0	0	0	0	1	0	0
2017-GLAP-NR-070717-032A	2	0	4	0	1	0	0	1	0	5	1	0	0	1	49	0	0	0	0	0	3	1	0	0	51	0	0	0	0	0	0	0	0	1	0	0
2017-GLAP-NR-070717-032A	3	0	4	0	0	0	0	0	0	9	0	2	0	1	29	0	0	0	0	0	4	0	0	0	47	0	1	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-290817-032A	1	0	7	0	0	0	0	0	0	3	0	2	1	188	23	0	0	0	0	0	12	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-290817-032A	2	0	4	0	0	0	0	0	0	1	0	3	0	61	5	0	0	0	0	0	21	0	0	0	6	0	0	0	0	0	0	0	0	1	0	0
2017-GLAP-NR-290817-032A	3	0	8	0	0	0	0	0	0	2	0	0	1	178	3	0	0	0	0	0	18	0	0	0	10	0	0	0	0	0	0	0	0	1	0	0
2017-GLAP-NR-231117-032A	1	0	0	0	0	0	0	0	0	2	0	0	0	34	1	0	0	0	0	52	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-231117-032A	2	0	0	0	0	0	0	0	0	3	0	0	0	18	4	0	0	0	0	17	8	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-231117-032A	3	0	0	0	0	0	0	1	0	3	0	0	0	17	0	0	0	0	0	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-041A	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-041A	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-041A	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-250815-041A	1	11	1	0	0	0	0	0	0	1	11	0	0	0	3	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-250815-041A	2	8	0	1	0	0	0	0	0	0	2	0	0	1	26	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-250815-041A	3	8	0	0	0	0	0	0	0	1	4	0	0	1	41	0	0	0	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-051015-041A	1	10	1	3	0	0	0	10	0	16	13	0	0	0	128	0	0	0	0	0	25	2	0	0	7	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-051015-041A	2	7	0	1	0	0	0	7	0	5	7	0	0	1	12	0	0	0	0	1	35	0	0	0	6	0	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-051015-041A	3	3	0	1	0	0	0	3	0	4	12	0	0	0	16	0	0	0	0	3	22	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-070616-041A	1	2	0	0	0	0	0	0	0	0	0	0	0	13	20	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-070616-041A	2	1	0	0	0	0	0	3	0	0	1	0	0	15	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-070616-041A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080816-041A	1	3	0	0	0	0	0	0	0	2	5	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080816-041A	2	6	1	0	0	0	0	0	0	4	1	0	0	1	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080816-041A	3	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-021116-041A	1	3	1	0	0	0	0	1	0	14	8	0	0	0	10	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2016-GLAP-NR-021116-041A	2	1	0	1	0	0	0	2	0	15	18	0	0	0	2	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-021116-041A	3	2	0	0	0	0	0	1	0	7	5	0	0	0	0	0	0	0	0	0	20	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-041A	1	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-041A	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-041A	3	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-041A	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2017-GLAP-NR-151117-041A	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-041A	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-042A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-042A	2	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-042A	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-250815-042A	1	5	0	1	0	0	0	0	0	1	2	0	0	0	9	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-250815-042A	2	4	0	0	0	0	0	0	0	2	0	0	1	1	16	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-250815-042A	3	5	0	0	0	0	0	0	0	0	0	0	10	1	4	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-051015-042A	1	1	0	0	0	0	0	2	0	2	3	0	0	47	12	0	0	0	0	17	8	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-051015-042A	2	1	0	0	0	0	0	0	0	1	1	0	0	9	4	0	0	0	0	4	13	0	0	0	6	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-051015-042A	3	0	0	1	0	0	0	4	0	0	5	0	0	2	2	0	0	0	0	17	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-070616-042A	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-070616-042A	2	0	0	0	0	0	0	0	0	0	0	0	0	25	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-070616-042A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080816-042A	1	5	7	0	1	0	0	0	0	0	2	0	0	74	2	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080816-042A	2	3	1	0	0	0	0	0	0	0	1	0	0	43	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080816-042A	3	1	3	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-021116-042A	1	2	0	0	0	0	0	2	0	10	3	0	0	0	4	1	0	0	0	1	10	0	0	0	6	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-021116-042A	2	1	0	0	0	0	0	2	0	2	6	0	0	2	9	0	0	0	0	0	3	2	0	0	10	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-021116-042A	3	0	0	0	0	0	0	0	0	4	3	0	0	1	10	0	0	0	0	0	21	1	0	0	8	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-042A	1	0	4	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-042A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-042A	3	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-042A	1	0	0	2	0	0	0	0	0	0	1	0	0	40	10	0	0	0	0	1	10	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-042A	2	0	0	0	0	0	0	1	0	0	1	0	0	5	4	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-042A	3	0	0	0	0	0	0	0	0	0	2	0	0	11	3	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-051A	1	0	0	0	0	0	0	1	0	3	0	0	0	69	2	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-051A	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-051A	3	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-210815-051A	1	3	1	0	0	0	0	0	0	4	0	2	0	163	8	0	0	0	0	0	6	2	0	0	1	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-210815-051A	2	2	1	0	0	0	0	0	0	4	0	0	1	76	5	0	0	0	0	0	7	3	0	0	4	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2015-GLAP-NR-210815-051A	3	3	1	0	0	0	0	1	0	4	0	2	2	46	2	0	0	0	0	0	4	1	0	0	4	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-151015-051A	1	1	0	0	0	0	0	2	0	0	2	1	0	21	2	0	0	1	0	24	2	0	0	0	9	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-151015-051A	2	4	0	0	0	0	0	0	0	2	0	0	0	12	2	0	0	0	0	71	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-151015-051A	3	0	0	0	0	0	0	0	0	0	3	1	0	20	1	0	0	0	0	63	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-060616-051A	1	0	0	0	0	0	0	0	0	1	0	0	0	36	29	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-060616-051A	2	0	0	0	0	0	0	2	0	2	0	0	0	56	26	0	0	0	0	14	0	0	0	0	10	0	0	0	0	1	0	0	0	0	0
2016-GLAP-NR-060616-051A	3	0	0	0	0	0	0	0	0	2	0	0	0	63	11	0	0	0	0	6	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100816-051A	1	9	10	0	0	0	0	1	0	3	0	0	2	11	1	0	0	0	0	0	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100816-051A	2	6	10	0	0	0	0	0	0	4	0	2	4	7	5	0	0	0	0	0	6	0	0	0	5	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100816-051A	3	6	5	0	3	0	0	0	0	4	0	2	1	10	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-251016-051A	1	5	0	0	0	0	0	0	0	2	0	3	0	7	4	0	0	0	0	2	4	0	0	0	3	0	0	1	0	0	0	0	0	0	0
2016-GLAP-NR-251016-051A	2	1	0	0	0	0	0	0	0	6	0	1	0	15	7	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-251016-051A	3	2	0	0	0	0	0	0	0	2	1	0	0	28	17	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-010817-051A	1	2	1	0	0	0	0	1	1	5	0	3	0	13	3	0	0	0	0	0	4	1	0	0	2	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-010817-051A	2	0	2	0	0	0	0	1	0	2	0	5	0	8	7	0	0	0	0	0	7	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-010817-051A	3	0	2	0	0	0	0	2	0	2	0	3	0	3	5	0	0	0	0	0	5	0	0	0	1	0	0	0	0	0	0	0	2	0	0
2017-GLAP-NR-061117-051A	1	0	0	3	0	0	0	0	0	2	0	2	0	62	4	0	0	0	0	8	7	0	0	0	5	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-061117-051A	2	0	0	0	0	0	0	0	0	0	0	1	0	31	1	0	0	0	0	4	7	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-061117-051A	3	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	11	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-052A	1	1	0	0	0	0	0	1	0	12	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-052A	2	1	0	0	0	0	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-100615-052A	3	0	0	0	0	0	0	0	0	0	0	0	0	86	1	0	0	0	0	7	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-210815-052A	1	3	7	0	0	0	0	0	0	16	0	4	0	50	6	0	0	0	0	0	19	1	0	0	6	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-210815-052A	2	2	2	0	0	0	1	1	0	8	2	8	0	25	3	0	0	0	0	0	8	1	0	0	6	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-210815-052A	3	5	4	0	0	0	0	0	0	10	2	0	0	6	0	0	0	0	0	1	7	0	0	0	4	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-151015-052A	1	1	0	0	0	0	0	1	0	7	3	13	0	36	11	0	0	0	0	12	13	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-151015-052A	2	1	0	0	0	0	0	1	0	3	0	7	0	48	7	0	0	0	0	79	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-151015-052A	3	0	1	0	0	0	0	2	0	2	0	6	0	17	5	0	0	0	0	16	7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-060616-052A	1	0	0	0	0	0	0	0	0	2	0	0	0	22	22	0	0	0	0	8	2	0	0	0	5	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-060616-052A	2	0	0	0	0	0	0	4	0	0	0	0	0	16	6	0	0	0	0	1	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-060616-052A	3	0	0	0	0	0	0	2	0	0	0	0	0	12	7	0	0	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2016-GLAP-NR-100816-052A	1	6	12	0	0	0	0	0	0	13	0	5	4	30	0	0	0	0	0	0	9	0	0	0	5	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100816-052A	2	3	14	0	0	0	0	1	0	7	0	1	2	82	2	0	0	0	0	0	16	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100816-052A	3	5	6	0	0	0	0	0	0	4	0	3	1	60	2	0	0	0	0	0	21	1	0	0	4	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-251016-052A	1	3	2	0	0	0	0	0	0	15	1	2	0	6	2	0	0	1	0	1	17	0	0	0	6	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-251016-052A	2	0	0	0	0	0	0	1	0	5	0	1	0	8	2	0	0	0	0	0	6	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-251016-052A	3	0	0	1	0	0	0	0	0	4	1	1	0	12	1	0	0	0	0	0	3	0	0	0	5	0	0	0	0	0	0	0	2	0	0
2017-GLAP-NR-070717-052A	1	0	2	0	0	0	0	0	0	8	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-070717-052A	2	0	1	0	0	0	0	0	0	8	1	9	0	0	0	0	0	0	0	0	2	0	0	0	7	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-070717-052A	3	0	1	0	0	0	0	0	0	3	1	1	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-010817-052A	1	0	1	0	0	0	0	2	0	10	0	12	0	26	14	0	0	0	0	0	16	0	0	0	4	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-010817-052A	2	0	1	0	0	0	0	0	0	6	2	8	0	60	6	0	0	0	0	0	8	0	0	0	6	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-010817-052A	3	0	2	0	0	0	0	1	0	5	0	2	0	14	8	0	0	0	0	0	6	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-061117-052A	1	0	0	0	0	0	0	0	0	4	0	2	0	47	3	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-061117-052A	2	0	0	1	0	0	0	0	0	0	0	1	0	12	3	1	0	0	0	5	7	0	0	0	1	0	0	1	0	0	0	0	0	0	0
2017-GLAP-NR-061117-052A	3	0	0	0	0	0	0	0	0	0	0	0	0	5	4	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-090615-061A	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-090615-061A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-090615-061A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-240815-061A	1	3	0	0	0	0	0	0	0	2	0	0	0	0	44	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-240815-061A	2	0	0	0	0	0	0	0	0	5	0	0	0	1	22	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-240815-061A	3	5	0	0	0	0	0	0	0	2	0	0	0	0	16	0	0	0	0	0	8	0	0	0	29	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-081015-061A	1	1	0	0	0	0	0	4	0	1	0	0	0	2	42	0	0	0	0	121	5	0	0	0	8	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-081015-061A	2	1	0	1	0	0	0	3	0	2	2	0	0	1	59	0	0	0	0	2	3	0	0	0	9	0	0	1	0	0	0	0	0	0	0
2015-GLAP-NR-081015-061A	3	1	0	0	0	0	0	3	0	0	0	0	0	0	48	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-240516-061A	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-240516-061A	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-240516-061A	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090816-061A	1	3	2	0	0	0	1	0	0	0	0	0	0	1	35	0	0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090816-061A	2	0	1	0	0	0	0	0	0	1	0	0	0	0	19	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090816-061A	3	4	1	0	0	0	0	0	0	2	0	0	0	0	10	0	0	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-011116-061A	1	0	0	4	0	0	0	7	0	7	1	0	0	0	27	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2016-GLAP-NR-011116-061A	2	1	0	2	0	0	0	3	0	8	2	0	0	0	32	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-011116-061A	3	2	0	1	0	0	0	3	0	1	3	0	1	0	6	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-310717-061A	1	0	0	0	0	0	0	0	0	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0
2017-GLAP-NR-310717-061A	2	0	0	0	0	0	0	0	1	1	0	0	0	17	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0
2017-GLAP-NR-310717-061A	3	0	0	0	0	0	0	0	0	2	0	0	0	19	27	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	9	0	0
2017-GLAP-NR-151117-061A	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-061A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-061A	3	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-090615-062A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-090615-062A	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-090615-062A	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-240815-062A	1	0	0	0	0	0	0	0	0	1	0	0	1	0	19	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-240815-062A	2	0	0	0	0	0	0	0	0	1	1	0	0	0	46	0	0	0	0	0	4	0	0	0	9	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-240815-062A	3	1	0	0	0	0	0	0	0	1	0	0	0	0	39	0	0	0	0	0	4	0	0	0	11	0	0	0	0	0	0	0	2	0	0
2015-GLAP-NR-081015-062A	1	2	0	0	0	0	0	0	0	1	0	0	0	0	32	0	0	0	0	32	5	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-081015-062A	2	1	0	0	0	0	0	2	0	1	0	0	0	0	10	0	0	0	0	10	6	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-081015-062A	3	0	0	0	0	0	0	0	0	1	0	0	0	2	14	0	0	0	0	8	5	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-240516-062A	1	0	0	0	0	0	0	0	0	0	1	0	0	3	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-240516-062A	2	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-240516-062A	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090816-062A	1	2	7	0	0	0	0	0	0	1	1	0	0	0	19	0	0	0	0	0	7	0	0	0	20	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090816-062A	2	6	2	0	0	0	0	1	0	3	1	0	0	1	13	0	0	0	0	0	3	0	0	0	9	0	0	0	0	0	0	1	1	0	0
2016-GLAP-NR-090816-062A	3	0	2	0	0	0	0	0	0	2	1	0	0	0	8	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-011116-062A	1	0	0	3	0	0	0	5	0	3	1	0	0	1	47	0	0	0	0	0	10	0	0	0	3	0	0	0	0	0	0	0	3	0	0
2016-GLAP-NR-011116-062A	2	0	0	1	0	0	0	6	0	12	0	0	0	3	21	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-011116-062A	3	0	0	0	0	0	0	2	0	3	0	0	0	4	4	0	0	0	0	0	5	0	0	0	3	0	0	1	0	0	0	0	1	0	0
2017-GLAP-NR-010817-062A	1	0	0	0	0	0	0	0	0	2	0	0	0	0	26	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-010817-062A	2	1	0	0	0	0	0	0	0	0	1	1	0	0	11	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	2	0	0
2017-GLAP-NR-010817-062A	3	0	0	0	0	0	0	0	0	5	0	1	0	1	57	0	0	0	0	0	20	0	0	0	2	0	0	0	0	0	0	0	3	0	0
2017-GLAP-NR-151117-062A	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-151117-062A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Nocomis biguttatus	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	14	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	4	0	0
0	0	2	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	11	2	0	0	0	10	0	0	0	0	0	0	0	0	1	0	0
2	0	2	0	0	0	0	0	18	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
2	0	2	0	0	0	0	0	13	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	30	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
0	1	1	2	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	4	0	1	0	0	0	2	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	3	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	2	0	0	0	8	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
0	0	29	6	0	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
0	0	2	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	4	1	2	2	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
0	0	2	0	0	0	5	2	2	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
0	0	3	1	0	0	7	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2015-GLAP-NR-200815-072A	1	1	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-200815-072A	2	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-200815-072A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-131015-072A	1	4	2	2	0	0	1	1	0	0	0	0	0	20	1	0	0	0	1	7	9	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-131015-072A	2	1	0	0	0	0	0	0	0	0	2	1	0	0	0	0	1	0	0	5	6	0	0	0	2	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-131015-072A	3	3	1	0	0	0	0	0	0	0	0	1	0	5	1	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080616-072A	1	6	0	0	1	0	0	1	0	5	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080616-072A	2	5	1	0	1	1	0	0	0	1	0	0	0	34	0	0	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-080616-072A	3	6	1	0	0	0	0	1	0	4	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-020816-072A	1	6	1	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-020816-072A	2	2	1	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-020816-072A	3	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-181016-072A	1	3	4	0	0	0	0	1	0	1	0	1	0	3	20	0	1	2	1	0	16	0	0	0	2	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-181016-072A	2	0	7	0	0	0	0	0	0	0	0	0	0	21	3	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-181016-072A	3	1	1	0	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-270617-072A	1	4	0	1	0	3	1	1	0	2	0	0	0	4	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-270617-072A	2	6	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-270617-072A	3	1	0	0	1	3	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2017-GLAP-NR-040817-072A	1	2	2	0	0	0	0	3	0	2	0	0	0	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-040817-072A	2	0	0	0	0	1	2	1	0	1	0	0	0	20	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-040817-072A	3	2	2	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-081117-072A	1	1	2	0	0	0	0	0	0	2	0	0	0	8	11	0	1	4	0	0	11	0	0	0	0	0	0	0	0	2	0	1	1	0	0	0
2017-GLAP-NR-081117-072A	2	1	1	0	0	1	0	0	0	0	0	0	0	3	0	0	2	7	0	0	18	0	0	0	0	0	0	0	0	4	0	3	1	0	0	0
2017-GLAP-NR-081117-072A	3	0	1	0	0	0	0	0	0	0	0	0	0	2	1	0	0	5	0	1	11	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0
2015-GLAP-NR-190615-081A	1	33	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-190615-081A	2	21	0	0	0	0	0	0	0	1	0	0	0	2	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190615-081A	3	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120815-081A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120815-081A	2	3	1	1	0	0	0	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120815-081A	3	2	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-161015-081A	1	0	2	1	0	0	0	10	0	6	0	2	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2015-GLAP-NR-161015-081A	2	0	1	0	0	0	0	0	0	2	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-161015-081A	3	0	3	1	0	0	0	2	0	2	0	0	0	1	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-081A	1	3	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-081A	2	8	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-081A	3	4	0	0	0	0	0	0	0	0	1	0	0	32	0	0	0	0	4	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-030816-081A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-030816-081A	2	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-030816-081A	3	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-281016-081A	1	1	3	1	0	0	0	1	0	11	0	0	0	1	7	0	0	0	0	0	44	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-281016-081A	2	1	3	0	0	0	0	0	0	17	0	1	0	1	3	0	0	0	0	0	30	0	0	0	3	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-281016-081A	3	1	4	7	0	0	0	5	0	8	0	2	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-270617-081A	1	11	0	0	0	0	0	0	0	1	0	0	0	6	3	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-270617-081A	2	5	0	0	2	0	0	0	0	2	0	0	0	12	6	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2017-GLAP-NR-270617-081A	3	4	0	0	0	0	0	0	0	4	0	0	1	3	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-030817-081A	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-030817-081A	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-030817-081A	3	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-091117-081A	1	2	1	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-091117-081A	2	1	2	0	0	0	0	0	0	5	0	0	0	2	1	0	0	1	0	1	17	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2017-GLAP-NR-091117-081A	3	1	0	0	0	0	0	1	0	1	0	0	0	2	1	0	0	3	0	1	17	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
2015-GLAP-NR-190615-082A	1	5	0	0	0	0	1	0	0	4	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190615-082A	2	3	0	0	0	0	0	0	0	1	0	0	0	6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190615-082A	3	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120815-082A	1	5	1	0	0	0	0	0	0	1	0	0	0	4	6	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-120815-082A	2	0	3	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2015-GLAP-NR-120815-082A	3	1	0	0	0	0	0	0	0	1	0	0	0	7	4	0	0	0	1	0	10	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2015-GLAP-NR-161015-082A	1	0	5	3	0	0	0	5	0	0	0	0	0	2	1	0	0	0	0	0	38	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-161015-082A	2	0	5	0	0	0	0	3	0	10	0	0	0	6	0	0	1	0	0	9	30	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-161015-082A	3	2	3	2	0	0	0	1	0	1	0	0	0	2	0	0	0	0	0	13	16	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-082A	1	8	0	0	0	0	0	1	0	1	0	1	0	2	1	0	0	0	5	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-082A	2	2	0	0	0	1	0	0	0	1	0	0	0	1	4	0	0	0	8	3	15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2016-GLAP-NR-090616-082A	3	3	0	0	0	0	0	1	0	1	1	0	0	5	1	0	0	0	5	1	11	0	0	0	0	0	0	0	2	0	0	0	0	0	0
2016-GLAP-NR-030816-082A	1	0	0	0	0	0	0	5	0	0	0	0	1	0	3	0	0	0	0	0	15	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2016-GLAP-NR-030816-082A	2	2	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-030816-082A	3	0	0	0	0	0	0	2	0	1	0	0	0	0	2	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-281016-082A	1	1	2	4	0	0	0	2	0	16	0	0	0	0	3	0	0	0	1	0	39	0	0	0	8	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-281016-082A	2	0	7	5	0	0	0	0	0	7	0	0	0	14	3	0	0	1	0	1	49	0	0	0	2	0	0	0	0	0	0	1	0	0	0
2016-GLAP-NR-281016-082A	3	1	3	6	0	0	0	2	0	1	0	0	0	25	1	1	0	0	0	0	34	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-270617-082A	1	2	1	0	0	0	0	0	0	0	0	0	0	28	6	0	0	0	7	0	9	0	0	0	0	0	0	0	0	0	0	0	3	0	0
2017-GLAP-NR-270617-082A	2	1	0	0	0	0	0	0	0	1	0	0	0	78	12	0	0	0	3	0	14	0	0	0	0	0	0	0	0	0	0	0	3	0	0
2017-GLAP-NR-270617-082A	3	1	0	0	0	0	0	0	0	1	0	0	0	6	7	0	0	0	2	1	12	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2017-GLAP-NR-030817-082A	1	0	2	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-030817-082A	2	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-030817-082A	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-091117-082A	1	1	1	1	0	0	2	1	0	3	0	3	0	8	0	0	1	0	0	2	55	0	0	0	5	0	0	0	0	1	0	1	0	0	0
2017-GLAP-NR-091117-082A	2	2	0	0	0	0	0	0	0	5	1	4	0	2	1	0	0	0	0	3	23	0	0	0	1	0	0	0	0	1	0	0	0	0	0
2017-GLAP-NR-091117-082A	3	0	2	2	0	0	0	0	0	4	0	0	0	0	2	0	1	0	0	2	34	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2015-GLAP-NR-190615-091A	1	42	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190615-091A	2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190615-091A	3	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190815-091A	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190815-091A	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190815-091A	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-221015-091A	1	4	2	0	0	0	0	4	0	2	0	0	0	2	0	0	0	3	0	6	15	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2015-GLAP-NR-221015-091A	2	1	2	3	0	0	0	1	0	4	1	0	0	12	0	0	0	0	1	15	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-221015-091A	3	1	0	2	0	0	0	1	5	5	0	0	0	39	0	0	0	0	0	2	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-091A	1	24	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-091A	2	13	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-090616-091A	3	10	0	0	0	0	0	1	0	0	1	0	0	23	0	0	0	0	2	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-110816-091A	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-110816-091A	2	0	0	0	0	0	0	0	0	0	0	0	1	3	3	3	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-110816-091A	3	1	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2016-GLAP-NR-041116-091A	1	0	5	0	0	0	0	0	0	13	0	0	0	1	0	0	0	0	0	0	48	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2016-GLAP-NR-041116-091A	2	0	7	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	3	0	0
2016-GLAP-NR-041116-091A	3	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-290617-091A	1	3	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
2017-GLAP-NR-290617-091A	2	3	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-290617-091A	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-030817-091A	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-030817-091A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-030817-091A	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-091A	1	0	0	0	0	0	0	1	0	0	0	0	0	4	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-091A	2	0	0	0	0	0	2	0	0	1	0	0	0	0	1	0	0	1	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-091A	3	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180615-092A	1	23	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	5	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
2015-GLAP-NR-180615-092A	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180615-092A	3	3	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2015-GLAP-NR-190815-092A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190815-092A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-190815-092A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-221015-092A	1	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-221015-092A	2	3	4	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	9	0	0	0	0	0	0	1	0	1	0	0	0	0	0
2015-GLAP-NR-221015-092A	3	1	1	0	0	0	0	4	0	3	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100616-092A	1	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100616-092A	2	4	0	0	0	0	0	0	0	1	7	1	0	20	0	0	0	0	3	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-100616-092A	3	1	0	0	0	0	0	1	0	0	1	1	0	37	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-110816-092A	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-110816-092A	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-110816-092A	3	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-041116-092A	1	2	3	0	0	0	0	0	0	4	5	0	0	0	2	0	0	1	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2016-GLAP-NR-041116-092A	2	0	4	3	0	0	0	0	0	2	0	1	0	0	0	0	0	0	5	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-041116-092A	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-290617-092A	1	12	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	5	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2017-GLAP-NR-290617-092A	2	4	0	0	0	0	1	0	0	2	0	1	0	0	1	0	0	3	2	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-290617-092A	3	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-020817-092A	1	0	2	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-020817-092A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-020817-092A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-092A	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-092A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-092A	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180615-101A	1	4	0	0	0	0	3	1	0	2	4	0	0	17	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180615-101A	2	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2015-GLAP-NR-180615-101A	3	4	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-130815-101A	1	0	0	1	0	0	0	0	0	1	0	0	0	11	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-130815-101A	2	0	2	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-130815-101A	3	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-231015-101A	1	6	0	5	0	0	0	0	0	1	11	0	0	9	0	0	0	1	2	35	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-231015-101A	2	3	1	6	0	0	0	2	1	0	7	0	0	6	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-231015-101A	3	3	0	0	0	0	0	0	0	0	3	0	0	1	0	0	1	3	0	3	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2016-GLAP-NR-100616-101A	1	7	0	0	0	0	0	3	0	0	2	0	0	15	0	0	1	0	0	0	11	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2016-GLAP-NR-100616-101A	2	6	0	0	0	0	0	0	0	0	9	0	0	25	0	0	0	1	5	1	22	0	0	0	0	0	0	0	0	2	0	0	0	0	0
2016-GLAP-NR-100616-101A	3	2	0	0	0	0	0	1	0	0	1	0	0	19	0	0	0	0	5	0	10	0	0	0	0	0	0	0	0	3	0	0	0	0	0
2016-GLAP-NR-040816-101A	1	1	1	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-040816-101A	2	5	1	0	0	0	0	2	0	4	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-040816-101A	3	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-311016-101A	1	4	3	0	0	0	0	0	0	1	3	0	0	0	1	0	1	0	0	0	22	1	0	0	2	0	0	0	0	0	0	0	0	0	0
2016-GLAP-NR-311016-101A	2	0	4	2	1	0	0	0	0	0	3	0	0	0	1	0	0	1	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2016-GLAP-NR-311016-101A	3	2	2	3	0	0	0	0	0	1	2	0	0	2	6	0	0	0	0	3	12	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2017-GLAP-NR-300617-101A	1	5	0	0	2	0	0	0	0	5	0	0	0	0	0	0	0	5	10	0	8	0	0	0	0	0	0	0	0	2	0	0	0	0	0
2017-GLAP-NR-300617-101A	2	6	0	0	0	1	0	1	0	2	0	0	0	0	0	0	0	5	4	1	8	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2017-GLAP-NR-300617-101A	3	6	0	0	0	0	0	1	0	4	0	0	0	1	0	0	0	4	7	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-020817-101A	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-020817-101A	2	2	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Field Number	Sampling Pass	*Micropterus dolomieu*	*Micropterus salmoides*	*Morone americana*	*Morone chrysops*	*Moxostoma anisurum*	*Moxostoma erythrurum*	*Moxostoma macrolepidotum*	*Moxostoma* sp.	*Moxostoma valenciennesi*	*Neogobius melanostomus*	*Nocomis biguttatus*	*Notemigonus crysoleucas*	*Notropis atherinoides*	*Notropis hudsonius*	*Notropis volucellus*	*Oncorhynchus kisutch*	*Oncorhynchus mykiss*	*Oncorhynchus tshawytscha*	*Osmerus mordax*	*Perca flavescens*	*Percina caprodes*	*Percopsis omiscomaycus*	*Petromyzon marinus*	*Pimephales notatus*	*Pimephales promelas*	*Pomoxis annularis*	*Pomoxis nigromaculatus*	*Salmo salar*	*Salmo trutta*	*Salmo trutta X Salvelinus fontinalis*	*Salvelinus namaycush*	*Sander vitreus*	*Scardinius erythrophthalmus*	*Semotilus atromaculatus*	*Umbra limi*
2017-GLAP-NR-020817-101A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017-GLAP-NR-161117-101A	1	1	2	0	0	0	0	0	0	0	0	0	0	6	0	0	1	1	0	5	6	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
2017-GLAP-NR-161117-101A	2	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	1	0	0	6	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0
2017-GLAP-NR-161117-101A	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180615-102A	1	3	0	0	0	0	2	2	0	1	0	1	0	0	0	0	0	1	12	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2015-GLAP-NR-180615-102A	2	1	0	0	0	0	1	1	0	0	0	0	0	10	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-180615-102A	3	0	1	0	0	0	0	1	0	0	1	0	0	4	0	0	0	1	7	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2015-GLAP-NR-130815-102A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-130815-102A	2	0	0	0	0	0	0	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-130815-102A	3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015-GLAP-NR-231015-102A	1	14	4	10	0	0	0	0	1	0	3	0	0	6	0	0	2	1	0	1	0	0	0	0	0	0	0	0	0	*1*	0	0	0	0	0	0
2015-GLAP-NR-231015-102A	2	9	2	8	0	0	0	0	0	0	1	0	0	71	0	0	1	0	1	3	0	0	0	0	0	0	0	0	0	*0*	0	0	0	0	0	0
2015-GLAP-NR-231015-102A	3	4	2	0	0	0	0	0	1	0	5	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	*1*	0	0	0	0	0	0
2016-GLAP-NR-100616-102A	1	5	0	0	0	0	0	6	0	0	2	0	0	14	0	0	0	2	15	0	10	0	0	0	0	0	0	0	0	*4*	0	0	0	0	0	0
2016-GLAP-NR-100616-102A	2	1	1	0	0	0	0	8	0	0	1	0	0	2	0	0	0	1	2	0	28	0	0	0	0	0	0	0	0	*3*	0	0	0	0	0	0
2016-GLAP-NR-100616-102A	3	0	0	0	0	0	0	0	0	1	1	0	0	48	0	0	0	0	6	0	14	0	0	0	0	0	0	0	0	*3*	0	0	0	0	0	0
2016-GLAP-NR-040816-102A	1	2	2	0	0	0	0	4	0	3	3	1	0	0	1	0	0	0	0	0	29	0	0	0	0	0	0	0	0	*0*	0	0	0	0	0	0
2016-GLAP-NR-040816-102A	2	1	0	0	0	0	0	1	0	3	1	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	*0*	0	0	0	0	0	0
2016-GLAP-NR-040816-102A	3	0	1	0	0	0	0	0	0	2	1	0	1	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	*1*	0	0	0	0	0	0
2016-GLAP-NR311016-102A	1	5	5	1	0	0	0	1	0	1	1	0	0	0	0	0	1	0	0	0	8	0	0	0	0	0	0	0	0	*0*	0	0	0	0	0	0
2016-GLAP-NR311016-102A	2	5	12	14	0	0	0	0	0	2	10	0	0	0	2	0	1	0	1	0	23	0	0	0	0	0	0	0	0	*0*	0	0	0	0	0	0
2016-GLAP-NR311016-102A	3	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	*0*	0	0	0	0	0	0
2017-GLAP-NR-300617-102A	1	5	0	0	1	1	0	1	0	2	0	0	0	0	0	0	0	6	4	0	10	0	0	0	0	0	0	0	0	*4*	0	0	0	0	0	0
2017-GLAP-NR-300617-102A	2	4	0	0	0	0	0	0	0	3	1	0	0	3	0	0	0	3	1	0	16	0	0	0	0	0	0	0	0	*6*	0	0	0	0	0	0
2017-GLAP-NR-300617-102A	3	1	0	0	0	1	0	1	0	5	0	0	0	1	1	0	0	1	1	0	4	0	0	0	0	0	0	0	0	*2*	0	0	0	0	0	0
2017-GLAP-NR-080817-102A	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	*0*	0	0	0	0	0	0
2017-GLAP-NR-080817-102A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	*0*	0	0	0	0	0	0
2017-GLAP-NR-080817-102A	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	*0*	0	0	0	0	0	0
2017-GLAP-NR-161117-102A	1	1	0	0	0	0	0	0	0	1	0	0	0	5	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	*0*	0	0	0	0	0	0
2017-GLAP-NR-161117-102A	2	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	1	3	0	0	63	0	0	0	0	0	0	0	0	*0*	0	0	0	0	0	0
2017-GLAP-NR-161117-102A	3	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	9	0	0	0	0	0	0	0	0	*0*	0	0	0	0	0	0

Appendix 4. *Abiotic habitat measures; water quality, water depth, water velocity, sampling distance from shore.*

Station code	Year	Season	Depth (m) 1	Depth (m) 2	Depth (m) 3	Water velocity (m/s) 1	Water velocity (m/s) 2	Water velocity (m/s) 3	Air temperature (°C)	Water temperature (°C)	Conductivity (µS)	Dissolved oxygen (mg/L)	pH	Turbidity (ntu)	Approx. distance from shore (m)
GLAP-NR-011	2015	SPRING	1.2	1.2	1.3	0.29	0.16	0.24	29.2	16.1	232.7	11.39	8.54	0.94	30
GLAP-NR-011	2016	SPRING	1.4	1.6	1.4	0.3	0.18	0.22	23.5	13.2	285	2.16	8.96	0.68	32
GLAP-NR-011	2017	SPRING	1.7	2.1	1.4	0.21	0.06	0.03	26.6	22.35	265	10.49	8.69	0.75	40
GLAP-NR-011	2015	SUMMER	1.3	1.8	1.1	0.19	0.08	0.24	25	22.8	268.8	8.32	8.52	1	49
GLAP-NR-011	2016	SUMMER	1.7	1.8	1.4	0.15	0.28	0.15	26.1	25.38	564.3	7.29	9.12	1.9	31
GLAP-NR-011	2017	SUMMER	1.8	1.9	1.9	0.14	0.15	0.1	19.1	21.81	270.9	8.55	8.6	1.58	27
GLAP-NR-011	2015	FALL	0.9	1	1.2	0.18	0.09	0.15	19.6	14.8	446.2	9.76	8.61	0.51	25
GLAP-NR-011	2016	FALL	2.1	1.7	1.8	0.28	0.21	0.27	22.5	18.3	256.1	8.79	9.38	0.6	36
GLAP-NR-011	2017	FALL	2.1	1.7	1.4	0.23	0.04	0.11	2.1	7.5	192.5	11.54	8.8	7.13	25
GLAP-NR-012	2015	SPRING	1.3	1.3	2.5	0.24	0.14	0.08	29.2	16.7	235.6	11.48	8.55	1.03	20
GLAP-NR-012	2016	SPRING	1.4	1.6	1.9	0.22	0.16	0.15	27.3	14.3	296	2.11	9.21	1.54	31
GLAP-NR-012	2017	SPRING	1.4	1.8	1.6	0.03	0.02	0.05	24.6	21.51	261.1	8.99	8.41	0.9	35
GLAP-NR-012	2015	SUMMER	1.1	0.9	1.2	0.24	0.08	0.14	25	23.16	270	8.96	8.58	0.85	20
GLAP-NR-012	2016	SUMMER	1.4	1.7	2	0.15	0.02	0.05	24.6	25.04	561.4	7.54	9.85	1.57	31
GLAP-NR-012	2017	SUMMER	1.9	2	2.4	0.1	0.01	0.09	19.1	21.56	270.1	8.45	8.54	1.06	35
GLAP-NR-012	2015	FALL	1.2	1	1.1	0.15	0.02	0.06	18.8	14.84	445.7	10.71	8.73	1.17	40
GLAP-NR-012	2016	FALL	1.8	1.4	1.6	0.27	0.01	0.14	22.5	20.17	310	9.72	9.29	2.65	33
GLAP-NR-012	2017	FALL	1.4	1.6	2.1	0.01	0.05	0.11	2.1	7.25	197.7	12	9.05	14.36	15
GLAP-NR-021	2015	SPRING	0.9	1.2	1.7	0.16	0.41	0.07	21	15.5	230	11.23	8.53	0.71	126
GLAP-NR-021	2016	SPRING	1.4	1.6	1.8	0.1	0.23	0.18	26.4	14.1	285	2.15	9.04	0.52	120
GLAP-NR-021	2017	SPRING	1.7	1.8	1.5	0.03	0.1	0.13	21.9	21.28	260.6	9.04	8.44	1.28	140
GLAP-NR-021	2015	SUMMER	1.4	1.3	1.3	0.05	0.12	0.11	23	22.9	270.5	8.08	8.75	1.09	117
GLAP-NR-021	2016	SUMMER	1.2	1.3	1.7	0.06	0.04	0	25.6	25.45	572.7	7.31	9.19	4.17	121
GLAP-NR-021	2017	SUMMER	1.7	2.1	2.4	0.02	0.03	0.03	20.2	22.09	270.7	10.17	8.89	1.41	120
GLAP-NR-021	2015	FALL	1.3	0.9	1.3	0.05	0.01	0.05	16.8	15.98	462.7	9.74	8.6	2.49	110
GLAP-NR-021	2016	FALL	1.9	2	2.1	0.15	0.11	0.08	10.7	13.4	236.7	9.94	9.24	16.66	102
GLAP-NR-021	2017	FALL	1.7	1.5	1.9	0.08	0.09	0.06	3	7.38	191.1	11.68	8.78	2.73	120
GLAP-NR-022	2015	SPRING	1.7	1.3	1.2	0.19	0.33	0.31	29.5	15.84	231.6	10.96	8.5	0.61	85
GLAP-NR-022	2016	SPRING	1.2	1.4	1.2	0.23	0.21	0.33	27.5	15.9	283	2.15	9.22	0.5	54
GLAP-NR-022	2017	SPRING	1.3	1.6	2	0.03	0.24	0.29	23.4	21.18	260.9	8.62	8.3	1.3	60
GLAP-NR-022	2015	SUMMER	1	1.2	1.8	0.01	0.07	0.11	24	22.9	270.4	8.18	8.49	1.07	52
GLAP-NR-022	2016	SUMMER	1.1	1.7	1.8	0	0.05	0.19	25.3	25.08	559.1	7.27	9.28	2.13	63
GLAP-NR-022	2017	SUMMER	1.9	2.3	2.1	0.01	0.05	0.06	19.2	21.7	270.8	8.38	8.55	2.86	80
GLAP-NR-022	2015	FALL	0.8	1.1	1.6	0.01	0.06	0.22	16.7	15.68	459.4	9.27	8.83	0.61	65
GLAP-NR-022	2016	FALL	1.7	1.8	1.5	0.03	0.07	0.29	7.3	11.92	222.6	11.19	9.29	1.08	60

Station code	Year	Season	Depth (m) 1	Depth (m) 2	Depth (m) 3	Water velocity (m/s) 1	Water velocity (m/s) 2	Water velocity (m/s) 3	Air temperature (°C)	Water temperature (°C)	Conductivity (µS)	Dissolved oxygen (mg/L)	pH	Turbidity (ntu)	Approx. distance from shore (m)
GLAP-NR-022	2017	FALL	1.5	1.8	1.6	0.01	0.13	0.16	3	7.31	190.6	11.78	8.78	2.74	50
GLAP-NR-031	2015	SPRING	3.2	1.4	0.5	0.71	0.68	0.04	19.7	15.3	229.7	10.41	8.32	1.75	26
GLAP-NR-031	2016	SPRING	1.4	1.7	1.1	0.3	0.33	0.12	28.1	14.39	286	2.09	8.83	1.94	28
GLAP-NR-031	2017	SPRING	1.3	1.6	1.4	0.34	0.43	0.02	-	21.44	260.9	8.39	8.26	2.46	25
GLAP-NR-031	2015	SUMMER	1.8	1.5	1	0.51	0.29	0.03	28.2	23.12	271.2	8.73	8.54	2.04	33
GLAP-NR-031	2016	SUMMER	1.9	1.4	1.5	0.32	0.27	0.03	23.4	25	561.8	7.21	8.95	4.34	26
GLAP-NR-031	2017	SUMMER	1.4	1.7	1.5	0.07	0.04	0.03	18.3	21.83	272.8	8.01	8.53	2.72	21
GLAP-NR-031	2015	FALL	1.2	0.5	0.5	0.03	0.09	0.31	12.4	15.12	454.1	9.86	8.63	2.13	25
GLAP-NR-031	2016	FALL	1.2	1.4	2.1	0.18	0.31	0.11	9	13.17	228.9	10.42	9.46	1.47	26
GLAP-NR-031	2017	FALL	1.5	1.5	2.2	0.18	0.38	0.24	5	7.07	189.3	11.51	8.77	9.9	35
GLAP-NR-032	2015	SPRING	0.5	1	1.2	0.04	0.27	0.5	28.1	15.9	233.5	10.71	8.42	2.93	26
GLAP-NR-032	2016	SPRING	1.1	1.4	1.8	0.12	0.34	0.38	26.3	14.35	288	2.08	8.85	2.11	29
GLAP-NR-032	2017	SPRING	1.4	1.6	1.7	0.02	0.2	0.49	23.6	21.48	261.1	8.53	8.3	3.54	30
GLAP-NR-032	2015	SUMMER	1	1.6	1.1	0.03	0.05	0.33	25.8	23.2	271.7	8.61	8.56	2.64	31
GLAP-NR-032	2016	SUMMER	1.5	1.7	1.4	0.03	0.05	0.21	22.2	24.96	561.3	7.38	9.11	4.02	24
GLAP-NR-032	2017	SUMMER	1.5	1.6	1.7	0.03	0.01	0.03	18.3	21.74	272.1	8.21	8.54	3.35	30
GLAP-NR-032	2015	FALL	0.9	1.5	1.2	0.17	0.33	0.03	15.7	15.13	449.9	9.64	8.56	2.19	19
GLAP-NR-032	2016	FALL	2.1	1.7	1.2	0.11	0.05	0.3	9	13.08	225.3	10.72	9.61	1.71	29
GLAP-NR-032	2017	FALL	2.2	1.8	1.3	0.24	0.4	0.27	5	7.13	189.5	11.68	8.94	8.93	30
GLAP-NR-041	2015	SPRING	1.6	1.3	2.4	0.44	0.51	0.26	21.2	14.9	225.2	10.81	8.41	1.41	17
GLAP-NR-041	2016	SPRING	1.9	1.8	1.6	0.53	0.23	0.5	19.3	18.36	469.2	9.26	8.68	1.61	17
GLAP-NR-041	2017	SPRING	-	-	-	-	-	-	-	-	-	-	-	-	-
GLAP-NR-041	2015	SUMMER	1.1	1.7	1.3	0.08	0.1	0.07	17.3	23.19	272.1	9.1	8.68	4.98	16
GLAP-NR-041	2016	SUMMER	1.8	1.5	1.7	0.12	0.28	0.25	24.8	24.91	552.6	8	9.32	0.92	17
GLAP-NR-041	2017	SUMMER	1.5	1.8	2.2	0.23	0.38	0.47	25.6	22.96	271.5	8.32	8.43	0.49	17
GLAP-NR-041	2015	FALL	1	1.2	1.1	0.28	0.2	0.18	16.2	16.33	463.7	9.32	8.58	0.18	16
GLAP-NR-041	2016	FALL	1.2	1.5	1.7	0.3	0.39	0.5	16.3	14.76	227.8	9.44	9.14	0.65	15
GLAP-NR-041	2017	FALL	1.6	1.7	1.7	0.29	0.3	0.39	7.4	10.56	201.7	10.62	8.64	1.5	14
GLAP-NR-042	2015	SPRING	2.4	3.8	3	0.26	0.49	0.73	23.4	14.8	225	10.73	8.38	2.1	19
GLAP-NR-042	2016	SPRING	1.6	2.4	1.9	0.5	0.49	0.42	19.3	18.5	470.3	9.27	8.8	1.66	15
GLAP-NR-042	2017	SPRING	-	-	-	-	-	-	-	-	-	-	-	-	-
GLAP-NR-042	2015	SUMMER	1.3	2.6	0.7	0.07	0.31	0.02	23.3	22.9	272.1	8.5	8.6	0.95	20
GLAP-NR-042	2016	SUMMER	1.7	2.3	1.4	0.25	0.23	0.04	24.5	25.01	552	8.22	9.73	1.29	10
GLAP-NR-042	2017	SUMMER	2.2	3	-	0.47	0.46	0.13	26.6	22.99	271.6	8.35	8.43	0.75	15
GLAP-NR-042	2015	FALL	1.1	2.3	1.1	0.18	0.22	0.09	14.9	16.5	464	9.9	8.76	1.79	12
GLAP-NR-042	2016	FALL	1.7	2.8	2.1	0.5	0.68	0.26	15.7	14.72	227.6	9.39	9.02	0.83	15
GLAP-NR-042	2017	FALL	1.7	1.7	1.7	0.39	0.05	0.04	7.4	10.44	201.1	10.69	8.63	1.95	8

Station code	Year	Season	Depth (m) 1	Depth (m) 2	Depth (m) 3	Water velocity (m/s) 1	Water velocity (m/s) 2	Water velocity (m/s) 3	Air temperature (°C)	Water temperature (°C)	Conductivity (µS)	Dissolved oxygen (mg/L)	pH	Turbidity (ntu)	Approx. distance from shore (m)
GLAP-NR-051	2015	SPRING	3.3	2.7	2	0.63	0.93	0.42	27	15.4	231.8	10.6	8.36	4.72	28
GLAP-NR-051	2016	SPRING	2.4	2	1.8	0.43	0.59	0.51	24.3	17.63	473.5	9.42	8.9	4.91	3
GLAP-NR-051	2017	SPRING	-	-	-	-	-	-	-	-	-	-	-	-	-
GLAP-NR-051	2015	SUMMER	2	1.8	1.3	0.35	0.28	0.12	22.8	23.1	271.7	8.53	8.57	2.94	15
GLAP-NR-051	2016	SUMMER	2.1	2.3	1.5	0.29	0.3	0.06	26.9	25.15	557.8	7.63	9.33	2.3	5
GLAP-NR-051	2017	SUMMER	2.3	1.8	1.9	0.28	0.44	0.17	26.6	23.7	276	8.74	8.52	1.35	5
GLAP-NR-051	2015	FALL	1.8	1.1	0.9	0.31	0.48	0.32	17.8	15.18	448.3	9.92	8.53	2.83	5
GLAP-NR-051	2016	FALL	2	1.6	1.7	0.33	0.25	0.26	7.5	13.35	233.3	9.74	9.34	4.42	10
GLAP-NR-051	2017	FALL	2.1	2.1	1.7	0.32	0.55	0.1	7.4	12.57	263	9.49	8.62	44.53	20
GLAP-NR-052	2015	SPRING	2	2.9	2.4	0.42	0.7	0.52	24.8	15.3	231.7	10.36	8.31	4.46	42
GLAP-NR-052	2016	SPRING	1.8	1.5	1.7	0.51	0.55	0.46	24.5	17.43	471.8	9.51	8.86	4.16	26
GLAP-NR-052	2017	SPRING	1.5	1.8	1.6	0.2	0.49	0.24	28.4	21.81	261.5	9.09	8.45	2.29	35
GLAP-NR-052	2015	SUMMER	1.3	1	1	0.12	0.22	0.11	23.4	23.03	271.3	8.46	8.56	2.21	30
GLAP-NR-052	2016	SUMMER	1.5	1.7	1.4	0.06	0.21	0.07	26.9	25.04	556.6	7.59	9.7	2.19	25
GLAP-NR-052	2017	SUMMER	1.9	1.5	1.7	0.17	0.23	0.21	26.6	23.62	276	8.57	8.46	1.22	30
GLAP-NR-052	2015	FALL	0.9	0.7	1.1	0.32	0.41	0.24	17.3	15.15	448.3	9.75	9	2.25	29
GLAP-NR-052	2016	FALL	1.7	1.5	1.8	0.26	0.23	0.07	7.6	10.68	231	10.69	9.75	4.9	27
GLAP-NR-052	2017	FALL	1.7	2.2	2	0.1	0.33	0.09	7.4	12.48	260.8	8.59	8.94	141.2	33
GLAP-NR-061	2015	SPRING	2.2	1.7	1	0.32	0.19	0.1	20	15.02	226.3	10.45	8.3	0.89	49
GLAP-NR-061	2016	SPRING	1.9	1.5	1.4	0.3	0.16	0.02	24.8	13.81	287	2.22	8.88	0.44	46
GLAP-NR-061	2017	SPRING	-	-	-	-	-	-	-	-	-	-	-	-	-
GLAP-NR-061	2015	SUMMER	1.8	2.1	1.6	0.16	0.1	0.03	23.2	22.9	272	8.67	9.09	0.71	60
GLAP-NR-061	2016	SUMMER	1.4	1.6	1.3	0.04	0.07	0.02	27.3	24.93	551.6	8.07	9.05	3.06	50
GLAP-NR-061	2017	SUMMER	2.1	2.2	1.8	0.04	0.03	0	28.5	23.59	273.7	9.52	8.7	0.29	100
GLAP-NR-061	2015	FALL	1.4	1.3	1	0.09	0.14	0.01	18.2	16.41	459.2	10.45	8.51	0.24	60
GLAP-NR-061	2016	FALL	1.4	1.6	1.5	0.25	0.06	0.04	13.8	14.58	227.1	9.46	9.35	0.81	48
GLAP-NR-061	2017	FALL	2	1.9	2.2	0.13	0.11	0.12	-	10.54	201.8	10.48	8.59	1.34	62
GLAP-NR-062	2015	SPRING	1	1.7	4.9	0.1	0.06	0.45	18.2	15.12	227	10.22	8.2	1.35	137
GLAP-NR-062	2016	SPRING	1.4	1.7	3.5	0.02	0.16	0.41	24.2	12.6	293	2.18	8.81	0.51	135
GLAP-NR-062	2017	SPRING	-	-	-	-	-	-	-	-	-	-	-	-	-
GLAP-NR-062	2015	SUMMER	1.6	2.4	3.5	0.03	0.17	0.12	23.4	22.81	271.9	8.37	8.6	0.83	159
GLAP-NR-062	2016	SUMMER	1.3	1.4	3.3	0.02	0.06	0.14	25.9	24.76	551.1	7.74	9.36	2.73	125
GLAP-NR-062	2017	SUMMER	1.8	1.7	2.4	0	0.07	0.1	29.1	23.39	274	8.37	8.47	0.57	120
GLAP-NR-062	2015	FALL	1	1.8	1.6	0.01	0.12	0.14	16.1	15.96	456.3	9.61	8.43	0.35	142
GLAP-NR-062	2016	FALL	1.5	1.8	2.3	0.04	0.1	0.09	11.7	11.93	222.6	10.31	9.58	0.83	130
GLAP-NR-062	2017	FALL	2.2	2.2	1.9	0.12	0.01	0.1	-	10.17	200.1	10.47	8.61	1.61	156
GLAP-NR-071	2015	SPRING	2	1.9	1.7	0.15	0.23	0.36	22.8	17.15	244.8	10.7	8.29	2.14	15

Station code	Year	Season	Depth (m) 1	Depth (m) 2	Depth (m) 3	Water velocity (m/s) 1	Water velocity (m/s) 2	Water velocity (m/s) 3	Air temperature (°C)	Water temperature (°C)	Conductivity (µS)	Dissolved oxygen (mg/L)	pH	Turbidity (ntu)	Approx. distance from shore (m)
GLAP-NR-071	2016	SPRING	1.6	1.8	1.7	0.17	0.05	0.4	13.8	17.65	465.5	9.83	9.17	2.81	10
GLAP-NR-071	2017	SPRING	2.3	2.1	2.4	0.02	0.18	0.14	23.3	20.93	260	9.68	8.27	4.17	20
GLAP-NR-071	2015	SUMMER	1.8	1.4	1.6	0.02	0.09	0.21	25.3	23.4	275	8.85	8.48	2.16	15
GLAP-NR-071	2016	SUMMER	1.8	2.3	2.1	0.03	0.05	0.27	27	24.78	554.7	8.9	9.11	1.66	16
GLAP-NR-071	2017	SUMMER	2.3	2.4	2	0.03	0.15	0.34	25.1	23.97	281.4	9.07	8.42	3.5	-
GLAP-NR-071	2015	FALL	1.2	1.5	1	0.17	0.18	0.55	18.2	15.94	458.8	10.34	8.53	3.14	10
GLAP-NR-071	2016	FALL	1.7	1.8	2.4	0.02	0.07	0.13	23.5	18.1	253.3	9.7	9.23	2.39	15
GLAP-NR-071	2017	FALL	2.1	2.2	2.4	0.06	0.02	0.01	8.4	12.13	213.1	11.1	8.85	10.5	10
GLAP-NR-072	2015	SPRING	1.7	1.5	2.1	0.36	0.37	0.27	22.8	17.11	244.5	10.63	8.2	10.7	10
GLAP-NR-072	2016	SPRING	1.7	2.4	1.8	0.4	0.66	0.1	12.8	17.6	466.8	9.8	9.52	2.93	10
GLAP-NR-072	2017	SPRING	2.4	2.4	2	0.14	0.16	0.06	21.7	20.8	260.4	9.55	8.24	5.29	5
GLAP-NR-072	2015	SUMMER	1.6	1.9	1.1	0.21	0.23	0.02	26	23.4	274.9	8.71	8.59	1.11	11
GLAP-NR-072	2016	SUMMER	2.1	2.3	1.9	0.27	0.43	0.01	27	24.77	554.7	8.85	9.59	2.08	15
GLAP-NR-072	2017	SUMMER	2	2.4	1.9	0.34	0.34	0.02	24.2	23.86	279.5	8.86	8.48	1.77	10
GLAP-NR-072	2015	FALL	1	1.6	0.5	0.55	0.26	0.06	18.6	15.92	459	10.22	8.97	1.95	13
GLAP-NR-072	2016	FALL	2.4	1.7	2.2	0.13	0.23	0.02	23.5	18.04	250.6	9.6	9.28	2.79	10
GLAP-NR-072	2017	FALL	2.4	1.9	2.3	0.01	0.01	0	8.4	12.19	213.7	11.14	8.76	9.57	10
GLAP-NR-081	2015	SPRING	1	0.9	0.7	0.04	0.1	0.12	19.6	17.5	246.4	11.04	8.43	1.7	45
GLAP-NR-081	2016	SPRING	1.7	1.6	1.4	0.14	0.1	0.1	20.7	17.6	463.3	10.79	8.74	2.88	48
GLAP-NR-081	2017	SPRING	1.7	1.9	2	0.14	0.01	0.01	18.9	21.14	260.3	10.93	8.57	2.61	45
GLAP-NR-081	2015	SUMMER	1.1	1.3	0.9	0.07	0.03	0.13	21.6	22.8	272.4	9	8.44	1.31	45
GLAP-NR-081	2016	SUMMER	1.3	2	2	0.07	0.04	0.02	24.8	24.82	556.5	8.65	9.18	1.52	54
GLAP-NR-081	2017	SUMMER	1.7	1.6	1.8	0.08	0.12	0.01	29.5	24.22	280.7	9.35	8.48	1.39	50
GLAP-NR-081	2015	FALL	0.8	0.7	0.5	0.03	0.02	0.01	14.8	15.05	448.4	10.44	8.57	6.46	53
GLAP-NR-081	2016	FALL	1.9	2	1.7	0.03	0.06	0.04	5.2	12.92	227.1	10.81	9.2	1.95	62
GLAP-NR-081	2017	FALL	1.9	2.2	2.3	0.02	0.01	0.05	5.8	11.98	210.6	11.5	8.91	6.03	52
GLAP-NR-082	2015	SPRING	0.7	1.1	1.3	0.12	0.13	0.26	18.7	17.32	245.5	10.61	8.37	1.96	20
GLAP-NR-082	2016	SPRING	1.4	2.1	1.7	0.1	0.08	0.12	20.7	17.36	461.7	10.18	8.76	2.18	20
GLAP-NR-082	2017	SPRING	2	2.5	2.7	0.01	0.05	0.1	18.9	20.77	259.3	10	8.33	5.43	19
GLAP-NR-082	2015	SUMMER	0.9	1.6	1.3	0.13	0.03	0.24	21.8	23	273.2	9.21	8.42	1.87	20
GLAP-NR-082	2016	SUMMER	2	1.7	1.8	0.02	0.12	0.32	24.8	25.19	555.8	8.93	9.75	1.44	21
GLAP-NR-082	2017	SUMMER	1.8	1.9	2.2	0.01	0.1	0.29	27.5	23.91	279.4	9.08	8.41	0.91	-
GLAP-NR-082	2015	FALL	0.5	1.5	1.7	0.01	0.12	0.3	15.4	15.03	447.3	10.64	8.73	5.56	17
GLAP-NR-082	2016	FALL	1.7	1.9	2.4	0.04	0.17	0.34	5.2	13.02	219.5	11.93	9.44	2.13	10
GLAP-NR-082	2017	FALL	2.3	2.2	1.9	0.05	0.16	0.15	5.8	12.02	210.7	11.47	8.74	7.23	25
GLAP-NR-091	2015	SPRING	1.6	1.1	1.9	0.02	0.03	0.17	19.4	17	244.6	10.39	8.47	1.47	15
GLAP-NR-091	2016	SPRING	2.3	1.9	2	0.1	0.09	0.14	24.5	17.26	460.7	10.08	8.64	2.22	10

Station code	Year	Season	Depth (m) 1	Depth (m) 2	Depth (m) 3	Water velocity (m/s) 1	Water velocity (m/s) 2	Water velocity (m/s) 3	Air temperature (°C)	Water temperature (°C)	Conductivity (µS)	Dissolved oxygen (mg/L)	pH	Turbidity (ntu)	Approx. distance from shore (m)
GLAP-NR-091	2017	SPRING	2.1	2.1	2	0.12	0	0.47	22.2	20.43	258.5	9.46	8.21	3.32	20
GLAP-NR-091	2015	SUMMER	1.4	1.3	1.8	0.25	0.05	0.04	29.2	23.7	276.2	9.12	8.57	1.04	-
GLAP-NR-091	2016	SUMMER	2.1	1.8	1.9	0	0.02	0.13	28.4	25.97	563.8	8.96	8.86	0.84	15
GLAP-NR-091	2017	SUMMER	1.9	2.1	2.8	0.05	0.07	0.09	30.7	24.12	280.1	9.38	8.45	0.91	15
GLAP-NR-091	2015	FALL	1.3	0.9	1.6	0.07	0.02	0.04	16.9	14.3	441	11.14	8.37	5.82	13
GLAP-NR-091	2016	FALL	1.5	1.4	1.6	0.04	0.03	0.11	7.8	13.12	224.4	11.28	9.14	1.51	10
GLAP-NR-091	2017	FALL	2	1.9	1.8	0.31	0.1	0.24	7.9	10.11	201.3	11.97	8.69	3.6	10
GLAP-NR-092	2015	SPRING	1	1.9	2	0.02	0.27	0.07	24.8	17.4	246.4	10.28	8.31	1.56	10
GLAP-NR-092	2016	SPRING	2	2.2	1.9	0.14	0.23	0.14	17.5	17.22	460.9	9.92	8.75	2.31	12
GLAP-NR-092	2017	SPRING	2	2.2	1.9	0.47	0.06	0.01	22.2	20.41	258.3	9.5	8.19	3.38	10
GLAP-NR-092	2015	SUMMER	1.8	1.4	1.2	0.04	0.05	0.11	29	23.9	278.1	8.84	8.91	0.98	15
GLAP-NR-092	2016	SUMMER	1.9	1.8	1.7	0.13	0.22	0.01	28.4	25.59	563.3	8.26	8.75	0.94	5
GLAP-NR-092	2017	SUMMER	2.8	2.7	1.9	0.09	0.35	0.11	30.2	24.14	280.1	9.17	8.4	1.61	10
GLAP-NR-092	2015	FALL	1.6	1.5	1.1	0.04	0.34	0.02	16.6	14.05	439.3	10.62	8.23	2.68	15
GLAP-NR-092	2016	FALL	1.6	1.7	1.5	0.11	0.13	0.04	7.8	13.3	225.9	11.56	9.18	1.04	10
GLAP-NR-092	2017	FALL	1.8	1.7	1.5	0.24	0.47	0.18	7.8	10.07	201.2	11.77	8.85	5.29	10
GLAP-NR-101	2015	SPRING	2.2	1.7	1.2	0.41	0.1	0.44	24.6	17.4	246.3	10.33	8.25	1.71	10
GLAP-NR-101	2016	SPRING	2.3	2.1	1.7	0.54	0.08	0.19	17.6	17.26	461.6	10.23	8.79	2.99	10
GLAP-NR-101	2017	SPRING	2.7	2.1	1.9	0.47	0.1	0.15	21.8	20.48	257.4	9.46	8.26	2.92	10
GLAP-NR-101	2015	SUMMER	2.3	1.4	1.2	0.19	0.15	0.02	26.2	22.5	270.8	8.94	8.47	1.46	10
GLAP-NR-101	2016	SUMMER	2	1.6	1.7	0.14	0.03	0.08	29.1	25.39	561.3	8.9	9	1.58	10
GLAP-NR-101	2017	SUMMER	2.4	1.9	1.7	0.22	0.09	0.1	26.8	23.89	278.5	9.22	8.41	1.28	-
GLAP-NR-101	2015	FALL	1.9	1.5	1.2	0.18	0.07	0.1	10.3	13.6	434.1	10.77	8.54	5.71	10
GLAP-NR-101	2016	FALL	2	2.1	1.8	0.25	0.2	0	6.6	12.02	222.2	11.19	9.73	2.2	7
GLAP-NR-101	2017	FALL	1.7	2.3	1.5	0.26	0.8	0.74	8.7	10.27	201.9	12.18	8.77	3.05	10
GLAP-NR-102	2015	SPRING	2.1	1.7	1.2	0.44	0.24	0.09	24.6	17.41	246.6	10.19	8.23	2.3	10
GLAP-NR-102	2016	SPRING	1.7	2	2.1	0.19	0.19	0.21	17.5	17.06	459.8	9.95	9.24	2.26	5
GLAP-NR-102	2017	SPRING	1.9	2.1	2.3	0.15	0.14	0.02	21.8	20.47	257.3	9.52	8.31	2.83	10
GLAP-NR-102	2015	SUMMER	1.2	1.1	1.9	0.02	0.06	0.04	26.2	22.5	270.8	8.88	8.45	1.18	10
GLAP-NR-102	2016	SUMMER	1.7	1.6	1.5	0.08	0.06	0.01	29.1	25.08	559.6	8.61	9.14	1.24	8
GLAP-NR-102	2017	SUMMER	1.7	1.7	-	0.1	0.06	0	29.6	23.96	278.8	9.14	8.44	2.51	10
GLAP-NR-102	2015	FALL	1.2	1.3	1.4	0.1	0.02	0.02	10.3	13.59	434	10.83	8.69	2.73	5
GLAP-NR-102	2016	FALL	1.8	2.2	1.7	0	0.23	0.01	6.6	10.95	220.5	11.77	10.27	1.61	11
GLAP-NR-102	2017	FALL	1.5	1.8	1.2	0.74	0.08	0.38	8.6	10.27	201.8	12.32	8.84	8.84	10

Appendix 5. *Substrate type by percent composition observed during each sampling event.*

Station code	Year	Season	Dominant substrate type	Organic	Clay	Silt	Sand	Gravel	Cobble	Boulder	Bedrock	Hardpan	Rubble	Concrete	Unknown	No data
GLAP-NR-011	2015	SPRING	Clay	5	85	0	10	0	0	0	0	0	0	0	-	-
GLAP-NR-011	2016	SPRING	Silt	10	0	50	40	0	0	0	0	0	0	0	-	-
GLAP-NR-011	2017	SPRING	Sand	0	10	30	40	0	0	20	0	0	0	0	-	-
GLAP-NR-011	2015	SUMMER	Clay	15	50	15	10	0	5	5	0	0	0	0	-	-
GLAP-NR-011	2016	SUMMER	Silt	15	0	60	15	5	5	0	0	0	0	0	-	-
GLAP-NR-011	2017	SUMMER	Silt	5	0	60	10	10	10	5	0	0	0	0	-	-
GLAP-NR-011	2015	FALL	Silt	0	30	50	5	5	5	5	0	0	0	0	-	-
GLAP-NR-011	2016	FALL	Silt	15	0	45	25	0	0	15	0	0	0	0	-	-
GLAP-NR-011	2017	FALL	Sand	0	0	20	65	5	10	0	0	0	0	0	-	-
GLAP-NR-012	2015	SPRING	Clay	0	90	0	10	0	0	0	0	0	0	0	-	-
GLAP-NR-012	2016	SPRING	Sand	5	0	10	55	0	30	0	0	0	0	0	-	-
GLAP-NR-012	2017	SPRING	Silt	5	0	40	20	0	10	25	0	0	0	0	-	-
GLAP-NR-012	2015	SUMMER	Sand	20	5	5	50	0	20	0	0	0	0	0	-	-
GLAP-NR-012	2016	SUMMER	Sand	0	10	25	35	15	10	5	0	0	0	0	-	-
GLAP-NR-012	2017	SUMMER	Silt	35	0	60	5	0	0	0	0	0	0	0	-	-
GLAP-NR-012	2015	FALL	Silt	0	25	55	5	5	10	0	0	0	0	0	-	-
GLAP-NR-012	2016	FALL	Silt	10	0	60	20	0	0	10	0	0	0	0	-	-
GLAP-NR-012	2017	FALL	Cobble	0	0	10	20	10	60	0	0	0	0	0	-	-
GLAP-NR-021	2015	SPRING	Clay	0	50	30	20	0	0	0	0	0	0	0	-	-
GLAP-NR-021	2016	SPRING	Silt	10	0	55	30	0	0	5	0	0	0	0	-	-
GLAP-NR-021	2017	SPRING	Silt	10	10	40	40	0	0	0	0	0	0	0	-	-
GLAP-NR-021	2015	SUMMER	Clay	10	50	10	30	0	0	0	0	0	0	0	-	-
GLAP-NR-021	2016	SUMMER	Silt	20	0	60	20	0	0	0	0	0	0	0	-	-
GLAP-NR-021	2017	SUMMER	Silt	10	0	70	20	0	0	0	0	0	0	0	-	-
GLAP-NR-021	2015	FALL	Silt	0	30	60	10	0	0	0	0	0	0	0	-	-
GLAP-NR-021	2016	FALL	Silt	0	10	50	40	0	0	0	0	0	0	0	-	-
GLAP-NR-021	2017	FALL	Sand	5	0	40	50	0	5	0	0	0	0	0	-	-
GLAP-NR-022	2015	SPRING	Sand	0	20	30	50	0	0	0	0	0	0	0	-	-
GLAP-NR-022	2016	SPRING	Sand	5	0	40	50	0	0	5	0	0	0	0	-	-
GLAP-NR-022	2017	SPRING	Sand	0	30	30	35	0	0	5	0	0	0	0	-	-
GLAP-NR-022	2015	SUMMER	Clay	10	50	20	15	0	0	5	0	0	0	0	-	-
GLAP-NR-022	2016	SUMMER	Silt	10	25	55	5	5	0	0	0	0	0	0	-	-
GLAP-NR-022	2017	SUMMER	Silt	0	0	65	30	0	0	5	0	0	0	0	-	-
GLAP-NR-022	2015	FALL	Clay	0	35	30	15	15	0	5	0	0	0	0	-	-
GLAP-NR-022	2016	FALL	Silt	0	0	60	40	0	0	0	0	0	0	0	-	-
GLAP-NR-022	2017	FALL	Sand	0	0	40	50	0	10	0	0	0	0	0	-	-
GLAP-NR-031	2015	SPRING	Silt	0	20	45	35	0	0	0	0	0	0	0	-	-
GLAP-NR-031	2016	SPRING	Gravel	0	10	10	20	50	10	0	0	0	0	0	-	-
GLAP-NR-031	2017	SPRING	Cobble	0	0	10	30	20	30	10	0	0	0	0	-	-
GLAP-NR-031	2015	SUMMER	Sand	10	0	30	50	10	0	0	0	0	0	0	-	-
GLAP-NR-031	2016	SUMMER	Silt	10	0	40	30	5	15	0	0	0	0	0	-	-
GLAP-NR-031	2017	SUMMER	Silt	0	5	75	10	5	5	0	0	0	0	0	-	-
GLAP-NR-031	2015	FALL	Silt	0	20	60	10	10	0	0	0	0	0	0	-	-
GLAP-NR-031	2016	FALL	Silt	0	0	45	20	15	20	0	0	0	0	0	-	-
GLAP-NR-031	2017	FALL	Sand	5	0	10	65	10	10	0	0	0	0	0	-	-
GLAP-NR-032	2015	SPRING	Clay	0	50	20	30	0	0	0	0	0	0	0	-	-
GLAP-NR-032	2016	SPRING	Silt	5	0	70	10	0	0	5	0	0	0	0	-	10
GLAP-NR-032	2017	SPRING	Sand	0	10	35	50	0	0	5	0	0	0	0	-	-
GLAP-NR-032	2015	SUMMER	Sand	10	30	20	40	0	0	0	0	0	0	0	-	-
GLAP-NR-032	2016	SUMMER	Sand	10	0	25	60	5	0	0	0	0	0	0	-	-
GLAP-NR-032	2017	SUMMER	Silt	0	0	60	30	10	0	0	0	0	0	0	-	-

Station code	Year	Season	Dominant substrate type	Organic	Clay	Silt	Sand	Gravel	Cobble	Boulder	Bedrock	Hardpan	Rubble	Concrete	Unknown	No data
GLAP-NR-032	2015	FALL	Sand	0	0	30	55	15	0	0	0	0	0	0	-	-
GLAP-NR-032	2016	FALL	Silt	0	0	60	25	10	5	0	0	0	0	0	-	-
GLAP-NR-032	2017	FALL	Sand	0	0	30	60	5	5	0	0	0	0	0	-	-
GLAP-NR-041	2015	SPRING	Sand	0	0	0	80	20	0	0	0	0	0	0	-	-
GLAP-NR-041	2016	SPRING	Cobble	0	5	5	15	30	40	5	0	0	0	0	-	-
GLAP-NR-041	2017	SPRING	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GLAP-NR-041	2015	SUMMER	Sand	10	0	0	40	0	30	20	0	0	0	0	-	-
GLAP-NR-041	2016	SUMMER	Cobble	0	0	5	10	30	50	5	0	0	0	0	-	-
GLAP-NR-041	2017	SUMMER	Cobble	0	0	0	10	35	50	5	0	0	0	0	-	-
GLAP-NR-041	2015	FALL	Sand	0	0	20	30	20	20	10	0	0	0	0	-	-
GLAP-NR-041	2016	FALL	Cobble	0	0	15	15	20	45	5	0	0	0	0	-	-
GLAP-NR-041	2017	FALL	Cobble	0	0	5	20	20	55	0	0	0	0	0	-	-
GLAP-NR-042	2015	SPRING	Gravel	0	0	0	40	60	0	0	0	0	0	0	-	-
GLAP-NR-042	2016	SPRING	Gravel	0	0	0	25	60	10	5	0	0	0	0	-	-
GLAP-NR-042	2017	SPRING	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GLAP-NR-042	2015	SUMMER	Sand	20	0	0	50	20	10	0	0	0	0	0	-	-
GLAP-NR-042	2016	SUMMER	Silt	30	0	30	10	20	10	0	0	0	0	0	-	-
GLAP-NR-042	2017	SUMMER	Sand	0	0	0	60	20	20	0	0	0	0	0	-	-
GLAP-NR-042	2015	FALL	Sand	0	0	40	60	0	0	0	0	0	0	0	-	-
GLAP-NR-042	2016	FALL	Gravel	0	0	20	30	40	5	5	0	0	0	0	-	-
GLAP-NR-042	2017	FALL	Cobble	0	0	30	20	20	30	0	0	0	0	0	-	-
GLAP-NR-051	2015	SPRING	Gravel	0	0	0	20	75	5	0	0	0	0	0	-	-
GLAP-NR-051	2016	SPRING	Boulder	0	0	5	0	25	25	45	0	0	0	0	-	-
GLAP-NR-051	2017	SPRING	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GLAP-NR-051	2015	SUMMER	Sand	5	10	5	30	15	20	15	0	0	0	0	-	-
GLAP-NR-051	2016	SUMMER	Cobble	10	0	10	20	10	30	20	0	0	0	0	-	-
GLAP-NR-051	2017	SUMMER	Cobble	0	0	5	10	30	50	5	0	0	0	0	-	-
GLAP-NR-051	2015	FALL	Silt	0	0	30	10	15	25	20	0	0	0	0	-	-
GLAP-NR-051	2016	FALL	Cobble	0	20	10	30	0	30	10	0	0	0	0	-	-
GLAP-NR-051	2017	FALL	Cobble	0	0	0	30	20	40	10	0	0	0	0	-	-
GLAP-NR-052	2015	SPRING	Sand	0	0	20	70	10	0	0	0	0	0	0	-	-
GLAP-NR-052	2016	SPRING	Gravel	0	0	5	25	50	0	20	0	0	0	0	-	-
GLAP-NR-052	2017	SPRING	Cobble	0	0	0	35	10	50	5	0	0	0	0	-	-
GLAP-NR-052	2015	SUMMER	Sand	5	10	10	35	10	10	20	0	0	0	0	-	-
GLAP-NR-052	2016	SUMMER	Sand	5	0	10	55	10	15	5	0	0	0	0	-	-
GLAP-NR-052	2017	SUMMER	Cobble	0	0	10	15	15	50	10	0	0	0	0	-	-
GLAP-NR-052	2015	FALL	Silt	0	0	45	25	10	10	10	0	0	0	0	-	-
GLAP-NR-052	2016	FALL	Cobble	0	0	0	20	20	50	10	0	0	0	0	-	-
GLAP-NR-052	2017	FALL	Cobble	0	0	5	25	20	50	0	0	0	0	0	-	-
GLAP-NR-061	2015	SPRING	Clay	0	50	30	20	0	0	0	0	0	0	0	-	-
GLAP-NR-061	2016	SPRING	Sand	5	0	15	80	0	0	0	0	0	0	0	-	-
GLAP-NR-061	2017	SPRING	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GLAP-NR-061	2015	SUMMER	Clay	10	50	35	5	0	0	0	0	0	0	0	-	-
GLAP-NR-061	2016	SUMMER	Silt	10	0	75	10	5	0	0	0	0	0	0	-	-
GLAP-NR-061	2017	SUMMER	Silt	0	0	90	10	0	0	0	0	0	0	0	-	-
GLAP-NR-061	2015	FALL	Silt	0	30	70	0	0	0	0	0	0	0	0	-	-
GLAP-NR-061	2016	FALL	Silt	5	5	80	10	0	0	0	0	0	0	0	-	-
GLAP-NR-061	2017	FALL	Sand	10	0	40	50	0	0	0	0	0	0	0	-	-
GLAP-NR-062	2015	SPRING	Clay	0	80	15	5	0	0	0	0	0	0	0	-	-
GLAP-NR-062	2016	SPRING	Silt	5	5	80	10	0	0	0	0	0	0	0	-	-
GLAP-NR-062	2017	SPRING	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GLAP-NR-062	2015	SUMMER	Clay	10	50	20	20	0	0	0	0	0	0	0	-	-
GLAP-NR-062	2016	SUMMER	Sand	0	0	5	90	5	0	0	0	0	0	0	-	-

Station code	Year	Season	Dominant substrate type	Organic	Clay	Silt	Sand	Gravel	Cobble	Boulder	Bedrock	Hardpan	Rubble	Concrete	Unknown	No data
GLAP-NR-062	2017	SUMMER	Sand	0	0	10	85	0	0	5	0	0	0	0	-	-
GLAP-NR-062	2015	FALL	Silt	0	30	60	0	0	5	5	0	0	0	0	-	-
GLAP-NR-062	2016	FALL	Silt	5	5	85	5	0	0	0	0	0	0	0	-	-
GLAP-NR-062	2017	FALL	Silt	20	0	60	20	0	0	0	0	0	0	0	-	-
GLAP-NR-071	2015	SPRING	Hardpan	0	15	0	10	10	0	10	0	55	0	0	-	-
GLAP-NR-071	2016	SPRING	Hardpan	5	0	20	10	15	20	5	0	25	0	0	-	-
GLAP-NR-071	2017	SPRING	Cobble	0	0	20	10	30	35	5	0	0	0	0	-	-
GLAP-NR-071	2015	SUMMER	Cobble	0	0	10	10	10	60	10	0	0	0	0	-	-
GLAP-NR-071	2016	SUMMER	Silt	5	10	40	0	15	20	5	0	5	0	0	-	-
GLAP-NR-071	2017	SUMMER	Gravel	0	0	10	10	45	30	5	0	0	0	0	-	-
GLAP-NR-071	2015	FALL	Hardpan	0	15	0	0	30	5	10	0	40	0	0	-	-
GLAP-NR-071	2016	FALL	Cobble	5	0	10	20	20	30	5	0	10	0	0	-	-
GLAP-NR-071	2017	FALL	Silt	10	0	40	20	15	10	5	0	0	0	0	-	-
GLAP-NR-072	2015	SPRING	Hardpan	0	10	0	0	20	5	10	0	55	0	0	-	-
GLAP-NR-072	2016	SPRING	Hardpan	5	0	5	0	15	20	5	0	50	0	0	-	-
GLAP-NR-072	2017	SPRING	Gravel	0	0	10	10	40	20	20	0	0	0	0	-	-
GLAP-NR-072	2015	SUMMER	Gravel	0	10	10	10	50	10	10	0	0	0	0	-	-
GLAP-NR-072	2016	SUMMER	Silt	0	0	40	0	20	25	5	0	10	0	0	-	-
GLAP-NR-072	2017	SUMMER	Cobble	0	0	20	20	15	40	5	0	0	0	0	-	-
GLAP-NR-072	2015	FALL	Hardpan	0	0	0	0	15	5	10	0	70	0	0	-	-
GLAP-NR-072	2016	FALL	Sand	0	0	20	30	20	20	10	0	0	0	0	-	-
GLAP-NR-072	2017	FALL	Silt	0	0	45	25	25	0	5	0	0	0	0	-	-
GLAP-NR-081	2015	SPRING	Silt	5	20	50	20	0	0	5	0	0	0	0	-	-
GLAP-NR-081	2016	SPRING	Silt	5	0	30	20	15	15	15	0	0	0	0	-	-
GLAP-NR-081	2017	SPRING	Sand	0	0	25	40	10	20	5	0	0	0	0	-	-
GLAP-NR-081	2015	SUMMER	Sand	10	40	10	40	0	0	0	0	0	0	0	-	-
GLAP-NR-081	2016	SUMMER	Sand	5	0	30	50	0	15	0	0	0	0	0	-	-
GLAP-NR-081	2017	SUMMER	Sand	0	0	10	55	20	10	5	0	0	0	0	-	-
GLAP-NR-081	2015	FALL	Sand	0	0	20	50	5	20	0	0	0	0	0	-	5
GLAP-NR-081	2016	FALL	Silt	0	0	40	20	10	20	10	0	0	0	0	-	-
GLAP-NR-081	2017	FALL	Silt	20	0	40	40	0	0	0	0	0	0	0	-	-
GLAP-NR-082	2015	SPRING	Clay	15	30	25	15	5	0	10	0	0	0	0	-	-
GLAP-NR-082	2016	SPRING	Silt	10	0	45	10	10	10	15	0	0	0	0	-	-
GLAP-NR-082	2017	SPRING	Silt	0	0	80	10	5	5	0	0	0	0	0	-	-
GLAP-NR-082	2015	SUMMER	Clay	5	45	10	25	5	5	5	0	0	0	0	-	-
GLAP-NR-082	2016	SUMMER	Silt	5	5	55	20	10	5	0	0	0	0	0	-	-
GLAP-NR-082	2017	SUMMER	Gravel	0	0	30	10	50	10	0	0	0	0	0	-	-
GLAP-NR-082	2015	FALL	Silt	0	0	55	20	10	15	0	0	0	0	0	-	-
GLAP-NR-082	2016	FALL	Silt	20	10	30	0	10	30	0	0	0	0	0	-	-
GLAP-NR-082	2017	FALL	Silt	30	0	60	10	0	0	0	0	0	0	0	-	-
GLAP-NR-091	2015	SPRING	Sand	5	0	10	50	10	15	10	0	0	0	0	-	-
GLAP-NR-091	2016	SPRING	Silt	0	0	30	20	10	30	10	0	0	0	0	-	-
GLAP-NR-091	2017	SPRING	Silt	0	10	65	10	10	5	0	0	0	0	0	-	-
GLAP-NR-091	2015	SUMMER	Sand	0	0	0	60	20	20	0	0	0	0	0	-	-
GLAP-NR-091	2016	SUMMER	Sand	0	0	15	50	25	10	0	0	0	0	0	-	-
GLAP-NR-091	2017	SUMMER	Cobble	0	0	30	10	20	35	5	0	0	0	0	-	-
GLAP-NR-091	2015	FALL	Silt	0	0	60	35	5	0	0	0	0	0	0	-	-
GLAP-NR-091	2016	FALL	Sand	0	0	30	50	0	20	0	0	0	0	0	-	-
GLAP-NR-091	2017	FALL	Cobble	0	0	30	30	0	40	0	0	0	0	0	-	-
GLAP-NR-092	2015	SPRING	Gravel	0	0	5	10	40	35	10	0	0	0	0	-	-
GLAP-NR-092	2016	SPRING	Sand	0	0	10	50	10	25	5	0	0	0	0	-	-
GLAP-NR-092	2017	SPRING	Cobble	0	0	5	20	30	45	0	0	0	0	0	-	-
GLAP-NR-092	2015	SUMMER	Sand	10	0	0	50	20	20	0	0	0	0	0	-	-

Station code	Year	Season	Dominant substrate type	Organic	Clay	Silt	Sand	Gravel	Cobble	Boulder	Bedrock	Hardpan	Rubble	Concrete	Unknown	No data
GLAP-NR-092	2016	SUMMER	Gravel	0	0	15	20	40	25	0	0	0	0	0	-	-
GLAP-NR-092	2017	SUMMER	Unknown	-	-	-	-	-	-	-	-	-	-	-	100	-
GLAP-NR-092	2015	FALL	Silt	0	0	50	30	20	0	0	0	0	0	0	-	-
GLAP-NR-092	2016	FALL	Cobble	0	0	20	20	0	60	0	0	0	0	0	-	-
GLAP-NR-092	2017	FALL	Cobble	0	0	5	25	25	45	0	0	0	0	0	-	-
GLAP-NR-101	2015	SPRING	Hardpan	0	0	5	15	25	15	0	10	30	0	0	-	-
GLAP-NR-101	2016	SPRING	Cobble	0	0	5	10	20	30	10	0	25	0	0	-	-
GLAP-NR-101	2017	SPRING	Hardpan	0	0	5	0	10	10	5	0	70	0	0	-	-
GLAP-NR-101	2015	SUMMER	Sand	10	0	20	60	0	5	5	0	0	0	0	-	-
GLAP-NR-101	2016	SUMMER	Cobble	0	0	10	0	25	55	10	0	0	0	0	-	-
GLAP-NR-101	2017	SUMMER	Cobble	0	0	5	5	15	65	10	0	0	0	0	-	-
GLAP-NR-101	2015	FALL	Cobble	0	0	0	15	10	60	5	0	10	0	0	-	-
GLAP-NR-101	2016	FALL	Cobble	0	0	5	10	15	50	15	0	5	0	0	-	-
GLAP-NR-101	2017	FALL	Cobble	0	0	5	10	0	70	0	0	15	0	0	-	-
GLAP-NR-102	2015	SPRING	Cobble	0	10	5	5	15	30	5	0	30	0	0	-	-
GLAP-NR-102	2016	SPRING	Cobble	0	0	5	15	20	35	15	0	10	0	0	-	-
GLAP-NR-102	2017	SPRING	Hardpan	0	0	10	0	10	10	0	0	70	0	0	-	-
GLAP-NR-102	2015	SUMMER	Sand	5	0	20	40	0	25	10	0	0	0	0	-	-
GLAP-NR-102	2016	SUMMER	Cobble	0	0	15	0	5	75	5	0	0	0	0	-	-
GLAP-NR-102	2017	SUMMER	Cobble	0	0	5	5	20	60	10	0	0	0	0	-	-
GLAP-NR-102	2015	FALL	Cobble	0	0	0	10	10	65	5	0	10	0	0	-	-
GLAP-NR-102	2016	FALL	Cobble	0	0	10	10	10	60	5	0	5	0	0	-	-
GLAP-NR-102	2017	FALL	Cobble	0	0	0	0	5	60	10	0	25	0	0	-	-

Appendix 6. *Aquatic and Riparian vegetation recorded during each sampling event measured in percent composition of each category of vegetation. Species of aquatic vegetation present were recorded, noting dominant species.*

Station code	Year	Season	Dominant aquatic vegetation type	Emergent	Floating	Submerged	Open water	Unknown	No data	Dominant vegetation species	Other vegetation species present	Dominant riparian vegetation type	Deciduous	Coniferous	Herbaceous	Shrubs	None	Unknown	No data
GLAP-NR-011	2015	SPRING	Open Water	0	0	10	90	-	-	-	-	None	20	0	10	10	60	-	-
GLAP-NR-011	2016	SPRING	Open Water	0	0	10	90	-	-	-	-	None	50	0	5	0	90	-	-
GLAP-NR-011	2017	SPRING	Submerged	0	0	95	5	-	-	*Stuckenia pectinatus*	*Potomegeton crispus*	None	5	0	5	0	90	-	-
GLAP-NR-011	2015	SUMMER	Submerged	0	0	90	10	-	-	*Stuckenia pectinatus*	*Vallisneria americana*	None	10	0	5	0	85	-	-
GLAP-NR-011	2016	SUMMER	Submerged	0	0	60	40	-	-	*Vallisneria americana*	*Elodea canadensis*, *Myriophyllum* sp.	None	5	0	5	0	90	-	-
GLAP-NR-011	2017	SUMMER	Submerged	0	0	90	10	-	-	*Vallisneria americana*	-	None	10	0	30	0	60	-	-
GLAP-NR-011	2015	FALL	Submerged	0	0	60	40	-	-	*Vallisneria americana*	-	None	0	0	10	5	85	-	-
GLAP-NR-011	2016	FALL	Open Water	0	0	25	75	-	-	*Vallisneria americana*	-	None	10	0	5	0	85	-	-
GLAP-NR-011	2017	FALL	Open Water	0	0	5	95	-	-	-	-	None	5	0	0	0	95	-	-
GLAP-NR-012	2015	SPRING	Open Water	0	0	0	100	-	-	n/a	-	Herbaceous	25	0	30	20	25	-	-
GLAP-NR-012	2016	SPRING	Open Water	0	0	15	85	-	-	-	-	None	20	0	10	0	70	-	-
GLAP-NR-012	2017	SPRING	Submerged	0	0	80	20	-	-	*Stuckenia pectinatus*	*Vallisneria americana*, *Potamogeton crispus*	None	30	0	20	0	50	-	-
GLAP-NR-012	2015	SUMMER	Submerged	0	0	90	10	-	-	*Stuckenia pectinatus*	*Vallisneria americana*, *Myriophyllum* sp.	None	20	0	20	0	60	-	-
GLAP-NR-012	2016	SUMMER	Submerged	0	0	90	10	-	-	*Vallisneria americana*	*Myriophyllum* sp.	None	20	0	20	10	50	-	-
GLAP-NR-012	2017	SUMMER	Submerged	0	0	95	5	-	-	*Vallisneria americana*	*Ceratophyllum demersum*, *Myriophyllum* sp.	None	20	0	20	0	60	-	-
GLAP-NR-012	2015	FALL	Submerged	0	0	60	40	-	-	*Vallisneria americana*		Deciduous	70	0	30	0	0	-	-
GLAP-NR-012	2016	FALL	Submerged	0	0	90	10	-	-	*Vallisneria americana*	*Myriophyllum* sp., *Elodea canadensis*	None	40	0	10	0	50	-	-
GLAP-NR-012	2017	FALL	Open Water	0	0	5	95	-	-	*Myriophyllum* sp.	-	None	5	0	5	0	90	-	-
GLAP-NR-021	2015	SPRING	Open Water	0	0	0	100	-	-	n/a	-	Deciduous	60	0	0	40	0	-	-
GLAP-NR-021	2016	SPRING	Open Water	0	0	10	90	-	-	-	-	Deciduous	70	0	10	10	10	-	-
GLAP-NR-021	2017	SPRING	Open Water	0	0	40	60	-	-	*Stuckenia pectinatus*	*Ceratophyllum demersum*	Deciduous	50	0	30	0	20	-	-
GLAP-NR-021	2015	SUMMER	Submerged	0	0	60	40	-	-	*Myriophyllum* sp.	*Vallisneria americana*, *Stuckenia pectinatus*	Deciduous	40	0	20	20	20	-	-
GLAP-NR-021	2016	SUMMER	Submerged	0	0	95	5	-	-	*Vallisneria americana*	*Myriophyllum* sp., *Ceratophyllum demersum*	Herbaceous	30	0	55	10	5	-	-
GLAP-NR-021	2017	SUMMER	Submerged	0	0	95	5	-	-	*Ceratophyllum demersum*	*Vallisneria americana*	Shrubs	30	0	20	50	0	-	-
GLAP-NR-021	2015	FALL	Submerged	0	0	80	20	-	-	*Vallisneria americana*	-	Deciduous	60	0	10	30	0	-	-
GLAP-NR-021	2016	FALL	Submerged	0	0	90	10	-	-	*Vallisneria americana*	-	Herbaceous	20	0	70	10	0	-	-
GLAP-NR-021	2017	FALL	Open Water	0	0	15	85	-	-	*Ceratophyllum demersum*	-	None	20	0	0	30	50	-	-
GLAP-NR-022	2015	SPRING	Open Water	0	0	0	100	-	-	n/a	-	Deciduous	40	0	30	30	0	-	-

Station code	Year	Season	Dominant aquatic vegetation type	Emergent	Floating	Submerged	Open water	Unknown	No data	Dominant vegetation species	Other vegetation species present	Dominant riparian vegetation type	Deciduous	Coniferous	Herbaceous	Shrubs	None	Unknown	No data
GLAP-NR-022	2016	SPRING	Open Water	0	0	10	90	-	-	-	-	Deciduous	50	0	10	0	40	-	-
GLAP-NR-022	2017	SPRING	Open Water	0	0	20	80	-	-	*Stuckenia pectinatus*	-	Deciduous	85	0	10	0	5	-	-
GLAP-NR-022	2015	SUMMER	Submerged	0	0	60	40	-	-	*Stuckenia pectinatus*	*Vallisneria americana*, *Myriophyllum* sp., *Elodea canadensis*	Deciduous	40	0	20	20	20	-	-
GLAP-NR-022	2016	SUMMER	Submerged	0	0	95	5	-	-	*Vallisneria americana*	*Myriophyllum* sp., *Elodea canadensis*	Deciduous	50	0	25	15	10	-	-
GLAP-NR-022	2017	SUMMER	Submerged	0	0	85	15	-	-	*Ceratophyllum demersum*	*Vallisneria americana*, *Myriophyllum* sp.	Shrubs	25	0	20	50	5	-	-
GLAP-NR-022	2015	FALL	Submerged	0	0	70	30	-	-	*Vallisneria americana*	-	Shrubs	40	0	20	40	0	-	-
GLAP-NR-022	2016	FALL	Submerged	0	0	70	30	-	-	*Vallisneria americana*	*Ceratophyllum demersum*	Herbaceous	30	0	40	30	0	-	-
GLAP-NR-022	2017	FALL	Open Water	0	0	20	80	-	-	*Vallisneria americana*	*Ceratophyllum demersum*, *Myriophyllum* sp.	None	20	0	0	40	40	-	-
GLAP-NR-031	2015	SPRING	Open Water	0	0	0	100	-	-	n/a	-	Deciduous	80	0	0	20	0	-	-
GLAP-NR-031	2016	SPRING	Open Water	0	0	15	85	-	-	-	-	Deciduous	50	0	20	0	30	-	-
GLAP-NR-031	2017	SPRING	Submerged	0	0	85	15	-	-	*Stuckenia pectinatus*	*Vallisneria americana*	Deciduous	70	0	5	0	25	-	-
GLAP-NR-031	2015	SUMMER	Submerged	0	0	95	5	-	-	*Vallisneria americana*	*Stuckenia pectinatus*, *Myriophyllum* sp.	Deciduous	70	0	25	5	0	-	-
GLAP-NR-031	2016	SUMMER	Submerged	0	0	60	40	-	-	*Vallisneria americana*	*Potomogeton richarsonii*, *Myriophyllum* sp.	Deciduous	60	0	30	0	10	-	-
GLAP-NR-031	2017	SUMMER	Submerged	0	0	90	10	-	-	*Vallisneria americana*	*Myriophyllum* sp.	Deciduous	65	0	20	0	15	-	-
GLAP-NR-031	2015	FALL	Submerged	0	0	80	20	-	-	*Vallisneria americana*	-	Herbaceous	30	0	70	0	0	-	-
GLAP-NR-031	2016	FALL	Submerged	0	0	90	10	-	-	*Vallisneria americana*	-	None	10	0	20	10	60	-	-
GLAP-NR-031	2017	FALL	Open Water	0	0	5	95	-	-	*Vallisneria americana*	-	None	40	0	10	0	50	-	-
GLAP-NR-032	2015	SPRING	Open Water	0	0	0	100	-	-	n/a	-	Deciduous	70	0	0	30	0	-	-
GLAP-NR-032	2016	SPRING	Open Water	0	0	5	95	-	-	-	-	None	20	0	10	0	70	-	-
GLAP-NR-032	2017	SPRING	Submerged	0	0	80	20	-	-	*Stuckenia pectinatus*	-	Deciduous	60	0	30	0	10	-	-
GLAP-NR-032	2015	SUMMER	Submerged	0	0	70	30	-	-	*Vallisneria americana*	*Stuckenia pectinatus*	Deciduous	70	0	0	30	0	-	-
GLAP-NR-032	2016	SUMMER	Submerged	0	0	70	30	-	-	*Vallisneria americana*	*Myriophyllum* sp.	None	20	0	30	10	40	-	-
GLAP-NR-032	2017	SUMMER	Submerged	0	0	95	5	-	-	*Vallisneria americana*	*Potamogeton natans*, *Myriophyllum* sp.	Deciduous	40	0	30	0	30	-	-
GLAP-NR-032	2015	FALL	Submerged	0	0	90	10	-	-	*Vallisneria americana*	-	Herbaceous	45	0	55	0	0	-	-
GLAP-NR-032	2016	FALL	Submerged	0	0	80	20	-	-	*Vallisneria americana*	-	None	20	0	20	10	50	-	-
GLAP-NR-032	2017	FALL	Open Water	0	0	5	95	-	-	*Vallisneria americana*	-	None	10	0	5	0	85	-	-
GLAP-NR-041	2015	SPRING	Open Water	0	0	0	100	-	-	n/a	-	Deciduous	80	0	20	0	0	-	-
GLAP-NR-041	2016	SPRING	Open Water	0	0	0	100	-	-	n/a	-	Deciduous	80	0	20	0	0	-	-
GLAP-NR-041	2017	SPRING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GLAP-NR-041	2015	SUMMER	Open Water	30	0	30	40	-	-	*Vallisneria americana*	reeds	Herbaceous	40	0	50	0	10	-	-
GLAP-NR-041	2016	SUMMER	Submerged	15	0	65	20	-	-	*Vallisneria americana*	-	None	40	0	20	0	40	-	-
GLAP-NR-041	2017	SUMMER	Submerged	5	0	65	30	-	-	*Vallisneria americana*	reeds, *Poaceae*	Deciduous	70	0	20	0	10	-	-

Station code	Year	Season	Dominant aquatic vegetation type	Emergent	Floating	Submerged	Open water	Unknown	No data	Dominant vegetation species	Other vegetation species present	Dominant riparian vegetation type	Deciduous	Coniferous	Herbaceous	Shrubs	None	Unknown	No data
GLAP-NR-041	2015	FALL	Submerged	0	0	70	30	-	-	*Vallisneria americana*	-	Deciduous	80	0	15	5	0	-	-
GLAP-NR-041	2016	FALL	Submerged	20	0	60	20	-	-	*Vallisneria americana*	reeds	None	10	0	40	0	50	-	-
GLAP-NR-041	2017	FALL	Open Water	5	0	5	90	-	-	-	-	Deciduous	30	0	30	0	40	-	-
GLAP-NR-042	2015	SPRING	Open Water	0	0	0	100	-	-	n/a	-	Deciduous	80	0	20	0	0	-	-
GLAP-NR-042	2016	SPRING	Open Water	5	0	0	95	-	-	-	-	Deciduous	80	0	20	0	0	-	-
GLAP-NR-042	2017	SPRING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GLAP-NR-042	2015	SUMMER	Open Water	10	0	40	50	-	-	*Vallisneria americana*	reeds, *Phragmites australis*	Herbaceous	40	0	50	0	10	-	-
GLAP-NR-042	2016	SUMMER	Submerged	5	0	50	45	-	-	*Vallisneria americana*	*Phragmites australis*, *Typha* sp.	None	30	0	10	0	60	-	-
GLAP-NR-042	2017	SUMMER	Submerged	5	0	80	15	-	-	*Vallisneria americana*	*Phragmites australis*	Herbaceous	40	0	40	10	10	-	-
GLAP-NR-042	2015	FALL	Submerged	0	0	90	10	-	-	*Vallisneria americana*	-	Deciduous	60	0	30	10	0	-	-
GLAP-NR-042	2016	FALL	Submerged	10	0	50	40	-	-	*Vallisneria americana*	reeds, *Phragmites australis*	None	10	0	10	0	80	-	-
GLAP-NR-042	2017	FALL	Open Water	5	0	10	85	-	-	*Vallisneria americana*	-	Deciduous	50	0	20	0	30	-	-
GLAP-NR-051	2015	SPRING	Open Water	0	0	0	100	-	-	n/a	-	Deciduous	70	0	10	20	0	-	-
GLAP-NR-051	2016	SPRING	Open Water	0	0	0	100	-	-	n/a	-	Herbaceous	35	0	60	0	5	-	-
GLAP-NR-051	2017	SPRING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GLAP-NR-051	2015	SUMMER	Submerged	0	0	50	50	-	-	*Vallisneria americana*	*Potomogeton richarsonii*, *Stuckenia pectinatus*	Herbaceous	25	0	50	0	25	-	-
GLAP-NR-051	2016	SUMMER	Open Water	0	0	40	60	-	-	*Potamogeton richardsonii*	*Vallisneria americana*	Herbaceous	30	0	35	5	30	-	-
GLAP-NR-051	2017	SUMMER	Submerged	0	0	55	45	-	-	*Vallisneria americana*	*Potomogeton richarsonii*	Herbaceous	25	0	40	5	30	-	-
GLAP-NR-051	2015	FALL	Open Water	0	0	20	80	-	-	-	-	Herbaceous	40	0	60	0	0	-	-
GLAP-NR-051	2016	FALL	Open Water	0	0	10	90	-	-	*Vallisneria americana*	-	None	20	0	30	0	50	-	-
GLAP-NR-051	2017	FALL	Open Water	0	0	10	90	-	-	*Vallisneria americana*	-	Deciduous	40	0	30	0	30	-	-
GLAP-NR-052	2015	SPRING	Open Water	0	0	0	100	-	-	n/a	-	Deciduous	80	0	10	10	0	-	-
GLAP-NR-052	2016	SPRING	Open Water	0	0	0	100	-	-	n/a	-	Herbaceous	35	0	60	0	5	-	-
GLAP-NR-052	2017	SPRING	Submerged	0	0	65	35	-	-	*Stuckenia pectinatus*	*Vallisneria americana*	Deciduous	45	0	10	15	30	-	-
GLAP-NR-052	2015	SUMMER	Submerged	0	0	60	40	-	-	*Vallisneria americana*	*Potomogeton richarsonii*, *Stuckenia pectinatus*	None	25	0	25	0	50	-	-
GLAP-NR-052	2016	SUMMER	Submerged	0	0	60	40	-	-	*Potamogeton richardsonii*	*Vallisneria americana*	Herbaceous	30	0	40	0	30	-	-
GLAP-NR-052	2017	SUMMER	Submerged	0	0	70	30	-	-	-	-	Herbaceous	30	0	35	5	30	-	-
GLAP-NR-052	2015	FALL	Open Water	0	0	40	60	-	-	-	-	Herbaceous	40	0	60	0	0	-	-
GLAP-NR-052	2016	FALL	Open Water	0	0	30	70	-	-	*Vallisneria americana*	-	None	40	0	10	0	50	-	-
GLAP-NR-052	2017	FALL	Open Water	0	0	5	95	-	-	*Vallisneria americana*	-	Deciduous	60	0	40	0	0	-	-
GLAP-NR-061	2015	SPRING	Open Water	0	0	10	90	-	-	-	-	Deciduous	90	0	10	0	0	-	-
GLAP-NR-061	2016	SPRING	Open Water	0	0	10	90	-	-	-	-	Deciduous	70	5	15	0	10	-	-
GLAP-NR-061	2017	SPRING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GLAP-NR-061	2015	SUMMER	Submerged	0	0	90	10	-	-	*Vallisneria americana*	-	Herbaceous	30	0	60	0	10	-	-

Station code	Year	Season	Dominant aquatic vegetation type	Emergent	Floating	Submerged	Open water	Unknown	No data	Dominant vegetation species	Other vegetation species present	Dominant riparian vegetation type	Deciduous	Coniferous	Herbaceous	Shrubs	None	Unknown	No data
GLAP-NR-061	2016	SUMMER	Submerged	0	0	90	10	-	-	*Vallisneria americana*	-	Deciduous	50	0	30	0	20	-	-
GLAP-NR-061	2017	SUMMER	Submerged	0	0	95	5	-	-	*Stuckenia pectinatus*	*Vallisneria americana*	Herbaceous	40	0	50	5	5	-	-
GLAP-NR-061	2015	FALL	Submerged	0	0	70	30	-	-	*Vallisneria americana*		Deciduous	80	0	15	5	0	-	-
GLAP-NR-061	2016	FALL	Submerged	0	0	60	40	-	-	*Ceratophyllum demersum*	*Vallisneria americana*	Herbaceous	20	0	50	0	30	-	-
GLAP-NR-061	2017	FALL	Open Water	0	0	5	95	-	-	*Vallisneria americana*	*Myriophyllum* sp.	Herbaceous	30	0	40	0	30	-	-
GLAP-NR-062	2015	SPRING	Open Water	0	0	15	85	-	-	-	-	Deciduous	90	0	10	0	0	-	-
GLAP-NR-062	2016	SPRING	Open Water	0	0	15	85	-	-	-	-	Deciduous	70	0	15	0	15	-	-
GLAP-NR-062	2017	SPRING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GLAP-NR-062	2015	SUMMER	Submerged	0	0	55	45	-	-	*Vallisneria americana*	*Myriophyllum* sp.	Herbaceous	20	0	60	0	20	-	-
GLAP-NR-062	2016	SUMMER	Submerged	0	0	90	10	-	-	*Vallisneria americana*		Deciduous	50	0	20	0	30	-	-
GLAP-NR-062	2017	SUMMER	Submerged	0	0	80	20	-	-	*Vallisneria americana*	*Stuckenia pectinatus*, *Myriophyllum* sp.	Deciduous	60	0	25	10	5	-	-
GLAP-NR-062	2015	FALL	Open Water	0	0	40	60	-	-	*Vallisneria americana*	-	Deciduous	80	0	10	10	0	-	-
GLAP-NR-062	2016	FALL	Submerged	0	0	80	20	-	-	*Vallisneria americana*	*Ceratophyllum demersum*	Herbaceous	30	0	40	0	30	-	-
GLAP-NR-062	2017	FALL	Open Water	0	0	5	95	-	-	*Vallisneria americana*	-	Deciduous	40	0	20	20	20	-	-
GLAP-NR-071	2015	SPRING	Open Water	0	0	20	80	-	-	-	-	Deciduous	60	0	5	5	30	-	-
GLAP-NR-071	2016	SPRING	Open Water	0	0	5	95	-	-	-	-	None	20	0	0	0	80	-	-
GLAP-NR-071	2017	SPRING	Submerged	0	0	60	40	-	-	*Potamogeton crispus*	-	Deciduous	40	0	40	0	20	-	-
GLAP-NR-071	2015	SUMMER	Submerged	0	0	60	40	-	-	*Vallisneria americana*	-	Deciduous	50	0	10	0	40	-	-
GLAP-NR-071	2016	SUMMER	Submerged	0	0	80	20	-	-	*Vallisneria americana*	*Stuckenia pectinatus*, *Elodea canadensis*	None	40	0	0	0	60	-	-
GLAP-NR-071	2017	SUMMER	Not recorded	-	-	-	-	-	100	-	-	None	-	-	-	-	40	-	60
GLAP-NR-071	2015	FALL	Submerged	0	0	50	50	-	-	-	-	Deciduous	90	0	0	10	0	-	-
GLAP-NR-071	2016	FALL	Open Water	0	0	15	85	-	-	*Vallisneria americana*	-	None	15	0	5	0	80	-	-
GLAP-NR-071	2017	FALL	Open Water	0	0	0	100	-	-	n/a	-	Deciduous	50	0	50	0	0	-	-
GLAP-NR-072	2015	SPRING	Open Water	0	0	30	70	-	-	-	-	Deciduous	50	0	5	5	40	-	-
GLAP-NR-072	2016	SPRING	Open Water	0	0	5	95	-	-	-	-	None	10	0	5	0	85	-	-
GLAP-NR-072	2017	SPRING	Submerged	0	0	60	40	-	-	*Potamogeton crispus*	*Stuckenia pectinatus*	Deciduous	45	0	15	0	40	-	-
GLAP-NR-072	2015	SUMMER	Submerged	0	0	50	50	-	-	*Vallisneria americana*	-	None	5	0	5	0	90	-	-
GLAP-NR-072	2016	SUMMER	Submerged	0	0	85	15	-	-	*Vallisneria americana*	*Stuckenia pectinatus*	None	45	0	5	0	50	-	-
GLAP-NR-072	2017	SUMMER	Not recorded	-	-	-	-	-	100	-	-	Deciduous	80	0	0	0	20	-	-
GLAP-NR-072	2015	FALL	Open Water	0	0	40	60	-	-	-	-	Deciduous	90	0	0	10	0	-	-
GLAP-NR-072	2016	FALL	Open Water	0	0	20	80	-	-	*Vallisneria americana*	-	None	20	0	5	0	75	-	-
GLAP-NR-072	2017	FALL	Open Water	0	0	0	100	-	-	n/a	-	Herbaceous	50	0	50	0	0	-	-
GLAP-NR-081	2015	SPRING	Submerged	0	0	90	10	-	-	*Stuckenia pectinatus*	-	Deciduous	90	0	5	5	0	-	-
GLAP-NR-081	2016	SPRING	Submerged	0	0	70	30	-	-	*Stuckenia pectinatus*	-	Deciduous	90	0	0	0	10	-	-

Station code	Year	Season	Dominant aquatic vegetation type	Emergent	Floating	Submerged	Open water	Unknown	No data	Dominant vegetation species	Other vegetation species present	Dominant riparian vegetation type	Deciduous	Coniferous	Herbaceous	Shrubs	None	Unknown	No data
GLAP-NR-081	2017	SPRING	Submerged	0	0	60	40	-	-	*Potamogeton crispus*	*Stuckenia pectinatus*	Deciduous	60	0	40	0	0	-	-
GLAP-NR-081	2015	SUMMER	Submerged	0	0	80	20	-	-	*Vallisneria americana*	*Stuckenia pectinatus*	Deciduous	90	0	10	0	0	-	-
GLAP-NR-081	2016	SUMMER	Submerged	0	0	95	5	-	-	*Vallisneria americana*	*Stuckenia pectinatus*, *Elodea canadensis*	Deciduous	90	0	5	0	5	-	-
GLAP-NR-081	2017	SUMMER	Open Water	0	0	30	70	-	-	*Vallisneria americana*	*Stuckenia pectinatus*, *Myriophyllum* sp.	Deciduous	90	0	5	5	0	-	-
GLAP-NR-081	2015	FALL	Submerged	0	0	80	20	-	-	*Vallisneria americana*	-	Deciduous	70	0	20	5	5	-	-
GLAP-NR-081	2016	FALL	Submerged	0	0	60	40	-	-	*Vallisneria americana*	-	None	15	0	5	0	80	-	-
GLAP-NR-081	2017	FALL	Submerged	0	0	60	40	-	-	*Myriophyllum* sp.	-	Deciduous	80	0	10	10	0	-	-
GLAP-NR-082	2015	SPRING	Submerged	0	0	75	25	-	-	*Stuckenia pectinatus*	-	Deciduous	80	0	10	10	0	-	-
GLAP-NR-082	2016	SPRING	Open Water	0	0	30	70	-	-	*Stuckenia pectinatus*	-	Deciduous	90	0	0	0	10	-	-
GLAP-NR-082	2017	SPRING	Submerged	0	0	70	30	-	-	*Potamogeton crispus*	*Stuckenia pectinatus*, *Elodea canadensis*	Deciduous	50	0	50	0	0	-	-
GLAP-NR-082	2015	SUMMER	Submerged	0	0	60	40	-	-	*Vallisneria americana*	*Stuckenia pectinatus*	Deciduous	85	0	10	0	5	-	-
GLAP-NR-082	2016	SUMMER	Submerged	0	0	90	10	-	-	*Vallisneria americana*	*Stuckenia pectinatus*, *Elodea canadensis*	Deciduous	90	0	5	0	5	-	-
GLAP-NR-082	2017	SUMMER	Not recorded	-	-	-	-	-	100	*Vallisneria americana*	-	No Data	-	-	-	-	-	-	100
GLAP-NR-082	2015	FALL	Submerged	0	0	60	40	-	-	*Vallisneria americana*	-	Deciduous	50	0	30	10	10	-	-
GLAP-NR-082	2016	FALL	Open Water	0	0	40	60	-	-	*Vallisneria americana*	-	None	10	0	10	0	80	-	-
GLAP-NR-082	2017	FALL	Submerged	0	0	60	40	-	-	*Myriophyllum* sp.	-	Deciduous	80	0	10	10	0	-	-
GLAP-NR-091	2015	SPRING	Submerged	0	0	60	40	-	-	*Stuckenia pectinatus*	filamentous algae	Deciduous	70	0	15	15	0	-	-
GLAP-NR-091	2016	SPRING	Submerged	0	0	60	40	-	-	*Elodea canadensis*	*Stuckenia pectinatus*	Deciduous	70	0	20	0	10	-	-
GLAP-NR-091	2017	SPRING	Submerged	0	0	80	20	-	-	*Potamogeton crispus*	*Stuckenia pectinatus*, *Elodea canadensis*	Deciduous	70	0	30	0	0	-	-
GLAP-NR-091	2015	SUMMER	Submerged	0	0	55	45	-	-	*Vallisneria americana*	*Stuckenia pectinatus*	Deciduous	40	0	25	25	10	-	-
GLAP-NR-091	2016	SUMMER	Submerged	0	0	70	30	-	-	*Vallisneria americana*	-	Deciduous	40	0	15	10	35	-	-
GLAP-NR-091	2017	SUMMER	Open Water	0	0	40	60	-	-	*Vallisneria americana*	*Myriophyllum* sp.	Deciduous	95	0	5	0	0	-	-
GLAP-NR-091	2015	FALL	Open Water	0	0	40	60	-	-	*Vallisneria americana*	-	Deciduous	80	0	10	10	0	-	-
GLAP-NR-091	2016	FALL	Open Water	0	0	40	60	-	-	*Vallisneria americana*	-	None	5	0	5	0	90	-	-
GLAP-NR-091	2017	FALL	Open Water	0	0	5	95	-	-	*Myriophyllum* sp.	-	None	20	0	20	10	50	-	-
GLAP-NR-092	2015	SPRING	Open Water	0	0	30	70	-	-	-	-	Deciduous	40	0	20	30	10	-	-
GLAP-NR-092	2016	SPRING	Submerged	0	0	70	30	-	-	*Elodea canadensis*	*Stuckenia pectinatus*	Deciduous	85	0	5	0	10	-	-
GLAP-NR-092	2017	SPRING	Submerged	0	0	90	10	-	-	*Potamogeton crispus*	*Stuckenia pectinatus*, *Elodea canadensis*	Deciduous	60	0	40	0	0	-	-
GLAP-NR-092	2015	SUMMER	Submerged	0	0	60	40	-	-	*Vallisneria americana*	*Stuckenia pectinatus*	Herbaceous	10	0	50	15	25	-	-
GLAP-NR-092	2016	SUMMER	Submerged	0	0	90	10	-	-	*Vallisneria americana*	-	Deciduous	55	0	10	10	25	-	-
GLAP-NR-092	2017	SUMMER	Open Water	0	0	10	90	-	-	*Stuckenia pectinatus*	*Myriophyllum* sp.	Deciduous	70	0	20	0	10	-	-
GLAP-NR-092	2015	FALL	Open Water	0	0	40	60	-	-	*Vallisneria americana*	-	Deciduous	60	0	25	15	0	-	-
GLAP-NR-092	2016	FALL	Open Water	0	0	40	60	-	-	*Vallisneria americana*	-	None	5	0	0	0	95	-	-

Station code	Year	Season	Dominant aquatic vegetation type	Emergent	Floating	Submerged	Open water	Unknown	No data	Dominant vegetation species	Other vegetation species present	Dominant riparian vegetation type	Deciduous	Coniferous	Herbaceous	Shrubs	None	Unknown	No data
GLAP-NR-092	2017	FALL	Open Water	0	0	5	95	-	-	*Myriophyllum* sp.	-	None	20	0	20	0	80	-	-
GLAP-NR-101	2015	SPRING	Open Water	0	0	10	90	-	-	-	-	None	20	0	10	10	60	-	-
GLAP-NR-101	2016	SPRING	Open Water	0	0	10	90	-	-	*Stuckenia pectinatus*	-	None	5	0	0	0	95	-	-
GLAP-NR-101	2017	SPRING	Open Water	0	0	10	90	-	-	*Stuckenia pectinatus*	-	Deciduous	60	0	20	0	20	-	-
GLAP-NR-101	2015	SUMMER	Submerged	0	0	60	40	-	-	*Vallisneria americana*	*Stuckenia pectinatus*	None	20	0	10	0	70	-	-
GLAP-NR-101	2016	SUMMER	Open Water	0	0	30	70	-	-	*Vallisneria americana*		None	20	0	0	0	80	-	-
GLAP-NR-101	2017	SUMMER	Open Water	0	0	20	80	-	-	*Vallisneria americana*	*Stuckenia pectinatus*, *Myriophyllum* sp.	None	10	0	10	10	70	-	-
GLAP-NR-101	2015	FALL	Open Water	0	0	10	90	-	-	*Vallisneria americana*	-	None	5	0	0	5	90	-	-
GLAP-NR-101	2016	FALL	Open Water	0	0	10	90	-	-	*Ceratophyllum demersum*	*Vallisneria americana*	None	0	0	0	0	100	-	-
GLAP-NR-101	2017	FALL	Open Water	0	0	5	95	-	-	*Myriophyllum* sp.	*Vallisneria americana*, *Myriophyllum* sp.	None	15	0	10	10	65	-	-
GLAP-NR-102	2015	SPRING	Open Water	0	0	5	95	-	-	-	-	None	20	0	20	10	50	-	-
GLAP-NR-102	2016	SPRING	Open Water	0	0	5	95	-	-	*Stuckenia pectinatus*	-	None	5	0	10	0	85	-	-
GLAP-NR-102	2017	SPRING	Open Water	0	0	10	90	-	-	*Stuckenia pectinatus*	-	None	40	0	20	0	40	-	-
GLAP-NR-102	2015	SUMMER	Open Water	0	0	40	60	-	-	*Vallisneria americana*	*Stuckenia pectinatus*	None	20	0	10	0	70	-	-
GLAP-NR-102	2016	SUMMER	Open Water	0	0	30	70	-	-	*Vallisneria americana*	-	None	20	0	0	0	80	-	-
GLAP-NR-102	2017	SUMMER	Open Water	0	0	30	70	-	-	*Vallisneria americana*	*Stuckena pectinatus*, *Myriophyllum* sp.	None	10	0	5	5	80	-	-
GLAP-NR-102	2015	FALL	Open Water	0	0	10	90	-	-	*Vallisneria americana*	-	None	5	0	5	0	90	-	-
GLAP-NR-102	2016	FALL	Open Water	0	0	10	90	-	-	*Ceratophyllum demersum*	*Vallisneria americana*	None	0	0	0	0	100	-	-
GLAP-NR-102	2017	FALL	Open Water	0	0	5	95	-	-	*Vallisneria americana*	-	None	10	0	10	10	70	-	-