



QUALIFICATIONS & EXPERIENCE

SOQ for NCS – Ecological Services

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Qualifications and Experience – Capabilities Package

A - Natural Community Services Company Qualifications

Natural Community Services (NCS), LLC – Owned by Liz and John DeLisle. NCS is an interdisciplinary ecological design, consulting and restoration firm with expertise in green stormwater infrastructure, ecosystem services, shoreline bioengineering and limnology, landscape design, wetlands, wildlife, forestry and invasive species control in the Detroit area, with staff educated in ecological and environmental sciences.

- An Oakland County company, licensed in Michigan; 11 years in business
- Woman-owned small business (WBE, certified by SBA and Wayne Co), equal opportunity employer (EEO)
- Has multi-disciplinary staff specializing in ecological assessment, invasive species management, landscape design-build-maintain, erosion control, forestry, bioretention
- Local knowledge of ecosystems, biological lab, design studio, and specialized equipment
- Measuring and improving values of biodiversity and managing natural resources
- Full suite of wildlife habitat restoration services
- Designing, restoring, and monitoring and natural areas and improving their functionality, aesthetics, and connectivity, using community appropriate native species
- Experienced in EPA Quality Assurance Plans
- Green stormwater infrastructure
- Native landscape design-build-maintain

NCS has locations at:

6410 Upper Straits Blvd. West Bloomfield, MI &
57835 8 Mile Rd. Northville, MI

Staff and Experience

NCS strives to provide the best possible assessment, design, restoration, monitoring and native landscape services for our clients. We perform ecological services for municipal, state, and federal government agencies, non-profits, private residences/HOAs, corporations, and schools. Please see the project reference sheets.

Description of BMPs we use

- Assess biological/ecological conditions, soil, hydrology
- Complete develop natural resources and forest management plans
- Manage remnant or restored natural areas
- Design and install landscapes using native plant species;
- Conduct plant and animal inventories;
- Map existing ecosystems and natural communities;
- Plan, implement, and monitor ecosystem restoration work;
- Conduct training for all aspects of wildlife habitat restoration
- Develop brochures and signage to help people understand and appreciate the natural features around them.
- Design, build, maintain and monitor native landscapes
- Invasive species and soil erosion control
- Self-performs revegetation, bioengineering, bank grading, and finish grading
- Broad experience and dedication to quality in design and construction

Relevant Highlights

- ✓ Habitat Restoration Design
- ✓ Assessment, design and restoration
- ✓ Biological surveys for flora & fauna
- ✓ Invasive species management
- ✓ Green infrastructure design-build-maintain
- ✓ Bioengineering

Years of Experience: 50+ combined

Education

All degreed professionals in environmental fields

Registrations/

Certifications/Training

- Natural Shoreline Professionals
- Professional Wetlands Scientist
- DNR Forester, ISA Arborist & USDA Certified TSP
- Licensed Landscape Architect
- Certified Ecological Restoration Practitioners

B – NCS Staff Resumes

Liz DeLisle

CEO and Owner

Liz is the CEO and owner of NCS, which is an SBA certified woman-owned small business. She takes charge of finance, bidding, grants, government contracting, client communications, materials costing, procurement, quality control, human resources and is our problem-solver. She has a master’s in management from Davenport University. Liz is passionate about protecting ecosystems through personal and professional endeavors. She works with clients to help them understand how NCS can take care of and protect our natural resources; and building relationships and projects that consider wildlife and aesthetics. Liz sets the business goals in restoring ecosystems to wildlife habitats, procures sustainable materials, and helps staff develop their skills with native plants, birds, bees, butterflies, frogs, and more, so they, and wildlife can flourish.



Project Experience

- Composes plans and schedules
- Schedules and supervises staff
- Communicates with clients and cooperators
- Procures materials and equipment

Experience

Consultant, relationship-builder and administrative project scoping lead for property owners, non-profits, construction managers/general contractors, architects, and engineers. Liz is a solution driven leader with integral visual-spatial, communications, estimating, human resources, accounting, and other business skills. She’s detail-oriented, an excellent ear for helping clients refine their goals into practical and beautiful site plans. Provides a planning and supportive role to projects requiring special care and detail, manages human resources, project development and related insight for project and design considerations, coordination between stakeholders, achieving local review approval, and construction phase support.

Education

M.S. in Management

- Concentration in Project Management
Davenport University, MI

Registrations/

Certifications/Training

- WBENC
- Foster Closet of MI
- QuickBooks ProSeries

John DeLisle

Principal Ecologist, CERP



Mr. DeLisle is a botanist, entomologist and ecologist with over 20 years of experience in biological assessments, habitat restoration and bioswale design, site restoration; wetlands, green infrastructure, invasive species, soil and landscape management, forestry and natural resources projects for various NGO/private, commercial, agricultural, and government clients. John is dedicated to restoring the diversity, vitality, integrity, and beauty of our clients' land and water resources. John manages a staff educated and experienced in planning, designing, installing, monitoring and maintaining native ecosystems, and well-versed in the range of native plants suitable to natural features. Natural Community Services accomplishes restoration, consulting, and native plant and food-web based scientific and sociological goals using survey, design and management methods proven to ameliorate disturbed soils, hydrology, wildlife, and vegetation, while establishing local flora adapted to site conditions.

- Relevant Highlights**
- Habitat Restoration Design
 - Assessment, design and construction of wetland
 - Biological surveys for plants and animals
 - 24 years of experience
 - 13 years with NCS

Education

- M.S. University of Michigan; Environmental Science
- B.S. Michigan State University, Natural Resources/Horticulture

- Registrations/
Certifications/Training**
- Natural Shoreline Professional
 - Professional Wetlands Scientist
 - DNR Forest Division and USDA NRCS Certified TSP
 - Certified Ecological Restoration Professional

Project Experience

John DeLisle supervised habitat-driven landscape design and field biology research programs for 10 years for governmental agencies before starting NCS. John has participated in many ecological survey, design and GIS projects, including over 10 GLRI-funded projects for governments and NGOs in southeast Michigan. He served as the team leader for DNR ecological survey on Belle Isle, Sterling and almost 10 other State Parks, led the implementation of SEMCOG and Macomb County (MI) green infrastructure program and similar initiatives for Wayne County and Southfield. John was the biological survey and ecological design lead for Detroit's Maheras-Gentry Park Coastal Habitat Feasibility study and served as the biological assessment lead for Chesterfield Township's Brandenburg Park Coastal Habitat Restoration, as well as restoration practice lead for Stony and Celeron Islands in the Detroit River.

At Maheras-Gentry, John led extensive green infrastructure, aquatic, wetlands, wildlife and natural history studies, having performed and reported on data collection, analysis, and basis of design, shoreline, waterway, soil investigation, and floristic quality inventories for the park oxbow backwater marsh, Detroit River frontage, and remaining natural swales and buffer in the southwest River margin and along the western fenceline. John categorized and prioritized plant and animal species and habitats for conservation and restoration. He directed NCS biologists for specific taxa-based studies and interfaced with the city and partners in coordinating public engagement, key stakeholder reviews, and analysis of site-scale, AOC-BUI based watershed analysis.

John led planning, design, and implementation services for savanna and wetlands restoration at City of Detroit Eliza Howell Park and Royal Oak's Normandy Oaks Parks, oversight of contractor restoration of Belle Isle's Flatwoods, prairie restoration projects at Heritage Park in Farmington Hills, Beverly Park in Beverly Hills, and several parks for the cities of Southfield – and still maintains these sites. John personally leads biological assessments, and map data products, basis of design, client interaction, design and implementation quality control, and overall leadership as part of this project, involving and enriching value for city staff, compiling data analysis summaries and reports, and performing field evaluation QA/QC. John co-led complex ecological restoration construction and green infrastructure maintenance projects for DNR and Washtenaw County in 2021, and is leading a 20-acre NFWF design-build savanna habitat grant project for Van Buren Township, as well as 50-acres of wetland restorations for Wayne County Parks this year.

Nick Longbucco

Senior Restoration Ecologist

Nick Longbucco is NCS lead ecologist, client representative, chief manager, and carries a wealth of knowledge in planning restoration ecology. After working in restoration planning in his native Michigan, Nick spent six years working on conservation issues in Illinois and with The Nature



Relevant Highlights

- Certified Conservation Planner, TSP
- Master rain gardener
- Soil survey and mapping expert
- Certified Arborist
- Certified Stormwater Operator
- 15 years of experience

Conservancy in Iowa working on watershed level water resource issues, which included managing a million dollar plus wetland restoration program and working with watershed and supply-chain partners to secure support for conservation throughout the watershed. Born and raised in Michigan, Nick also worked for the Oakland County SCWD working with local landowners on a variety of BMPs to address water and soil resource concerns. He is a proud MSU Spartan (Go Green) and holds a M.S. in Environmental Resource Management from Southern Illinois University. With a strong appreciation for the soil and water resources that bless the Great Lakes, Longbucco is passionate about finding solutions that benefit local communities and protects and improves these invaluable resources. Nick coalesces cross-functional teams by streamlining information distribution and analysis. Nick is a certified forester and has interdisciplinary restoration ecology skills.

Education

- B.S. Michigan State University; Fisheries and Wildlife.
- M.S. Wayne St. Southern Illinois University; Environmental Planning.

Registrations/

Certifications/Training

- Certified Arborist
- Conservation Planning certifications
- CERPIT
- MDARD Applicator

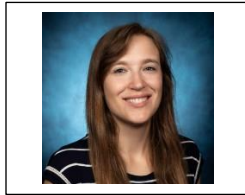
Project Experience

Mr. Longbucco, is a professional restoration ecologist with extensive experience in organization management and development, project oversight, design and implementation of wetland construction, soft shoreline engineering, prairie planting, natural areas management and best management practice (BMP) design projects with more than 17 years of experience throughout the United States. He has given presentations and workshops throughout the country on a variety of topics related to ecological restoration, including natural shoreline design and wetland restoration. He has led restoration operations, including scheduling, planning, and field implementation for greater than 20 projects in the Southeast Michigan region. He has in-depth experience with invasive species biology, forest and restoration methodology, implementation, and statistical analysis.

Laura Gumper

Landscape Designer & Ecologist

Laura Gumper is an ecological designer and environmental planner with over 5 years of environmental planning, engineering design, ecological survey, construction and project management experience. Her diverse portfolio of work demonstrates his ability to thoughtfully engage and collaborate with a broad range of clients and community stakeholders in projects ranging from: flora and fauna surveys, residential design/build, community open space and vacant land development, urban agriculture, water harvesting and re-use, green stormwater infrastructure, public space and park development. Her combined work experiences exemplify an interdisciplinary approach to project development from site inventory, environmental review, concept through construction administration. Furthermore, Laura’s work underscores a personal belief that the landscape is a powerful tool for change that can support social and environmental cohesion while transforming and shealing, land, people, and communities.



Relevant Highlights

- Concept and Design Development
- Site Planning
- Park and Public Space Planning
- Green Stormwater Infrastructure
- Urban Agriculture
- Project Management
- Proposal and Contract Development
- Estimating and Scheduling
- Construction Documentation and Administration
- Project Implementation and Oversight

Education

B.S. Engineering MSU
Northern Michigan University
M.S. Landscape Ecology, U-M

**Registrations/
Certifications/Training**

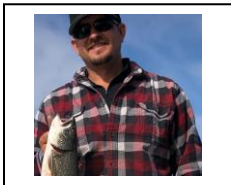
- Certified Natural Shoreline Professional
- CERPIT
- MDARD Applicator

Project Experience

Laura recently designed and oversaw installation of Normandy Oaks Park Habitat Restoration and Green Stormwater Infrastructure project in Royal Oak as well as . The modestly budgeted re-development effectively combines essential community programmatic elements alongside practical GSI applications. Laura’s portion of the design manages the spaces internal storm water while additionally accepting adjacent watershed runoff. Native plant species provide beauty while adding additional layers of ecological continuity. Laura has experience as a natural shoreline professional, with bioengineered erosion control design and implementation expertise. Additional experience includes implementation of invasive species control, habitat restorations, design and construction of many non-profit stormwater, native garden and education sites. Laura would contribute to survey, data and spatial analysis, as well as implementation for this project.

Mike McClintock

Operations Manager



Mr. McClintock has been running and maintaining NCS' marine, environmental, civil and agricultural equipment and has been involved with all aspects of ecological restoration for 5 years. Michael plays an active role in managing all aspects of NCS field work and provides unique skills and leadership in a wide range of mechanical and electronic equipment operations and maintenance: marine vessel captain, expert angler, certified welder, burn

boss, construction operator, drainage/pump management, mobile irrigation technician, and sawyer. For several years, he owned and operated his own specialty construction business. His skill set includes creative problem solving, aquatic resources and industrial technology expertise, and customized design of specialized equipment for native plant seeding, planting and other specialized restoration ecology tasks. If there's a mechanized option, he's likely used it or engineered something better. He is extremely well-versed in equipment operation, instructional safety plans for staff, maintenance, herbicide application and mixing, prescribed fire, erosion and sediment control as well as terrestrial and aquatic planting. He has provided daily construction oversight for activities including equipment inspection, sub and final grade approvals, compaction standards inspection, and approval. He also has conducted oversight of soil placement and grading of over one million cubic yards of material. Mike has performed underwater, subsurface, and aerial implementation of various aquatic and heavy civil construction tasks, managed crews of up to 18 while performing such tasks as mitigation dives, fisheries studies, geotechnical investigation, wetland site preparation, seeding, planting, erosion control, invasive species management, and brushing. Michael is the grounds, landscape, civil and marine methods expert, ready to help your project finish on-time, safely, and on-budget.

Relevant Highlights

- Agriculture and marine operations expert
- Mechanized Equipment manager
- Biological control
- Intimate personal experience with Great Lakes waters
- CWD woody and aggregate habitat construction expert

Registrations/ Certifications/Training

- Certified Welder
- OSHA Hazwoper
- Safety Lead
- MDARD applicator

Project Experience

Michael has led field restoration and site investigation work at all NCS work locations in the last 5 years. Michael led technical equipment planning for Detroit's Maheras-Gentry Park Coastal Habitat Restoration Design and served as the vessel and equipment operations and maintenance manager for Chesterfield Township's Brandenburg Park Coastal Habitat Restoration, Normandy Oaks Savanna, Stony and Celeron Islands, our Washtenaw County and Eliza Howell Park Habitat Restorations. Michael has spent his adulthood auditing, analyzing and retrofitting equipment for various civil construction genres.

Bob Muller

Fish Biologist



Bob Muller has been studying non-game native fishes for over 30 years, with a special interest in darters and other benthic fishes. Sampling a Round Goby in a local river in 2008 began an interest in the effect they would have on the benthic fish community. He has been working in partnership with Friends of the Rouge and Dr. Larissa Sano since 2013 under a grant from the Graham Water Center at the University of Michigan to collect data on the goby and fish community of the Lower Rouge. Beyond the grant, he has also been investigating other local river fish communities and the impact of the Round Goby on them.

Relevant Highlights

- 30 years' experience
- Assessment, design and monitoring of spawning and foraging habitats
- Great Lakes, rivers, inland lakes and stream experiences
- Renowned minnow expert
- Fish data and populations analyses
- Past-president of Michigan Native Fish Assoc.
- Biological surveys for birds, plants, herpetofauna

Education

B.S.; University of Michigan; Environmental Science

Registrations/

Certifications/Training

- Natural Shoreline Professional
- Certified DNR protected species permit-holder
- NANFA

Project Experience

Bob has worked on several GLRI projects with NCS, including fish and other QAPP-development, site survey, and habitat restoration monitoring on DNR, Chesterfield Twp., Detroit, Farmington Hills, MNA, and Royal Oak lands and waters. Bob's 40 years of experience as a biological survey and ecological design specification writer for NCS, Friends of the Rouge and others includes work at Detroit's Maheras-Gentry Park Coastal Habitat Feasibility study, field biologist for Chesterfield Township's Brandenburg Park Coastal Habitat Restoration, multiple City of Royal Oak projects, Stony and Celeron Islands, and Eliza Howell Park Habitat Restoration. Bob has sampled fish in all of southeast Michigan's watersheds, including the Detroit River and Ecorse Creek, and Great Lakes waters in the St. Clair-Detroit River System, and is also an avid birder, herpetologist, and expert in DNR wildlife regulations, with sampling "take" permits for several taxa.

Jon Weyrauch

Ecological Restoration Manager

Mr. Weyrauch is a master rain gardener, invasive species management planner, engineer, forester and team leader with 20 years of experience in ecology, ecological survey, forestry, soil science, GIS and management.



Relevant Highlights

- Certified NCICP trainer
- Master rain gardener
- Tree inventory and mapping
- Forester; management planning
- Machine operator, sawyer
- 20 years of experience

Jon leads forestry operations in addition to general project management. Establishes Key Performance Indicators and QA/QC deliverables for work planners. Communicates and negotiates management strategies with cooperators and internal managers through organizational and cultural processes. Jon coalesces cross-functional teams by streamlining information distribution and analysis. Jon is a certified forester and has adroit sawyer skills. He selects and guides project managers for various site sustainable developments as well as oversee environmental sampling, green infrastructure and community engagement projects. He designed and led pilot green infrastructure program funded by Great Lakes Protection Fund.

Education

- B.S. Oakland University; Environmental Science.
- M.S. Wayne St. University; Civil-Environmental Engineering.

**Registrations/
Certifications/Training**

- NGICP Trainer Lead
- Soil Science Society of America
- Certified Natural Shoreline Professional
- MDARD Applicator

Project Experience

Mr. Weyrauch has been running NCS invasive species and green infrastructure training and maintenance programs for NCS in 2020 and 2021. He has run 2 non-profits as their director or manager from 2015-on. With ReRoot Pontiac and ReRoot Environmental, he's coordinated invasive plant and animal surveys, composed project specifications, performed oversight of control operations and managed cooperative staff. As a university doctoral researcher, Jon has led assessment services for invasive species contracts within over the course of the last 10 years, serving Macomb, Oakland and Wayne counties, working alongside ecological contractors, environmental consultants, NGO and government staff. In doing so, he developed an auditing process for assessing contractor efficiency and their budgetary efficiency. He has led restoration operations, including scheduling, planning, and field implementation for greater than 20 projects in the Southeast Michigan region. He has in-depth experience with invasive species biology, forest and restoration methodology, implementation, and statistical analysis. Additionally, he is certified natural shoreline professional, and Master Rain Gardener, having worked with CRWC WaterTowns. He's a certified trainer for the NGICP green infrastructure program. Jon has also directed grants, project development, office strategic plans and provided science and technical advisory roles for the community ecological services non-profits ReRoot Environmental and ReRoot Pontiac for over 5 years. Jon would manage technical data, scheduling and implementation for this project.

Joe DeLisle and **Jim Keller** are NCS field supervisors, with years of vegetation management and crew management experience. **Bob Ford** also works with NCS as consulting planner and landscape architect on an as-needed basis.

C – Experience and References

Client references from previous corporate or government customers above in Experience and References, with email addresses of most relevant references included.

Michigan Department of Natural Resources

Sterling State Park - Natural areas inventories, assessment, and resource mapping

Belle Isle Flatwoods - Natural areas inventories, assessment, and resource mapping;

Habitat Restoration Design, Construction Oversight

Milliken State Park – Wildlife habitat restoration

Point of Contact- Robert Clancy (517) 202-6751.gov, clancyr@michigan.gov

Description of Work- Project Manager of wet-mesic prairie portions of GLRI project encompassing vegetation mapping, and invasive species control. NCS coordinated the invasive species monitoring and control project item for the River Raisin Ecological Restoration which coordinated the efforts of many BUI removal items. NCS served as the GPS data collector and GIS analyst who fed DNR project management teams standardized metadata and mapping of invasive species populations and control information. His specific projects, purple loosestrife and phragmites control, incorporated attributes of ecosystem types, land cover data, created a GIS depiction of before and after population sizes, control efficacy, and retreatment prioritization. NCS was responsible for botanical survey, data collection, and mapping activities at Sterling State Park, as part of an invasive plant control AOC project in the River Raisin delta area. Investigation activities included the identification of all invasive plants, documentation of their areal extents, population densities, and expression on data sheet, GIS, and maps. NCS assisted in wildlife habitat restoration and native landscape design, installation and management at Milliken State Park, in three different project areas. NCS performed biological assessments of plant, insect, bird, reptile, amphibian, fish, and tree pathogenic fungi for the Flatwoods design, and is currently leading contractor oversight for the hydrologic restoration in the Flatwoods, focused on protection of endangered species. NCS also worked as a design-build consultant to DTMB's contract lead to assess and implement BMP solutions to site watershed plan, survey, geotechnical assessment, stormwater pollution runoff, native planting plan, green credit submittals, stakeholder landscape aesthetic and maintenance planning, landscape architectural design, permitting, construction, establishment maintenance and monitoring of bioretention. NCS has assisted with the planning, design, construction and maintenance of several bioswales, and assessing plants, soils, hydrology and wildlife in wetlands for BIC/FOG, to improve water quality and wildlife habitat for DNR and partner NGO's on Belle Isle.

Detroit Northends Christian CDC

Trail Design

Green Infrastructure Maintenance

Point of Contact- Jerry Hebron jannhebron@gmail.com

Description of Work: Natural Community Services worked with Detroit Northends, Erb Foundation and the State of Michigan to design, build, and maintain 2 green infrastructure projects. This work included corridor survey and engineering, landscape architecture and plantings for bioretention, permaculture, phytoremediation, invasive species management and grassland bird habitat. Project included planning, design, phytoremediation planting, prairie, rain and pollinator gardens, and other enhancements of the site which absorb runoff and prevent pollution, and erosion through a number of design and agency review iterations, monitoring, and restoration practices. NCS also specified and implemented maintenance of GSI and native landscapes.

Macomb County

MCDR/SEMCOG Metro Parkway Green Infrastructure

Nicholson Nature Center Wetlands & Green Infrastructure Maintenance

Point of Contact- John Crumm, Gerry Santoro (586) 463-8671 jcrumm@rcmcweb.org

Description of Work: Macomb County/SEMCOG Metroparkway Greening — NCS compiled GIS vegetation data, which was critical to create a solid understanding of the relationships between environmental features, restored landscapes and local stormwater inputs. NCS used a suite of GIS software, as well as landscape architecture software for GPS/GIS data upload and analyzing optimal native plant materials for local soils and hydrologic goals. The project included coordinating contractors and composting green infrastructure specifications. The project was implemented using phenology-based scheduling and native landscape design as the backbone of the effort. NCS, with county and regional partners, presented the project quality assessment data to SEMCOG, and was profiled in SEMCOG programs online and to each southeast MI CVT as project #11 in the SEMCOG green streets manual. Nicholson Nature Center— NCS worked with the County to design, install, and establish wetland, GSI, and natural shoreline features funded by Environmental Protection Agency (EPA) grants. The project of restoration of a wetland through invasive shrub/tree removal, soil fill removal, water retention berm, and wetland plantings NCS assisted the county with permitting and the Michigan Natural Resources Trust Fund and EPA grants used to fund construction.

NOAA/Friends of the Detroit River

Stony and Celeron Island Habitat Restoration

Belle Isle Lake Okonoka Habitat Restoration

Sugar Island and Hennepin Marsh Restoration

Grosse Ile and Detroit, MI

Point of Contact- Sam Lovall 248-797-5667, sam.lovall@gmail.com

Description of Work: Project Manager responsible for Habitat Restoration for wildlife structures, native vegetation, GIS/mapping and soil erosion control activities at the Stony and Celeron Island project sites located within the Detroit River area of concern. Construction management activities include wildlife habitat and erosion control design, installation monitoring and maintenance, vegetation, habitat structure, and environmental features data collection and GIS map composition, technical drawings, reports and submittals, support of design changes during construction and planning of construction to ensure completion according to plans. Natural Community Services worked with FDR to restore wetland habitat including the use of GIS mapping, MDEQ permitting, precision site preparation, woody debris management, wet-prairie seeding, and invasive species control. We used ecological restoration methods using vegetation, erosion control and habitat management best practices, log habitat anchoring technique to minimize washout, enhance habitat for fish and wildlife, minimize flooding and erosion through a number of planning, monitoring, and restoration practices.

City of Huntington Woods

Green Infrastructure Maintenance

Scotia Park Retrofit

Point of Contact- Tracy Shanley (248) 543-9720, tshanley@hwmi.org

Description of Work- NCS worked with the city of Huntington Woods and partners to design, install, establish and maintain green infrastructure practices. The project took street stormwater and piped it to bioswales. NCS also replaced turf with native gardens that reduced the total area of heavily treated landscapes. NCS provided assessment, design-build and establishment maintenance/monitoring services. NCS continues to monitor the site, providing species data collection, maintenance, photo-documentation and reporting.

Clinton Township

DPW Bioretention Design and Management Consulting

Tomlinson Arboretum Design Green Infrastructure Maintenance

Point of Contact- Mary Bednar/Jim Hungerford; m.bednar@clintontownship-mi.gov

Description of Work- NCS worked with the township's Arboretum committee to design, install, and establish arboricultural collections, prairie, wetland, stream and natural shoreline features funded MDNR and DEQ grants. The project consisted of restoration of a drain corridor, bioretention, tree planting designs, erosion controls and wetland plantings. NCS assisted the township with survey, conceptualization, permitting, planting and vegetation management specifications and the grants used to fund construction. NCS also consulted on the design, implementation and management of bioretention wetlands, shorelines, and swales on the township's civic center property.

City of Farmington Hills

Heritage Park Nature Trail Design

Green Infrastructure Maintenance

Point of Contact- Ashlie Smith 248-417-3256, asmith@fhills.gov

Description of Work: Designer responsible for survey, wetland delineation and biological assessment, native planting and erosion control plans, trail, pond and native landscape design, habitat restoration, construction oversight, and interpretation for wildlife structures, native vegetation, GIS/mapping and soil erosion control activities at the Heritage Park located within city of Farmington Hills. NCS also designed, and supervised construction of, natural playscape features, bench and perch logs, interpretive water cycle, geology, and botany outdoor recreation along the trail. Construction management activities include existing species assessment, wildlife browse study, native plant layouts, planting and establishment specifications, wildlife habitat and erosion control design, vegetation, habitat structure, and environmental features data and GIS map composition, technical drawing and submittals, support of design changes during construction and vegetation establishment activities to ensure completion according to design plans.

City of Southfield

Carpenter Lake Nature Preserve Natural History Gardens

Green Infrastructure Maintenance

Point of Contact- Brandy Siedalczyk 248-796-4806; email: bsiedlaczek@cityofsouthfield.com

Description of Work: The Great Lakes Natural History Garden is a collection of geologic features and gardens hand selected for the creation of a beautiful savanna like park area celebrating our region's natural heritage, geologic bedrock/outcrops, and re-create many of the special habitats found here such as dune, limestone/granite cliffs, lakeplain flatwoods, oak openings and prairie. We've planted the Gardens with Great Lakes endemics: prairie, savanna-woodland wildflowers and woody plants. In the gardens a series of accessible pathways, boardwalks, and overlooks invites up-close views of plant collections interpreted for a most beautiful play on Michigan's natural landscape: Dune, Lakeplain Oak Openings, Woodland Garden, Coniferous Outcrop, Butterfly-Pollinator, Lakeplain Prairie. NCS also maintains bioretention and natural areas for the City, on an ongoing basis, and works with consultant team on collecting and reporting monitoring data of species cover and sediment conditions.

City of Royal Oak/Nature Society

Arboretum – Native Landscape, Trail and Bioretention Design

Tenhave Woods and Commingston Park – Natural Areas Management

Point of Contact- Don Drife 248-885-6821, donalldrife@comcast.net

Description of Work: NCS assisted the Royal Oak Nature Society with Arboretum planning, data collection, native tree procurement, mapping, methods and development, restoration alternatives, and implementation of solutions. NCS wrote plans and specifications, managed invasive species, performed detailed vegetation and wildlife surveys, designed ADA trail and chip trail profiles, and designed rain gardens and arboretum native plantings at Worden Park. NCS staff also led planning and design for pond habitat, install, and establishing wetland and natural shoreline features.

City of Royal Oak

Normandy Oaks – Savanna Restoration Habitat Assessment and Design

Green Infrastructure Maintenance

Point of Contact- John Fedele 248-398-0195, JohnF@romi.gov

Description of Work: NCS led the site biological assessments, ecological data analysis, wildlife structure, grading, hydrology and planting plans for an urban oak savanna and wetland habitat restoration. NCS is facilitating migrant bird recovery, oak canopy protection and expansion, wet-mesic flatwoods development and 20 pollinator gardens, and designing environmental interpretive signage. NCS assessed 10 acres of wildlife habitat and completed a savanna and wetland design, integrated with park master plan and design-build grant submittals and coordination and assistance with north park bioretention design and construction to reconnect hydrology and habitat corridors to recreational park areas. 2 acres of wetlands, a half-acre bioswale, 6 acres of savanna, forested wetland edges with 25 log and brush habitat structures, 2 sand nesting mounds, a vernal pool and other habitat types will be constructed from design plans to create habitat for birds, reptiles, amphibians and pollinators, and enhance existing macroinvertebrates and other fully aquatic species through water quality improvement. This provides critical connected, safe habitat for nesting and breeding species like snapping turtle, which have been negatively affected by invasive species and urbanization. NCS also led invasive species management planning, for an additional 20 acres of restoration planning, including cut-stump treatments of woody exotics whose biomass will be reused on-site as habitat.

West Bloomfield Township

West Bloomfield Lake Assessment, Bioengineering Design and Construction, and Monitoring Fire Station Green Infrastructure Maintenance

West Bloomfield, MI

Point of Contact- John Donohue, Marshall 248-943-0016, jdonohue@wbtownship.org

NCS assessed stormwater, habitat, fine and coarse fuels, evaluated plant composition and relative abundance, salt inputs, landscape aesthetic input, planning, design, permitting, construction, establishment maintenance and monitoring of shoreline restoration, and its wetlands, uplands, habitat structures, and native plantings to benefit the wildlife and water quality as well as improving recreational opportunities for HOA residents. NCS has now executed three design-build-maintain GSI projects for WBLE, street bioswales and prairie filters, constructed floating wetlands, and fire station maintenance and prescribed burn planning.

ReRoot Pontiac

Bioretention Design, Construction and Maintenance

Pontiac, MI

Point of Contact- Alison Shapic 248-275-7934 alison@rerootpontiac.org

Description of Work- Natural Community Services worked with ReRoot and a Foundation to design and install green infrastructure projects along Henderson Street in Pontiac. This work included corridor survey and engineering, landscape architecture and plantings for bioretention, permaculture, phytoremediation, invasive species management and grassland bird habitat. Project included planning, design, phytoremediation planting,

prairie, rain and pollinator gardens, and other enhancements of the site which absorb runoff and prevent pollution, and erosion through a number of design and agency review iterations, monitoring, and restoration practices. The final stormwater design accounts for city runoff and green credit processes and holistic farm management approach. NCS also performed solar farm pollinator habitat restoration design-build work.

Huron-Clinton Metroparks

Stormwater Management Plan

Contact- Ryan Colliton, Natural Resources Manager 248-369-1950 Ryan.Colliton@metroparks.org

Description of Work- NCS assisted a consultant team in survey, planning and administration of a SAW (Storm water, Asset management, Wastewater) grant - covering the biological, stream habitat, and water-quality assessment development of a storm water asset management plan. The goal of the plan is to improve water quality through strategic assessment, and NCS led investigation of natural features. We determined invasive species cover, stream bank integrity, and other asset classes within the park system that require maintenance and long-term planning moving forward. We identified and quantified natural resource deficiencies – helping the client assess existing storm water conveyance systems and map the entire network throughout all the parks. We performed mapping, analysis and recommendations and a storm water management report. for shorelines, riverbanks, culverts, ditches, and watershed areas. We recommended retrofitted green infrastructure BMPs and specifications for maintenance.

The Nature Conservancy

Oakwoods Monitoring and Invasive Species Control and Maintenance

Eastern Market-Sacred Heart Church GSI Consulting Installation and Maintenance

Michigan and NW Ohio

Point of Contact- Val Strassberg valerie.strassberg@tnc.org (303) 902-9591

Description of Work- NCS worked with TNC, City of Detroit and partners to design, install, establish and maintain green infrastructure practices. The project took parking lot stormwater and channeled and piped it to bioswales. NCS also replaced turf with native gardens that reduced the total area of heavily treated landscapes. NCS provided assessment, green infrastructure planning, training and establishment maintenance/monitoring services. NCS continues to monitor the site, providing species data collection, maintenance, photo-documentation and reporting. Also, NCS worked with the Oak Openings team on savanna and floodplain forest habitat and invasive species control in Michigan and Ohio.

Van Buren Township

French Landing

Riggs Park

Wildlife Habitat Assessment, Invasive Species, Burn Plan & Green Infrastructure Design-Build

Shoreline and Natural Areas Restoration – Consulting, Design, Installation and Maintenance

Point of Contact- Elizabeth Renaud/Matt Best 313-699-8900; email: erenaud@vanburen-mi.org

NCS assessed, designed, and implemented invasive species control, biomass removal, shoreline and forest ecological restoration, lawn conversion to prairie, butterfly garden groundcover planting, restored food, shelter, and water resources for wildlife through natural planting scheme focused on erosion control for water quality, habitat value and productivity of park forest, savanna and prairie. For Van Buren Park, Riggs Park, and cemeteries, NCS surveyed invasive species cover, soils, and park layouts to compose native revegetation plans for water quality, wildlife, and improved user recreational and aesthetic enjoyment. NCS wrote and obtained NFWF habitat restoration grant for Riggs Park, monitored biota pre and post-construction, designed ecological restoration practices, implemented and maintained them.

Washtenaw County

Pepper Pike-Millers Creek Restoration

Benz Creek Wetlands Restoration

Ann Arbor, MI

Point of Contact- Harry Sheehan (734) 261-9861 sheehan@washtenaw.org

Natural Community Services worked with Washtenaw County and partners to restore riparian wetland, savanna and forest habitats including the use of GIS mapping, designed woody debris management, rolled erosion control products, native tree/shrub and plug plantings, and riparian seeding restoration. NCS assessed stormwater, aquatic habitat, evaluated and treated invasive species; performed planning, construction, establishment maintenance and monitoring of shoreline restoration. It restored wetlands, uplands, habitat structures, and native plantings to benefit wildlife and water quality as well as improving recreational opportunities for HOA residents. NCS has now executed two ecological restoration/erosion control projects for Washtenaw County.

Detroit Future City

Green Stormwater Infrastructure Design and Construction at YAW & Oak Grove AME

GSI Construction and Maintenance for DBG

Detroit, MI

Point of Contact- Susan Rusinowski srusinowski@detroitfuturecity.com 313.499.3330

NCS worked as a design-build-maintain consultant to Detroit Future City to assess and implement BMP solutions to site watershed plan, survey, geotechnical assessment, stormwater pollution runoff, native planting plan, green credit submittals, stakeholder landscape aesthetic and maintenance planning, landscape architectural design, permitting, construction, establishment maintenance and monitoring of bioretention. The 2500 square foot bioswale is improving water quality as well as improving pollinator habitat for the client. At Oak Grove AME, NCS led planting design, green stormwater construction, and site restoration. At DBG, NCS excavated, graded, connected drainage to bioswales, planted and maintained them.

City of Detroit/Sidewalk Detroit

Habitat Restoration Design-Build-Maintain for Eliza Howell Park

Detroit, MI

Point of Contact- Ryan Johnson (734)545-0589, ryan@sidewalkdetroit.com

NCS led the site biological assessments, ecological data analysis, wildlife structure planting plans, installation and maintenance for an urban riparian wetland habitat restoration: 22 structures planned, and 8 acres of wildlife habitat were evaluated in a conceptual design process as part of a park master plan and design-build grant submittal to reconnect Rouge River hydrology and habitat connectivity to low-lying disturbed park areas. 2 acres of wetlands, a half-acre bioswale, 6 acres of upland prairies, 20 log and brush habitat structures, 2 sand nesting mounds, a vernal pool and other habitat types will be constructed from design plans to create habitat for birds, reptiles, amphibians and pollinators, and enhance existing Rouge River habitats for fish, macroinvertebrates and other fully aquatic species through water quality improvement. This provides critical connected, safe habitat for nesting and breeding species like snapping turtle, which have been negatively affected by invasive species and road impacts. NCS also led invasive species management, interpretive signage and native landscape maintenance, for an additional 8.25 acres of restoration planning, including cut-stump treatments of woody exotics whose biomass will be reused on-site as habitat.

City of Detroit

DWSD Green Infrastructure Maintenance

Maheras-Gentry Habitat Restoration Feasibility and Design

Detroit, MI

Point of Contact- Arianna Zanetti (313) 628-4307 zannettia@detroitmi.gov

NCS worked with city planning to restore aquatic, wetland, and upland habitat including the use of GIS mapping, MDEQ permitting, biological assessment, fish and herpetofauna detailed studies, substrate sampling and analysis, hydrologic and resiliency planning, invasive species management, habitat structure and native vegetation design. We are using ecologically adaptive design approaches using flow patterns, native vegetation, erosion control and wildlife habitat management best practices, log habitat anchoring techniques to minimize washout, enhance habitat for fish and wildlife, minimize flooding and erosion through a number of planning, monitoring, and restoration practices. For benthos management, NCS is determining usable and stable substrate components, including muck, cobble, large woody debris (LWD) obstructions to kayaking, what was workable and permissible to remove, and how and where it is likely to get trapped and accumulate; its role in aquatic ecology and fluvial geomorphology, and how to assess and manage the features. NCS is again partnered with OHM on full engineering and ecological design. NCS also manages 8 park GSI sites using comprehensive green infrastructure monitoring data collection, analysis, and grounds management.

Wayne County Parks

Elizabeth Park Shoreline Restoration

Nankin Lake Habitat Restoration

Alliance of Rouge River Communities – Wetland Restorations (3 Parks)

Livonia and Southward, MI

Point of Contact- John Gundry (734) 261-9861 jgundry@waynecounty.com

Natural Community Services continues to work with Wayne County to restore forest, wetland, and shoreline habitats on over 100 acres. Through site inventory, analysis, GIS mapping, permitting, prescribed burning, designed woody debris management, monitoring and maintenance, and riparian landscape restoration, we have worked with diverse teams to compose management plans and implement erosion/invasive species control and revegetation services. NCS is currently working on a 40-acre aquatic, wetland and riparian forest improvement project- restoring Nankin Lake area forests, lake's littoral zone with 20,000 aquatic plugs and wildlife fencing. We used live staking and soil lifts, both clean and open methods as well as the habitat anchoring techniques to stabilize the shores of the canal, enhance habitat for fish and wildlife, minimize flooding and erosion through several planning, monitoring, and restoration practices. For woody debris management, NCS identified obstructions to kayaking, CWD workable and permissible to remove; its role in river ecology and fluvial geomorphology, and how to manage the LWD.

Wayne County Airport Authority

Endangered Species Vegetation Management Planning and Implementation

Phragmites Control

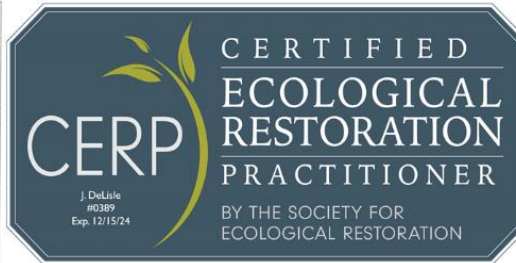
Romulus, MI

Point of Contact- James Wadsworth (734) 934-3262 -9861 jwadsworth@wcaa.com

Natural Community Services works with Wayne County to restore endangered plant habitats including rare species inventory, GIS mapping, permitting, invasive species control, and prescribed burning (two burns in fall, and one in spring): Obtain necessary permits for, and conduct brush control and prescribed burns during the period June 2014 – May 2017 for the following four (4) areas: Airport Central Site (~10 acres), Airport East Site (~2 acres), Crosswinds Threatened Plant Mitigation Site (~20 acres), and Crosswinds Former Gun Club Site (~10 acres). We also perform Phragmites control for WCAA.

D - Certifications

NCS has relevant natural resources certifications including Pesticide Applicator License and Certified, fire and safety training, Ecological Restoration Practitioner Stamp information pasted below; certified arborist and forester listed in experience.



E - Equipment

NCS measures twice and cuts once, with environmental and restoration construction and ecological consulting equipment that supports precise data analysis and field actions, as follows:

EARTHWORK & RESTORATION

1. Tractors and Crawlers: BX23 & BX26 Kubotas; Mini-excavator, dozer
2. UTV & dump trailers – Polaris Ranger & 3yd dump + 1yd mini-dump onsite mobilization
3. Implements -grading rakes, harrows, rollers, cultipacker, tiller, seeders/broadcasters

1. Trash pump
2. Golf course & garden hoses
3. Fittings and washers

TANKS & SPRAYERS

1. 250 gal truck tank
2. 60gal truck tank
3. 25 gal utility or backpack fill tank
4. 50gal UTV spray tank
5. 40gal spray tank
6. 25gal spray tank
7. Backpacks & spray bottles

FORESTRY

1. Brushcutters
2. Mowers
3. Saws
4. Rigging equipment
5. Planting augers
6. Wheeled trimmers
7. Sicklebar mower

BOATS

1. Jon boat
2. Lund fishing boat
3. Swamp “duck” boat
4. Kayaks

PUMPS & HOSES

CONSULTING

Ecological assessment services are essential to ensuring the successful design and completion of a project reliant on good data. Ecological restoration projects efficient technical methods with value-added services that ensure sampling gear, software and computing hardware to generate good data analysis that supports biodiversity, recreation, and aesthetics.

- AutoCAD, Sketchup, ArcGIS, and other site planning software
- Soil Sampling Tools and Supplies, probes
- Submeter GPS data collectors
- Soil Test Instruments, Thermometers and Kits
- Benthic and water column sampling tools, nets
- Caliper and tape measures, wheels
- Conductivity, DO, pH, and TDS Meters
- Water Flow Meters, Seines, and Current Meters
- Dissolved Oxygen Meters, Data Loggers
- Water Level Recording and Stream Gauges
- Laser level, transit, sight compass
- Seed cleaners and sieves
- Custom SESC and plant propagation resources

John and Liz DeLisle

Principal Ecologist and Owner

Natural Community Services

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