**Liz and John DeLisle**
*CEO/Owner and Principal Ecologist*
**Natural Community Services**
http://naturalcommunityservices.com
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# STATEMENT OF QUALIFICATIONS

For: Natural Community Services, LLC

**Ecological Services & Native Landscape Design-Build**

West Bloomfield, MI

**Liz and John DeLisle**
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# Contents

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# Company Profile

## Natural Community Services, (NCS) – Assessing, Preserving, Creating, and Restoring Nature Near You

Natural Community Services is an SBA-certified woman-owned small business and equal opportunity employer. Our ecological assessment, planning, design, and restoration philosophy approaches ecosystem and land manager concerns by:

- Designing best management practices for stormwater, floodplains, forests, parks, and ecosystems
- Assessing and monitoring wildlife, plants, streams, wetlands and forest resources; natural resources management plans
- Constructing bioswales and wetlands terrestrial and aquatic systems, parks, and other green infrastructure
- Acknowledging the intrinsic value of biodiversity and enhancing natural system integrity by creating, restoring, and maintaining naturalized/sustainable bioretention and natural areas and improving their functionality, aesthetics, and connectivity.
- Strategizing cost-efficient restoration/remediation actions which have the greatest positive environmental impact effect per dollar spent.
- Educating clients and stakeholders about the value of plants, animals, sustainable land-use
- Controlling invasive species and re-introducing native species for maximum biodiversity
- Native landscape and wildlife habitat planning design and construction for biological, recreational, and visual appeal.
- Surveying, mapping, planning, designing and constructing natural features and public places for economic and environmental benefit

***Our mission is to restore and maintain the health, integrity, beauty, recreation and resource value of clients' land and water.***

Natural Community Services' environmental scientists and ecologists use best management practices of site assessment, sustainable design/planning, and ecological restoration to enhance and restore wetlands, woodlands, prairies and other environmental, social, and agricultural resources in natural areas and in urban settings. We design solutions for soil-water quality, biodiversity, green infrastructure, public program management and nature interpretation. We plan/design and restore conservation buffers, native landscaping and other LID features, naturalized detention basins, streambank stabilizations/natural shorelines, natural areas/natural features setbacks, phytoremediation, and create wetlands.

Promoting the functions and values of native plants, Natural Community Services works with clients to foster sustainable landscapes and functional stormwater BMPs ranging from forest preserves to ditch bioswales to private/NGO land and water management. Natural Community Services participates in collaborative professional teams to work on environmental projects for the preservation and restoration of natural resources, urban ecological restoration, water quality controls, and environmental remediation.

Paramount is the belief that restoration and remediation must benefit the larger environment in which we live, enriching the natural heritage of people, plants, and animals and improving native habitats throughout Michigan. Since 2008, Natural Community Services has had continued success planning natural resource programs, restoring and maintaining native ecosystems, enhancing local forests and agriculture, and protecting and maintaining environmental health throughout Michigan.

# Scope of Services Overview

### Ecological Assessments and Monitoring

- Flora, Fauna, Hydrology, Soils, Data collection and analysis
- ESA, EIS, Baseline data, systematic monitoring, mapping GIS

### Soil Erosion and Sediment Control Projects

- Streambank Stabilization
- Erosion Control Matting
- Revegetation
- Bank soil profile and in channel water-level/sediment monitoring
- Bioengineering design and construction

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### Green Infrastructure (GI)

- Bioretention design-build
- Constructed wetlands
- Native Landscapes – GI Planning and Design
- Native trees and Urban Forest Planning
- Pollinator buffer strips
- Rain Gardens
- Wildlife Habitat Enhancements

### Naturalized Detention Basins

- Erosion and Sedimentation Control
- Shoreline Stabilization
- Native Plant Installation
- Stewardship/Maintenance
- Drill and conventional Seeding

### Forestry and permaculture

- Urban food grower education, farm planning and design
- Soil sampling and testing, composting
- Native pollinator strips/buffers
- Fertility and environmental quality consulting
- Forestry, arboriculture, dendrology, silvics, GIS

### Water Resources

- Hydrologic, and water quality studies
- Watershed management; evaluation/permitting, NPDES
- Stream and lake restoration
- Sediment quality studies, aquatic toxicity, risk assessment
- Design and construction of BMPs
- Green Infrastructure, Grant writing and project design
- Watershed education and outreach support
- Wetland, stream, and bank assessment
- Indicator sampling/inventory: macroinvertebrates, amphibians, fish

### Natural Areas Stewardship and Maintenance

- Prescribed Burn Planning (Implementation sub-contracted)
- Invasive Species Control
- Invasive Brush Clearing
- Custom Herbicide Applications
- Ecological Mowing

### Environmental Planning

- Parks, Recreation, Public Program/education, and Planning
- Land Planning
- Vegetative and Habitat Assessments
- Restoration Management Plans
- Native Landscape Design
- Wetland Analysis/Wetland Delineations

# Field Services

## Soil Erosion and Sediment Control

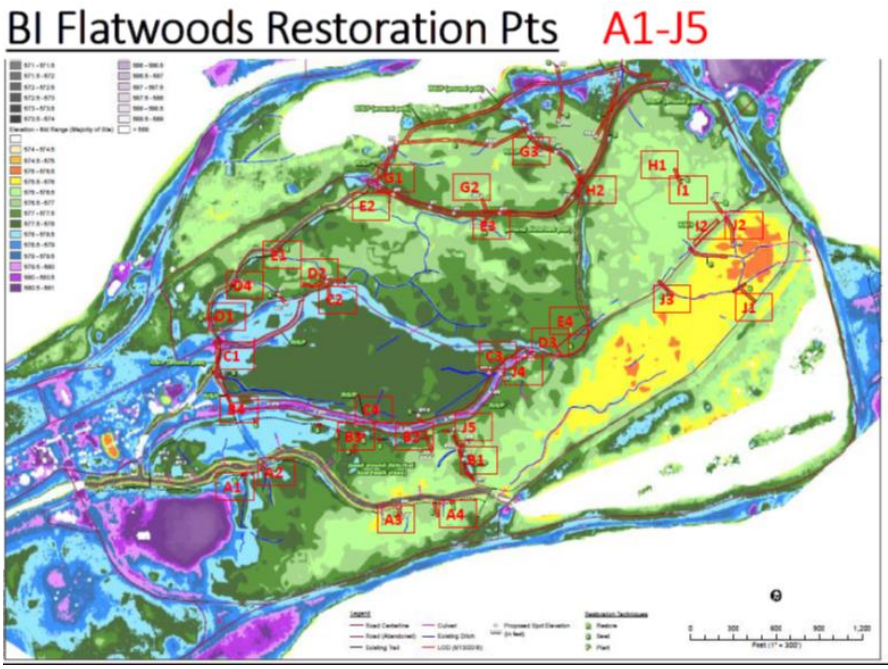
Soil erosion and sedimentation negatively affect the local environment. When soil is left bare, rainfall and melt water increase the volume and velocity of runoff. This sets off a chain reaction wherein soil is increasingly displaced, depositing in downstream sources, including urban centers. Above and beyond the potential damage incurred by urban stormwater runoff, suspended sediment

contributes to a decline in water quality and a decline in associated quality indices (biodiversity, EPT indices). Not only are shorelines subject to erosion, but ravines, hillsides, and bluffs can fall victim to deterioration.
Depending on the severity of the problem, ranging from a gradual water flow to a landslide, controlling and preventing soil from eroding is a significant concern. Using native vegetation to stabilize the soil prevents erosion and allows rainfall infiltration, reducing sediment loads and runoff downstream while improving wildlife habitat and aesthetics. Native plants also adsorb and reduce the movement of sediment, nutrients, and hazardous chemical compounds carried by runoff to receiving waters, and protect groundwater supplies by adsorbing pollutants such as Cd, Cu, Hg, As, and Pb in the runoff within their root zones. Natural Community Services assesses fluvial geomorphology, channelization, sediment load and indicator species, vegetative cover status, and design bioengineering plans to individually suit the site. NCS professionally installs soil erosion and sediment control products for large and small scale commercial, industrial, and residential projects. Our experience includes stream bank stabilizations, naturalized detention basins, coarse woody debris management, and ravine stabilization and restoration.

## Bioengineering: Sustaining Michigan Lakes and Streams through LID and Integrated Management

Michigan's Lakes, streams, and associated wetlands and uplands are of great local environmental and recreational importance. At NCS, we care for these water resources using the following BMPs:

- Design natural riparian zones for structural/biological integrity
- Train contractors in shoreline technologies and native plants for improved habitat and water quality
- Target wildlife for in-water habitat enhancements; natural shorelines that benefit riparian ecosystems.
- Research, demonstrate, and develop natural shoreline technologies for stable ecosystems.
- Encourage local and state policies that promote natural shoreline management.
- Biological monitoring, lake board planning, aquatic ecosystem management
- Bioengineering for streams and detention ponds, and bioswales

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## Native Plant Installations, and Green Infrastructure

What color is your infrastructure? It's actually EASY BEING GREEN…AND cheap! ***Green Infrastructure Definition:*** Green infrastructure is strategically planned and managed networks of natural lands and native landscapes that conserve ecosystem values and functions and provide associated benefits to human populations (Conservation Fund, 2012).

We believe in educating our clients while providing tactical and attractive designs for cost-effective solutions that benefit the environment while maximizing for aesthetic quality. The fundamental basis for using native plant species for improved soil erosion and sediment control in streams and stormwater facilities is that native plants have extensive root systems which improve the ability of the soil to infiltrate water and withstand wet or erosive conditions. But the added benefit of lower maintenance costs is a great motivator for agency and landowner adoption.

There are three basic reasons to support native plant restoration. First, restoration improves the functionality of the ecosystem and its natural processes - restored wetlands provide increased water quality and quantity by storing rainfall and filtering pollutants before recharging groundwater, streams and rivers, and the deep-root systems of natives prevent soil erosion and sedimentation as well as provide greater infiltration for the soil. Second, native plants will provide visually pleasing bursts of colors that change throughout the season. A well-managed natural community improves the look of the area by adding diversity of plants which leads to more song birds, butterflies, and herpetofauna. Since native plants are mostly perennial, there is less cost. Canada geese prefer non-vegetated shorelines and mowed turf side-slopes, allowing quick access to the water's edge for an unlimited food source. This results in large amounts of droppings that degrade water quality and present a potential health risk. Installation of natives on the shoreline creates a permanent, effective barrier which makes it difficult for geese to move from water to land. It also eliminates the food source provided by turfgrass and provides cover for potential predators discouraging Canada geese.

Lastly, promoting native restoration is ecologically important. There are many species of plants, animals, and other organisms that are listed as threatened or endangered or of special concern. Some ecosystems are considered rare and imperiled. An oak savanna is the perfect example of a disappearing ecosystem, one that cannot be recreated but must be restored. Restoring natural communities improves wildlife habitat, and provides much needed feeding grounds for wildlife. Wetlands and prairies are nature's storm water systems and can help decrease flooding and pollution.. The ecologists and environmental scientists of Natural Community Services have the expertise to design, install, and maintain these natural communities. Our installation services can help in the certification process for Leadership in Energy and Environmental Design (LEED) designations. NCS is improving our community, natural and built - providing you with a sustainable and healthy environment.

## Naturalized Detention Basins & Ponds

A conventional detention basin consists of a riprap lined shallow-water basin surrounded by turf grass side-slopes. Although conventional basins provide storm water storage they do very little to treat the polluted storm water runoff for the receiving stream. This results in an increase in nonpoint source pollution downstream. Storm water runoff from developed areas contains a variety of pollutants including sediments, organic matter, heavy metals, bacteria, and nutrients such as nitrogen and phosphorous.

A naturalized detention basin can be an attractive landscaped basin containing a variety of native plants including trees shrubs, and wildflowers. Native plants encourage infiltration resulting in groundwater recharge and reduced surface water discharge. Naturalized detention basins utilize native plants to provide shoreline and side-slope stabilization. Not only are native wetland and prairie plants more reliable soil stabilizers than riprap and turfgrass, they benefit microbial colonization and water quality, provide high quality wildlife habitat, and provide year round aesthetic quality. NCS also designs and constructs bioswales and rain gardens.

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## Natural Areas Stewardship and Green Infrastructure Maintenance

**Prescribed Fire:** NCS assesses natural areas, educates land owners and managers on the ecological necessities of prescribed fire, evaluates burnable landscapes for species composition, fuel loads, and spatial arrangements, writes prescribed burn plans and implements prescribed fire. Burning is generally the most powerful tool for managing invasive species and improving wildlife habitats. The outcome desired and site characteristics dictate the prescription for a burn. Every aspect of a burn is planned well in advance to ensure adequate fuel loads, prepare firebreaks, organize staff, and obtain permits. Accomplishing specific habitat management goals requires training, knowledge and experience. To ensure smoke dispersion, weather conditions are monitored before and during prescribed fires.

**Invasive Species Control:** Invasive non-native plants are a serious threat to native species, communities, stormwater infrastructure/wetland function, and ecosystems in many areas in Michigan. They can compete with and displace native plants and animals, alter ecosystems functions, structures, and cycles, and promote other invaders. The good news is that many plant invasions can be halted. Even heavily infested areas can be restored to healthy systems dominated by native species. This requires taking action to control and manage the invasive plants. Whether it is buckthorn, reed canary grass, or thistle, NCS provides a complete restoration and maintenance plan to reduce the population of invasive plants. Using a wide array of tools and specialized machinery, we have successfully removed invasive species from numerous sensitive areas. In addition to prescribed fire, NCS uses ecological mowing/brush-cutting, custom herbicide applications, chainsaws, and heavy machinery to tackle the job. Once the initial weed removal has been completed, ongoing stewardship visits from field ecologists ensure the establishment of the native plants. NCS plans and manages prescribed grazing using goats on a TEMPORARY basis according to BMPs. NCS herein establishes ecological management goals, making adjustments as needed to ensure that the health of the goats and the invasive suppression objectives of the prescribed grazing plan are met. Our grazing plans address: (a) changing the length of grazing and rest periods; (b) changing paddock sizes; (c) downing taller woody invasive species while goats are present to facilitate access and biomass removal (d) moving watering facilities; and/or (d) moving access

**Green Stormwater Infrastructure:** NCS maintains all GSI facilities according to the BMPs listed in SEMCOG's LID and green infrastructure manuals. We perform all maintenance, watering, installation, supervision, and delivery of all soils and plant material received for GSI-based operations, and also train cities and NGO's in design, operations maintenance, including:

1. See that the allocation of all plant material is correct.
2. See that soil, planting quality and productivity requirements are met.
3. Physical and biological monitoring.
4. Report to community including owner project data.

**A Restoration Year (Typical Schedule)**

Ecological restoration is based on a seasonal calendar, using the related science of phenology to optimal times to address. There are practices and activities that have to be completed during certain weather conditions and in certain months of the growing season. We begin our year with invasive species removal or "clearing" work. The field crews work to remove buckthorn, honeysuckle, and other undesirable woody species during the winter so as not to disturb sensitive areas. NCS will also go through the cleared areas and treat the stumps with herbicide to reduce re-sprouting. There is some seed installation that can happen in the winter depending on weather conditions. If the ground begins to thaw, the drill seeder may be used for installation. Once the ground is frozen and covered in snow, the field crews hand broadcast the native seed mixes to be absorbed into the soil. In between winter and spring, the spring burn season begins and ends rather quickly. During this four to six week period, contractor crews work long days to conduct the burns on clients' land. The burns need to be completed after the snow melts and before majority of the herbaceous layer greens.

NCS' workload increases in the late spring and early summer with projects for applying herbicide to cool season invasive plants (garlic mustard, reed canary grass, etc.) along with tree and shrub installations. Site preparations are completed to install seed and native plant plugs. Our project managers also begin stream bank projects by installing erosion and sediment control measures along

shorelines and planting native plants to stabilize the soil along the banks. Around the same time, early summer live plants installations begin. These projects may be large in size and take considerable manpower. The goal is to install the plants before the weather gets too hot and dry. Come July, the field crews are kept busy with stewardship or maintenance of the projects. They will visit the sites anywhere between two and eight times during the growing season to control weed invasions and ensure that native plants are being established.

By the end of the summer and moving into fall, the crews will again start installing native plugs, trees, and shrubs. Stewardship visits continue through late Fall until the plants become dormant for the season. Before the end of fall and the first day of winter our fall burn season begins. It is a mirror image of the spring burn season. Four to six weeks to burn while everything is dry and before the snow starts. This is NCS' basic work schedule for the field ecological restoration activities. Consulting services are year round which supplements our workload, and provides ample time for data collection, analysis and design.

## Consulting Services

In addition to on-the-ground services, NCS provides expert consulting teams to evaluate the quality of an area, engineer stormwater basins, decipher the habitat types, and recommend appropriate actions to ensure compliance with all Federal, state, and local regulations. Our capabilities allow us to bring a vast array of services tour clients including Site Inventory and Analysis, Municipal Code and Ordinance Research, Tree Preservation, Concept and Design Development, Construction Documentation and Specification, and Construction Observation and/or Administration. Strong ideals coupled with the latest design technology give our clients the best plan for their money.

### Native Landscape & Green Stormwater Infrastructure Design

NCS promotes native landscapes - we believe in educating our clients by providing portfolio pictures, biodiversity and beauty of naturescapes, and the best **native designs** possible so they can make the most balanced decisions for a native landscape. NCS believes in tactical, attractive design for cost-effective solutions that benefit the environment while maximizing beauty! NCS has CAD, GIS, and Sketchup capacity, and we're passionate about ecological design in landscape architecture.

Let us help you connect habitat, form and function on your site. We lead

- Site survey, soil testing, hydrologic and stormwater bioretention conceptual and full-phase design
- work with all kinds of clients, from homeowners and commercial clients, to large institutions, and public entities
- offer an extensive suite of design and consultation services, ranging from master planning to detailed construction documents
- have a lot of practical experience with the planning, installation, and maintenance of ecological design and restoration projects
- design animal habitats to have water, food, shelter, and cover/structure to raise young

**Vegetation assessments**

Vegetation assessments provide our clients with the initial data on the health of their land. From quality plant mapping to invasive species control needs, this is the first step in creating a comprehensive **restoration management plan**. NCS staff ecologists will create management zones and/or restoration units and designate the activities needed to create a diverse natural community. With the talent at NCS, we have the ability to pull together some incredible teams to work on botanical projects. As each project will be different, each project team will be different. In this way, we market several different sets of skills and showcase them in several different combinations. Also, we develop our staff in a way that will be inspirational and motivating to NCS, our clients, and our community.

**Wildlife and Habitat Assessments**:

NCS inventories, analyzes data, and provides management information and assessments of animal species and their landscape/structural and food web habitat needs from a risk perspective. The threats framework used within the action plan is

described, as are the processes used to identify threat associations with landscape features and SGCN and to identify conservation needs to address threats. Additionally, priority threats and priority conservation needs are identified at multiple scales.

**Ecological Inventories**

Surveying and compiling/analyzing data for native and exotic biota according to MNFI and USFWS protocols. NCS evaluates soil/decomposer, benthic and terrestrial invertebrates, fish, avian, herpetological, and mammalian species and assemblages using TMS.

**Wetlands Assessments**

Determination and delineation of Jurisdictional Waters and Isolated Wetlands, as well as evaluating , permitting , and mitigating wetland projects

- Wetland assessment using USAC & MIRAM methods
- Wetland design and permitting
- Mitigation site selection and design services
- Wetland and stream mitigation monitoring
- Wetland restoration
- Design and construction of structural and BMPs
- Initial site visits, GPS/data collection. Floristic survey/FQI
- DEQ permitting, Feasibility analyses, soil and hydrology
- Site planning guidance, including preparation of site plans
- Wetland delineations, determinations, mapping planning
- Wetland rating forms and data sheets for report submittal
- Illicit discharge elimination projects
- Watershed education and outreach support
- Wet and dry weather monitoring
- Aquatic toxicity and risk assessment
- Assistance in grant writing for stormwater LID
- Indicator sampling: Benthic macroinvertebrates, herps Stream, river, and lake delineations of OHWM
- Wildlife habitat assessments
- GIS Mapping of Wildlife surveys
- Wildlife Habitat Management Plans and Wildlife Habitat
- Floodplain Assessment and Mitigation Reports

## Urban and Organic Agriculture Consulting

NCS provides innovative results-oriented services to start-up and existing cooperatives and related farmer-owned businesses. We specialize in value-added and sustainable/organic agriculture and forestry; biomass energy; pollinator partnerships and conservation buffer strips, community education and sustainable development. NCS offers specialized urban farm training, planning and consulting, to assist Detroit area resident, non-profits, corporations, and interested municipalities in establishing their own Urban Agriculture programs. The consulting services provide local governments the capacity to address regulatory and financial challenges for the establishment of urban farms on former industrial property in their inner-city neighborhoods, as well as business, operations and site development expertise to non-profit and for-profit entities that will build and operate these new farms. **Soil Science** - NCS' staff includes soil science professionals, and we have the necessary sampling equipment and cooperators to evaluate your soil health.

## Forestry

NCS staffs an arborist and performs silviculture, timber sales and site preparation, Urban Forestry and Arboriculture. Specifics include:

- CWD Management Plans: *Advises and/or develops riparian woody management plans. Includes DNR and DEQ permits*
- CWD/LWD field work – *using MDEQ 201/301 methods to restore ecological integrity on banks and in-stream*
- Ordinance / Specification Development: *Advises and/or develops municipal tree ordinances*
- Woodlands and Tree Conservation Ordinance Consulting, data collection, best practices implementation
- Inventories: *Advises and/or conducts street/park tree inventories according to local needs/goals.*
- GIS mapping and planning - *Uses various inventory software programs and GIS.*
- Urban Tree Canopy Analysis (UTC): *Provides aerial imagery mapping and analysis of urban tree canopy.*

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- Planting Design and Selection: *Provides landscape design services and species selection advice.*
- Tree Protection on Construction Sites: *Assists client in design and implementation of tree protection systems*
- Municipal Program Administration: *Provides contracted services for municipal forestry program admin.*
- Training / Education: *Provides technical and educational training in arboriculture and urban forestry.*
- Grant Applications: *Assists client in developing project proposals and applying for grants and funding*
- Expert Witness: *Investigates litigious situations involving trees and can serve as an expert witness for clients*
- Certified Arborist on Staff:
- Landscape Tree Appraisal: *Uses Council of Tree and Landscape Appraiser (CTLA) method for tree valuation*
- i-Tree Analysis: *Advises and/or conducts various i-Tree (www.itreetools.org) analysis for urban forests.*
- Land management plans
- Arboriculture services (individual tree maintenance and risk mgt.)
- Habitat improvement and restoration
- Timber sale preparation administration
- Invasive species Management
- Resource inventories and assessments
- Timber tax consultation
- Enrollment in property tax reduction programs
- Program enrollment and certification (Tree Farm®)
- Watershed management and protection

## Environmental Planning

In urbanizing areas as well as in pristine tracts, planning healthy natural resources is essential – if you wish to have healthy water systems and sustainable opportunities for recreation. If you don't plan for natures' needs or people's paths, you simply won't grow for long. NCS regularly conducts studies and ecological assessments in urbanizing areas and wilderness tracts, and in areas between, to determine "health trajectories" of natural areas and park programs. We take pride in bringing residents and public officials into a greater understanding of the potential opportunities for creative restoration and recreational activities in their backyards!

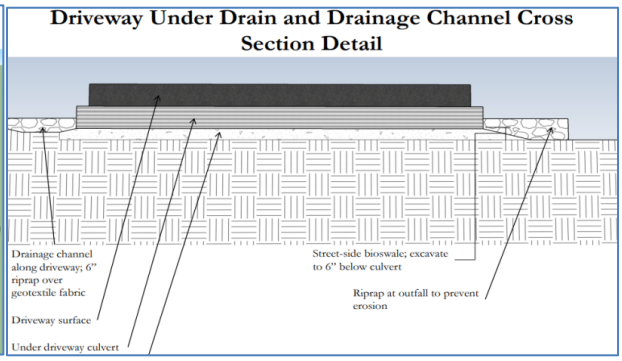
An in-depth, scientific understanding of ecosystems ranging from prairie and wetlands to savanna and forest systems is necessary to lay the foundation for quality land use and land management plans. NCS' planners and ecologists are specialists in understanding the interactions of plant and animal species and communities, and in recognizing the effects of human impacts on land.

**Environmental project programming**

- Regional, watershed, and water resources planning
- Environmental education, communications, and facilitation
- Invasive species management plans
- Interpretive planning, interpretation, public awareness programs
- Wetland mitigation, regulatory consulting

**Native Landscape Design**

- Native landscapes, pond restoration
- Rain gardens, bioswales, and bioretention facilities
- Prairie, Savanna, Wetland seeding and bioengineering
- Fountains, pools, wetlands, and water features
- Butterfly & pollinator buffers
- Construction documents

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## Client and Company References

We have had the privilege of completing over 500 client projects since NCS was first founded. Our clients' privacy is important to us, however a portion have given us permission to release their names on a selective basis. If you require a detailed or specific list, please contact us for an SF330 project experience. Our clients are divided into four sectors: private, government, corporate, and nonprofit.

### Public Projects

| Project Name | Group | Project Type | Address | Contact Name | Contact Details |
|---|---|---|---|---|---|
| Township Parcels 2014-2016 | Independence Twp., MI | Ecosystem survey, DEQ Permitting, GIS, planning, design, invasive species management | 6483 Waldon Center Dr. Clarkston, MI 48346 | Dave McKee, Linda, Ken Elwert DPW Manager | 248.240.2986 dmckee@indetwp.com |
| Greenmead Park | City of Livonia, MI | Bioswale Design/Build | 33000 Civic Center Drive Livonia, MI 48154 | Doug Moore, Superintendent | 734.466.2200 dmoore@ci.livonia.mi.us |
| Ten have Woods, Cummingston Nature Park | City of Royal Oak/Royal Oak Nature Society, MI | Basal bark spray treatment of invasive shrubs & trees | 3500 N. Marais, Royal Oak, MI 48073 | Don Drife President | 248.528.0479 donalddrife@comcast.net |
| Sterling, Holly, Island Lk., Algonac SP. | The MI Department of Natural Resources | Natural areas inventories, resource mapping, Invasive species control. | P.O. Box 30028 Lansing, MI 48909 | Glenn Palmgrenn. Ecologist | 517.241.2055 palmgrenng@michigan.gov |
| Various | West Bloomfield Township | Environmental Ordinance Assessments, Bioswale designs, Ecological Restorations | 4550 Walnut Lake Rd., West Bloomfield, MI | John Roda Environmental Manager | 248.451.4829 jroda@wbtownship.org |
| Invasives Management | Oakland Township | Invasive species mapping and control | 4393 Collins Road, Rochester Michigan 48306 | Ben Vanderweide Natural Areas | 248.218.6951 bvanderweide@oaklandtownship.org |
| Various | City of Farmington Hills | Trail Native Habitat & Landscape Design, Project Planning, Oversight and Site management | 24915 Farmington Rd, Farmington Hills, MI 48336 | Ashlie Smith, Bryan Farmer Managers | 248.477.1135, asmith@fhgov.com |
| Various | City of Novi | Native Habitat Project Design & Invasive Species Management | 24915 Farmington Rd, Farmington Hills, MI 48336 | Rick Meader. LA | 248.735.5620 rmeader@cityofnovi.org |
| Various | Oakland County CISMA/Springfield Twp/TNC | Habitat and invasive species projects | | Mike Losey | 248-820-9284; mlosey@springfield-twp.us |
| Scotia Park project | City of Huntington Woods, MI | Planning, design, invasive species assessment/mapping and control, native seeding, | | Mary Gustafson, Parks Director | 248.263.0168 mgustafson@hwmi.org |

| | | | | | |
|---|---|---|---|---|---|
| | | planting | | | |
| Village Preserve 2011, 2012 | Village Preserve and City of Lathrup Village, Lathrup Village, MI | Planning, design, invasive species assessment/mapping and control, native seeding, planting | | Sandie Johnson, President, Friends of Village Preserve | 248.376.0422, sfjinlv@aol.com |
| Metro Parkway Green Infrastructure | Macomb County Department of Roads | Prairie GrowZone for natural stormwater management | | John Crumm | (586.484.3413 jcrumm@rcmcweb.com |
| Nicholson Nature Center | Macomb County Department of Planning and Economic Development | Wetlands Planning and Restoration | | Gerry Santor | 586.469.6443 gerard.santoro@macombgov.com |

## Corporate and NGO

| Project Name | Group | Project Type | Address | Contact Name | Contact Details |
|---|---|---|---|---|---|
| Natural Features Assessment | Waste Management | Natural Features Assessment | | Kathleen Klein, Publicist | 734.721.8258 kklein@wm.com |
| Various | DensAmerica | Natural Features Assessment, Native Landscape Design, Interpretive sign design, Project leadership, staff training | 24777 Dens Dr, Southfield, MI 48033 | Michelle Smith, Natural Resources/Community Relations | 248.372.8238 michelle.smith@denso.com |
| Various | Six Rivers Regional Land Conservancy | Planning, design, invasive species assessment/mapping and control, native seeding, planting | | Chris Bunch, Stewardship Director | 248.601.2816 cbunch@sixriversrlc.org |
| Various | Friends of Detroit River | Ecological Planning, Wetland Restoration Design/Build | | Sam Lovall, Director | 734.309.8761 samlovasll@gmail.com |
| Various | North Oakland Headwaters Land Conservancy | Ecological Assessments, Wetland Restoration, Invasive Species | 7150 Dixie Hwy, Clarkston, MI 48346 | Sue Julian, Stewardship Director | 734.309.8761 land@nohlc.org |

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# Staff and Experience

NCS strives to provide the best possible assessment, design, restoration, monitoring and native landscape services for our clients. We are skilled in site investigation, data analysis, design and construction, and perform ecological and green infrastructure services for municipal, state, and federal government agencies, non-profits, agribusinesses, private residences/HOAs, Golf Courses, corporations, and schools. We staff 2 designers and a registered landscape architect, and specialize in designing green stormwater infrastructure, wildlife habitats, and natural shoreline buffers.

## Description of BMPs we use

- Develop management plans & conduct prescribed burns
- Complete invasive plant removal projects
- Site soils and hydrology assessments
- Manage remnant or created natural areas;
- Design and install landscapes using native plant species
- Conduct plant and animal inventories
- Map existing ecosystems and natural communities
- Coordinate volunteer groups for planting or restoration work
- Conduct training for all aspects of natural area restoration
- Develop brochures and signage to help people understand and appreciate the natural features around them.
- Unique in our use of biological controls

## Staff Capacity

### John DeLisle, PWS, CNSP, TSP

**Principal Ecologist**

Mr. DeLisle is a wetland scientist and terrestrial ecologist with over 15 years of experience in assessment, habitat restoration design, bioretention, invasive species management, SESC and permitting projects for residential, 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, installing and maintaining native ecosystems, and well-versed in the range of native plants suitable to these natural habitats. John facilitates ecological survey, design and site management methods proven to ameliorate disturbed soils, hydrology, wildlife, and vegetation, while establishing locally indigenous plants adapted to restoring pre-settlement conditions.

**Project Experience:** John is the principal ecologist of NCS, has participated in many ecological survey and GIS projects, including 4 for GLRI-funded projects. He led the planning and implementation of a SEMCOG and Macomb County (MI) Metro Parkway green infrastructure program, and is currently leading planning services for nature trail design-build for Farmington Hills. John is the project manager for biological assessment and bioengineering design for DTMB/DNR at Belle Isle Flatwoods.

**Relevant Highlights**
- ✓ Habitat Restoration Design
- ✓ Wetlands assessment, design
- ✓ Biological surveys
- ✓ Shoreline assessment and bioengineering design

**Years of Experience:** 17
**Years with NCS: 9**
**Education**
M.S.; University of Michigan; Environmental Science; 2008
B.S.; Michigan State University, Natural Resources; 1999
**Registrations/ Certifications/Training**
- Natural Shoreline Professional
- DNR USDA NRCS TSP
- CERP & PWS

### Derek Updegrove, CERPIT

**Habitat Designer**

Derek is a designer and ecologist responsible for promotion and development of NCS' stream restoration practice, green infrastructure & wildlife habitat design, and invasive species planning. His project experience is varied, but focused on assessment, design, management, and restoration of natural resources including permitting, wildlife biology, and invasive plants, including GIS, EDRR species prioritization and plan writing.

**Project Experience**

Derek has led management plan surveys, composition, GIS and implementation for invasive species, green infrastructure and wildlife management projects and restorations in interlobate and lakeplain communities for Cities of Novi, Royal Oak, Wayne County, Oakland County, and 6 Rivers Land Conservancy. Derek also

**Relevant Highlights**
- ✓ Permitting
- ✓ Project design, CAD
- ✓ Biological survey experience
- ✓ Wildlife ecology

**Years of Experience:** 5
**Years with NCS:** 3
**Education**
B.S.; University of Michigan; Ecology; 2015
**Registrations/ Certifications/Training**
- WPIT. CERPIT

has designed wildlife habitat structures, conservation seed mixes, and composed CAD planting layouts for numerous private clients.

## Seth McRobb, CP

**Environmental Designer**

Mr. McRobb is an interdisciplinary design professional with over 5 years of experience in ecology, habitat restoration design, site restoration, bioretention, bioengineering and interpretive design, landscape architectural and CAD software drafting. He is dedicated to educating clients about biodiversity, vitality, integrity, and beauty of our clients' land and water resources. Seth manages a staff educated and experienced in planning, installing and maintaining native ecosystems, and well-versed in the range of native plants suitable to these natural habitats. Seth has won several awards for permaculture design, and interpretive signage

**Project Experience**

Seth McRobb has designed and prepared plans and specification documents for native landscapes, bioretention facilities, constructed wetlands, and stream and upland habitats for a variety of clients. He has helped the cities of Farmington Hills, Royal Oak, and West Bloomfield Township design shorelines, wetlands, and other ecosystems. He's designed natural area interpretive signage there, for AT&T, and for Grosse Ile Nature Conservancy, and composed conservation easement native vegetation plans on for several Detroit GSI projects, as well as designing bioengineered natural shorelines for over 20 private clients. Seth also has extensive experience in benthic macroinvertebrate survey, and soil restorative design, and has designed several retention basins and constructed wetlands

Seth has designed, led construction and/or monitoring/oversight activities for, flora and fauna post construction on several wetland restorations, including a stream mitigation project on Norton Creek in Wixom, MI. This project included an intensive aquatic habitat assessment, and structural habitat design. .

**Relevant Highlights**
- ✓ Habitat Restoration Design
- ✓ Assessment, design and construction of wetlands
- ✓ Bioengineering
- ✓ Biological surveys
- ✓ Habitat structures for target animals
- ✓ Design team manager

**Years of Experience: 8**
**Years with NCS: 4**
**Education**
B.S.; University of Michigan; Environmental Science; 2014
A.S.; Architectural Design; 2009

**Certifications/Training**
- Certified Permaculturist

## Jeff Klein, RLA

**Landscape Architect**

Mr. Klein is an interdisciplinary design professional with 25 years of experience in landscape planning, stormwater management, restoration design, site restoration, bioretention, bioengineering and interpretive design, landscape architectural and CAD software drafting. He is dedicated to educating clients landscape functionality, sustainability, and beauty of our land and water resources

**Project Experience**

Jeff has designed and prepared plans and specification documents for complex commercial, residential, and municipal landscapes, bioretention facilities, pervious paving and other environmental design for a variety of LEED projects. He has helped the cities of Farmington Hills, Royal Oak, and West Bloomfield Township design shorelines, wetlands, and other ecosystems. He's designed natural area interpretive signage there, for AT&T, and for Grosse Ile Nature Conservancy, and composed conservation easement native vegetation plans on for several Detroit GSI projects, as well as designing bioengineered natural shorelines for over 20 private clients. Seth also has extensive experience in benthic macroinvertebrate survey, and soil restorative design, and has designed several retention basins and constructed wetlands

**Relevant Highlights**
- ✓ Stormwater Calculations & Design
- ✓ Assessment, survey and oversight of Bioswale
- ✓ Bioengineering
- ✓ Plan reviewer

**Years of Experience: 25**
**Years with NCS: 2**
**Education**
B.LA..; Michigan State University; 1994
**Certifications/Training**
- Registered Landscape Architect, ASLA

**Liz and John DeLisle**
*CEO/Owner and Principal Ecologist*
**Natural Community Services**
http://naturalcommunityservices.com
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Email: info@naturalcommunityservices.com

## McKenzi Bergmoser, WPIT

**Ecosystem Project Manager**

Ms. Bergmoser is a wetland scientist and wildlife ecologist with 5 years of experience in ecology, wildlife survey, rescue, botany, bioretention, invasive species management and phenology-contingent projects. McKenzi has experience managing numerous wetland, aquatic, and large-scale ecosystem restorations.

**Project Experience**

- Composes plans and schedules for wildlife habitat restoration projects
- Schedules and supervises staff
- Surveyed native ecosystems for invasion of non-native plant species.
- Conducts flora and fauna surveys of natural areas, detention ponds, and green
- Utilized field guide to key out aquatic macroinvertebrates.
- Planned felled trees to river substrate to create fish habitat.
- Writes grant applications
- Leads large-scale wildlife ecology and aquatic habitat projects, prescribed burns
- Operates equipment

**Relevant Highlights**
✓QA/QC & data analysis
✓Project design, CAD
✓Biological survey experience
✓Wildlife ecology
**Years of Experience:** 5
**Years with NCS:** 3
**Education**
B.S.; University of Michigan; Ecology; 2015
**Registrations/ Certifications/Training**
- WPIT. CERPIT

## Patrick Duffy

**Forester & General Manager**

Mr. Duffy is a forester and team leader with 9 years of experience in ecology, wildlife survey, forestry, soil science, GIS and management. Patrick creates project plans that reduce workload by creating and executing project management processes to develop staff efficiencies. 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. Coalesces cross-functional teams by streamlining information distribution and analysis.

**Project Experience**

- Composes plans and schedules for wildlife habitat restoration projects
- Schedules and supervises staff
- Surveys ecosystem for invasion of exotic species.
- Conducts surveys of natural areas, trees/forests, detention ponds, and green infrastructure
- Planned felled trees to river substrate to create fish habitat.
- Writes grant applications, and performs project QA/QC

**Relevant Highlights**
✓Habitat quality assessment
✓Project planning
✓Biological survey experience
✓Wildlife ecology and organismal biology research
**Years of Experience:** 9
**Years with NCS:** 1
**Education**
M.S. Forestry; Purdue University 2016
B.S. Env. Science, Education; University of Michigan: 2014
**Registrations/ Certifications/Training**
- SAF, DNR TSP

## Liz DeLisle

**CE& Owner**

Liz is the CEO and owner of NCS, which is an SBA certified woman-owned small business. She takes charge of finance, accounting, bidding, grants, government contracting, client communications and accounts receivable, materials costing, procurement, human resources and is our problem-solver, and team-builder. She has a Masters in Management from Davenport University.

**Project Experience**

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

**Relevant Highlights**
✓Budgets & finance
✓Project planning, human resources
**Years of Experience:** 9
**Years with NCS:** 5
**Education**
M.S. Management, Davenport University
B.S.; Grand Valley State University

**Liz and John DeLisle**
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# Equipment- Environmental and biotechnology

- Infiltrometers, probes
- AutoCAD, Sketchup, ArcGIS, and other site planning software
- Soil Sampling Tools and Supplies
- 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

**Ecological Restoration and Forestry Equipment**

- Backpack sprayers, 60g Truck-tanks,30g electric sprayer
- Plastic mixing tools/equipment, water tanks, PPE
- Tractor, landscape tools
- Pickup and dump truck, UTV, Skid loaders, Chippers
- Leatherman, hoses, clamps, and nozzles
- GPS - Magellan Explorist 750, Garmin Etrex Sc
- Pesticide flags, Waders/boots, wicks
- Chainsaws, brush-mowers, other Forestry equipment,

**Software**

- Graphics, CAD
- MS Office
- Trimble Sketch-Up
- ArcGIS, GoogleEarth Pro
- Magellan 510 and Garmin GPS units
- iTree, StormCAD, HEC-RAS, RuSle2
- Minitab