

| First Name | Last Name  | Affiliation                                    | Email Address                     | Telephone Number      | What is the name of the project or dataset?   | Where is the project site, or where were the data collected?  | When were the data collected?   | What were the goals of the project?  | What habitats were sampled?  | What was measured?   | Data format       | Data Availability   |
|------------|------------|--|-----------------------------------|-----------------------|---|---|---|--|--|--|-------------------|---|
| Andy       | Edwards    | 1854 Treaty Authority                          | aedwards@1854treatyauthority.org  | 218-722-8907          | Juvenile Sturgeon telemetry   | sturgeon were captured from Boy Scout landing to Blatnik Bridge and received external radio transmitters; St. Louis River Complex   | 2005-2008 open water seasons  | Examine movements and areas utilized by juvenile lake sturgeon in the St. Louis River estuary.   | Shallow flats, dredged areas, natural channels   |  | Electronic; Paper | Available with permission   |
| Andy       | Edwards    | 1854 Treaty Authority                          | aedwards@1854treatyauthority.org  | 218-722-8907          | Monitoring for larval sturgeon production   | immediately downstream of Hwy. 23 bridge in 2010; immediately below FDL dam in 2011; 2012 sampling will be immediately below FDL dam; St. Louis River Complex   | spring 2010, spring 2011 by FDL (218-878-8004); planned as annual spring survey beginning in 2012 | Test effectiveness of larval drift netting (in 2010) with goal of implementing additional monitoring to determine if larval sturgeon are being produced in the St. Louis River estuary. 4 larval sturgeon collected by FDL in 2011; goal of continued annual sampling is to document annual reproduction.  | riffle/run channel areas   |  | Paper             | Available with permission   |
| Andy       | Edwards    | 1854 Treaty Authority                          | aedwards@1854treatyauthority.org  | 218-722-8907          | Monitoring Native and Invasive Fish Communities with Bottom Trawling  | 40 randomly selected locations stratified by depth/habitat type; St. Louis River Complex  | August 2010, August 2011, planned annual, next in August 2012                                     | Resume annual bottom trawling survey (previously initiated and conducted by USFWS/USGS) to monitor abundance and distribution of native and invasive fish species in the St. Louis River estuary. Additional goals are to use as surveillance tool for new invasives, remove a portion of invasive species annually, and as another surveillance method to document successful reproduction of lake sturgeon, if/when that occurs. | Shallow flats, dredged areas, natural channels   | location and cpue (fish/ha trawled)  | Electronic; Paper | Available with permission, 2011 report should be completed by 3/31/12 |
| Chad       | Scott      | AMI Consulting Engineers                       | chad.scott@amiengineers.com       | 715-718-2193          | General Harbor Information  | Duluth-Superior Harbor, Lake Superior, Rivers; St. Louis River Complex  | 1997-2011   | Corrosion measurements, water quality measurements, underwater video, soundings, structure information, soils info, water temps, etc.  | River / Harbor / Lake  | All depths   | Electronic        | Available with permission   |
| Charlene   | Johnson    | City of Superior                               | johnsoncharlene@ci.superior.wi.us | 715-395-7506          | City of Superior Special Area Management Plan   | City of Superior; St. Louis River Complex   | 2002-2006   | Identify wetlands in otherwise developable areas of the City, evaluate their functions, update the wetland boundaries (estimated- not wetland delineations), supplement the Wisconsin Wetland Inventory, and identify highly functional wetlands in the City. Data is used to evaluate and manage permitting decisions at the local, state, and federal level.   | Wetland habitats   | Qualitatively (functional assessments); quantitatively by estimate of wetland area   | Paper             | Available with permission   |
| Charlene   | Johnson    | City of Superior                               | johnsoncharlene@ci.superior.wi.us | 715-395-7506          | City of Superior Mitigation Banking Document  | City of Superior, Douglas County; St. Louis River Complex   | 2000-2011   | Design, implement, administer, and monitor compensatory wetland mitigation sites in the Lake Superior watershed supporting the City of Superior SAMP I and II programs. Other mitigation sites, including preservation of more than 600 acres of wetlands in the Superior area (including within the SLR estuary). Purple loosestrife reduction and preservation in the Pokegama watershed.  | Wetland; Upland Buffers  | Wetland restoration, enhancement, creation, preservation   | Electronic        | Available with permission   |
| Charlene   | Johnson    | City of Superior                               | johnsoncharlene@ci.superior.wi.us | 715-395-7506          | Predicting vegetation from wetlands created from dredged material in the Duluth-Superior Harbors  | Duluth-Superior Harbor; St. Louis River Complex   | 2002-2003   | Determine if dredged material used to create wetland habitats in the harbor would house enough viable seeds in the seed bank to provide density and diversity to a created/restored wetland habitat.   | Harbor   | seed bank composition; soil characters of dredged samples  | Electronic        | Available with permission   |
| Diane      | Desotelle  | Desotelle Consulting, PLC (contractor to MPCA) | desotelle@chartermi.net           |                       | Draft SLR AOC Sediment Quality Management Plan  | St. Louis River Complex   |   | The overarching goal of this project was to assist the MPCA and other key stakeholders in developing a sediment quality management plan that will facilitate the restoration of the economic, ecological, and cultural components of the Lower St. Louis River and work toward removing this AOC from the federal list.  |  | Sediment data were integrated and synthesized from a variety of sources and formats. Where feasible, a GIS data management system was incorporated to help with the decision-making process of the plan. This plan and data management system organizes the sediment quality information into a dynamic user-friendly format that will help with future decision-making for sediment contamination in the Lower St. Louis River. | Electronic        | Free  |
| Mark       | Pearson    | EPA - Duluth, MN                               | pearson.mark@epa.gov              | 218-529-5205          | Great Lakes Case Study  | Three locations: Hwy 23 bridge, Indian Point, & Nemadji River; St. Louis River Complex  | spring-summer 2004  | In support of Aquatic stressors: Framework and implementation plan for effects research. USEPA 2002.   | main channel borders   | Fish, macroinvertebrates, algae, water quality, physical habitat   | Electronic        | Available with permission   |
| Amy        | Eliot      | Lake Superior Research Institute               | a Eliot@uwsuper.edu               | 715-394-8313          | Lake Superior Water Action Volunteers   | Bear Creek @ city limits road; Bear Creek north of Hwy 53; Bluff Creek @ City Limits Road. These streams are located in Douglas County and empty to Allouez Bay.; St. Louis River Complex   | Bear: 2007-2010. Bluff: 2008-2009.  | Train volunteers to collect stream data in the Lake Superior basin.  | wadeable streams   | DO, flow, temp, transparency, habitat, biotic index  | Electronic        | Free  |
| Amy        | Eliot      | Lake Superior Research Institute               | a Eliot@uwsuper.edu               | 715-394-8313          | Implementing WDNR's Lake Superior Nearshore Monitoring Program  | Little Pokegama, Pokegama watersheds; Lower Nemadji wetlands #1 and #2; Allouez Bay; North Fish Creek; Oronto Creek; Bark River; Bois Brule River; Cranberry River; Flag River; Iron River; Lost Creek; Onion River; Raspberry River; Saxine Creek; Sioux River | 2011-2013   | Collect baseline water quality and land cover data in 17 WI Lake Superior basin watersheds identified as priority areas by the WDNR.   | Stream; estuary; nearshore zone  | Streams: Habitat assessment; transparency; flow; DO; pH; Chlorophyll a; turbidity; temperature; nutrients; macroinvertebrates; Estuaries: Same as streams plus amphibians; birds; vegetation Nearshore zone: same as streams plus zooplankton; larval fish. Land cover assessment of 17 watersheds.  | Electronic        | Not currently available   |
| Sue        | O'Halloran | Lake Superior Research Institute               | sohallor@uwsuper.edu              | 715-392-3141          | Lake Superior Coastal Wetland and Stream Monitoring Project   | St. Louis River Complex; Bark River; Flag River; Lost Creek; Sioux River; Newton Creek  | 2007-2010   | The major goal of the project was to pilot coastal wetland biological indicators developed by the Great Lakes Coastal Wetland Consortium and the State of the Lake Ecosystem Conference (SOLEC).   | Stream bed and coastal wetland   | Water Chemistry, invertebrates and plant community   | Digital           | Free  |
| John       | Lindgren   | Minnesota Department of Natural Resources      | john.lindgren@state.mn.us         | 218-525-0853          | MDNR annual gillnet index of the St. Louis River estuary  | St. Louis River Complex   | Annually in July, from 1980 through 2011  | Sample juvenile and adult fish populations with five-panel experimental gillnets   | sheltered bays, flats and channels   | species identification, length, weight, age  | Electronic        | Free  |
| John       | Lindgren   | Minnesota Department of Natural Resources      | john.lindgren@state.mn.us         | 218-525-0853          | Annual spring spawning electrofishing index of adult walleye population of St. Louis River estuary (cooperative effort between MDNR and WDNR) | From the Fond du Lac Hydro Station down stream to below Highway 23 Bridge; St. Louis River Complex  | April of 1980 through 2011  | Maintain index of spawning walleye population  | Spawning grounds   | number, sex, length, age   | Electronic        | Free  |
| John       | Lindgren   | Minnesota Department of Natural Resources      | john.lindgren@state.mn.us         | 218-525-0853          | Fall electrofishing index of young-of-the-year muskellunge  | St. Louis River Complex   | October of 2005 through 2011  | Index natural recruitment of muskellunge   | wetland and channel fringes  | effort, number, length   | Electronic        | Free  |
| Judy       | Crane      | Minnesota Pollution Control Agency             | judy.crane@state.mn.us            | 651-757-2293          | REMAP   | St. Louis River estuary, Thomson reservoir, & Forebay canal; St. Louis River Complex  | 1995-1996   | Evaluating sediment quality in a Great Lakes embayment   | shallow and channel  | habitat characteristics, water and sediment chemistry, sediment toxicity, benthic macroinvertebrates   | Electronic        | Free  |
| Judy       | Crane      | Minnesota Pollution Control Agency             | judy.crane@state.mn.us            | 651-757-2293          | Phase IV GIS-based Sediment Quality Database for the St. Louis River AOC  | Throughout the St. Louis River AOC and some adjoining areas sampled by the Fond du Lac Band.; St. Louis River Complex   | 1990-2006   | Organize sediment quality data collected from within the St. Louis River AOC into a comprehensive MS Access database, in addition to preparing several GIS map documents to plot the data on.  | various habitats throughout the AOC  | sediment chemistry, sediment toxicity, benthic invertebrate community, and tissue residue data   | Electronic        | Free  |
| Mark       | Hershfield | Minnesota Pollution Control Agency             | marc.hershfield@state.mn.us       | 218-302-6633          | Field Truthing and Vegetation Assessment of NRR1-GLEI Reference Sites for Near Shore Ecotypes in the SLR -AOC (2007-2008)                     | Within nearshore habitats of 12,000 acre estuary in MN and WI below FDL Dam and river mouths.   | Summers 2007 and 2008   | Establish AOC reference sites in both WI and MN for baseline vegetation data, defining restoration objectives and targets, invasives distribution, plant composition of specific ecotypes identified in the SLR/CAC Habitat Plan.  | Sheltered Bays, Clay-Influenced River Mouths, Industrially Influenced Bays, Clay Influenced Tributaries, Clay Influenced Bay, Lower Estuary Flats, Upper Estuary Flats, Industrial Slips | Vegetation, substrate and some macroinvertebrates  | Paper             | Free  |
| Patrick    | Collins    | MN DNR   | pat.collins@state.mn.us           | 218-529-5171          | Grassy Point Subsurface data  | Grassy Point (Duluth, MN)   | winter 1995   | To determine depth and extent of wood waste at Grassy Point.   | wetland  | soil borings of wood waste, limited chemical contaminant analysis  | Paper             | Free  |
| John       | Lindgren   | MN DNR   | john.lindgren@state.mn.us         | 218-525-0853 ext. 209 | Spring Spawning Lake Surgeon Observations   | Just below Fond du Lac Dam; St. Louis River Complex   | 2007-2010   | Develop a visual index of spawning lake sturgeon by making observation from the Fond du Lac Dam  | large boulder riffles  | number   | Electronic        | Free  |
| John       | Lindgren   | MN DNR   | john.lindgren@state.mn.us         | 218-525-0853 ext. 209 | Lake Sturgeon Tagging   | Below Fond du Lac Dam; St. Louis River Complex  | 2007-2010   | Capture and pit tag lake sturgeon within the St. Louis River estuary   | large boulder riffles  | length, weight, age  | Electronic        | Free  |
| John       | Lindgren   | MN DNR   | john.lindgren@state.mn.us         | 218-525-0853 ext. 209 | Angler Creel Survey of St. Louis River Estuary  | St. Louis River Complex   | 2003  | Determine angler pressure and harvest  | All habitats   | pressure, harvest, species, number, length   | Electronic        | Free  |

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| Clinton    | Little    | MN DNR      | clinton.little@state.mn.us | 218-834-1446     | Duluth Wetland Inventory and Evaluation  | City of Duluth; St. Louis River Complex   | 2001                          | The City of Duluth identified a need for detailed wetland data to assist in development planning that protects wetlands, and subsequently the City's many urban streams. The City purchased 1997 color infrared aerial photos, 1995 unrectified digital aerial photos, and other necessary data layers. They contracted with the Natural Resources Research Institute (NRI) to digitally scan and rectify the imagery, and employ US Fish and Wildlife Services conventions to identify and locate wetlands within the watersheds of all streams flowing through the City of Duluth. The data was made available both via a web page and on CD. The wetland data is used for preliminary site analysis on proposed developments, and it proved critically important during the City of Duluth's Comprehensive Planning efforts.  | Wetlands                    | Wetlands                   | Electronic  | Free              |
| Clinton    | Little    | MN DNR      | clinton.little@state.mn.us | 218-834-1446     | Lake Superior Drainage Mussel Survey: Distribution and Abundance of Unionids and Zebra Mussels             | St. Louis Estuary and its tributaries; Cloquet, Whiteface, Swan, Paleface, Otter, and several other tributaries. (along tributaries outside of the estuary; Cascade, Temperance, Cross, Caribou, Manitou, Baptism, Split Rock, Gooseberry, Knife, Beaver, and Lester rivers); St. Louis River Complex | June-August 2002              | Account for the mussel resources of rivers and streams throughout Minnesota's Lake Superior Drainage. Measure the sentinels of river health and impacts from society's impacts.  | Estuary and tributaries     | Mussels                    | Electronic  | Free              |
| Clinton    | Little    | MN DNR      | clinton.little@state.mn.us | 218-834-1446     | Rare Herpetofauna And Important Seasonal Ponds Within The Minnesota Lake Superior Coastal Region           | Minnesota's Lake Superior Coastal Program Boundary  | Summer 2003                   | To properly manage and protect native herpetofauna it is necessary to have knowledge of the species present and sites known to provide essential habitat. Some critical habitats such as isolated, fishless, seasonal ponds are easily overlooked, and often are not addressed in resource management plans. Yet these wetlands provide important amphibian breeding habitat and can be substantially impacted by forest management practices and poor placement of recreational trails (deMaynadier and Hunter, 1995).  | herpetofaunal habitat       | rare herpetofaunal species | Electronic  | Free              |
| Clinton    | Little    | MN DNR      | clinton.little@state.mn.us | 218-834-1446     | Field Identification and Mapping of Duluth Trout Stream Tributaries  | City of Duluth  | Winter 2006                   | The City of Duluth has 12 designated trout streams within City limits. These streams demand an increased level of protection to insure that appropriate quality is maintained to provide an environment suitable for survival and reproduction of trout. Thus an in-depth knowledge of the location and characteristics of the streams is essential to all development and functional uses of lands on or near their shores. From experience, the City has become aware that although the trout streams are all well-known, the smaller tributaries entering the streams are not appropriately mapped. Because these tributaries must be taken into consideration in planning and stormwater infrastructure decisions appropriate mapping is needed. Mapping in appropriate GIS format would allow for more efficient decision making and prevent damage to stream environments.   | Streams                     | GPS Stream alignments      | Electronic  | Free              |
| Clinton    | Little    | MN DNR      | clinton.little@state.mn.us | 218-834-1446     | The risk to native Minnesota beach grass posed by historical restoration efforts that used Michigan plants | Park Point, Duluth, MN  | 2005                          | There is mounting concern over the source and genetic history of propagules used in restoration projects. This is because genetic mixing between remnant native populations and introduced nonlocal propagules can have unpredictable results, either causing hybrid vigor if gene flow masks deleterious recessive alleles, or outbreeding depression if populations are substantially genetically diverged. In Minnesota, historical dune restoration projects introduced nonlocal propagules of <i>Ammophila breviligulata</i> from Michigan to augment the threatened native population. In an effort to assess the potential impact of these historical plantings of MI genotypes on the remnant native MN population, we conducted the following studies: 1) a molecular marker study to distinguish native and naturalized nonnative plants in the field, 2) a common garden and observational study of MN and MI genotypes to determine if genotypes differ in terms of phenology and morphology, and 3) a hybridization experiment between MN and MI genotypes to assess the effects of genetic mixing. We were able to find molecular markers using ISSR microsatellite primers that distinguish native from nonnative propagules in naturalized populations in the field. In our observational study, the native MN plants flowered on average six weeks earlier than MI but there was a 17-day overlap in the distribution of flowering time suggesting that gene flow between populations may occur. Surprisingly, MI had significantly higher survival rates and flowered more | Beach                       | Beach grass species        | Electronic  | Free              |
| Clinton    | Little    | MN DNR      | clinton.little@state.mn.us | 218-834-1446     | Minnesota's Lake Superior Coast and St. Louis Estuary  | St. Louis River Complex   | Spring 2007                   | This project is an update of the 2002 Lake Superior's North Shore Oblique Aerial Photography Project with an added extension into the St. Louis River. Community GIS Services, Inc. will provide to the Coastal Program oblique aerial imagery of the shoreline from the intersection of MN HWY 23 bridge on the St. Louis River to the Duluth Aerial lift bridge, along the harbor side of Duluth's Park Point neighborhood to the Wisconsin entry then continuing along the Lake Superior shoreline to Pigeon Point at the U.S. - Canadian Border. Approximately 2,600 continual images of the shoreline will be captured with each photo encompassing 900 feet of horizontal and 600 feet vertical planar distances of shoreline. The location of exposure for each image will be collected, converted to Arcview shapefile format, and used in a ArcGIS Map file or Arcview 3.2 project file. The project file will contain aerial imagery, digital USGS Topographic map images, and the photo location along the shoreline. Like the original 2002 project users will have the ability to choose an area of shoreline to view click on an image point and view the oblique shoreline imagery in a pop-up window.  | N/A                         | N/A                        | Electronic  | Free              |

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| Clinton    | Little    | MN DNR   | clinton.little@state.mn.us | 218-834-1446           | 2002 Coastal Oblique Imagery   | Park Point to Pigeon Point, Minnesota  | Spring 2002   | Acquire oblique photography of Minnesota's Lake Superior coast to be used to determine potential erosion hazards and update erosion hazard data.  | Coastline  | N/A  | Electronic  | Free                      |
| Clinton    | Little    | MN DNR   | clinton.little@state.mn.us | 218-834-1446           | Coastal Area Imperviousness Assessment and Education                       | Minnesota's Lake Superior watersheds   | Aug-2006  | To measure impervious surfaces within Minnesota's Lake Superior Coastal Program Boundary while comparing different methods of calculating impervious surface.   | Human  | Impervious surfaces  | Electronic  | Free                      |
| Clinton    | Little    | MN DNR   | clinton.little@state.mn.us | 218-834-1446           | United States Army Corps of Engineers Topo/Bathy Mapping                   | Duluth Harbor, Park Point, Superior Harbor and Wisconsin Point; St. Louis River Complex  | 2009  | The LIDAR-derived data were collected by the Joint Airborne Lidar Bathymetry Technical Center of Expertise (JALBTCX) using the Compact Hydrographic Airborne Rapid Total Survey (CHARTS) system. The data includes hydrographic and topographic data. The data were collected to depict the elevations above and below water along the immediate coastal zone. The survey generally extends 750 meters inland and up to 1500 meters over the water (depending on water depth and clarity). The goal of the project is to collect data covering the shoreline of the conterminous United States where feasible | Bathymetry   | Bathymetry   | Electronic  | Free                      |
| Clinton    | Little    | MN DNR   | clinton.little@state.mn.us | 218-834-1446           | National Geodetic Survey aerial imagery                                    | St. Louis River Complex  | 1996-present  | The National Geodetic Survey (NGS) has been collecting aerial imagery over coastal regions since 1945 using traditional metric cameras and, more recently, a medium format digital camera. Several types of historical images available in the archive, such as color, black and white, color infrared and black and white infrared. The most common scales for historical imagery range from 1:30,000 to 1:50,000, with more recent imagery acquired between 5,000 ft and 10,000 ft above ground level. In an effort to make these data available, NGS created the Aerial Photo Ordering System.             | N/A  | Aerial imagery   | Electronic;Paper  | Available for a fee       |
| Clinton    | Little    | MN DNR   | clinton.little@state.mn.us | 218-834-1446           | Oblique aerial photography   | Minnesota shoreline of SLRE; St. Louis River Complex   | 2007  |   | shoreline  | Low altitude photography   | Electronic  | Free                      |
| Jill       | Jacoby    | MPCA St. Louis River Watch   | pumilios@aol.com           | 218-724-9786           | Liver Watch  | St. Louis Harbor; St. Louis River Complex  | 1994 or 1995  | To determine the incidence of tumors and lesions on Bullhead livers found in the St. Louis Harbor area.   |  | tumors/lesions   | Paper   | Free                      |
| Jill       | Jacoby    | MPCA St. Louis River Watch   | pumilios@aol.com           | 218-724-9786           | Frog Watch   | St. Louis River from harbor to Jay Cooke State Park; St. Louis River Complex   | spring/summer 1993-95   | To collect data on Anuran Populations along the St. Louis River.  |  | Frog calls   | Paper   | Free                      |
| Jill       | Jacoby    | MPCA St. Louis River Watch   | pumilios@aol.com           | 218-724-9786           | St. Louis River Watch  | From harbor to Cotton; St. Louis River Complex   | 1992-1995   | To collect benthic macroinvertebrate data along the St. Louis River.  | Benthic communities  | Macroinvertebrates   | Paper   | Free                      |
| Joan       | Elias     | National Park Service - Great Lakes Inventory & Monitoring Network | joan_elias@nps.gov         | 715-682-0631           | water quality monitoring of inland lakes and lagoons                       | Michigan Island Lagoon; Little Sand Bay; Outer Island Lagoon; Stockton Island Tomolo   | beginning in 2007, 3 times/summer, monitoring is ongoing        | assess current status, determine trends in water quality  | open water   | alkalinity, calcium, magnesium, sodium, potassium, dissolved organic carbon, sulfate, chloride, dissolved silica, total nitrogen, total phosphorus, nitrate+nitrite-nitrogen, ammonium-nitrogen, chlorophyll-a, water transparency, water level, pH, temperature, dissolved oxygen, specific conductance, environmental conditions (wind, waves, air temp, etc.) | Electronic;Paper  | Free                      |
| Joan       | Elias     | National Park Service - Great Lakes Inventory & Monitoring Network | joan_elias@nps.gov         | 715-682-0631           | EPA nationwide wetland assessment  | Stockton Island Quarry Bay wetland; Stockton Island Tomolo   | Aug-2011  | reference sites for nationwide assessment   | vegetated wetlands   | water chemistry, chlorophyll, contaminants in water and sediments, sediment chemistry, vegetation species composition & % cover, vegetation structure, soil horizons, depth to water table, algae toxins, algal taxonomic ID   | Electronic;Paper  | Unsure                    |
| Jerry      | Niemi     | Natural Resources Research Institute                               | gniemi@d.umn.edu           |                        | Great Lakes Restoration Initiative Project: Great Lakes Coastal Monitoring | Big Bay Lagoon Wetland, Allouez Bay Wetland; Fish Creek (East) - Eileen Twp; Middle River; St. Louis River Complex   | Sites surveyed in May-June 2011 and will be again in 2012       | To determine the status and trends of Great Lakes coastal wetland condition at a basin scale. Efforts will provide resource managers with critical information upon which to base strategic wetland protection and restoration policies that will ultimately improve the health of the Great Lakes Ecosystem.   | coastal wetland habitat                                    | surveying each site to visually and aurally identify birds and amphibians  | Electronic;Paper  | Unsure                    |
| Doug       | Graham    | NOAA   | Doug.Graham@noaa.gov       | 301-713-2676, ext. 170 | NOAA National Shoreline  | Duluth Harbor; St. Louis River Complex   | Varies  | This shoreline was originally intended to support NOAA nautical chart production. Other applications include shoreline change analysis, boundary determination, and cartographic representation.  | Shoreland  | Great Lakes shoreline  | Electronic  | Free                      |
| Rich       | Axler     | NRRI   | raxler@nrri.umn.edu        | 218-720-4316           | Stressor Gradients and Spatial Narratives of the St. Louis River Estuary   | MN and WI outlets up to the Highway 23 bridge; St. Louis River Complex   | Summer 2010   | The goal is to investigate relationships between land use stressor gradients and water quality.   | Thalweg, tributaries and near-shore by the tributaries     | T-tube, Depth, Temperature, Conductivity, Turbidity, DO, pH, Color, Chlorophyll-a, Chlorophyll Fluorescence, Phaeophytin, OP, TP, NO2/NO3-N, NH4-N, Cl, SO4  | Electronic  | Not currently available   |
| George     | Host      | NRRI-UMD   | ghost@nrri.umn.edu         | 218-720-4264           | SumRel Environmental Stressors   | Basinwide for Lake Superior  | GIS data circa 2000   | To create and distribute an index of watershed stressors to aquatic systems, using a high-resolution delineation of watersheds; funded by EPA-GLNPO.  |  | Density of point sources, roads, population, others  | Electronic  | Free                      |
| Dan        | Breneman  | NRRI-University of Minnesota Duluth                                | dbrenema@d.umn.edu         | 218-720-2722           | REMAP  | St. Louis River Complex  | 1995, 1996  | Regional REMAP project through the EPA to evaluate sediment conditions within the St. Louis River Estuary   | random selection stratified by depth and surface area      | Sediment chemistry and size characteristics, pore-water toxicity, and benthic macroinvertebrate community structure  | Electronic  | Available for a fee       |
| Matthew    | Starry    | SRA International, Inc.; Contractor to U.S. EPA                    | matthew_starry@sra.com     |                        | St. Louis River Estuary Bathymetry   | St. Louis River Estuary from the Fond du Lac dam to the harbor areas of Duluth/Superior; St. Louis River Complex   | compiled 2006   | A bathymetric surface raster for the St. Louis River estuary was compiled as a base layer for ongoing research projects at the US EPA Mid-Continent Ecology Division (MED) laboratory.  |  | Estimated water depths   | Electronic  | Free                      |
| Julene     | Boe       | St. Louis River Alliance   | jboe@stlouisriver.org      | 218-733-9520           | Citizen Stream Monitoring  | St. Louis River Complex  | 2008-2010   | TO COLLECT DATA ON VARIOUS PARAMETERS FOR STREAM ASSESSMENT. THIS DATA WAS PROVIDED TO THE MPCA.  | Stream mouths  | WATER QUALITY PARAMETERS, PHYSICAL, CHEMICAL AND BIOLOGICAL PARAMETERS USING METERS, T-TUBES AND LAB SAMPLES   | Electronic  | Free                      |
| Joel       | Hoffman   | U.S. EPA - MED   | hoffman.joel@epa.gov       | 218-529-5420           | SLR larval fish  | Sites spanned three regions: 1) Fond du Lac through Spirit Lake, 2) Pokegama River and Bay, and 3) Barkers-Nemadji-Superior entry-Allouez Bay; St. Louis River Complex | Aug-Sep 2006, April-July 2007                                   | Evaluate stable isotopes of larval fish as indicator of wetland connectivity and condition.   | thalweg, including upriver stations above seiche influence | Water quality (temp, scond, turbidity), chemistry (NOx, NH4, TN, SRP, TP, Si, cations/anions), particulates (POC, PN, Chl a), zooplankton density, larval fish density, stable isotopes of fish. (15 fixed WQ sites sampled every other week and 9-11 ichthyoplankton sites weekly.)   | Electronic  | Available with permission |
| Joel       | Hoffman   | U.S. EPA - MED   | hoffman.joel@epa.gov       | 218-529-5420           | Water quality trends   | 23 Bridge, Oliver Bridge, Arrowhead Bridge, Blatnik (interstate) Bridge; St. Louis River Complex   | parameter dependent, within 1953-2008 and 1973-2008 most common | To analyze long-term trends in St. Louis River water quality based on PCA data from 1953-present, as well as old reports from 1928-29 and 1941-1942. Loadings were estimated, as well.  | Thalweg  | DO, TSS, TP, NH4/NH3, NOx  | Raw data from EnviroMapper. QA's and averaged STORET time-series as well as converted old report data to digital format. Electronic | Available with permission |

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| Tom        | Hollenhorst | U.S. EPA - MED                        | hollenhorst.tom@epa.gov | 218-529-5220     | High Resolution Bathymetry   | Across the River and estuary and across Lake Superior; St. Louis River Complex.  |  | Develop high resolution bathymetry from NOAA Electronic Navigational Charts. Soundings from the charts were interpolated to create a DEM of bathymetry for the river and estuary at about 8 meter pixel resolution. All the available navigational charts for Lake Superior were processed.   |  | Depth  | Electronic        | Free  |
| Tom        | Hollenhorst | U.S. EPA - MED                        | hollenhorst.tom@epa.gov | 218-529-5220     | Scanned aerial photos of SLR   | Mostly around US Steel site, some over larger area; St. Louis River Complex.   | 1953, 1975, 1976, 1977, 1980, 1981, 1984                         | Aerial photos usually associated with Superfund sites   | NA   | Fish populations, zooplankton, and water temperature profiles.   | Electronic        | Free  |
| Mark       | Vinson      | U.S. Geological Survey                | mvinson@usgs.gov        | 715-682-6163     | Lake Superior fish community assessment  | Lake Superior, large bays, nearshore and offshore locations; St. Louis River Complex   | Annually since 1957.   | Monitoring and research to determine status and trends.   | Bays, nearshore, offshore.   |  | Electronic; Paper | data sharing agreement; Free  |
| Michael    | Lynch       | University of Minnesota               | lynch257@d.umn.edu      | 608-347-9502     | Duluth-Superior Round Goby   | Rice's Point; St. Louis River Complex  | Weekly during ice free period from July 1, 2009 to July 22, 2010 | 1. Investigate seasonal demographic patterns in the round goby population living among the rocky shoreline substrate in the Duluth-Superior Harbor. 2. Investigate round goby movement patterns based on: Month, Gender, Size. 3. In situ growth of round gobies.   | Shoreline  | Fish abundance, growth, movement   | Electronic        | Available with permission   |
| Carol      | Reschke     | University of Minnesota-Duluth, NRRRI | creschke@nrri.umn.edu   | 218-720-4338     | 40th Avenue West Remediation and Restoration   | in the 40th Avenue West wetland complex, and in five reference areas NE of Dwight's Point, NE of Clough Island, between Dwight's Point and Clough Island, near Spirit Island, and west of Kilchis Meadow Island in Spirit Lake.; St. Louis River Complex   | 2010   | To model aquatic vegetation patterns in the St. Louis River Estuary for the purpose of informing wetland restoration planning in the St. Louis River AOC at the 40th Avenue West wetland complex.   | wetlands and open water  | aquatic plants - presence/absence; water depth; Secchi depth; up to 3 most prominent sediment textures   | Electronic        |   |
| Nicholas   | Danz        | University of Wisconsin-Superior      | ndanz@uwsuper.edu       | 715-394-8161     | Fifty years of vegetation change on Wisconsin Point  | T49N, R13W, Section 28   | 2010   | To evaluate vegetation change 1956-2010 on lakeward dune vegetation near the tip of Wisconsin Point. John Curtis surveyed 4 plots on Wisconsin Point in 1956 and we resurveyed these areas in 2010.   | Dunes  | Plant species percent cover in 1-m <sup>2</sup> quadrats (n=135)   | Electronic        | Available with permission   |
| Nicholas   | Danz        | University of Wisconsin-Superior      | ndanz@uwsuper.edu       | 715-394-8161     | Stressor Gradients and Spatial Narratives of the SLRE -- Wetland Vegetation  | 15 tributary mouth wetlands distributed across stress and spatially across the SLRE  | summer 2010  | Study relationships between wetland vegetation condition and anthropogenic stress   | Tributary mouth wetlands   | Percent species cover of emergent and submergent plants  | Electronic        | Available with permission   |
| Nicholas   | Danz        | University of Wisconsin-Superior      | ndanz@uwsuper.edu       | 715-394-8161     | Survey of invasive plant distribution on Wisconsin Point   | Wisconsin Point  | Summer 2011  | To develop a systematic, spatial survey of invasive plant abundance on Wisconsin Point.   | Dunes, forests, wetlands.  | Density per m <sup>2</sup> of invasive plants in 255 1-m <sup>2</sup> quadrats.  | Electronic        | Data will become available  |
| Nicholas   | Danz        | University of Wisconsin-Superior      | ndanz@uwsuper.edu       | 715-394-8161     | Great Lakes Indicator Consortium: Coastal Monitoring   | Multiple wetlands along LS coastline   | Summer 2011-2015   | To survey wetland vegetation on all coastal wetlands in Lake Superior and Lake Michigan. Goal is to report on wetlands status across the entire GL basin.   | Wet meadow, emergent, submergent   | Percent cover of vegetation in 45 1-m <sup>2</sup> quadrats.   | Electronic        | Will become available in the future.  |
| Anett      | Treibitz    | US EPA                                | treibitz.anett@epa.gov  | 218-529-5209     | Invasive species detection research  | St. Louis River Complex. Over 200 stations spanning area from Fond du Lac dam to Lake Superior. Combination of randomized point design and targeted area design.   | Summers 2005-2008  | Use SLRE as case study for evaluating strategies for efficient early detection monitoring.  | Various  | Fish, zooplankton, and benthos composition (species or genus level) WQ via field chem, plant cover, sediment density   | Digital           | Available with permission.  |
| Anett      | Treibitz    | US EPA                                | treibitz.anett@epa.gov  | 218-529-5209     | Great Lakes coastal wetlands   | Sampled 58 different coastal wetlands around the Great Lakes (US side of all 5 Great Lakes). Wetlands sampled within the SLRE were Allouez Bay, Pokegama Bay, and Rask Bay. Others are Amnicon River Estuary, Bad River/Kakagon Complex, Bark River, Flag River, Lost Creek, and Middle River Estuary. | Summers 2002-2004  | Evaluate condition of coastal wetlands along a gradient of eutrophication, using comprehensive suite of data (water quality, hydrology, habitat structure, primary production, fish composition).   | Wetlands   | Bathym, hydrology, broad suite of water quality, sediment type, vegetation structure, fish composition.  | Digital           | Available with permission.  |
| Dan        | Villeneuve  | US EPA Mid-Continent Ecology Division | villeneuve.dan@epa.gov  |                  | Use of in vitro bioassays and caged fish for detection and monitoring of contaminants of emerging concern in the Great Lakes | St. Louis River Complex  | July, September 2010; August 2011; Summer 2012                   | (1) Develop/document robust effect-based monitoring assays and approaches. (2) Identify and characterize suites of supporting morphological, histological, biochemical and molecular endpoints/assays that can help define and establish Adverse Outcome Pathways for regulatory endpoints of interest and associated effect-based monitoring methods. (3) Conduct field studies to evaluate performance of the test system(s)/endpoints/approaches relative to exposures characterized analytically and/or through source analysis. (4) Use exploratory genomic tools (microarrays, NMR-based metabolomics) in conjunction with caged fish exposures to identify additional mechanism-based endpoints and pathways reflective of occurrence of different classes of human and veterinary drugs to aid the design of additional effect-based monitoring approaches. | Water column/surface waters near waste-water treatment plant effluent discharge. | A range of reproduction-related biological endpoints, androgenic activity, a large suite of organic chemical analytes (through collaboration with US FWS, USGS)  | Electronic        | through collaboration; Free   |
| Tom        | Custer      | USGS                                  | tcuster@usgs.gov        | 608-781-6375     | Birds as Indicators of Contaminant Exposure in the Great Lakes.  | St. Louis River Complex; Stockton Island Tombolo   | 2010 & 2011  | This project is quantifying exposure to and effects of both historical and emerging contaminants on Great Lakes food chains, using sentinel indicator species such as colonial waterbirds and tree swallows. Results will contribute directly to assessments of Great Lakes ecosystem health and science-based decision making, provide data that directly contribute to Beneficial Use Impairment (BUI) removal and Areas of Concern (AOCs) delisting assessments, and determine the effectiveness of recently remediated AOCs. Partners include FWS, EPA, NPS, NOAA, Canadian Wildlife Service, Great Lakes States, cities, and universities.   | shoreline  | Effects endpoint information was collected in 2010-2011 from across the Great Lakes in tree swallows at all 32 sites and will continue in 2012. At each active nest box at these sites, 14 independent measures of exposure and effects are being quantified. Exposure data include both legacy contaminants (PCBs, dioxins/furans, pesticides, mercury), as well as new and emerging contaminants (PBDEs, PFCS). Effects data range from genetic damage endpoints to population-level effects on reproduction, which are important metrics in assessing two wildlife BUIs. This extensive range of effects endpoints covers numerous possible effects of many different classes of chemicals at many different levels of biological organization. | Electronic; Paper | A web site was established for GLRI Project 80 (Figure 2) which provides access to preliminary results ( <a href="http://www.umesc.usgs.gov/wildlife_toxicology/gli_project80.html">http://www.umesc.usgs.gov/wildlife_toxicology/gli_project80.html</a> ). These results are being updated frequently as new information becomes available, and currently include summary data on mercury, lead, other trace elements, biomarker results, and several organic contaminant classes. |
| Lori       | Evrard      | USGS                                  | levrard@usgs.gov        |                  | Fish Community of the St. Louis River  | St. Louis River Complex  | Spring, Summer, and Fall 1989 - 2004                             | Investigate population dynamics and impacts of ruffe ( <i>Gymnocephalus cernuus</i> ) on native fish community.   | Shallow flats, undredged channels, and dredged channels                          | Fish numbers, fish length, temperature, depth.   | Electronic; Paper | Available with Memorandum of Understanding. Must work cooperatively with USGS on any research publication resulting from data.  |
| Richard    | Kiesling    | USGS                                  | kiesling@usgs.gov       | 763-783-3131     | 2010 Endocrine-active Compounds sampling   | St. Louis Bay, Superior Bay on Minnesota side; St. Louis River Complex   | Aug-Sept 2010  | The overall goal was to document the distribution of emerging contaminants and to understand how the characteristics of depositional environments may contribute to the observed distribution of these compounds. We identified the extent to which pharmaceuticals, including hormones, and other waste compounds occur in the SLRE and to what extent the compounds may have accumulated in surface sediments of the study area.  |  |  | Electronic        | Free  |
| Richard    | Kiesling    | USGS                                  | kiesling@usgs.gov       | 763-783-3131     | Endocrine-active and pharmaceutical compounds in the SLRE  | Saint Louis Bay, Superior Bay; St. Louis River Complex   | Sept-Oct 2010  | The overall goal of the study was to document the extent of the presence of emerging contaminants and to understand how the characteristics of depositional environments may contribute to the observed distribution of these compounds.  | Depositional environments throughout the SLRE                                    | Approximately 83 separate compounds in water and sediment at each site. Additional field parameters collected at each site included pH, temperature, specific conductance, and dissolved oxygen.   | Electronic        | Free  |

| First Name | Last Name | Affiliation                     | Email Address             | Telephone Number | What is the name of the project or dataset? | Where is the project site, or where were the data collected?  | When were the data collected?   | What were the goals of the project?  | What habitats were sampled?    | What was measured?   | Data format | Data Availability |
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| Ryan       | Brady     | WDNR                            | ryan.brady@wisconsin.gov  | 715.685.2933     | Wisconsin Marshbird Survey                  | Lost Creek  | 3 playback surveys conducted between May 15 and June 30 at each of 5 survey points within the Lost Creek Bog open marsh/bog. 2008 to present and intend to continue annually. | Status and trend surveillance monitoring. This was one of 50+ survey areas statewide.                | Open bog, some emergent marsh. | Some bird species were counted. Targets were secretive marshbirds (rails, bitterns, etc.) but also some passerines (Sedge Wren, Swamp Sparrow). No rails ever found but American Bittern most years. | Electronic  | Free              |
| Amy        | Staffen   | WDNR Natural Heritage Inventory | amy.staffen@wisconsin.gov | 608-261-0747     | Lake Superior Estuary Plant Surveys         | Amnicon River; Bay City Creek; Bois Brule River; Cranberry River; Dutchman Creek; Flag River; Frog Creek; Graveyard Creek; Iron River; Middle River; Montreal River; Onion River; Pikes Creek Slough; Poplar River; Reefer Creek; Saxeine Creek; Siskiwit River; Thompson Creek; Whittlesey Creek | Summer and fall 2012  | Collect coarse-level baseline data for 21 estuarine sites not surveyed by Epstein et al. in 1995-96. | Estuaries.                     | Plants (presence/absence using meander surveys) Notes on threats to native community. Notes on hydrological regime, estuarine classification.  | Unsure      | Unsure            |