

5. Conservation Opportunity Areas

This Section offers additional information relevant to SWAP Element 4 in relation to Conservation Opportunity Areas.

(4) Descriptions of conservation actions determined to be necessary to conserve the identified species and habitats and priorities for implementing such actions.

Conservation Opportunity Areas represent areas of the state where organizations and individuals working on the conservation of SGCN and their habitat would be most likely to successfully implement the conservation actions summarized in Sections 3 and 4 for taxonomic and natural community groups. Providing information to help people make decisions about “where” to implement conservation actions is an important related aspect of conservation actions. Although most COAs have been given boundaries, they are “fuzzy”, meaning their application can vary considerably according to context or conditions and they are not fixed or definitive—they will move, depending on the objectives. Revisions to Conservation Opportunity Areas are recommended to be undertaken in three areas¹:

- Starting points to revise existing COAs based on updates to the sources originally used to define them.
- Considerations for new COAs to bring them up-to-date with other areas of ecological significance.
- Summary of Associations among SGCN, Natural Communities and Ecological Landscapes to assist WWAP users in evaluating existing COAs or identifying possible additional COAs.

The approach and methods used to arrive at these results are described in Section 2.6.2 of the WWAP. Table 5.3 provides a compilation of all 213 existing COAs, including those that are unmapped (marked with “U”). Unmapped COAs exist as patches within a matrix of other land uses and cannot be mapped at the landscape scale, or the boundary itself is difficult to estimate at the scale of available ecological maps.

It is important to reiterate that this effort at revisions to the COAs is modest because we realize that a comprehensive effort at updating the role of and criteria used to identify COAs is needed that extends beyond the scope of this WWAP revision. Changing environments, social and economic influences and trends, and anticipated land use patterns should also be considered when identifying COAs. Partners and stakeholders that support and use the WWAP will be invited to take on this subject during WWAP implementation. The updates proposed in this section are suggested starting points for this larger effort.

¹ Conservation Opportunity Areas were initially presented in 2008 after publication of the WWAP in 2005 as part of a follow-up document known as the Implementation Plan. To further your knowledge and sources on this topic go to <http://dnr.wi.gov/topic/WildlifeHabitat/COA.html>.

5.1 Starting Points to Revise Existing COAs

Revisions to the boundaries of existing COAs should be based on local knowledge—not only that of WDNR staff, but also other public and private sector organizations and individuals with ecological, biological and land use knowledge of the area. As a starting point, adjustments to existing COA boundaries may be made to match Important Bird Area boundaries that did not exist or were not mapped at the time of writing the Implementation Plan in 2008². An Important Bird Area (IBA) is a site that provides essential habitat to one or more species of breeding or non-breeding birds.³ Others adjustments may be based on further field verification of the original COA maps, which relied on satellite images and other vegetation and topographical maps. There may be cases where conditions have changed since 2008 such that some COAs no longer provide good opportunities for management or restoration of SGCN or their habitat and those COAs may be identified for reduction in size or deletion.⁴

5.2 Considerations for New COAs

5.2.1 Significant Ecological Areas

New COAs may include Important Bird Areas that are not associated with any COA. In some cases the function and diversity of COAs may be improved by linking them to one another or other ecologically important areas along waterways, transportation, utility ROWs and other corridors. Designated areas that include wetland sites along the Mississippi River have also been suggested as suitable areas. Large county and municipal park areas such as the natural areas managed by the Milwaukee County Department of Parks, Recreation and Culture may also be considered.

5.2.2 USFS Management Areas

The US Forest Services Management Plan for the Chequamegon-Nicolet Nation Forest identifies ecologically significant areas. Several of these are already identified as COAs; however, one subset of these areas was not included and USFS has recommended they be added to the existing list of COAs within the CNNF. They are referred to as Management Area (MA) 8G Old Growth and Natural Feature Complex and are depicted in Figure 5.1. These areas are characterized by ecosystem complexes and scattered individual stands which feature existing or developing old growth forest, as well as other exemplary natural communities. They provide habitat for a number of forest interior plant and animal species. A wide range of compatible recreational activities occur in this MA including hiking, skiing, fishing, hunting, and wildlife viewing.

² Information about Important Bird Areas, including maps, may be found at:

<http://www.wisconsinbirds.org/IBA/sites.htm>. (Search Terms: Wisconsin important bird areas sites).

³ The definition and criteria used to identify Important Bird Areas may be found at:

<http://www.wisconsinbirds.org/IBA/overview.htm>

⁴ Carter, S., Stephanie R. Januchowski-Hartley, JohnD.Pohlman, Tara L. Bergeson, Anna M. Pidgeon and Volker C. Radelof. 2015. An evaluation of environmental, institutional and socio-economic factors explaining successful conservation plan implementation in the north-central United States. *Biological Conservation*. 192: 135-144.

https://www.researchgate.net/publication/282289703_An_evaluation_of_environmental_institutional_and_socio-economic_factors_explaining_successful_conservation_plan_implementation_in_the_north-central_United_States

The MA may serve as a benchmark or reference area for use in monitoring, adaptive management, or research.⁵

5.2.3 TNC Portfolio Lakes (Applications for Conservation Opportunity Areas)

In 2014, The Nature Conservancy developed a 'portfolio' of lakes to support lake conservation planning in Wisconsin⁶: "Conservancy staff worked with an array of lake experts and partners, including Wisconsin DNR and the Wisconsin Lakes Partnership, to understand how fish, plants, water quality and aquatic communities vary across the state and how these differences may influence vulnerability of lakes to stressors. Inventory and assessment data such as water quality data, fish and aquatic plant species presence surveys, as well as information on stressors such as watershed and lakeshore impervious surface, nutrient loading, invasive species, and water level alterations are being compiled in a decision tool to help identify high quality examples of each lake type, identify conservation opportunities, and support prioritization of strategies for protection, maintenance, and restoration of Wisconsin's diversity of lake ecosystems."

The final analysis recommended 3,051 lakes for inclusion in a "best of the best" (i.e., highest quality) portfolio (hereafter "Portfolio Lakes"). An additional 3,424 lakes were also identified as having conservation value (hereafter "Provisional Lakes"), though they didn't completely meet the strict screening criteria applied to derive the "best of the best."

The authors acknowledge that the Lakes Portfolio is intended to encourage maximum flexibility in use and implementation, and that additional criteria could potentially justify elimination or addition of lakes. To that end, the WDNR took this dataset a step further in 2015 by applying additional screening criteria to the TNC Portfolio and Provisional Lakes to suit the needs of the WWAP update, particularly in terms of assigning COA status to lakes. This involved:

- Accepting most TNC Portfolio and Provisional Lakes that occur within or near (within 0.5 mile) of an existing terrestrial COA. (Exceptions occurred where inland lakes were in no way complimentary to or compatible with the original values identified as important for a given COA. The criteria originally used to identify COAs were more applicable to terrestrial environments.⁷)

⁵ <http://www.fs.usda.gov/main/cnnf/landmanagement/planning> (Search Terms: Chequamegon-Nicolet National Forest Land and Resource Management Plan)

⁶ Blann, K. and J. Wagner. 2014. Development of a Lake Classification and Conservation Portfolio to Support Lake Conservation Planning in Wisconsin. Report produced for the Wisconsin Lakes Partnership and Wisconsin DNR. The Nature Conservancy, Madison, WI.

⁷ Criteria used to identify COAs in the Implementation Plan that were largely applied to terrestrial habitats: 1) high priority Natural Community and/or a concentration of species of greatest conservation need (SGCN) is(are) present; 2) site is a Wisconsin conservation responsibility in that representative and significant ecological features on a global, continental, Midwest-regional or state level is(are) present; 3) other initiatives or plans (e.g., Land Legacy, TNC, etc.) identify it as a priority; 4) establishes an interconnected network; and 5) large, minimally-fragmented, ecologically functioning systems. There are aquatic COAs, but they are underrepresented in the original approach and analysis.

- Applying additional weight to factors that were already part of the original TNC analysis (presence of rare, declining, or diverse aquatic species, WDNR Outstanding or Exceptional Resource Water (OER) status).

Initial results of the secondary COA screening are summarized as follows. An example of a portion of the filtering results from this first phase is provided in Figure 5.2:

- TNC Portfolio Lakes that occur within 0.5 miles of existing terrestrial COA = 1,632
- TNC Provisional Lakes that occur within 0.5 miles of existing terrestrial COA = 898
- TNC Portfolio and Provisional Lakes that don't lie within 0.5 miles of an existing terrestrial COA but do have presence of rare, declining, or diverse aquatic species, or WDNR Outstanding or Exceptional Resource Waters (O/ERW)⁸ status = 240
- Total for preliminary screening evaluation of COA status: 2,770

At this point, it became evident that if we are left with this many sites, it will dilute their importance. There are multiple options for proceeding with further screening. We could adhere to the original COA criteria, but quantitative specifications would have to be added to be able to apply them to the dataset; or we could update the criteria directly according to current metrics and spatial datasets used for conservation planning. In either case, these decisions were clearly a topic for the larger group of WWAP users beyond WDNR and exceed the scope of our planned WWAP revisions and timeframe. As such, the COA candidate lakes and the next phase of screening will be reviewed by lake conservation stakeholders and winnowed down before final designation as COAs. During this future discussion, additional consideration may be given to:

- Eliminate lakes selected to ensure equal distribution (included due to their association with a region and top 10% requirement, but not necessarily the best of the best from a statewide perspective)
- Landscape context (clusters of lakes based on watersheds, basins or ecological features with bio/ecological significance)
- Most recent water quality data
- Narrow the use of SGCN to include indicator (water quality sensitive) plant and animal species rather than number of SGCN present (largest, most diverse lakes do not necessarily have the best habitat quality)
- Protection status
- Last observation date of rare species
- Proximity or connectivity to other candidate lakes (clusters may be given higher priority)
- Proximity to existing lake or stream COAs

5.3 Assessing Potential COAs Using Association Scores

Many different factors and processes can be used to identify ecological priorities for implementing conservation actions. For example, at an Ecological Landscape scale,

⁸ <http://dnr.wi.gov/topic/SurfaceWater/orwerw.html> (Search Terms: Wisconsin DNR Outstanding Exceptional Resource Waters)

priorities could be established by evaluating what actions are most easily accomplished, what actions best fit a site's capability, which actions would combine the efforts of multiple partners, or which actions address the needs of the rarest, most imperiled species in an area of the state. Different groups will identify priorities using different criteria based on their particular interests.

In Tables 5.1 to 5.16 (one for each ecological landscape) conservation opportunities are identified by evaluating species' distributions through their SGCN-EL association scores; species' associations with habitats (natural communities) through their SGCN-NC association scores; and the importance that the Ecological Landscape plays in a given natural community's management through their NC-EL opportunity scores.

Ecological Landscapes are comprised of mosaics of natural communities and other land cover types (e.g., urban and agriculture). For any given natural community, some landscapes represent major opportunities for management and restoration, and others are less important. Similarly, in addition to a species' degree of probability of occurring in an Ecological Landscape, species have different levels of association with different natural communities. For example, Franklin's Ground Squirrels are significantly associated with oak barrens and pine barrens, but are moderately associated with dry-mesic prairies.

These components were evaluated to see where all three scores were maximized at the same time. Whether a managed area, a state forest or an agricultural mosaic, a site's conservation potential can be assessed in part by looking at the combination of these components to identify the best opportunities (e.g., from a capability or ecological potential perspective) to manage, protect, restore, and/or sustain Species of Greatest Conservation Need in specific natural communities. *That is, Tables 5.1 to 5.16 list those high priority situations where all of the following are true:*

- *There is a high or moderate degree of probability that the Species of Greatest Conservation Need is associated with the Ecological Landscape, the SGCN-EL score = 3 or 2 (H or M), AND*
- *The Species of Greatest Conservation Need is significantly or moderately associated with the natural community, the SGCN-NC score = 3 or 2 (H or M) AND*
- *The Ecological Landscape represents a major opportunity to manage or sustain that natural community, the NC-EL score = 3 (H).*

Groups of species with similar needs. Use the lists in each of these tables as starting points in planning and implementing various conservation efforts. For example, projects focused on a particular species-natural community-ecological landscape combination may be able to incorporate the needs of many other Species of Greatest Conservation Need species (as well as those species that are not rare or declining) that also occur in that natural community in the Ecological Landscape.

Species management and habitat compatibility. In some cases, although the high-scoring Species of Greatest Conservation Need listed together within a natural community are all significantly or moderately associated with that natural community, they may have different management needs, may use the habitat at different times of the year, or at different life stages. At times, managing for one or several Species of

Greatest Conservation Need may conflict with other Species of Greatest Conservation Need. In such cases other factors such as likelihood of success and compatibility with adjacent habitats may be used to balance species' management decisions.

SGCN with few or no high scoring combinations at the landscape level. Some SGCN have a limited number (4 or fewer) of high scoring natural community-ecological landscape combinations. Generally speaking, these species tend to be present in small numbers or narrowly distributed; and their habitats may also be unique or uncommon on the landscape level (e.g., ephemeral ponds in upland forest, floodplains and wetlands along streams in the Western Coulees and Ridges. Therefore, do not ignore the need to view conservation actions and their implementation at “finer scales” (both the natural community and species levels) to meet the needs of those species that are not well represented in this Ecological Landscape scale assessment. These natural community-landscape combinations may represent their best opportunities for management and recovery in the state.

Invertebrate SGCN. Invertebrates are not necessarily associated with the natural communities used in this report in that their habitat may be defined by characteristics at a scale or classification not used to define our natural communities (e.g., microhabitat combinations of water depth, bed conditions or plant and animal hosts). Further, the range and distribution for many invertebrates are not well correlated with the Ecological Landscapes used in the report. This again underscores the need to also plan and implement conservation actions at a finer scale within the high scoring “species-natural community-Ecological Landscape” combinations.

Natural Communities that do not support vertebrate SGCN should not be ignored. A few natural communities that are “major” opportunities within an Ecological Landscape are not associated with Species of Greatest Conservation Need that have high scoring “species-natural community-Ecological Landscape” combinations. Many of these communities (dry and moist cliffs, Great Lakes rockshore, and algal talus slopes) have historically and currently occupied small areas. These natural communities can be very important for rare invertebrate, rare plants or other SGCNs, but we lack the habitat and survey information to confirm this—association scores are incomplete.

SGCN listed multiple times as priorities. Readers will also see in the following pages that some species meet the “species-natural community-Ecological Landscape” priority combinations many times. For example, Wood Turtle is listed many times in the following tables. These species tend to be associated with many habitats and occur in many regions of the state although in low numbers.

Tables 5.1 to 5.16 are in PDF version only

Table 5.1 Central Lake Michigan Coastal – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)	
NC Group	NC Type		
Aquatic (lakes-rivers)	Lake Michigan	2 - Birds Common Tern 1 - Fish 3 - Mammals Little Brown Bat 3 - Insects - Terrestrial Trimerotropis huroniana	Caspian Tern Lake Sturgeon Big Brown Bat Silver-haired Bat Cicindela hirticollis rhodensis Trimerotropis maritima
	Warmwater rivers	3 - Birds Great Egret 3 - Fish River Redhorse 2 - Herps Wood Turtle 4 - Mammals Little Brown Bat Silver-haired Bat 6 - Insects - Aquatic Libellula incesta Stenelmis fuscata Stenelmis quadrimaculata 1 - Insects - Terrestrial 7 - Invertebrates - Mussels & Clams Alasmidonta viridis Quadrula quadrula Tritogonia verrucosa	Black-crowned Night-Heron Yellow-crowned Night-Heron Lake Sturgeon Shoal Chub Blanding's Turtle Big Brown Bat Northern Long-eared Bat Hetaerina titia Stenelmis antennalis Stenelmis musgravei Trimerotropis maritima Alasmidonta marginata Epioblasma triquetra Simpsonaias ambigua Venustaconcha ellipsiformis
	Warmwater streams	2 - Herps Wood Turtle 4 - Mammals Little Brown Bat Silver-haired Bat 5 - Insects - Aquatic Enallagma basidens Hetaerina titia 7 - Invertebrates - Mussels & Clams Alasmidonta viridis Quadrula quadrula Tritogonia verrucosa	Blanding's Turtle Big Brown Bat Northern Long-eared Bat Dubiraphia robusta Epiaeschna heros Heterosternuta wickhami Alasmidonta marginata Epioblasma triquetra Simpsonaias ambigua Venustaconcha ellipsiformis

Miscellaneous	Alvar	1 - Mammals 1 - Insects - Terrestrial	Big Brown Bat Limotettix elegans
	Dry Cliff	1 - Birds 1 - Mammals 1 - Invertebrates - Terrestrial Snails &	Peregrine Falcon Big Brown Bat Striatura ferrea
	Great Lakes Beach	4 - Birds Common Tern Red Knot 5 - Insects - Terrestrial Cicindela hirticollis rhodensis Trimerotropis huroniana	Caspian Tern Piping Plover Camnula pellucida Melanoplus flavidus Trimerotropis maritima
	Great Lakes Dune	1 - Birds 8 - Insects - Terrestrial Camnula pellucida Melanoplus flavidus Melanoplus stonei Trimerotropis maritima	Piping Plover Aeropedellus clavatus Grammia phyllira Melanoplus scudderi Trimerotropis huroniana
	Great Lakes Ridge and Swale	2 - Birds Rusty Blackbird 1 - Herps 1 - Mammals 1 - Insects - Aquatic 1 - Invertebrates - Terrestrial Snails &	Least Flycatcher Four-toed Salamander Big Brown Bat Somatochlora hineana Paravitrea multidentata
	Lacustrine Mud Flat	1 - Birds 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat	Rusty Blackbird Wood Turtle Big Brown Bat Northern Long-eared Bat

Table 5.2 Central Sand Hills – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)	
NC Group	NC Type		
Aquatic (lakes-rivers)	Coldwater streams	2 - Herps Four-toed Salamander 5 - Mammals Little Brown Bat Silver-haired Bat 5 - Insects - Aquatic Ilybius gagates Psilotreta indecisa	Blanding's Turtle Big Brown Bat Northern Long-eared Bat Water Shrew Ameletus lineatus Lepidostoma vernale Zealeuctra narfi
	Warmwater rivers	1 - Birds 6 - Fish Blue Sucker Mud Darter Shoal Chub 2 - Herps Smooth Softshell 4 - Mammals Little Brown Bat Silver-haired Bat 5 - Insects - Aquatic Paracloeodes minutus Stenelmis douglasensis 2 - Insects - Terrestrial Ellipsoptera macra 3 - Invertebrates - Mussels & Clams Simpsonaias ambigua	Black-crowned Night-Heron Black Buffalo Lake Sturgeon Paddlefish Blanding's Turtle Big Brown Bat Northern Long-eared Bat Cercobrachys fox Stenelmis antennalis Stenelmis fuscata Cicindela hirticollis hirticollis Plethobasus cyphus Tritogonia verrucosa
Grassland	Wet-mesic Prairie	8 - Birds Brewer's Blackbird Henslow's Sparrow Northern Bobwhite Upland Sandpiper 1 - Herps 3 - Mammals Franklin's Ground Squirrel 2 - Insects - Terrestrial Limotettix pseudosphagneticus	Bobolink Eastern Meadowlark Le Conte's Sparrow Short-eared Owl Blanding's Turtle Big Brown Bat Little Brown Bat Aflexia rubranura

Miscellaneous	Lacustrine Mud Flat	1 - Birds 4 - Mammals Little Brown Bat Silver-haired Bat	Rusty Blackbird Big Brown Bat Northern Long-eared Bat
Northern Forest	Northern Wet Forest	1 - Birds 1 - Herps 3 - Mammals Silver-haired Bat	Golden-winged Warbler Four-toed Salamander Little Brown Bat Water Shrew
	Tamarack Swamp (poor)	1 - Birds 1 - Herps 3 - Mammals Silver-haired Bat	Golden-winged Warbler Four-toed Salamander Little Brown Bat Water Shrew
Southern Forest	Central Sands Pine - Oak Forest	2 - Birds Red-headed Woodpecker 1 - Herps 3 - Mammals Northern Long-eared Bat 3 - Insects - Terrestrial Melanoplus flavidus	Eastern whip-poor-will Ornate Box Turtle Big Brown Bat Silver-haired Bat Ellipsoptera lepida Melanoplus stonei
	Southern Dry Forest	2 - Birds Red-headed Woodpecker 2 - Herps Ornate Box Turtle 2 - Mammals Northern Long-eared Bat 1 - Insects - Terrestrial	Eastern whip-poor-will North American Racer Big Brown Bat Melanoplus flavidus
Wetland	Calcareous Fen	2 - Birds Rusty Blackbird 3 - Mammals Northern Long-eared Bat 1 - Insects - Aquatic 2 - Insects - Terrestrial Orphulella pelidna 1 - Invertebrates - Terrestrial Snails &	American Woodcock Big Brown Bat Silver-haired Bat Liodesmus cantralli Calephelis muticum Vertigo morsei
	Coastal Plain Marsh	1 - Birds 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat	Purple Martin Blanding's Turtle Big Brown Bat Northern Long-eared Bat

Wetland

Emergent Marsh	<p>9 - Birds Black Tern Forster's Tern Purple Martin Whooping Crane</p> <p>2 - Herps Four-toed Salamander</p> <p>4 - Mammals Little Brown Bat Silver-haired Bat</p> <p>3 - Insects - Aquatic Hygrotus sylvanus</p> <p>1 - Insects - Terrestrial</p>	<p>American Bittern Black-crowned Night-Heron Least Bittern Rusty Blackbird Yellow-headed Blackbird Blanding's Turtle</p> <p>Big Brown Bat Northern Long-eared Bat</p> <p>Colymbetes exaratus Rhionaeschna mutata Limotettix pseudosphagneticus</p>
Floating-leaved Marsh	<p>6 - Birds Black Tern Least Bittern Yellow-headed Blackbird</p> <p>3 - Mammals Little Brown Bat</p>	<p>American Bittern Black-crowned Night-Heron Whooping Crane</p> <p>Big Brown Bat Northern Long-eared Bat</p>
Shrub Carr	<p>3 - Birds Golden-winged Warbler</p> <p>2 - Herps Four-toed Salamander</p> <p>3 - Mammals Northern Long-eared Bat</p>	<p>American Woodcock Rusty Blackbird Blanding's Turtle</p> <p>Little Brown Bat Silver-haired Bat</p>
Southern Sedge Meadow	<p>7 - Birds Bobolink Eastern Meadowlark Short-eared Owl</p> <p>2 - Herps Four-toed Salamander</p> <p>4 - Mammals Little Brown Bat Silver-haired Bat</p> <p>1 - Insects - Aquatic 4 - Insects - Terrestrial Eutrichapion huron Orphulella pelidna</p>	<p>American Bittern Common Nighthawk Henslow's Sparrow Whooping Crane Blanding's Turtle</p> <p>Big Brown Bat Northern Long-eared Bat</p> <p>Colymbetes exaratus Calephelis muticum Limotettix pseudosphagneticus</p>

Wetland

Submergent
Marsh

4 - Birds	Black Tern
Black-crowned Night-Heron	Forster's Tern
Whooping Crane	
1 - Herps	Blanding's Turtle
4 - Mammals	Big Brown Bat
Little Brown Bat	Northern Long-eared Bat
Silver-haired Bat	
1 -Insects - Aquatic	Rhionaeschna mutata

Table 5.3 Central Sand Plains – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)	
NC Group	NC Type		
Aquatic (lakes-rivers)	Riverine Impoundment	1 - Birds 1 - Fish 1 - Herps 3 - Mammals Little Brown Bat 1 -Insects - Aquatic	Black Tern Lake Sturgeon Blanding's Turtle Big Brown Bat Silver-haired Bat Libellula cyanea
	Riverine Lake - Pond	2 - Birds Red-shouldered Hawk 1 - Fish 2 - Herps Wood Turtle 4 - Mammals Little Brown Bat Silver-haired Bat 6 -Insects - Aquatic Agabus leptapsis Ilybius angustior Rhionaeschna mutata	Black Tern Lake Sturgeon Blanding's Turtle Big Brown Bat Northern Long-eared Bat Agabetes acuductus Colymbetes exaratus Libellula cyanea

Barrens	Oak Barrens	<p>10 - Birds Common Nighthawk Grasshopper Sparrow Red-headed Woodpecker Upland Sandpiper Western Meadowlark</p> <p>6 - Herps Eastern Massasauga North American Racer Wood Turtle</p> <p>4 - Mammals Northern Long-eared Bat Prairie Vole</p> <p>17 - Insects - Terrestrial Arphia conspersa Callophrys irus Ellipsoptera lepida Lycaeides melissa samuelis Melanoplus flavidus Pachybrachis luridus Polyamia dilata Schinia indiana</p>	<p>Brewer's Blackbird Eastern whip-poor-will Lark Sparrow Sharp-tailed Grouse Vesper Sparrow</p> <p>Blanding's Turtle Gophersnake Slender Glass Lizard</p> <p>Franklin's Ground Squirrel Prairie Deer Mouse</p> <p>Acronicta dolli Atrytonopsis hianna Distigmoptera impennata Erynnis persius Melanoplus fasciatus Melanoplus stonei Paraphlepsius maculosus Pygarctia spraguei Trachyrhachys kiowa</p>
	Pine Barrens	<p>7 - Birds Eastern whip-poor-will Red-headed Woodpecker Upland Sandpiper</p> <p>6 - Herps Eastern Massasauga North American Racer Wood Turtle</p> <p>1 - Mammals</p> <p>19 - Insects - Terrestrial Arphia conspersa Callophrys irus Chloealtis abdominalis Ellipsoptera lepida Lycaeides melissa samuelis Melanoplus flavidus Pachybrachis luridus Polyamia dilata Schinia indiana</p>	<p>Common Nighthawk Lark Sparrow Sharp-tailed Grouse Vesper Sparrow</p> <p>Blanding's Turtle Gophersnake Slender Glass Lizard</p> <p>Franklin's Ground Squirrel Acronicta dolli Atrytonopsis hianna Camnula pellucida Distigmoptera impennata Erynnis persius Melanoplus fasciatus Melanoplus stonei Paraphlepsius maculosus Pygarctia spraguei Trachyrhachys kiowa</p>

Grassland	Sand Prairie	8 - Birds Eastern Meadowlark Grasshopper Sparrow Upland Sandpiper Western Meadowlark 6 - Herps Eastern Massasauga North American Racer Wood Turtle 3 - Mammals Prairie Deer Mouse 15 - Insects - Terrestrial Arphia conspersa Camnula pellucida Grammia phyllira Melanoplus flavidus Pachybrachis luridus Paraphlepsius maculosus Schinia indiana	Common Nighthawk Eastern whip-poor-will Lark Sparrow Vesper Sparrow Blanding's Turtle Gophersnake Slender Glass Lizard Franklin's Ground Squirrel Prairie Vole Aeropedellus clavatus Atrytonopsis hianna Ellipsoptera lepida Lycaeides melissa samuelis Melanoplus gladstoni Paraphlepsius altus Polyamia dilata Trachyrhachys kiowa
	Surrogate Grasslands	14 - Birds Bobolink Common Nighthawk Eastern Meadowlark Greater Prairie-Chicken Le Conte's Sparrow Short-eared Owl Western Meadowlark 6 - Herps Eastern Massasauga North American Racer Wood Turtle 3 - Mammals Franklin's Ground Squirrel 1 - Insects - Terrestrial	American Woodcock Brewer's Blackbird Dickcissel Grasshopper Sparrow Henslow's Sparrow Sharp-tailed Grouse Upland Sandpiper Blanding's Turtle Gophersnake Slender Glass Lizard Big Brown Bat Prairie Deer Mouse Speyeria idalia
Miscellaneous	Caves and Subterranean Cultural	3 - Mammals Little Brown Bat	Big Brown Bat Northern Long-eared Bat
	Dry Cliff	2 - Herps North American Racer 1 - Mammals	Gophersnake Big Brown Bat
Northern Forest	Conifer Plantation	1 - Birds	Northern Goshawk

Northern Forest	Northern Wet Forest	1 - Birds 2 - Herps Wood Turtle 3 - Mammals Silver-haired Bat	Golden-winged Warbler Four-toed Salamander Little Brown Bat Water Shrew
	Tamarack Swamp (poor)	1 - Birds 2 - Herps Wood Turtle 3 - Mammals Silver-haired Bat 1 -Insects - Aquatic	Golden-winged Warbler Four-toed Salamander Little Brown Bat Water Shrew Hydrocolus persimilis
Southern Forest	Central Sands Pine - Oak Forest	2 - Birds Red-headed Woodpecker 1 - Herps 3 - Mammals Northern Long-eared Bat 4 -Insects - Terrestrial Ellipsoptera lepida Melanoplus stonei	Eastern whip-poor-will Gophersnake Big Brown Bat Silver-haired Bat Callophrys irus Melanoplus flavidus
	Floodplain Forest	7 - Birds Cerulean Warbler Prothonotary Warbler Red-shouldered Hawk 4 - Herps Eastern Massasauga Wood Turtle 5 - Mammals Little Brown Bat Silver-haired Bat 1 -Insects - Aquatic 1 -Insects - Terrestrial	American Woodcock Least Flycatcher Red-headed Woodpecker Rusty Blackbird Blanding's Turtle Four-toed Salamander Big Brown Bat Northern Long-eared Bat Water Shrew Libellula cyanea Lycaena dione
	Southern Dry-mesic Forest	3 - Birds Eastern whip-poor-will 3 - Herps Gophersnake 2 - Mammals Northern Long-eared Bat	Cerulean Warbler Red-headed Woodpecker Blanding's Turtle North American Racer Big Brown Bat
	White Pine - Red Maple Swamp	2 - Birds Northern Goshawk 3 - Mammals Northern Long-eared Bat 1 -Insects - Aquatic	Golden-winged Warbler Little Brown Bat Silver-haired Bat Hydrocolus persimilis

Wetland	Alder Thicket	4 - Birds American Woodcock Rusty Blackbird 4 - Herps Eastern Massasauga Wood Turtle 3 - Mammals Silver-haired Bat 1 -Insects - Aquatic	American Bittern Golden-winged Warbler Blanding's Turtle Four-toed Salamander Northern Long-eared Bat Water Shrew Agabus leptapsis
	Central Poor Fen	7 - Birds Bobolink Le Conte's Sparrow Whooping Crane 2 - Herps Four-toed Salamander 3 - Mammals Little Brown Bat 2 -Insects - Aquatic Williamsonia lintneri	American Bittern Henslow's Sparrow Rusty Blackbird Yellow Rail Eastern Massasauga Big Brown Bat Northern Long-eared Bat Somatochlora incurvata
	Floating-leaved Marsh	6 - Birds Black Tern Least Bittern Whooping Crane 3 - Mammals Little Brown Bat	American Bittern King Rail Red-necked Grebe Big Brown Bat Northern Long-eared Bat
	Northern Sedge Meadow	11 - Birds Black Tern Common Nighthawk Le Conte's Sparrow Short-eared Owl Wilson's Phalarope 3 - Herps Four-toed Salamander 3 - Mammals Northern Long-eared Bat 1 -Insects - Terrestrial	American Bittern Bobolink Greater Prairie-Chicken Sharp-tailed Grouse Whooping Crane Yellow Rail Blanding's Turtle Wood Turtle Little Brown Bat Silver-haired Bat Orphulella pelidna

Wetland	Open Bog	4 - Birds Rusty Blackbird Yellow Rail 2 - Herps Four-toed Salamander 3 - Mammals Northern Long-eared Bat 3 - Insects - Aquatic Somatochlora incurvata 2 - Insects - Terrestrial Orphulella pelidna	American Bittern Whooping Crane Eastern Massasauga Little Brown Bat Silver-haired Bat Banksiola dossuaria Williamsonia lintneri Limotettix pseudosphagneticus
	Poor Fen	5 - Birds Bobolink Whooping Crane 2 - Herps Four-toed Salamander 3 - Mammals Northern Long-eared Bat 2 - Insects - Aquatic Williamsonia lintneri	American Bittern Rusty Blackbird Yellow Rail Eastern Massasauga Little Brown Bat Silver-haired Bat Somatochlora incurvata
	Shrub Carr	3 - Birds Golden-winged Warbler 4 - Herps Eastern Massasauga Wood Turtle 3 - Mammals Northern Long-eared Bat	American Woodcock Rusty Blackbird Blanding's Turtle Four-toed Salamander Little Brown Bat Silver-haired Bat

Table 5.4 Forest Transition – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)	
NC Group	NC Type		
Aquatic (lakes-rivers)	Coldwater streams	3 - Herps Four-toed Salamander 5 - Mammals Little Brown Bat Silver-haired Bat 2 -Insects - Aquatic Wormaldia moesta	Blanding's Turtle Wood Turtle Big Brown Bat Northern Long-eared Bat Water Shrew Pseudodiamesa pertinax
	Coolwater streams	3 - Herps Four-toed Salamander 5 - Mammals Little Brown Bat Silver-haired Bat 7 -Insects - Aquatic Ilybius confusus Maccaffertium pulchellum Plauditus cestus 2 -Invertebrates - Mussels & Clams Venustaconcha ellipsiformis	Blanding's Turtle Wood Turtle Big Brown Bat Northern Long-eared Bat Water Shrew Dolania americana Lioporeus triangularis Ophiogomphus smithi Wormaldia moesta Alasmidonta marginata
	Warmwater rivers	4 - Fish Crystal Darter Redfin Shiner 2 - Herps Wood Turtle 4 - Mammals Little Brown Bat Silver-haired Bat 3 -Insects - Aquatic Macdunnoa persimplex 1 -Insects - Terrestrial 14 -Invertebrates - Mussels & Clams Cumberlandia monodonta Ellipsaria lineolata Epioblasma triquetra Quadrula fragosa Quadrula nodulata Tritogonia verrucosa Venustaconcha ellipsiformis	Black Redhorse Lake Sturgeon Blanding's Turtle Big Brown Bat Northern Long-eared Bat Lioporeus triangularis Paracloeodes minutus Trimerotropis maritima Alasmidonta marginata Cyclonaias tuberculata Elliptio crassidens Lampsilis higginsii Quadrula metanevra Simpsonaias ambigua Truncilla donaciformis

Aquatic (lakes-rivers)	Warmwater streams	3 - Fish Ozark Minnow 2 - Herps Wood Turtle 4 - Mammals Little Brown Bat Silver-haired Bat 5 - Insects - Aquatic Ilybius confusus Ophiogomphus smithi 12 - Invertebrates - Mussels & Clams Cumberlandia monodonta Ellipsaria lineolata Epioblasma triquetra Quadrula nodulata Tritogonia verrucosa Venustaconcha ellipsiformis	Least Darter Redfin Shiner Blanding's Turtle Big Brown Bat Northern Long-eared Bat Dubiraphia robusta Lioporeus triangularis Paracloeodes minutus Alasmidonta marginata Cyclonaias tuberculata Elliptio crassidens Quadrula metanevra Simpsonaias ambigua Truncilla donaciformis
Northern Forest	Black Spruce Swamp	2 - Herps Wood Turtle 5 - Mammals Northern Flying Squirrel Water Shrew 1 - Insects - Aquatic	Four-toed Salamander Little Brown Bat Silver-haired Bat Woodland Jumping Mouse Agabus discolor
	Northern Mesic Forest--early seral	4 - Birds Evening Grosbeak Northern Goshawk 2 - Herps Wood Turtle 2 - Mammals Woodland Jumping Mouse	American Woodcock Least Flycatcher Four-toed Salamander Water Shrew
	Northern Mesic Forest--late seral	4 - Birds Least Flycatcher Red-shouldered Hawk 2 - Herps Wood Turtle 6 - Mammals Northern Flying Squirrel Silver-haired Bat Woodland Jumping Mouse 1 - Insects - Terrestrial	Evening Grosbeak Northern Goshawk Four-toed Salamander Little Brown Bat Northern Long-eared Bat Water Shrew Trimerotropis verruculata

Northern Forest	Northern Mesic Forest--mid seral	5 - Birds Evening Grosbeak Northern Goshawk 2 - Herps Wood Turtle 6 - Mammals Northern Flying Squirrel Silver-haired Bat Woodland Jumping Mouse 1 -Insects - Terrestrial	American Woodcock Least Flycatcher Red-shouldered Hawk Four-toed Salamander Little Brown Bat Northern Long-eared Bat Water Shrew Trimerotropis verruculata
	Northern Mesic Forest--young seral	2 - Birds Golden-winged Warbler 2 - Herps Wood Turtle 2 - Mammals Woodland Jumping Mouse	American Woodcock Four-toed Salamander Water Shrew
	Northern Wet Forest	2 - Birds Golden-winged Warbler 2 - Herps Wood Turtle 5 - Mammals Northern Flying Squirrel Water Shrew	Evening Grosbeak Four-toed Salamander Little Brown Bat Silver-haired Bat Woodland Jumping Mouse
	Northern Wet-mesic Forest	1 - Birds 2 - Herps Wood Turtle 5 - Mammals Northern Flying Squirrel Water Shrew 2 -Insects - Terrestrial Trimerotropis verruculata	Evening Grosbeak Four-toed Salamander Little Brown Bat Silver-haired Bat Woodland Jumping Mouse Bombus (Psithyrus) insularis
	Tamarack Swamp (poor)	1 - Birds 2 - Herps Wood Turtle 4 - Mammals Northern Flying Squirrel Water Shrew	Golden-winged Warbler Four-toed Salamander Little Brown Bat Silver-haired Bat

Table 5.5 North Central Forest – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)	
NC Group	NC Type		
Aquatic (lakes-rivers)	Coldwater streams	3 - Herps Mink Frog	Four-toed Salamander Wood Turtle
		5 - Mammals Little Brown Bat Silver-haired Bat	Big Brown Bat Northern Long-eared Bat Water Shrew
		9 -Insects - Aquatic Eurylophella aestiva Isogenoides frontalis Neophemera bicolor Rhithrogena undulata	Drunella cornuta Helophorus orchymonti Isogenoides olivaceus Pseudodiamesa pertinax Wormaldia moesta
	Coolwater streams	3 - Herps Mink Frog	Four-toed Salamander Wood Turtle
		5 - Mammals Little Brown Bat Silver-haired Bat	Big Brown Bat Northern Long-eared Bat Water Shrew
		11 -Insects - Aquatic Eurylophella aestiva Heterosternuta pulchra Maccaffertium pulchellum Ophiogomphus smithi Rhithrogena undulata	Drunella cornuta Helophorus orchymonti Ilybius confusus Neophemera bicolor Plauditus cestus Wormaldia moesta
		1 -Invertebrates - Mussels & Clams	Alasmidonta marginata
	Lake Superior	1 - Birds 1 - Fish 2 -Insects - Aquatic Notonecta borealis	Common Goldeneye Lake Sturgeon Heterosternuta pulchra
	Large Lake--deep, hard, seepage	2 - Birds Common Goldeneye 2 - Fish Longear Sunfish 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat 4 -Insects - Aquatic Gomphus graslinellus Somatochlora cingulata	Black Tern Least Darter Mink Frog Big Brown Bat Northern Long-eared Bat Aeshna clepsydra Haliphus apostolicus

Aquatic (lakes-rivers)	Large Lake--deep, soft and very soft, seepage	2 - Birds Common Goldeneye 2 - Fish Longear Sunfish 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat 4 - Insects - Aquatic Gomphus graslinellus Somatochlora cingulata	Black Tern Least Darter Mink Frog Big Brown Bat Northern Long-eared Bat Aeshna clepsydra Halipus apostolicus
	Large Lake-- shallow, hard and very hard (marl), drainage	2 - Birds Common Goldeneye 3 - Fish Least Darter 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat 5 - Insects - Aquatic Dubiraphia robusta Halipus apostolicus	Black Tern Lake Sturgeon Longear Sunfish Mink Frog Big Brown Bat Northern Long-eared Bat Aeshna clepsydra Gomphus graslinellus Somatochlora cingulata
	Large Lake-- shallow, hard, seepage	2 - Birds Common Goldeneye 2 - Fish Longear Sunfish 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat 6 - Insects - Aquatic Dubiraphia robusta Halipus apostolicus Somatochlora cingulata	Black Tern Least Darter Mink Frog Big Brown Bat Northern Long-eared Bat Aeshna clepsydra Gomphus graslinellus Hygrotus falli

Aquatic (lakes-rivers)	Large Lake-- shallow, soft, seepage	2 - Birds Common Goldeneye 2 - Fish Longear Sunfish 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat 6 -Insects - Aquatic Dubiraphia robusta Halipus apostolicus Somatochlora cingulata	Black Tern Least Darter Mink Frog Big Brown Bat Northern Long-eared Bat Aeshna clepsydra Gomphus graslinellus Hygrotus falli
	Riverine Impoundment	1 - Birds 1 - Fish 1 - Herps 3 - Mammals Little Brown Bat 2 -Insects - Aquatic Gomphus graslinellus	Black Tern Lake Sturgeon Mink Frog Big Brown Bat Silver-haired Bat Aeshna clepsydra
	Small Lake-- meromictic	2 - Birds Common Goldeneye 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat 3 -Insects - Aquatic Gomphus graslinellus	Black Tern Mink Frog Big Brown Bat Northern Long-eared Bat Aeshna clepsydra Somatochlora cingulata
	Small Lake--Other	2 - Birds Common Goldeneye 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat 8 -Insects - Aquatic Dasycorixa hybrida Halipus apostolicus Ilybius angustior Somatochlora cingulata	Black Tern Mink Frog Big Brown Bat Northern Long-eared Bat Aeshna clepsydra Gomphus graslinellus Hygrotus farctus Ilybius confusus

Aquatic (lakes-rivers)	Spring Pond, Lake--Spring	1 - Birds 1 - Herps 5 - Mammals Little Brown Bat Silver-haired Bat 7 -Insects - Aquatic Agabetes acuductus Helophorus orchymonti Pseudodiamesa pertinax	Black Tern Mink Frog Big Brown Bat Northern Long-eared Bat Water Shrew Aeshna clepsydra Gomphus graslinellus Ilybius angustior Somatochlora cingulata
	Springs and Spring Runs (Hard)	5 - Mammals Little Brown Bat Silver-haired Bat 1 -Insects - Aquatic	Big Brown Bat Northern Long-eared Bat Water Shrew Somatochlora forcipata
	Springs and Spring Runs (Soft)	5 - Mammals Little Brown Bat Silver-haired Bat 1 -Insects - Aquatic	Big Brown Bat Northern Long-eared Bat Water Shrew Somatochlora forcipata
	Warmwater rivers	2 - Fish Lake Sturgeon 2 - Herps Wood Turtle 4 - Mammals Little Brown Bat Silver-haired Bat 3 -Insects - Aquatic Ophiogomphus susbehcha 3 -Invertebrates - Mussels & Clams Cyclonaias tuberculata	Gilt Darter Mink Frog Big Brown Bat Northern Long-eared Bat Ophiogomphus anomalus Paracloeodes minutus Alasmidonta marginata Plethobasus cyphus
	Warmwater streams	3 - Fish Least Darter 2 - Herps Wood Turtle 4 - Mammals Little Brown Bat Silver-haired Bat 7 -Insects - Aquatic Gomphus graslinellus Ilybius confusus Ophiogomphus smithi 3 -Invertebrates - Mussels & Clams Cyclonaias tuberculata	Gilt Darter Longear Sunfish Mink Frog Big Brown Bat Northern Long-eared Bat Dubiraphia robusta Heterosternuta pulchra Ophiogomphus anomalus Paracloeodes minutus Alasmidonta marginata Plethobasus cyphus
	Miscellaneous	Bedrock Glade	1 - Birds

Miscellaneous	Dry Cliff	1 - Mammals	Big Brown Bat
	Moist Cliff	1 - Mammals 1 - Invertebrates - Terrestrial Snails &	Big Brown Bat Zoogenetes harpa
Northern Forest	Aspen-Birch	4 - Birds Golden-winged Warbler Swainson's Thrush 2 - Herps Wood Turtle	American Woodcock Least Flycatcher Four-toed Salamander
	Black Spruce Swamp	8 - Birds Boreal Chickadee Gray Jay Ruby-crowned Kinglet Swainson's Thrush 2 - Herps Wood Turtle 5 - Mammals Northern Flying Squirrel Water Shrew 5 - Insects - Aquatic Hydrocolus persimilis Microvelia albonotata	Black-backed Woodpecker Connecticut Warbler Olive-sided Flycatcher Spruce Grouse Four-toed Salamander Little Brown Bat Silver-haired Bat Woodland Jumping Mouse Agabus discolor Hydroporus morio Somatochlora forcipata
	Northern Hardwood Swamp	3 - Birds Golden-winged Warbler 2 - Herps Wood Turtle 6 - Mammals Northern Flying Squirrel Silver-haired Bat Woodland Jumping Mouse 2 - Insects - Aquatic Hydroporus morio 1 - Invertebrates - Terrestrial Snails &	American Woodcock Least Flycatcher Four-toed Salamander Little Brown Bat Northern Long-eared Bat Water Shrew Hydrocolus persimilis Zoogenetes harpa
Northern Mesic Forest--early seral	5 - Birds Evening Grosbeak Long-eared Owl 2 - Herps Wood Turtle 2 - Mammals Woodland Jumping Mouse 4 - Insects - Terrestrial Melanoplus bruneri Pieris virginiensis	American Woodcock Least Flycatcher Northern Goshawk Four-toed Salamander Water Shrew Bombus (Pyrobombus) sanderso Melanoplus islandicus	

Northern Forest	Northern Mesic Forest--late seral	5 - Birds Least Flycatcher Red-shouldered Hawk 2 - Herps Wood Turtle 7 - Mammals Little Brown Bat Northern Long-eared Bat Water Shrew 3 -Insects - Terrestrial Pieris virginensis	Evening Grosbeak Northern Goshawk Swainson's Thrush Four-toed Salamander American Marten Northern Flying Squirrel Silver-haired Bat Woodland Jumping Mouse Melanoplus islandicus Trimerotropis verruculata
	Northern Mesic Forest--mid seral	5 - Birds Evening Grosbeak Northern Goshawk 2 - Herps Wood Turtle 7 - Mammals Little Brown Bat Northern Long-eared Bat Water Shrew 3 -Insects - Terrestrial Pieris virginensis 1 -Invertebrates - Terrestrial Snails &	American Woodcock Least Flycatcher Red-shouldered Hawk Four-toed Salamander American Marten Northern Flying Squirrel Silver-haired Bat Woodland Jumping Mouse Melanoplus islandicus Trimerotropis verruculata Zoogenetes harpa
	Northern Mesic Forest--young seral	3 - Birds Golden-winged Warbler 2 - Herps Wood Turtle 2 - Mammals Woodland Jumping Mouse 2 -Insects - Terrestrial Pieris virginensis	American Woodcock Long-eared Owl Four-toed Salamander Water Shrew Melanoplus islandicus
	Northern Wet Forest	9 - Birds Boreal Chickadee Golden-winged Warbler Long-eared Owl Ruby-crowned Kinglet 2 - Herps Wood Turtle 5 - Mammals Northern Flying Squirrel Water Shrew 1 -Insects - Aquatic	Black-backed Woodpecker Evening Grosbeak Gray Jay Olive-sided Flycatcher Spruce Grouse Four-toed Salamander Little Brown Bat Silver-haired Bat Woodland Jumping Mouse Somatochlora forcipata

Northern Forest	Northern Wet-mesic Forest	5 - Birds Gray Jay Olive-sided Flycatcher 2 - Herps Wood Turtle 5 - Mammals Northern Flying Squirrel Water Shrew 1 - Insects - Terrestrial	Evening Grosbeak Long-eared Owl Swainson's Thrush Four-toed Salamander Little Brown Bat Silver-haired Bat Woodland Jumping Mouse Trimerotropis verruculata
	Tamarack Swamp (poor)	7 - Birds Boreal Chickadee Gray Jay Spruce Grouse 2 - Herps Wood Turtle 4 - Mammals Northern Flying Squirrel Water Shrew 4 - Insects - Aquatic Hydroporus morio Somatochlora forcipata	Black-backed Woodpecker Golden-winged Warbler Olive-sided Flycatcher Swainson's Thrush Four-toed Salamander Little Brown Bat Silver-haired Bat Hydrocolus persimilis Microvelia albonotata
Wetland	Alder Thicket	5 - Birds American Woodcock Rusty Blackbird 3 - Herps Mink Frog 3 - Mammals Silver-haired Bat 1 - Insects - Aquatic	American Bittern Golden-winged Warbler Swainson's Thrush Four-toed Salamander Wood Turtle Northern Long-eared Bat Water Shrew Agabus leptapsis
	Emergent Marsh	3 - Birds Black Tern 2 - Herps Mink Frog 4 - Mammals Little Brown Bat Silver-haired Bat 4 - Insects - Aquatic Hygrotus marklini Ilybius angustior	American Bittern Rusty Blackbird Four-toed Salamander Big Brown Bat Northern Long-eared Bat Agabus discolor Hygrotus sylvanus

Wetland	Ephemeral Pond	2 - Birds Rusty Blackbird 3 - Herps Mink Frog 5 - Mammals Little Brown Bat Silver-haired Bat 3 - Insects - Aquatic Helophorus latipenis 1 - Insects - Terrestrial	Red-shouldered Hawk Four-toed Salamander Wood Turtle Big Brown Bat Northern Long-eared Bat Woodland Jumping Mouse Agabetes acuductus Hygrotus compar Orphulella pelidna
	Floating-leaved Marsh	2 - Birds Black Tern 3 - Mammals Little Brown Bat	American Bittern Big Brown Bat Northern Long-eared Bat
	Muskeg	4 - Birds Olive-sided Flycatcher Rusty Blackbird 2 - Herps Mink Frog 3 - Mammals Northern Long-eared Bat 3 - Insects - Aquatic Somatochlora forcipata 1 - Insects - Terrestrial	American Bittern Ruby-crowned Kinglet Four-toed Salamander Little Brown Bat Silver-haired Bat Nehalennia gracilis Somatochlora incurvata Bombus frigidus
	Northern Sedge Meadow	4 - Birds Black Tern Sharp-tailed Grouse 3 - Herps Mink Frog 3 - Mammals Northern Long-eared Bat 2 - Insects - Aquatic Nehalennia gracilis 1 - Insects - Terrestrial	American Bittern Bobolink Four-toed Salamander Wood Turtle Little Brown Bat Silver-haired Bat Agabus immaturus Orphulella pelidna

Wetland	<p>Open Bog</p>	<p>3 - Birds Olive-sided Flycatcher</p> <p>2 - Herps Mink Frog</p> <p>3 - Mammals Northern Long-eared Bat</p> <p>4 - Insects - Aquatic Beothukus complicatus Somatochlora incurvata</p> <p>2 - Insects - Terrestrial Trimerotropis verruculata</p>	<p>American Bittern Rusty Blackbird Four-toed Salamander</p> <p>Little Brown Bat Silver-haired Bat Banksiola dossuaria Somatochlora forcipata</p> <p>Orphulella pelidna</p>
	<p>Poor Fen</p>	<p>4 - Birds Bobolink Rusty Blackbird</p> <p>2 - Herps Mink Frog</p> <p>3 - Mammals Northern Long-eared Bat</p> <p>3 - Insects - Aquatic Somatochlora forcipata</p> <p>1 - Insects - Terrestrial</p>	<p>American Bittern Olive-sided Flycatcher</p> <p>Four-toed Salamander</p> <p>Little Brown Bat Silver-haired Bat Nehalennia gracilis Somatochlora incurvata Bombus frigidus</p>
	<p>Submergent Marsh</p>	<p>1 - Birds</p> <p>2 - Herps Wood Turtle</p> <p>4 - Mammals Little Brown Bat Silver-haired Bat</p> <p>2 - Insects - Aquatic Nehalennia gracilis</p>	<p>Black Tern Mink Frog</p> <p>Big Brown Bat Northern Long-eared Bat</p> <p>Aeshna clepsydra</p>

Table 5.6 Northeast Sands – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)	
NC Group	NC Type		
Aquatic (lakes-rivers)	Coldwater streams	4 - Herps Four-toed Salamander Wood Turtle 3 - Mammals Little Brown Bat 4 - Insects - Aquatic Drunella cornuta Wormaldia moesta	Blanding's Turtle Mink Frog Big Brown Bat Water Shrew Cordulegaster diastatops Eurylophella aestiva
	Coolwater streams	4 - Herps Four-toed Salamander Wood Turtle 3 - Mammals Little Brown Bat 7 - Insects - Aquatic Dolania americana Eurylophella aestiva Somatochlora ensigera 1 - Invertebrates - Mussels & Clams	Blanding's Turtle Mink Frog Big Brown Bat Water Shrew Cordulegaster diastatops Drunella cornuta Maccaffertium pulchellum Wormaldia moesta Alasmidonta viridis
Barrens	Pine Barrens	7 - Birds Eastern whip-poor-will Red-headed Woodpecker Upland Sandpiper 2 - Herps Wood Turtle 13 - Insects - Terrestrial Atrytonopsis hianna Chloea abdominalis Ellipsoptera lepida Lycaeides idas Melanoplus islandicus Oeneis chryxus	Common Nighthawk Lark Sparrow Sharp-tailed Grouse Vesper Sparrow Blanding's Turtle Arphia conspersa Camnula pellucida Cicindela patruela patruela Hesperia metea Melanoplus fasciatus Melanoplus stonei Schinia indiana

Grassland	Bracken Grassland	5 - Birds Grasshopper Sparrow Upland Sandpiper 2 - Herps Wood Turtle 4 -Insects - Terrestrial Ellipsoptera lepida Oeneis chryxus	Common Nighthawk Sharp-tailed Grouse Vesper Sparrow Blanding's Turtle Cicindela patruela patruela Lycaeides idas
Miscellaneous	Lacustrine Mud Flat	1 - Birds 1 - Herps 2 - Mammals Little Brown Bat	Rusty Blackbird Wood Turtle Big Brown Bat
Northern Forest	Aspen-Birch	3 - Birds Golden-winged Warbler 2 - Herps Wood Turtle	American Woodcock Least Flycatcher Four-toed Salamander
	Conifer Plantation	1 - Birds	Northern Goshawk
	Northern Dry Forest--late seral	1 - Birds 1 - Herps 1 - Mammals 8 -Insects - Terrestrial Camnula pellucida Melanoplus bruneri Melanoplus islandicus Trimerotropis verruculata	Eastern whip-poor-will Wood Turtle Northern Flying Squirrel Arphia conspersa Cicindela patruela patruela Melanoplus fasciatus Melanoplus stonei
	Northern Dry Forest--mid-seral	3 - Birds Eastern whip-poor-will 1 - Herps 7 -Insects - Terrestrial Camnula pellucida Melanoplus bruneri Melanoplus islandicus	American Woodcock Least Flycatcher Wood Turtle Arphia conspersa Cicindela patruela patruela Melanoplus fasciatus Melanoplus stonei
	Northern Dry Forest--young seral	3 - Birds Eastern whip-poor-will 2 - Herps Wood Turtle 9 -Insects - Terrestrial Camnula pellucida Cicindela patruela patruela Melanoplus bruneri Melanoplus islandicus	American Woodcock Golden-winged Warbler Blanding's Turtle Arphia conspersa Chloealtis abdominalis Lycaeides idas Melanoplus fasciatus Melanoplus stonei

Northern Forest	Northern Dry Mesic--late seral	4 - Birds Least Flycatcher Red-shouldered Hawk 1 - Herps 2 - Mammals Northern Flying Squirrel 3 - Insects - Terrestrial Melanoplus bruneri	Eastern whip-poor-will Northern Goshawk Wood Turtle Little Brown Bat Arphia conspersa Melanoplus islandicus
	Northern Dry Mesic--mid-seral	3 - Birds Eastern whip-poor-will 1 - Herps 3 - Insects - Terrestrial Melanoplus bruneri	American Woodcock Least Flycatcher Wood Turtle Arphia conspersa Melanoplus islandicus
	Northern Dry Mesic--young seral	3 - Birds Eastern whip-poor-will 1 - Herps 3 - Insects - Terrestrial Melanoplus bruneri	American Woodcock Golden-winged Warbler Wood Turtle Arphia conspersa Melanoplus islandicus
	Northern Wet-mesic Forest	2 - Herps Wood Turtle 4 - Mammals Northern Flying Squirrel Woodland Jumping Mouse 1 - Insects - Terrestrial 1 - Invertebrates - Terrestrial Snails &	Four-toed Salamander Little Brown Bat Water Shrew Trimerotropis verruculata Planogyra asteriscus
Wetland	Floating-leaved Marsh	1 - Birds 2 - Mammals Little Brown Bat 1 - Insects - Aquatic	American Bittern Big Brown Bat Libellula incesta

Table 5.7 Northern Highland – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)	
NC Group	NC Type		
Aquatic (lakes-rivers)	Large Lake--deep, hard, seepage	1 - Birds 3 - Fish Longear Sunfish 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat 2 -Insects - Aquatic Somatochlora cingulata	Black Tern Least Darter Pugnose Shiner Mink Frog Big Brown Bat Northern Long-eared Bat Aeshna clepsydra
	Large Lake--deep, soft and very soft, seepage	1 - Birds 3 - Fish Longear Sunfish 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat 2 -Insects - Aquatic Somatochlora cingulata	Black Tern Least Darter Pugnose Shiner Mink Frog Big Brown Bat Northern Long-eared Bat Aeshna clepsydra
	Large Lake-- shallow, soft, drainage	1 - Birds 4 - Fish Least Darter Pugnose Shiner 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat 3 -Insects - Aquatic Dubiraphia robusta	Black Tern Lake Sturgeon Longear Sunfish Mink Frog Big Brown Bat Northern Long-eared Bat Aeshna clepsydra Somatochlora cingulata
	Small Lake--Other	1 - Birds 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat 2 -Insects - Aquatic Somatochlora cingulata	Black Tern Mink Frog Big Brown Bat Northern Long-eared Bat Aeshna clepsydra

Aquatic (lakes-rivers)	Spring Pond, Lake--Spring	1 - Birds 1 - Herps 5 - Mammals Little Brown Bat Silver-haired Bat 3 -Insects - Aquatic Agabetes acuductus	Black Tern Mink Frog Big Brown Bat Northern Long-eared Bat Water Shrew Aeshna clepsydra Somatochlora cingulata
	Springs and Spring Runs (Hard)	5 - Mammals Little Brown Bat Silver-haired Bat 1 -Insects - Aquatic	Big Brown Bat Northern Long-eared Bat Water Shrew Somatochlora forcipata
	Springs and Spring Runs (Soft)	5 - Mammals Little Brown Bat Silver-haired Bat 1 -Insects - Aquatic	Big Brown Bat Northern Long-eared Bat Water Shrew Somatochlora forcipata
	Warmwater rivers	1 - Fish 2 - Herps Wood Turtle 4 - Mammals Little Brown Bat Silver-haired Bat 2 -Insects - Aquatic Stenelmis musgravei	Lake Sturgeon Mink Frog Big Brown Bat Northern Long-eared Bat Lioporeus triangularis
	Warmwater streams	3 - Fish Longear Sunfish 2 - Herps Wood Turtle 4 - Mammals Little Brown Bat Silver-haired Bat 2 -Insects - Aquatic Lioporeus triangularis	Least Darter Pugnose Shiner Mink Frog Big Brown Bat Northern Long-eared Bat Dubiraphia robusta
Northern Forest	Aspen-Birch	4 - Birds Golden-winged Warbler Swainson's Thrush 2 - Herps Wood Turtle	American Woodcock Least Flycatcher Four-toed Salamander

Northern Forest

<p>Black Spruce Swamp</p>	<p>8 - Birds Boreal Chickadee Gray Jay Ruby-crowned Kinglet Swainson's Thrush 2 - Herps Wood Turtle 5 - Mammals Northern Flying Squirrel Water Shrew 3 - Insects - Aquatic Microvelia albonotata</p>	<p>Black-backed Woodpecker Connecticut Warbler Olive-sided Flycatcher Spruce Grouse Four-toed Salamander Little Brown Bat Silver-haired Bat Woodland Jumping Mouse Hydroporus morio Somatochlora forcipata</p>
<p>Conifer Plantation</p>	<p>3 - Birds Northern Goshawk</p>	<p>Long-eared Owl Spruce Grouse</p>
<p>Northern Dry Mesic--late seral</p>	<p>4 - Birds Evening Grosbeak Northern Goshawk 1 - Herps 4 - Mammals Northern Flying Squirrel Silver-haired Bat 3 - Insects - Terrestrial Melanoplus bruneri</p>	<p>Eastern whip-poor-will Least Flycatcher Wood Turtle Little Brown Bat Northern Long-eared Bat Arphia conspersa Melanoplus islandicus</p>
<p>Northern Dry Mesic--mid-seral</p>	<p>5 - Birds Eastern whip-poor-will Least Flycatcher 1 - Herps 3 - Insects - Terrestrial Melanoplus bruneri</p>	<p>American Woodcock Evening Grosbeak Long-eared Owl Wood Turtle Arphia conspersa Melanoplus islandicus</p>
<p>Northern Dry Mesic--young seral</p>	<p>4 - Birds Eastern whip-poor-will Long-eared Owl 1 - Herps 3 - Insects - Terrestrial Melanoplus bruneri</p>	<p>American Woodcock Golden-winged Warbler Wood Turtle Arphia conspersa Melanoplus islandicus</p>

Northern Forest	Northern Wet Forest	9 - Birds Boreal Chickadee Golden-winged Warbler Long-eared Owl Ruby-crowned Kinglet 2 - Herps Wood Turtle 5 - Mammals Northern Flying Squirrel Water Shrew 1 - Insects - Aquatic	Black-backed Woodpecker Evening Grosbeak Gray Jay Olive-sided Flycatcher Spruce Grouse Four-toed Salamander Little Brown Bat Silver-haired Bat Woodland Jumping Mouse Somatochlora forcipata
	Tamarack Swamp (poor)	7 - Birds Boreal Chickadee Gray Jay Spruce Grouse 2 - Herps Wood Turtle 4 - Mammals Northern Flying Squirrel Water Shrew 3 - Insects - Aquatic Microvelia albonotata	Black-backed Woodpecker Golden-winged Warbler Olive-sided Flycatcher Swainson's Thrush Four-toed Salamander Little Brown Bat Silver-haired Bat Hydroporus morio Somatochlora forcipata
Wetland	Emergent Marsh	3 - Birds Black Tern 2 - Herps Mink Frog 4 - Mammals Little Brown Bat Silver-haired Bat	American Bittern Rusty Blackbird Four-toed Salamander Big Brown Bat Northern Long-eared Bat
	Emergent Marsh - Wild Rice	1 - Birds 1 - Herps 2 - Mammals Little Brown Bat	Black Tern Mink Frog Big Brown Bat
	Floating-leaved Marsh	2 - Birds Black Tern 3 - Mammals Little Brown Bat	American Bittern Big Brown Bat Northern Long-eared Bat

Wetland

Muskeg	<p>5 - Birds Olive-sided Flycatcher Rusty Blackbird</p> <p>2 - Herps Mink Frog</p> <p>3 - Mammals Northern Long-eared Bat</p> <p>2 - Insects - Aquatic Somatochlora forcipata</p> <p>1 - Insects - Terrestrial</p>	<p>American Bittern Ruby-crowned Kinglet Yellow Rail Four-toed Salamander</p> <p>Little Brown Bat Silver-haired Bat Nehalennia gracilis</p> <p>Bombus frigidus</p>
Northern Sedge Meadow	<p>5 - Birds Black Tern Nelson's Sparrow</p> <p>3 - Herps Mink Frog</p> <p>3 - Mammals Northern Long-eared Bat</p> <p>1 - Insects - Aquatic</p>	<p>American Bittern Common Nighthawk Yellow Rail Four-toed Salamander Wood Turtle Little Brown Bat Silver-haired Bat Nehalennia gracilis</p>
Open Bog	<p>4 - Birds Olive-sided Flycatcher Yellow Rail</p> <p>2 - Herps Mink Frog</p> <p>3 - Mammals Northern Long-eared Bat</p> <p>2 - Insects - Aquatic Somatochlora forcipata</p> <p>1 - Insects - Terrestrial</p>	<p>American Bittern Rusty Blackbird</p> <p>Four-toed Salamander</p> <p>Little Brown Bat Silver-haired Bat Banksiola dossuaria</p> <p>Trimerotropis verruculata</p>
Poor Fen	<p>5 - Birds Nelson's Sparrow Rusty Blackbird</p> <p>2 - Herps Mink Frog</p> <p>3 - Mammals Northern Long-eared Bat</p> <p>2 - Insects - Aquatic Somatochlora forcipata</p> <p>1 - Insects - Terrestrial</p>	<p>American Bittern Olive-sided Flycatcher Yellow Rail Four-toed Salamander</p> <p>Little Brown Bat Silver-haired Bat Nehalennia gracilis</p> <p>Bombus frigidus</p>

Wetland

Submergent Marsh	1 - Birds 2 - Herps Wood Turtle 4 - Mammals Little Brown Bat Silver-haired Bat 2 -Insects - Aquatic Nehalennia gracilis	Black Tern Mink Frog Big Brown Bat Northern Long-eared Bat Aeshna clepsydra
Submergent Marsh - Oligotrophic	1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat 2 -Insects - Aquatic Nehalennia gracilis	Mink Frog Big Brown Bat Northern Long-eared Bat Aeshna clepsydra

Table 5.8 Northern Lake Michigan Coastal – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)	
NC Group	NC Type		
Aquatic (lakes-rivers)	Lake Michigan	3 - Birds Common Goldeneye 1 - Fish 3 - Mammals Little Brown Bat 1 - Insects - Aquatic 2 - Insects - Terrestrial Trimerotropis huroniana	Caspian Tern Common Tern Lake Sturgeon Big Brown Bat Silver-haired Bat Heterosternuta pulchra Cicindela hirticollis rhodensis
	Warmwater rivers	2 - Birds Great Egret 3 - Fish Redfin Shiner 2 - Herps Wood Turtle 4 - Mammals Little Brown Bat Silver-haired Bat 6 - Insects - Aquatic Libellula incesta Paracloeodes minutus Stenelmis fuscata 1 - Invertebrates - Mussels & Clams	Black-crowned Night-Heron Lake Sturgeon Shoal Chub Blanding's Turtle Big Brown Bat Northern Long-eared Bat Hetaerina titia Lioporeus triangularis Stenelmis antennalis Alasmidonta viridis
	Warmwater streams	2 - Fish Redfin Shiner 2 - Herps Wood Turtle 4 - Mammals Little Brown Bat Silver-haired Bat 7 - Insects - Aquatic Hetaerina titia Heterosternuta wickhami Paracloeodes minutus 1 - Invertebrates - Mussels & Clams	Longear Sunfish Blanding's Turtle Big Brown Bat Northern Long-eared Bat Epiaeschna heros Heterosternuta pulchra Lioporeus triangularis Somatochlora ensigera Alasmidonta viridis
Miscellaneous	Dry Cliff	1 - Birds 1 - Mammals 1 - Invertebrates - Terrestrial Snails &	Peregrine Falcon Big Brown Bat Striatura ferrea

Miscellaneous	Great Lakes Alkaline Rockshore	1 - Invertebrates - Terrestrial Snails & Cochlicopa morseana
	Great Lakes Beach	4 - Birds Caspian Tern Common Tern Piping Plover Red Knot 4 - Insects - Terrestrial Camnula pellucida Cicindela hirticollis rhodensis Melanoplus bruneri Trimerotropis huroniana
	Great Lakes Dune	1 - Birds Piping Plover 7 - Insects - Terrestrial Aeropedellus clavatus Camnula pellucida Grammia phyllira Melanoplus bruneri Melanoplus islandicus Melanoplus stonei Trimerotropis huroniana
	Great Lakes Ridge and Swale	3 - Birds Least Flycatcher Olive-sided Flycatcher Rusty Blackbird 1 - Herps Four-toed Salamander 2 - Mammals Big Brown Bat Northern Flying Squirrel 1 - Insects - Aquatic Somatochlora hineana 2 - Invertebrates - Terrestrial Snails & Cochlicopa morseana Paravitrea multidentata
	Lacustrine Mud Flat	1 - Birds Rusty Blackbird 1 - Herps Wood Turtle 4 - Mammals Big Brown Bat Little Brown Bat Northern Long-eared Bat Silver-haired Bat
Northern Forest	Northern Mesic Forest--early seral	3 - Birds American Woodcock Least Flycatcher Northern Goshawk 2 - Herps Four-toed Salamander Wood Turtle 2 - Mammals Water Shrew Woodland Jumping Mouse 3 - Insects - Terrestrial Bombus (Pyrobombus) sanderso Melanoplus bruneri Melanoplus islandicus 1 - Invertebrates - Terrestrial Snails & Paravitrea multidentata

Northern Forest	Northern Mesic Forest--late seral	3 - Birds Northern Goshawk 2 - Herps Wood Turtle 6 - Mammals Northern Flying Squirrel Silver-haired Bat Woodland Jumping Mouse 2 - Insects - Terrestrial Trimerotropis verruculata 7 - Invertebrates - Terrestrial Snails & Glyphyalinia rhoadsi Hendersonia occulta Striatura exigua	Least Flycatcher Red-shouldered Hawk Four-toed Salamander Little Brown Bat Northern Long-eared Bat Water Shrew Melanoplus islandicus Cochlicopa morseana Glyphyalinia wheatleyi Paravitrea multidentata Vertigo hubrichti
	Northern Mesic Forest--mid seral	4 - Birds Least Flycatcher Red-shouldered Hawk 2 - Herps Wood Turtle 6 - Mammals Northern Flying Squirrel Silver-haired Bat Woodland Jumping Mouse 2 - Insects - Terrestrial Trimerotropis verruculata 9 - Invertebrates - Terrestrial Snails & Glyphyalinia rhoadsi Hendersonia occulta Striatura exigua Vertigo hubrichti	American Woodcock Northern Goshawk Four-toed Salamander Little Brown Bat Northern Long-eared Bat Water Shrew Melanoplus islandicus Cochlicopa morseana Glyphyalinia wheatleyi Paravitrea multidentata Striatura ferrea Zoogenetes harpa
	Northern Mesic Forest--young seral	2 - Birds Golden-winged Warbler 2 - Herps Wood Turtle 2 - Mammals Woodland Jumping Mouse 1 - Insects - Terrestrial 1 - Invertebrates - Terrestrial Snails &	American Woodcock Four-toed Salamander Water Shrew Melanoplus islandicus Paravitrea multidentata

Northern Forest	Northern Wet-mesic Forest	1 - Birds 2 - Herps Wood Turtle 5 - Mammals Northern Flying Squirrel Water Shrew 1 - Insects - Terrestrial 3 - Invertebrates - Terrestrial Snails & Striatura exigua	Olive-sided Flycatcher Four-toed Salamander Little Brown Bat Silver-haired Bat Woodland Jumping Mouse Trimerotropis verruculata Glyphyalinia wheatleyi Vitrina angelicae
Wetland	Boreal Rich Fen	1 - Birds 2 - Mammals Silver-haired Bat 1 - Insects - Aquatic	Yellow Rail Northern Long-eared Bat Somatochlora hineana
	Emergent Marsh	10 - Birds Black Tern Common Tern Great Egret Red Knot Yellow-headed Blackbird 2 - Herps Four-toed Salamander 4 - Mammals Little Brown Bat Silver-haired Bat 3 - Insects - Aquatic Ilybius angustior	American Bittern Black-crowned Night-Heron Forster's Tern Purple Martin Rusty Blackbird Blanding's Turtle Big Brown Bat Northern Long-eared Bat Agabus discolor Libellula incesta
Floating-leaved Marsh	7 - Birds Black Tern Common Tern Red Knot 3 - Mammals Little Brown Bat 1 - Insects - Aquatic	American Bittern Black-crowned Night-Heron Great Egret Yellow-headed Blackbird Big Brown Bat Northern Long-eared Bat Libellula incesta	

Wetland	Northern Sedge Meadow	4 - Birds Black Tern Yellow Rail 3 - Herps Four-toed Salamander 3 - Mammals Northern Long-eared Bat 1 - Insects - Aquatic 6 - Invertebrates - Terrestrial Snails & Striatura exigua Vertigo morsei Vitrina angelicae	American Bittern Bobolink Blanding's Turtle Wood Turtle Little Brown Bat Silver-haired Bat Somatochlora hineana Paravitrea multidentata Vertigo hubrichti Vertigo nylanderi
	Shrub Carr	3 - Birds Golden-winged Warbler 3 - Herps Four-toed Salamander 3 - Mammals Northern Long-eared Bat	American Woodcock Rusty Blackbird Blanding's Turtle Wood Turtle Little Brown Bat Silver-haired Bat

Table 5.9 Northwest Lowlands – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)	
NC Group	NC Type		
Aquatic (lakes-rivers)	Small Lake--hard, bog	1 - Birds 2 - Herps Wood Turtle 4 - Mammals Little Brown Bat Silver-haired Bat 1 -Insects - Aquatic	Black Tern Mink Frog Big Brown Bat Northern Long-eared Bat Gomphus graslinellus
	Warmwater rivers	3 - Fish Lake Sturgeon 2 - Herps Wood Turtle 4 - Mammals Little Brown Bat Silver-haired Bat 4 -Insects - Aquatic Macdunnoa persimplex Stenelmis quadrimaculata 3 -Invertebrates - Mussels & Clams Cumberlandia monodonta	Gilt Darter River Redhorse Mink Frog Big Brown Bat Northern Long-eared Bat Brachycentrus lateralis Stenelmis antennalis Alasmidonta marginata Cyclonaias tuberculata
Miscellaneous	Lacustrine Mud Flat	1 - Birds 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat	Rusty Blackbird Wood Turtle Big Brown Bat Northern Long-eared Bat
Northern Forest	Aspen-Birch	3 - Birds Golden-winged Warbler 2 - Herps Wood Turtle	American Woodcock Least Flycatcher Four-toed Salamander
	Forested Seep	1 - Birds 1 - Herps 3 - Mammals Silver-haired Bat	American Woodcock Four-toed Salamander Little Brown Bat Woodland Jumping Mouse

Northern Forest	Northern Wet Forest	5 - Birds Boreal Chickadee Gray Jay 2 - Herps Wood Turtle 5 - Mammals Northern Flying Squirrel Water Shrew 1 - Insects - Aquatic	Black-backed Woodpecker Golden-winged Warbler Olive-sided Flycatcher Four-toed Salamander Little Brown Bat Silver-haired Bat Woodland Jumping Mouse Somatochlora forcipata
	Tamarack Swamp (poor)	5 - Birds Boreal Chickadee Gray Jay 2 - Herps Wood Turtle 4 - Mammals Northern Flying Squirrel Water Shrew 3 - Insects - Aquatic Hydroporus morio 1 - Insects - Terrestrial	Black-backed Woodpecker Golden-winged Warbler Olive-sided Flycatcher Four-toed Salamander Little Brown Bat Silver-haired Bat Hydrocolus persimilis Somatochlora forcipata Boloria chariclea
Wetland	Floating-leaved Marsh	2 - Birds Black Tern 3 - Mammals Little Brown Bat	American Bittern Big Brown Bat Northern Long-eared Bat
	Northern Sedge Meadow	4 - Birds Black Tern Le Conte's Sparrow 3 - Herps Mink Frog 3 - Mammals Northern Long-eared Bat 1 - Insects - Terrestrial	American Bittern Bobolink Four-toed Salamander Wood Turtle Little Brown Bat Silver-haired Bat Boloria chariclea
	Open Bog	3 - Birds Olive-sided Flycatcher 2 - Herps Mink Frog 3 - Mammals Northern Long-eared Bat 2 - Insects - Aquatic Somatochlora forcipata 2 - Insects - Terrestrial Trimerotropis verruculata	American Bittern Rusty Blackbird Four-toed Salamander Little Brown Bat Silver-haired Bat Aeshna subarctica Boloria chariclea

Wetland

Poor Fen

4 - Birds	American Bittern
Bobolink	Olive-sided Flycatcher
Rusty Blackbird	
2 - Herps	Four-toed Salamander
Mink Frog	
3 - Mammals	Little Brown Bat
Northern Long-eared Bat	Silver-haired Bat
2 -Insects - Aquatic	Aeshna subarctica
Somatochlora forcipata	
1 -Insects - Terrestrial	Boloria chariclea

Table 5.10 Northwest Sands – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)	
NC Group	NC Type		
Aquatic (lakes-rivers)	Coldwater streams	4 - Herps Four-toed Salamander Wood Turtle 3 - Mammals Little Brown Bat 5 -Insects - Aquatic Isogenoides frontalis Pseudodiamesa pertinax	Blanding's Turtle Mink Frog Big Brown Bat Water Shrew Drunella cornuta Isogenoides olivaceus Rhithrogena undulata
Large Lake--deep, hard, seepage		2 - Birds Purple Martin 2 - Fish Pugnose Shiner 2 - Herps Mink Frog 2 - Mammals Little Brown Bat 2 -Insects - Aquatic Haliplus apostolicus	Black Tern Least Darter Blanding's Turtle Big Brown Bat Gomphus graslinellus
Large Lake--deep, soft and very soft, seepage		2 - Birds Purple Martin 2 - Fish Pugnose Shiner 2 - Herps Mink Frog 2 - Mammals Little Brown Bat 2 -Insects - Aquatic Haliplus apostolicus	Black Tern Least Darter Blanding's Turtle Big Brown Bat Gomphus graslinellus

Aquatic (lakes-rivers)	Large Lake-- shallow, hard, seepage	2 - Birds Purple Martin 2 - Fish Pugnose Shiner 2 - Herps Mink Frog 2 - Mammals Little Brown Bat 4 -Insects - Aquatic Gomphus graslinellus Hygrotus falli	Black Tern Least Darter Blanding's Turtle Big Brown Bat Dubiraphia robusta Halipus apostolicus
	Large Lake-- shallow, soft, seepage	2 - Birds Purple Martin 2 - Fish Pugnose Shiner 2 - Herps Mink Frog 2 - Mammals Little Brown Bat 4 -Insects - Aquatic Gomphus graslinellus Hygrotus falli	Black Tern Least Darter Blanding's Turtle Big Brown Bat Dubiraphia robusta Halipus apostolicus
	Small Lake--Other	1 - Birds 2 - Herps Mink Frog 2 - Mammals Little Brown Bat 4 -Insects - Aquatic Halipus apostolicus Rhantus sericans	Black Tern Blanding's Turtle Big Brown Bat Gomphus graslinellus Hygrotus farctus
	Warmwater rivers	3 - Fish Lake Sturgeon 3 - Herps Mink Frog 2 - Mammals Little Brown Bat 7 -Insects - Aquatic Cercobrachys lilliei Ophiogomphus anomalus Stenelmis antennalis 3 -Invertebrates - Mussels & Clams Cumberlandia monodonta	Gilt Darter River Redhorse Blanding's Turtle Wood Turtle Big Brown Bat Brachycentrus lateralis Macdunnoa persimplex Ophiogomphus susbehcha Stenelmis quadrimaculata Alasmidonta marginata Cyclonaias tuberculata

Barrens	Oak Barrens	8 - Birds Common Nighthawk Grasshopper Sparrow Sharp-tailed Grouse Vesper Sparrow 3 - Herps Gophersnake 1 - Mammals 16 -Insects - Terrestrial Arphia conspersa Cerma cora Cicindela patruela patruela Erynnis persius Lycaeides melissa samuelis Melanoplus foedus Pachybrachis luridus Schinia indiana	Brewer's Blackbird Eastern whip-poor-will Red-headed Woodpecker Upland Sandpiper Blanding's Turtle Wood Turtle Franklin's Ground Squirrel Acronicta dolli Atrytonopsis hianna Chlosyne gorgone Erynnis martialis Hesperia metea Melanoplus flavidus Melanoplus stonei Polites origenes
	Pine Barrens	6 - Birds Eastern whip-poor-will Sharp-tailed Grouse Vesper Sparrow 3 - Herps Gophersnake 1 - Mammals 20 -Insects - Terrestrial Arphia conspersa Camnula pellucida Chloealtis abdominalis Cicindela patruela patruela Erynnis persius Lycaeides melissa samuelis Melanoplus foedus Melanoplus stonei Pachybrachis luridus Schinia indiana	Common Nighthawk Red-headed Woodpecker Upland Sandpiper Blanding's Turtle Wood Turtle Franklin's Ground Squirrel Acronicta dolli Atrytonopsis hianna Cerma cora Chlosyne gorgone Erynnis martialis Hesperia metea Melanoplus flavidus Melanoplus islandicus Oeneis chryxus Polites origenes

Grassland	Surrogate Grasslands	10 - Birds Bobolink Common Nighthawk Grasshopper Sparrow Purple Martin Upland Sandpiper 3 - Herps Gophersnake 2 - Mammals Franklin's Ground Squirrel	American Woodcock Brewer's Blackbird Eastern Meadowlark Le Conte's Sparrow Sharp-tailed Grouse Blanding's Turtle Wood Turtle Big Brown Bat
Miscellaneous	Inland Beach	1 - Birds 1 -Insects - Terrestrial	Common Nighthawk Melanoplus flavidus
Northern Forest	Aspen-Birch	3 - Birds Golden-winged Warbler 2 - Herps Wood Turtle	American Woodcock Least Flycatcher Four-toed Salamander
	Conifer Plantation	1 - Birds	Northern Goshawk
	Northern Dry Forest--late seral	3 - Birds Connecticut Warbler 1 - Herps 1 - Mammals 8 -Insects - Terrestrial Camnula pellucida Melanoplus bruneri Melanoplus islandicus Trimerotropis verruculata	Black-backed Woodpecker Eastern whip-poor-will Wood Turtle Northern Flying Squirrel Arphia conspersa Cicindela patruela patruela Melanoplus flavidus Melanoplus stonei
	Northern Dry Forest--mid-seral	4 - Birds Black-backed Woodpecker Least Flycatcher 1 - Herps 7 -Insects - Terrestrial Camnula pellucida Melanoplus bruneri Melanoplus islandicus	American Woodcock Eastern whip-poor-will Wood Turtle Arphia conspersa Cicindela patruela patruela Melanoplus flavidus Melanoplus stonei

Northern Forest

Northern Dry Forest--young seral	<p>4 - Birds Black-backed Woodpecker Golden-winged Warbler</p> <p>3 - Herps Gophersnake</p> <p>8 -Insects - Terrestrial Camnula pellucida Cicindela patruela patruela Melanoplus flavidus Melanoplus stonei</p>	<p>American Woodcock Eastern whip-poor-will</p> <p>Blanding's Turtle Wood Turtle Arphia conspersa Chloealtis abdominalis Melanoplus bruneri Melanoplus islandicus</p>
Northern Dry Mesic--late seral	<p>4 - Birds Least Flycatcher Red-shouldered Hawk</p> <p>1 - Herps</p> <p>2 - Mammals Northern Flying Squirrel</p> <p>3 -Insects - Terrestrial Melanoplus bruneri</p>	<p>Eastern whip-poor-will Northern Goshawk</p> <p>Wood Turtle Little Brown Bat</p> <p>Arphia conspersa Melanoplus islandicus</p>
Northern Dry Mesic--mid-seral	<p>3 - Birds Eastern whip-poor-will</p> <p>1 - Herps</p> <p>3 -Insects - Terrestrial Melanoplus bruneri</p>	<p>American Woodcock Least Flycatcher Wood Turtle Arphia conspersa Melanoplus islandicus</p>
Northern Dry Mesic--young seral	<p>3 - Birds Eastern whip-poor-will</p> <p>1 - Herps</p> <p>3 -Insects - Terrestrial Melanoplus bruneri</p>	<p>American Woodcock Golden-winged Warbler Wood Turtle Arphia conspersa Melanoplus islandicus</p>
Northern Wet Forest	<p>3 - Birds Golden-winged Warbler</p> <p>2 - Herps Wood Turtle</p> <p>4 - Mammals Northern Flying Squirrel Woodland Jumping Mouse</p> <p>1 -Insects - Aquatic</p>	<p>Black-backed Woodpecker Olive-sided Flycatcher Four-toed Salamander</p> <p>Little Brown Bat Water Shrew</p> <p>Somatochlora forcipata</p>

Northern Forest	Tamarack Swamp (poor)	3 - Birds Golden-winged Warbler 2 - Herps Wood Turtle 3 - Mammals Northern Flying Squirrel 3 - Insects - Aquatic Hydroporus morio	Black-backed Woodpecker Olive-sided Flycatcher Four-toed Salamander Little Brown Bat Water Shrew Hydrocolus persimilis Somatochlora forcipata
Wetland	Emergent Marsh	6 - Birds Black Tern Purple Martin Rusty Blackbird 3 - Herps Four-toed Salamander 2 - Mammals Little Brown Bat 1 - Insects - Aquatic	American Bittern Least Bittern Red-necked Grebe Blanding's Turtle Mink Frog Big Brown Bat Hygrotus sylvanus
	Emergent Marsh - Wild Rice	2 - Birds Least Bittern 2 - Herps Mink Frog 2 - Mammals Little Brown Bat	Black Tern Blanding's Turtle Big Brown Bat
	Floating-leaved Marsh	4 - Birds Black Tern Red-necked Grebe 2 - Mammals Little Brown Bat	American Bittern Least Bittern Big Brown Bat
	Northern Sedge Meadow	9 - Birds Black Tern Common Nighthawk Nelson's Sparrow Wilson's Phalarope 4 - Herps Four-toed Salamander Wood Turtle 1 - Mammals 1 - Insects - Terrestrial	American Bittern Bobolink Le Conte's Sparrow Sharp-tailed Grouse Yellow Rail Blanding's Turtle Mink Frog Little Brown Bat Orphulella pelidna

Wetland

Open Bog	<p>4 - Birds Olive-sided Flycatcher Yellow Rail 2 - Herps Mink Frog 1 - Mammals 1 -Insects - Aquatic 2 -Insects - Terrestrial Trimerotropis verruculata</p>	<p>American Bittern Rusty Blackbird Four-toed Salamander Little Brown Bat Somatochlora forcipata Orphulella pelidna</p>
Poor Fen	<p>6 - Birds Bobolink Olive-sided Flycatcher Yellow Rail 2 - Herps Mink Frog 1 - Mammals 1 -Insects - Aquatic</p>	<p>American Bittern Nelson's Sparrow Rusty Blackbird Four-toed Salamander Little Brown Bat Somatochlora forcipata</p>
Submergent Marsh	<p>2 - Birds Red-necked Grebe 3 - Herps Mink Frog 2 - Mammals Little Brown Bat</p>	<p>Black Tern Blanding's Turtle Wood Turtle Big Brown Bat</p>

Table 5.11 Southeast Glacial Plains – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)			
NC Group	NC Type				
Aquatic (lakes-rivers)	Small Lake--Other	1 - Birds	Black Tern		
		3 - Herps	Blanding's Turtle		
		Eastern Ribbonsnake	Northern Cricket Frog		
		4 - Mammals	Big Brown Bat		
		Little Brown Bat	Northern Long-eared Bat		
		Silver-haired Bat			
		10 -Insects - Aquatic	Aeshna clepsydra		
		Arigomphus villosipes	Cybister fimbriolatus		
		Enallagma basidens	Gomphus graslinellus		
		Hygrotus farctus	Ilybius confusus		
		Libellula incesta	Ramphocorixa acuminata		
		Thermonectus basilaris			
		Warmwater rivers		2 - Birds	Black-crowned Night-Heron
				Yellow-crowned Night-Heron	
				6 - Fish	Black Buffalo
Gravel Chub	Lake Sturgeon				
Redfin Shiner	River Redhorse				
Starhead Topminnow					
4 - Herps	Blanding's Turtle				
Eastern Massasauga	Northern Cricket Frog				
Queensnake					
5 - Mammals	Big Brown Bat				
Eastern Pipistrelle	Little Brown Bat				
Northern Long-eared Bat	Silver-haired Bat				
13 -Insects - Aquatic	Acanthametropus pecatonica				
Cercobrachys fox	Cercobrachys lilliei				
Cercobrachys winnebago	Hetaerina titia				
Homoeoneuria ammophila	Libellula incesta				
Paracloeodes minutus	Pentagenia vittigera				
Stenelmis douglasensis	Stenelmis fuscata				
Stenelmis musgravei	Stenelmis quadrimaculata				
1 -Insects - Terrestrial	Trimerotropis maritima				
5 -Invertebrates - Mussels & Clams	Alasmidonta marginata				
Alasmidonta viridis	Quadrula quadrula				
Tritogonia verrucosa	Venustaconcha ellipsiformis				

Aquatic (lakes-rivers)	Warmwater streams	<p>9 - Fish Lake Chubsucker Longear Sunfish Pugnose Shiner Slender Madtom</p> <p>4 - Herps Northern Cricket Frog Queensnake</p> <p>5 - Mammals Eastern Pipistrelle Northern Long-eared Bat</p> <p>9 - Insects - Aquatic Enallagma basidens Gomphus graslinellus Homoeoneuria ammophila Paracloeodes minutus</p> <p>6 - Invertebrates - Mussels & Clams Alasmidonta viridis Tritogonia verrucosa Villosa iris</p>	<p>Gravel Chub Least Darter Ozark Minnow Redfin Shiner Starhead Topminnow Blanding's Turtle Plains Gartersnake</p> <p>Big Brown Bat Little Brown Bat Silver-haired Bat Dubiraphia robusta Epiaeschna heros Hetaerina titia Ilybius confusus Stenelmis sexlineata Alasmidonta marginata Quadrula quadrula Venustaconcha ellipsiformis</p>
Grassland	Dry Prairie	<p>11 - Birds Common Nighthawk Grasshopper Sparrow Loggerhead Shrike Short-eared Owl Vesper Sparrow</p> <p>5 - Herps Eastern Massasauga Ornate Box Turtle</p> <p>2 - Mammals Prairie Vole</p> <p>21 - Insects - Terrestrial Bruchomorpha extensa Cuerna sayi Erythroneura carbonata Laevicephalus vannus Mermiria bivittata Opeia obscura Pachybrachis atomarius Polites origenes Prairiana kansana Schinia lucens</p>	<p>Bell's Vireo Eastern Meadowlark Lark Sparrow Northern Bobwhite Upland Sandpiper Western Meadowlark Blanding's Turtle North American Racer Plains Gartersnake Prairie Deer Mouse</p> <p>Aflexia rubranura Colaspis suggona Dichromorpha viridis Kansendria kansiensis Memnonia panzeri Myndus ovatus Orphulella pelidna Paraphlepsius nebulosus Prairiana cinerea Saxinis omogera Syrbula admirabilis</p>

Grassland

Dry-mesic Prairie

13 - Birds

Bobolink
Dickcissel
Grasshopper Sparrow
Loggerhead Shrike
Short-eared Owl
Vesper Sparrow

6 - Herps

Butler's Gartersnake
North American Racer
Plains Gartersnake

2 - Mammals

Prairie Deer Mouse

26 - Insects - Terrestrial

Antistrophus silphii
Bombus pensylvanicus
Colaspis suggona
Dichromorpha viridis
Kansendria kansiensis
Memnonia panzeri
Myndus ovatus
Orphulella pelidna
Papaipema beeriana
Polites origenes
Prairiana kansana
Schinia lucens
Syrbula admirabilis

Bell's Vireo

Common Nighthawk
Eastern Meadowlark
Henslow's Sparrow
Northern Bobwhite
Upland Sandpiper
Western Meadowlark
Blanding's Turtle
Eastern Massasauga
Ornate Box Turtle

Franklin's Ground Squirrel

Aflexia rubranura
Aphelonema simplex
Bruchomorpha extensa
Cuerna sayi
Erythroneura carbonata
Laevicephalus vannus
Mermiria bivittata
Opeia obscura
Pachybrachis atomarius
Paraphlepsius nebulosus
Prairiana cinerea
Saxinis omogera
Speyeria idalia

Grassland	Mesic Prairie	8 - Birds Common Nighthawk Eastern Meadowlark Northern Bobwhite Upland Sandpiper 5 - Herps Butler's Gartersnake Ornate Box Turtle 2 - Mammals Little Brown Bat 15 - Insects - Terrestrial Antistrophus silphii Bombus pensylvanicus Dichromorpha viridis Memnonia panzeri Pachybrachis atomarius Papaipema silphii Prairiana kansana 1 - Invertebrates - Crustacea	Bobolink Dickcissel Henslow's Sparrow Short-eared Owl Blanding's Turtle Eastern Massasauga Plains Gartersnake Franklin's Ground Squirrel Aflexia rubranura Aphelonema simplex Bruchomorpha extensa Erythroneura carbonata Myndus ovatus Papaipema beeriana Paraphlepsius nebulosus Speyeria idalia Procambarus gracilis
	Surrogate Grasslands	15 - Birds Bell's Vireo Common Nighthawk Eastern Meadowlark Henslow's Sparrow Northern Bobwhite Short-eared Owl Western Meadowlark 6 - Herps Butler's Gartersnake North American Racer Plains Gartersnake 4 - Mammals Eastern Pipistrelle Prairie Deer Mouse 1 - Insects - Terrestrial	American Woodcock Bobolink Dickcissel Grasshopper Sparrow Loggerhead Shrike Purple Martin Upland Sandpiper Yellow-breasted Chat Blanding's Turtle Eastern Massasauga Ornate Box Turtle Big Brown Bat Franklin's Ground Squirrel Speyeria idalia

Grassland	Wet Prairie	8 - Birds American Woodcock Bobolink Purple Martin Upland Sandpiper 6 - Herps Butler's Gartersnake Northern Cricket Frog Queensnake 1 - Mammals 8 - Insects - Terrestrial Calephelis muticum Flexamia prairiana Orchelimum delicatum Papaipema silphii 1 - Invertebrates - Crustacea	American Bittern Bell's Vireo Henslow's Sparrow Short-eared Owl Blanding's Turtle Eastern Massasauga Plains Gartersnake Big Brown Bat Altica litigata Cryptocephalus venustus Neoconocephalus lyristes Papaipema beeriana Procambarus gracilis
	Wet-mesic Prairie	8 - Birds Bobolink Henslow's Sparrow Short-eared Owl Yellow-breasted Chat 5 - Herps Butler's Gartersnake Northern Cricket Frog 3 - Mammals Franklin's Ground Squirrel 16 - Insects - Terrestrial Antistrophus silphii Colaspis suggona Erythroneura carbonata Flexamia prairiana Neoconocephalus lyristes Orchelimum delicatum Papaipema silphii Speyeria idalia 1 - Invertebrates - Crustacea	Bell's Vireo Eastern Meadowlark Northern Bobwhite Upland Sandpiper Blanding's Turtle Eastern Massasauga Plains Gartersnake Big Brown Bat Little Brown Bat Aflexia rubranura Aphelonema simplex Cryptocephalus venustus Fallapion bischoffi Myndus ovatus Oarisma poweshiek Papaipema beeriana Paraphlepsius nebulosus Procambarus gracilis
Miscellaneous	Caves and Subterranean Cultural	4 - Mammals Eastern Pipistrelle Northern Long-eared Bat	Big Brown Bat Little Brown Bat

Miscellaneous	Dry Cliff	1 - Herps 2 - Mammals Eastern Pipistrelle 1 - Insects - Terrestrial	North American Racer Big Brown Bat Erynnis lucilius
Savanna	Oak Opening	7 - Birds Eastern Meadowlark Henslow's Sparrow Red-headed Woodpecker 3 - Herps North American Racer 5 - Mammals Eastern Pipistrelle Little Brown Bat 1 - Insects - Aquatic 11 - Insects - Terrestrial Cryptocephalus cuneatus Dichromorpha viridis Pachybrachis atomarius Prairiana angustens Speyeria idalia	Common Nighthawk Eastern whip-poor-will Northern Bobwhite Vesper Sparrow Blanding's Turtle Ornate Box Turtle Big Brown Bat Franklin's Ground Squirrel Woodland Vole Aeshna clepsydra Bruchomorpha extensa Cuerna sayi Erythroneura carbonata Papaipema silphii Prairiana kansana Syrbula admirabilis
	Oak Woodland	3 - Birds Eastern whip-poor-will 2 - Herps Ornate Box Turtle 5 - Mammals Eastern Pipistrelle Northern Long-eared Bat	Cerulean Warbler Red-headed Woodpecker Blanding's Turtle Big Brown Bat Franklin's Ground Squirrel Woodland Vole
Southern Forest	Floodplain Forest	8 - Birds Cerulean Warbler Prothonotary Warbler Red-shouldered Hawk Yellow-crowned Night-Heron 4 - Herps Butler's Gartersnake Four-toed Salamander 5 - Mammals Eastern Pipistrelle Northern Long-eared Bat 1 - Insects - Aquatic	American Woodcock Least Flycatcher Red-headed Woodpecker Rusty Blackbird Blanding's Turtle Eastern Massasauga Big Brown Bat Little Brown Bat Silver-haired Bat Epieaschna heros

Southern Forest	Southern Dry Forest	3 - Birds Hooded Warbler 2 - Herps Ornate Box Turtle 4 - Mammals Eastern Pipistrelle Woodland Vole	Eastern whip-poor-will Red-headed Woodpecker North American Racer Big Brown Bat Northern Long-eared Bat
	Southern Dry-mesic Forest	5 - Birds Cerulean Warbler Hooded Warbler 3 - Herps North American Racer 4 - Mammals Eastern Pipistrelle Woodland Vole	Acadian Flycatcher Eastern whip-poor-will Red-headed Woodpecker Blanding's Turtle Ornate Box Turtle Big Brown Bat Northern Long-eared Bat
	Southern Tamarack Swamp (rich)	1 - Birds 2 - Herps Four-toed Salamander 1 -Insects - Aquatic	Rusty Blackbird Blanding's Turtle Agabus discolor
Wetland	Bog Relict	1 - Birds 2 - Herps Four-toed Salamander 3 - Mammals Little Brown Bat 2 -Insects - Terrestrial Orphulella pelidna	Rusty Blackbird Eastern Ribbonsnake Big Brown Bat Silver-haired Bat Hemileuca nevadensis ssp. 3
	Calcareous Fen	2 - Birds Rusty Blackbird 2 - Herps Eastern Massasauga 3 - Mammals Northern Long-eared Bat 1 -Insects - Aquatic 6 -Insects - Terrestrial Cryptocephalus venustus Neoconocephalus lyristes Orphulella pelidna	American Woodcock Butler's Gartersnake Big Brown Bat Silver-haired Bat Liodessus cantralli Calephelis muticum Flexamia prairiana Orchelimum delicatum

Wetland	Emergent Marsh	14 - Birds Black Tern Common Tern King Rail Purple Martin Red-necked Grebe Whooping Crane Yellow-headed Blackbird 7 - Herps Butler's Gartersnake Four-toed Salamander Plains Gartersnake 4 - Mammals Little Brown Bat Silver-haired Bat 5 - Insects - Aquatic Colymbetes exaratus Libellula incesta	American Bittern Black-crowned Night-Heron Forster's Tern Least Bittern Red Knot Rusty Blackbird Yellow-crowned Night-Heron Blanding's Turtle Eastern Massasauga Northern Cricket Frog Queensnake Big Brown Bat Northern Long-eared Bat Agabus discolor Hygrotus marklini Thermonectus basilaris
	Ephemeral Pond	4 - Birds Red-shouldered Hawk Yellow-crowned Night-Heron 3 - Herps Eastern Massasauga 5 - Mammals Eastern Pipistrelle Northern Long-eared Bat 4 - Insects - Aquatic Copelatus chevrolati Laccornis deltoides 1 - Insects - Terrestrial	Black-crowned Night-Heron Rusty Blackbird Blanding's Turtle Four-toed Salamander Big Brown Bat Little Brown Bat Silver-haired Bat Agabates acuductus Epiaschna heros Orphulella pelidna
	Floating-leaved Marsh	11 - Birds Black Tern Common Tern Least Bittern Red-necked Grebe Yellow-crowned Night-Heron 3 - Mammals Little Brown Bat 1 - Insects - Aquatic	American Bittern Black-crowned Night-Heron King Rail Red Knot Whooping Crane Yellow-headed Blackbird Big Brown Bat Northern Long-eared Bat Libellula incesta

Wetland	Riverine Mud Flat	1 - Birds 5 - Mammals Eastern Pipistrelle Northern Long-eared Bat	Rusty Blackbird Big Brown Bat Little Brown Bat Silver-haired Bat
	Shrub Carr	6 - Birds Bell's Vireo Rusty Blackbird Yellow-crowned Night-Heron 7 - Herps Butler's Gartersnake Eastern Ribbonsnake Plains Gartersnake 3 - Mammals Northern Long-eared Bat	American Woodcock Golden-winged Warbler Yellow-breasted Chat Blanding's Turtle Eastern Massasauga Four-toed Salamander Queensnake Little Brown Bat Silver-haired Bat
	Southern Sedge Meadow	8 - Birds Bobolink Eastern Meadowlark King Rail Whooping Crane 7 - Herps Butler's Gartersnake Four-toed Salamander Plains Gartersnake 4 - Mammals Little Brown Bat Silver-haired Bat 1 - Insects - Aquatic 3 - Insects - Terrestrial Orchelimum delicatum	American Bittern Common Nighthawk Henslow's Sparrow Short-eared Owl Blanding's Turtle Eastern Massasauga Northern Cricket Frog Queensnake Big Brown Bat Northern Long-eared Bat Colymbetes exaratus Calephelis muticum Orphulella pelidna

Table 5.12 Southern Lake Michigan Coastal – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)	
NC Group	NC Type		
Aquatic (lakes-rivers)	Lake Michigan	1 - Fish 2 - Mammals Little Brown Bat 2 - Insects - Terrestrial Trimerotropis maritima	Lake Sturgeon Big Brown Bat Cicindela hirticollis rhodensis
	Warmwater streams	3 - Fish Redfin Shiner 3 - Herps Plains Gartersnake 3 - Mammals Eastern Pipistrelle 6 - Insects - Aquatic Epiaeschna heros Hetaerina titia Somatochlora ensigera 3 - Invertebrates - Mussels & Clams Venustaconcha ellipsiformis	Longear Sunfish Striped Shiner Blanding's Turtle Queensnake Big Brown Bat Little Brown Bat Enallagma basidens Gomphus graslinellus Heterosternuta wickhami Alasmidonta viridis Villosa iris
Grassland	Wet-mesic Prairie	5 - Birds Bobolink Henslow's Sparrow 4 - Herps Butler's Gartersnake Plains Gartersnake 3 - Mammals Franklin's Ground Squirrel 12 - Insects - Terrestrial Antistrophus silphii Colaspis suggona Fallapion bischoffi Myndus ovatus Orchelimum delicatum Papaipema silphii 1 - Invertebrates - Crustacea	Bell's Vireo Eastern Meadowlark Short-eared Owl Blanding's Turtle Eastern Massasauga Big Brown Bat Little Brown Bat Aflexia rubranura Aphelonema simplex Destria crocea Flexamia prairiana Neoconocephalus lyristes Papaipema beeriana Procambarus gracilis
Miscellaneous	Lacustrine Mud Flat	1 - Birds 1 - Herps 3 - Mammals Eastern Pipistrelle	Rusty Blackbird Eastern Massasauga Big Brown Bat Little Brown Bat

Table 5.13 Southwest Savanna – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)	
NC Group	NC Type		
Aquatic (lakes-rivers)	Spring Pond, Lake--Spring	2 - Herps	Blanding's Turtle
		Northern Cricket Frog	
		3 - Mammals	Big Brown Bat
		Little Brown Bat	Northern Long-eared Bat
		1 -Insects - Aquatic	Agabetes acuductus
	Springs and Spring Runs (Hard)	3 - Mammals	Big Brown Bat
		Little Brown Bat	Northern Long-eared Bat
	Springs and Spring Runs (Soft)	3 - Mammals	Big Brown Bat
		Little Brown Bat	Northern Long-eared Bat
	Warmwater streams	3 - Fish	Gravel Chub
		Ozark Minnow	Slender Madtom
		2 - Herps	Blanding's Turtle
		Northern Cricket Frog	
		4 - Mammals	Big Brown Bat
		Eastern Pipistrelle	Little Brown Bat
		Northern Long-eared Bat	
	2 -Insects - Aquatic	Heterosternuta wickhami	
		Paracloeodes minutus	

Grassland	Dry Prairie	<p>10 - Birds Common Nighthawk Grasshopper Sparrow Northern Bobwhite Upland Sandpiper Western Meadowlark</p> <p>3 - Herps Lined Snake</p> <p>1 - Mammals</p> <p>23 -Insects - Terrestrial Arphia simplex Bruchomorpha extensa Cuerna sayi Driotura robusta Hesperia ottoe Kansendria kansiensis Memnonia panzeri Opeia obscura Pachybrachis atomarius Polyamia dilata Prairiana kansana</p> <p>1 -Invertebrates - Terrestrial Snails &</p>	<p>Bell's Vireo Eastern Meadowlark Loggerhead Shrike Short-eared Owl Vesper Sparrow</p> <p>Blanding's Turtle North American Racer Prairie Deer Mouse Aflexia rubranura Attenuipyga vanduzeei Catocala abbreviatella Dichromorpha viridis Erythroneura carbonata Hesperotettix viridis Laevicephalus vannus Myndus ovatus Orphulella pelidna Paraphlepsius nebulosus Prairiana cinerea Syrbula admirabilis Gastrocopta procera</p>
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Grassland	Dry-mesic Prairie	13 - Birds Bobolink Dickcissel Grasshopper Sparrow Loggerhead Shrike Short-eared Owl Vesper Sparrow 3 - Herps Lined Snake 2 - Mammals Prairie Deer Mouse 26 - Insects - Terrestrial Antistrophus silphii Attenuipyga vanduzeei Bruchomorpha extensa Cuerna sayi Driotura robusta Hesperia ottoe Kansendria kansiensis Memnonia panzeri Opeia obscura Pachybrachis atomarius Polyamia dilata Prairiana kansana Syrbula admirabilis	Bell's Vireo Common Nighthawk Eastern Meadowlark Henslow's Sparrow Northern Bobwhite Upland Sandpiper Western Meadowlark Blanding's Turtle North American Racer Franklin's Ground Squirrel Aflexia rubranura Arphia simplex Bombus pensylvanicus Catocala abbreviatella Dichromorpha viridis Erythroneura carbonata Hesperotettix viridis Laevicephalus vannus Myndus ovatus Orphulella pelidna Paraphlepsius nebulosus Prairiana cinerea Speyeria idalia
	Mesic Prairie	8 - Birds Common Nighthawk Eastern Meadowlark Northern Bobwhite Upland Sandpiper 1 - Herps 2 - Mammals Little Brown Bat 13 - Insects - Terrestrial Antistrophus silphii Bruchomorpha extensa Erythroneura carbonata Myndus ovatus Paraphlepsius nebulosus Prairiana kansana	Bobolink Dickcissel Henslow's Sparrow Short-eared Owl Blanding's Turtle Franklin's Ground Squirrel Aflexia rubranura Bombus pensylvanicus Dichromorpha viridis Memnonia panzeri Pachybrachis atomarius Polyamia dilata Speyeria idalia

Grassland	Surrogate Grasslands	13 - Birds Bobolink Dickcissel Grasshopper Sparrow Loggerhead Shrike Short-eared Owl Western Meadowlark 3 - Herps Lined Snake 4 - Mammals Eastern Pipistrelle Prairie Deer Mouse 1 - Insects - Terrestrial	Bell's Vireo Common Nighthawk Eastern Meadowlark Henslow's Sparrow Northern Bobwhite Upland Sandpiper Yellow-breasted Chat Blanding's Turtle North American Racer Big Brown Bat Franklin's Ground Squirrel Speyeria idalia
Miscellaneous	Lacustrine Mud Flat	1 - Birds 4 - Mammals Eastern Pipistrelle Northern Long-eared Bat	Rusty Blackbird Big Brown Bat Little Brown Bat
Savanna	Oak Opening	6 - Birds Eastern Meadowlark Northern Bobwhite Vesper Sparrow 2 - Herps North American Racer 5 - Mammals Eastern Pipistrelle Little Brown Bat 13 - Insects - Terrestrial Bruchomorpha extensa Cuerna sayi Erythroneura carbonata Pachybrachis atomarius Prairiana angustens Speyeria idalia	Common Nighthawk Henslow's Sparrow Red-headed Woodpecker Blanding's Turtle Big Brown Bat Franklin's Ground Squirrel Woodland Vole Arphia simplex Cryptocephalus cuneatus Dichromorpha viridis Melanoplus foedus Polyamia dilata Prairiana kansana Syrbula admirabilis
	Oak Woodland	1 - Birds 1 - Herps 5 - Mammals Eastern Pipistrelle Northern Long-eared Bat 1 - Insects - Terrestrial	Red-headed Woodpecker Blanding's Turtle Big Brown Bat Franklin's Ground Squirrel Woodland Vole Melanoplus foedus
Wetland	Floating-leaved Marsh	3 - Mammals Little Brown Bat	Big Brown Bat Northern Long-eared Bat

Table 5.14 Superior Coastal Plain – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)	
NC Group	NC Type		
Aquatic (lakes-rivers)	Coldwater streams	3 - Herps Mink Frog	Four-toed Salamander Wood Turtle
		4 - Mammals Little Brown Bat Silver-haired Bat	Big Brown Bat Northern Long-eared Bat
		8 - Insects - Aquatic Ilybius subaeneus Neoephemera bicolor Pseudodiamesa pertinax Wormaldia moesta	Drunella cornuta Isogenoides frontalis Oreodytes scitulus Rhithrogena undulata
	Coolwater streams	3 - Herps Mink Frog	Four-toed Salamander Wood Turtle
		4 - Mammals Little Brown Bat Silver-haired Bat	Big Brown Bat Northern Long-eared Bat
		9 - Insects - Aquatic Heterosternuta pulchra Maccaffertium pulchellum Oreodytes scitulus Rhithrogena undulata	Drunella cornuta Ilybius confusus Neoephemera bicolor Plauditus cestus Wormaldia moesta
	Lake Superior	1 - Birds 2 - Fish Shortjaw Cisco	Common Tern Lake Sturgeon
		4 - Insects - Aquatic Heterosternuta pulchra Notonecta borealis	Enallagma clausum Ilybius subaeneus
		1 - Insects - Terrestrial 1 - Invertebrates - Mussels & Clams	Cicindela hirticollis rhodensis Elliptio complanata
	Warmwater streams	2 - Herps Wood Turtle	Mink Frog
		4 - Mammals Little Brown Bat Silver-haired Bat	Big Brown Bat Northern Long-eared Bat
		3 - Insects - Aquatic Ilybius confusus	Heterosternuta pulchra Paracloeodes minutus

Barrens	Great Lakes Barrens	1 - Herps 1 - Mammals 1 - Insects - Terrestrial	Wood Turtle Northern Flying Squirrel Melanoplus fasciatus
Miscellaneous	Dry Cliff	1 - Birds 1 - Mammals	Peregrine Falcon Big Brown Bat
	Great Lakes Beach	3 - Birds Piping Plover 3 - Insects - Terrestrial Cicindela hirticollis rhodensis	Common Tern Red Knot Camnula pellucida Melanoplus bruneri
	Great Lakes Dune	1 - Birds 1 - Mammals 3 - Insects - Terrestrial Melanoplus bruneri	Piping Plover Franklin's Ground Squirrel Camnula pellucida Melanoplus islandicus
	Lacustrine Mud Flat	1 - Birds 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat	Rusty Blackbird Wood Turtle Big Brown Bat Northern Long-eared Bat
	Moist Cliff	1 - Mammals 1 - Invertebrates - Terrestrial Snails &	Big Brown Bat Zoogenetes harpa
Northern Forest	Aspen-Birch	4 - Birds Golden-winged Warbler Swainson's Thrush 2 - Herps Wood Turtle	American Woodcock Least Flycatcher Four-toed Salamander
	Boreal Forest	6 - Birds Evening Grosbeak Olive-sided Flycatcher Swainson's Thrush 1 - Herps 4 - Mammals Little Brown Bat Silver-haired Bat 2 - Insects - Terrestrial Melanoplus fasciatus	Black-backed Woodpecker Least Flycatcher Ruby-crowned Kinglet Four-toed Salamander American Marten Northern Flying Squirrel Catocala semirelictica

Wetland	Emergent Marsh	5 - Birds Black Tern Red Knot 2 - Herps Mink Frog 4 - Mammals Little Brown Bat Silver-haired Bat 1 -Insects - Aquatic	American Bittern Common Tern Rusty Blackbird Four-toed Salamander Big Brown Bat Northern Long-eared Bat Ilybius angustior
	Emergent Marsh - Wild Rice	1 - Birds 1 - Herps 2 - Mammals Little Brown Bat	Black Tern Mink Frog Big Brown Bat
	Open Bog	4 - Birds Olive-sided Flycatcher Yellow Rail 2 - Herps Mink Frog 3 - Mammals Northern Long-eared Bat 3 -Insects - Aquatic Somatochlora forcipata 2 -Insects - Terrestrial Trimerotropis verruculata	American Bittern Rusty Blackbird Four-toed Salamander Little Brown Bat Silver-haired Bat Aeshna sitchensis Somatochlora incurvata Orphulella pelidna
	Poor Fen	5 - Birds Bobolink Rusty Blackbird 2 - Herps Mink Frog 3 - Mammals Northern Long-eared Bat 3 -Insects - Aquatic Somatochlora forcipata	American Bittern Olive-sided Flycatcher Yellow Rail Four-toed Salamander Little Brown Bat Silver-haired Bat Aeshna sitchensis Somatochlora incurvata
	Shore Fen	3 - Birds Le Conte's Sparrow 1 - Herps 1 - Mammals 1 -Insects - Aquatic 1 -Insects - Terrestrial	American Bittern Yellow Rail Four-toed Salamander Silver-haired Bat Aeshna sitchensis Orphulella pelidna

Wetland	Submergent Marsh	1 - Birds 2 - Herps Wood Turtle 4 - Mammals Little Brown Bat Silver-haired Bat	Black Tern Mink Frog Big Brown Bat Northern Long-eared Bat
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Table 5.15 Western Coulee and Ridges – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)	
NC Group	NC Type		
Aquatic (lakes-rivers)	Coldwater streams	4 - Herps Four-toed Salamander Wood Turtle 5 - Mammals Eastern Pipistrelle Northern Long-eared Bat 11 -Insects - Aquatic Argia plana Helophorus orchymonti Lepidostoma vernale Psilotreta indecisa Wormaldia moesta	Blanding's Turtle Northern Cricket Frog Big Brown Bat Little Brown Bat Silver-haired Bat Ameletus lineatus Eurylophella aestiva Ilybius gagates Platambus confusus Somatochlora tenebrosa Zealeuctra narfi
	Coolwater streams	5 - Herps Four-toed Salamander Plains Gartersnake 5 - Mammals Eastern Pipistrelle Northern Long-eared Bat 12 -Insects - Aquatic Argia plana Eurylophella aestiva Heterosternuta wickhami Metretopus borealis Plauditus cestus Wormaldia moesta 1 -Invertebrates - Mussels & Clams	Blanding's Turtle Northern Cricket Frog Wood Turtle Big Brown Bat Little Brown Bat Silver-haired Bat Ameletus lineatus Cymbiodyta toddi Helophorus orchymonti Lioporeus triangularis Ophiogomphus smithi Somatochlora tenebrosa Alasmidonta marginata

Aquatic (lakes-rivers)	Riverine Lake - Pond	4 - Birds Great Egret Yellow-crowned Night-Heron 3 - Fish Lake Sturgeon 3 - Herps Northern Cricket Frog 4 - Mammals Little Brown Bat Silver-haired Bat 7 -Insects - Aquatic Agabus leptapsis Libellula cyanea Neoporus hybridus	Black Tern Red-shouldered Hawk Lake Chubsucker Starhead Topminnow Blanding's Turtle Wood Turtle Big Brown Bat Northern Long-eared Bat Agabetes acuductus Colymbetes exaratus Liodessus obscurellus Ochthebius lineatus
	Spring Pond, Lake--Spring	1 - Birds 3 - Herps Northern Cricket Frog 4 - Mammals Little Brown Bat Silver-haired Bat 3 -Insects - Aquatic Helophorus orchymonti	Black Tern Blanding's Turtle Plains Gartersnake Big Brown Bat Northern Long-eared Bat Agabetes acuductus Libellula cyanea
	Springs and Spring Runs (Hard)	4 - Mammals Little Brown Bat Silver-haired Bat 1 -Insects - Aquatic	Big Brown Bat Northern Long-eared Bat Argia plana
	Springs and Spring Runs (Soft)	4 - Mammals Little Brown Bat Silver-haired Bat 1 -Insects - Aquatic	Big Brown Bat Northern Long-eared Bat Argia plana

Aquatic
(lakes-rivers)

Warmwater rivers

2 - Birds	Great Egret
Yellow-crowned Night-Heron	
13 - Fish	Black Buffalo
Blue Sucker	Bluntnose Darter
Crystal Darter	Gilt Darter
Goldeye	Lake Sturgeon
Mud Darter	Paddlefish
Pallid Shiner	River Redhorse
Shoal Chub	Starhead Topminnow
5 - Herps	Blanding's Turtle
Eastern Massasauga	Northern Cricket Frog
Smooth Softshell	Wood Turtle
5 - Mammals	Big Brown Bat
Eastern Pipistrelle	Little Brown Bat
Northern Long-eared Bat	Silver-haired Bat
15 - Insects - Aquatic	Acanthametropus pecatonica
Cercobrachys fox	Cercobrachys lilliei
Homoeoneuria ammophila	Lioporeus triangularis
Macdunnoa persimplex	Macromia taeniolata
Neoporus hybridus	Paracloeodes minutus
Pentagenia vittigera	Spinadis simplex
Stenelmis antennalis	Stenelmis douglasensis
Stenelmis fuscata	Stenelmis knobeli
3 - Insects - Terrestrial	Cicindela hirticollis hirticollis
Ellipsoptera macra	Trimerotropis maritima
17 - Invertebrates - Mussels & Clams	Alasmidonta marginata
Anodonta suborbiculata	Arcidens confragosus
Cumberlandia monodonta	Ellipsaria lineolata
Elliptio crassidens	Fusconaia ebena
Lampsilis higginsii	Lampsilis teres
Megaloniaias nervosa	Plethobasus cyphus
Quadrula metanevra	Quadrula nodulata
Quadrula quadrula	Simpsonaias ambigua
Tritogonia verrucosa	Truncilla donaciformis

Barrens	Oak Barrens		
		8 - Birds Eastern whip-poor-will Lark Sparrow Upland Sandpiper Western Meadowlark	Common Nighthawk Grasshopper Sparrow Red-headed Woodpecker Vesper Sparrow
		8 - Herps Eastern Massasauga North American Racer Six-lined Racerunner Wood Turtle	Blanding's Turtle Gophersnake Prairie Ring-necked Snake Slender Glass Lizard
		4 - Mammals Northern Long-eared Bat Prairie Vole	Franklin's Ground Squirrel Prairie Deer Mouse
		27 - Insects - Terrestrial Arphia simplex Callophrys irus Cicindela patruela patruela Ellipsoptera lepida Hesperia metea Laevicephalus vannus Melanoplus fasciatus Melanoplus foedus Mermiria bivittata Paraphlepsius maculosus Polyamia dilata Sayapion segnipes Trachyrhachys kiowa	Arphia conspersa Atrytonopsis hianna Chlosyne gorgone Distigmoptera impennata Erynnis persius Hesperotettix viridis Lycaeides melissa samuelis Melanoplus flavidus Melanoplus scudderi Pachybrachis luridus Polites origenes Prairiana kansana Schinia indiana Trichapion perforicolle

Barrens

Sand Barrens

8 - Birds	Bell's Vireo
Common Nighthawk	Eastern Meadowlark
Eastern whip-poor-will	Grasshopper Sparrow
Lark Sparrow	Vesper Sparrow
Western Meadowlark	
10 - Herps	Blanding's Turtle
Eastern Massasauga	Gophersnake
North American Racer	Ornate Box Turtle
Prairie Ring-necked Snake	Six-lined Racerunner
Slender Glass Lizard	Timber Rattlesnake
Wood Turtle	
5 - Mammals	Franklin's Ground Squirrel
Little Brown Bat	Northern Long-eared Bat
Prairie Deer Mouse	Prairie Vole
26 - Insects - Terrestrial	Aeropedellus clavatus
Arphia conspersa	Arphia simplex
Atrytonopsis hianna	Bruchomorpha extensa
Camnula pellucida	Chlosyne gorgone
Cicindela patruela patruela	Ellipsoptera lepida
Epeolus ainsliei	Erynnis persius
Fallapion impeditum	Grammia phyllira
Hesperotettix viridis	Laevincephalus vannus
Melanoplus flavidus	Melanoplus foedus
Melanoplus gladstoni	Melanoplus punctulatus
Neolarra vigilans	Pachybrachis luridus
Paraphlepsius maculosus	Polyamia dilata
Tetracha virginica	Trachyrhachys kiowa
Trimerotropis maritima	

Grassland	Dry Prairie	<p>10 - Birds</p> <p>Common Nighthawk Grasshopper Sparrow Northern Bobwhite Upland Sandpiper Western Meadowlark</p> <p>12 - Herps</p> <p>Eastern Massasauga North American Racer Plains Gartersnake Six-lined Racerunner Timber Rattlesnake Wood Turtle</p> <p>2 - Mammals</p> <p>Prairie Vole</p> <p>49 - Insects - Terrestrial</p> <p>Arphia conspersa Atrytonopsis hianna Bassaricus lituratus Bruchomorpha extensa Catocala whitneyi Colaspis suggona Dichagyris reliqua Driotura robusta Eritettix simplex Fitchiella robertsonii Hesperia ottoe Hesperotettix viridis Laevicephalus vannus Melanoplus scudderi Mermiria bivittata Neolarra vigilans Orphulella pelidna Pachybrachis peccans Paraphlepsius maculosus Polites origenes Prairiana cinerea Problema byssus Saxinis omogera Syrbula admirabilis</p> <p>3 - Invertebrates - Terrestrial Snails &</p> <p>Helicodiscus singleyanus</p>	<p>Bell's Vireo Eastern Meadowlark Lark Sparrow Short-eared Owl Vesper Sparrow</p> <p>Blanding's Turtle Gophersnake Ornate Box Turtle Prairie Ring-necked Snake Slender Glass Lizard Western Wormsnake</p> <p>Prairie Deer Mouse</p> <p>Aflexia rubranura Arphia simplex Attenuipyga vanduzeei Brachypnoea convexa Catocala abbreviatella Chlosyne gorgone Cuerna sayi Dichromorpha viridis Epeolus ainsliei Erythroneura carbonata Glyptina brunnea Hesperotettix speciosus Kansendria kansiensis Melanoplus gladstoni Memnonia panzeri Myndus ovatus Opeia obscura Pachybrachis atomarius Paraphlepsius altus Paraphlepsius nebulosus Polyamia dilata Prairiana kansana Rhynchomitra microrhina Schinia lucens Triachus vacuus</p> <p>Gastrocopta procera Vallonia parvula</p>
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Grassland

Dry-mesic Prairie

12 - Birds

Bobolink
Dickcissel
Grasshopper Sparrow
Northern Bobwhite
Upland Sandpiper
Western Meadowlark

10 - Herps

Eastern Massasauga
North American Racer
Plains Gartersnake
Slender Glass Lizard
Wood Turtle

2 - Mammals

Prairie Deer Mouse

49 - Insects - Terrestrial

Antistropheus silphii
Arphia simplex
Bassaricus lituratus
Brachynoea convexa
Catocala abbreviatella
Coelocephalopion decoloratum
Cuerna sayi
Dichromorpha viridis
Eritettix simplex
Fitchiella robertsonii
Hesperia ottoe
Hesperotettix viridis
Laevicephalus vannus
Memnonia panzeri
Myndus ovatus
Orphulella pelidna
Pachybrachis peccans
Paraphlepsius maculosus
Polites origenes
Prairiana cinerea
Problema byssus
Saxinis omogera
Schinia lucens
Syrbula admirabilis

2 - Invertebrates - Terrestrial Snails &

Vallonia parvula

Bell's Vireo

Common Nighthawk
Eastern Meadowlark
Henslow's Sparrow
Short-eared Owl
Vesper Sparrow

Blanding's Turtle

Gophersnake
Ornate Box Turtle
Prairie Ring-necked Snake
Timber Rattlesnake

Franklin's Ground Squirrel

Aflexia rubranura

Arphia conspersa
Attenuipyga vanduzeei
Bombus pensylvanicus
Bruchomorpha extensa
Catocala whitneyi
Colaspis suggona
Dichagyris reliqua
Driotura robusta
Erythroneura carbonata
Glyptina brunnea
Hesperotettix speciosus
Kansendria kansiensis
Melanoplus gladstoni
Mermiria bivittata
Opeia obscura
Pachybrachis atomarius
Paraphlepsius altus
Paraphlepsius nebulosus
Polyamia dilata
Prairiana kansana
Rhynchomitra microrhina
Schinia indiana
Speyeria idalia
Triachus vacuus

Helicodiscus singleyanus

Grassland

Sand Prairie

9 - Birds	Bell's Vireo
Common Nighthawk	Eastern Meadowlark
Eastern whip-poor-will	Grasshopper Sparrow
Lark Sparrow	Upland Sandpiper
Vesper Sparrow	Western Meadowlark
10 - Herps	Blanding's Turtle
Eastern Massasauga	Gophersnake
North American Racer	Ornate Box Turtle
Prairie Ring-necked Snake	Six-lined Racerunner
Slender Glass Lizard	Timber Rattlesnake
Wood Turtle	
3 - Mammals	Franklin's Ground Squirrel
Prairie Deer Mouse	Prairie Vole
42 -Insects - Terrestrial	Aeropedellus clavatus
Arphia conspersa	Arphia simplex
Atrytonopsis hianna	Attenuipyga vanduzeei
Bruchomorpha extensa	Camnula pellucida
Catocala abbreviatella	Catocala whitneyi
Cuerna sayi	Ellipsoptera lepida
Epeolus ainsliei	Erythroneura carbonata
Fallapion impeditum	Fitchiella robertsonii
Glyptina leptosoma	Grammia phyllira
Hesperotettix speciosus	Laevicephalus vannus
Lycaeides melissa samuelis	Melanoplus flavidus
Melanoplus foedus	Melanoplus gladstoni
Melanoplus punctulatus	Memnonia panzeri
Myndus ovatus	Neolarra vigilans
Pachybrachis luridus	Pachybrachis peccans
Paraphlepsius altus	Paraphlepsius maculosus
Paraphlepsius nebulosus	Polyamia dilata
Prairiana angustens	Prairiana cinerea
Sayapion segnipes	Schinia indiana
Schinia lucens	Slaterobius quadristriata
Tetracha virginica	Trachyrhachys kiowa
Trichapion perforicolle	
1 -Invertebrates - Terrestrial Snails &	Helicodiscus singleyanus

Grassland	Surrogate Grasslands	13 - Birds Bell's Vireo Common Nighthawk Eastern Meadowlark Henslow's Sparrow Short-eared Owl Western Meadowlark 8 - Herps Eastern Massasauga North American Racer Plains Gartersnake Wood Turtle 4 - Mammals Eastern Pipistrelle Prairie Deer Mouse 1 - Insects - Terrestrial	American Woodcock Bobolink Dickcissel Grasshopper Sparrow Northern Bobwhite Upland Sandpiper Yellow-breasted Chat Blanding's Turtle Gophersnake Ornate Box Turtle Slender Glass Lizard Big Brown Bat Franklin's Ground Squirrel Speyeria idalia
Miscellaneous	Algific Talus Slope	1 - Mammals 4 - Invertebrates - Terrestrial Snails & Gastrocopta procera Vertigo hubrichti	Big Brown Bat Allogona profunda Hendersonia occulta
	Bedrock Glade	2 - Birds Eastern whip-poor-will 4 - Herps Prairie Ring-necked Snake Timber Rattlesnake	Common Nighthawk Gophersnake Six-lined Racerunner
	Caves and Subterranean Cultural	4 - Mammals Eastern Pipistrelle Northern Long-eared Bat	Big Brown Bat Little Brown Bat
	Dry Cliff	1 - Birds 3 - Herps North American Racer 2 - Mammals Eastern Pipistrelle 1 - Insects - Terrestrial 2 - Invertebrates - Terrestrial Snails & Gastrocopta procera	Peregrine Falcon Gophersnake Timber Rattlesnake Big Brown Bat Erynnis lucilius Allogona profunda
	Lacustrine Mud Flat	1 - Birds 2 - Herps Wood Turtle 5 - Mammals Eastern Pipistrelle Northern Long-eared Bat	Rusty Blackbird Eastern Massasauga Big Brown Bat Little Brown Bat Silver-haired Bat

Miscellaneous	Moist Cliff	1 - Mammals 5 - Invertebrates - Terrestrial Snails & Gastrocopta procera Hendersonia occulta	Big Brown Bat Allogona profunda Guppya sterkii Vertigo hubrichti
Northern Forest	Forested Seep	1 - Birds 1 - Herps 3 - Mammals Little Brown Bat	American Woodcock Four-toed Salamander Eastern Pipistrelle Silver-haired Bat
Savanna	Oak Opening	7 - Birds Eastern Meadowlark Henslow's Sparrow Red-headed Woodpecker 9 - Herps Gophersnake Ornate Box Turtle Six-lined Racerunner Timber Rattlesnake 5 - Mammals Eastern Pipistrelle Little Brown Bat 19 - Insects - Terrestrial Bruchomorpha extensa Coelocephalapion decoloratum Cuerna sayi Erythroneura carbonata Hesperotettix speciosus Melanoplus foedus Paraphlepsius maculosus Prairiana angustens Speyeria idalia	Common Nighthawk Eastern whip-poor-will Northern Bobwhite Vesper Sparrow Blanding's Turtle North American Racer Prairie Ring-necked Snake Slender Glass Lizard Wood Turtle Big Brown Bat Franklin's Ground Squirrel Woodland Vole Arphia simplex Catocala whitneyi Cryptocephalus cuneatus Dichromorpha viridis Hesperia metea Lycaeides melissa samuelis Pachybrachis atomarius Polyamia dilata Prairiana kansana Syrbula admirabilis
	Oak Woodland	4 - Birds Eastern whip-poor-will Worm-eating Warbler 6 - Herps Gophersnake Prairie Ring-necked Snake Wood Turtle 5 - Mammals Eastern Pipistrelle Northern Long-eared Bat 2 - Insects - Terrestrial Melanoplus foedus	Cerulean Warbler Red-headed Woodpecker Blanding's Turtle Ornate Box Turtle Timber Rattlesnake Big Brown Bat Franklin's Ground Squirrel Woodland Vole Hesperotettix speciosus

Southern Forest	Floodplain Forest	11 - Birds Cerulean Warbler Kentucky Warbler Prothonotary Warbler Red-shouldered Hawk Yellow-crowned Night-Heron 5 - Herps Eastern Massasauga Timber Rattlesnake 5 - Mammals Eastern Pipistrelle Northern Long-eared Bat 2 - Insects - Aquatic Libellula cyanea 3 - Insects - Terrestrial Lycaena dione 2 - Invertebrates - Terrestrial Snails & Zonitoides limatulus	American Woodcock Great Egret Least Flycatcher Red-headed Woodpecker Rusty Blackbird Yellow-throated Warbler Blanding's Turtle Four-toed Salamander Wood Turtle Big Brown Bat Little Brown Bat Silver-haired Bat Laccophilus undatus Bagisara gulfare Melanoplus foedus Allogona profunda
	Hemlock Relict	1 - Birds 3 - Mammals Northern Long-eared Bat	Acadian Flycatcher Eastern Pipistrelle Silver-haired Bat
	Pine Relict	3 - Birds Worm-eating Warbler 2 - Herps Timber Rattlesnake 1 - Insects - Terrestrial	Eastern whip-poor-will Yellow-throated Warbler Gophersnake Melanoplus punctulatus
	Southern Dry Forest	4 - Birds Hooded Warbler Worm-eating Warbler 6 - Herps North American Racer Prairie Ring-necked Snake Western Wormsnake 4 - Mammals Eastern Pipistrelle Woodland Vole 3 - Insects - Terrestrial Melanoplus punctulatus 1 - Invertebrates - Terrestrial Snails &	Eastern whip-poor-will Red-headed Woodpecker Gophersnake Ornate Box Turtle Timber Rattlesnake Big Brown Bat Northern Long-eared Bat Melanoplus flavidus Slaterobius quadristriata Helicodiscus singleyanus

Southern Forest	Southern Dry-mesic Forest	7 - Birds Cerulean Warbler Hooded Warbler Red-headed Woodpecker 7 - Herps Gophersnake Ornate Box Turtle Timber Rattlesnake 4 - Mammals Eastern Pipistrelle Woodland Vole 4 - Invertebrates - Terrestrial Snails & Helicodiscus singleyanus Strobilops aeneus	Acadian Flycatcher Eastern whip-poor-will Kentucky Warbler Worm-eating Warbler Blanding's Turtle North American Racer Prairie Ring-necked Snake Western Wormsnake Big Brown Bat Northern Long-eared Bat Guppya sterkii Hendersonia occulta
	Southern Mesic Forest	4 - Birds Cerulean Warbler Kentucky Warbler 6 - Herps Four-toed Salamander Ornate Box Turtle Wood Turtle 3 - Mammals Little Brown Bat 6 - Invertebrates - Terrestrial Snails & Guppya sterkii Striatura exigua Vertigo hubrichti	Acadian Flycatcher Hooded Warbler Blanding's Turtle Gophersnake Timber Rattlesnake Eastern Pipistrelle Northern Long-eared Bat Allogona profunda Hendersonia occulta Strobilops aeneus
Wetland	Emergent Marsh	6 - Birds Great Egret Rusty Blackbird Yellow-crowned Night-Heron 5 - Herps Eastern Massasauga Northern Cricket Frog 4 - Mammals Little Brown Bat Silver-haired Bat 3 - Insects - Aquatic Hygrotus marklini	Black Tern King Rail Whooping Crane Blanding's Turtle Four-toed Salamander Plains Gartersnake Big Brown Bat Northern Long-eared Bat Colymbetes exaratus Libellula cyanea

Wetland	Riverine Mud Flat	1 - Birds 5 - Mammals Eastern Pipistrelle Northern Long-eared Bat 1 - Insects - Terrestrial	Rusty Blackbird Big Brown Bat Little Brown Bat Silver-haired Bat Melanoplus gladstoni
	Shrub Carr	5 - Birds Bell's Vireo Yellow-breasted Chat 5 - Herps Eastern Massasauga Plains Gartersnake 3 - Mammals Northern Long-eared Bat	American Woodcock Rusty Blackbird Yellow-crowned Night-Heron Blanding's Turtle Four-toed Salamander Wood Turtle Little Brown Bat Silver-haired Bat
	Submergent Marsh	4 - Birds Great Egret Yellow-crowned Night-Heron 3 - Herps Northern Cricket Frog 4 - Mammals Little Brown Bat Silver-haired Bat 1 - Insects - Aquatic	Black Tern Whooping Crane Blanding's Turtle Wood Turtle Big Brown Bat Northern Long-eared Bat Libellula cyanea

Table 5.16 Western Prairie – Ecological Priorities for Conservation

Natural Communities with NCxEL Opportunity Score = 3 in this Ecological Landscape		High Priority SGCN for this Natural Community and Ecological Landscape Combination (SGCNxNatural Community and SGCNxEcological Landscape Scores = 2 or 3)	
NC Group	NC Type		
Aquatic (lakes-rivers)	Coldwater streams	2 - Mammals Little Brown Bat	Big Brown Bat
		1 -Insects - Aquatic	Wormaldia moesta
	Coolwater streams	2 - Mammals Little Brown Bat	Big Brown Bat
		3 -Insects - Aquatic Ophiogomphus smithi	Ilybius confusus Wormaldia moesta
		1 -Invertebrates - Mussels & Clams	Alasmidonta marginata
	Warmwater rivers	1 - Birds 7 - Fish Blue Sucker Goldeye Mud Darter	Great Egret Black Buffalo Crystal Darter Lake Sturgeon River Redhorse
		2 - Mammals Little Brown Bat	Big Brown Bat
		2 -Insects - Aquatic Macdunnoa persimplex	Attaneuria ruralis
		2 -Insects - Terrestrial Trimerotropis maritima	Ellipsoptera macra
		16 -Invertebrates - Mussels & Clams Anodonta suborbiculata Cumberlandia monodonta Ellipsaria lineolata Epioblasma triquetra Quadrula fragosa Quadrula nodulata Simpsonaias ambigua Truncilla donaciformis	Alasmidonta marginata Arcidens confragosus Cyclonaias tuberculata Elliptio crassidens Lampsilis higginsii Quadrula metanevra Quadrula quadrula Tritogonia verrucosa

Aquatic (lakes-rivers)	Warmwater streams	2 - Mammals Little Brown Bat 2 - Insects - Aquatic Ophiogomphus smithi 12 - Invertebrates - Mussels & Clams Cumberlandia monodonta Ellipsaria lineolata Epioblasma triquetra Quadrula nodulata Simpsonaias ambigua Truncilla donaciformis	Big Brown Bat Ilybius confusus Alasmidonta marginata Cyclonaias tuberculata Elliptio crassidens Quadrula metanevra Quadrula quadrula Tritogonia verrucosa
Grassland	Mesic Prairie	6 - Birds Dickcissel Henslow's Sparrow Upland Sandpiper 1 - Herps 2 - Mammals Little Brown Bat 5 - Insects - Terrestrial Dichromorpha viridis Fitchiella robertsonii	Bobolink Eastern Meadowlark Short-eared Owl Timber Rattlesnake Franklin's Ground Squirrel Bombus pennsylvanicus Erythroneura carbonata Polyamia dilata
	Surrogate Grasslands	12 - Birds Bobolink Eastern Meadowlark Henslow's Sparrow Loggerhead Shrike Short-eared Owl Western Meadowlark 1 - Herps 2 - Mammals Franklin's Ground Squirrel	American Woodcock Dickcissel Grasshopper Sparrow Le Conte's Sparrow Purple Martin Upland Sandpiper North American Racer Big Brown Bat
Miscellaneous	Lacustrine Mud Flat	1 - Birds 2 - Mammals Little Brown Bat	Rusty Blackbird Big Brown Bat
Wetland	Emergent Marsh	8 - Birds Black Tern King Rail Red-necked Grebe Yellow-headed Blackbird 2 - Mammals Little Brown Bat 1 - Insects - Aquatic	American Bittern Great Egret Purple Martin Rusty Blackbird Big Brown Bat Colymbetes exaratus

Wetland	Floating-leaved Marsh	6 - Birds Black Tern King Rail Yellow-headed Blackbird 2 - Mammals Little Brown Bat	American Bittern Great Egret Red-necked Grebe Big Brown Bat
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Table 5.17 List of Existing Terrestrial and Aquatic Conservation Opportunity Areas from WWAP1 Sorted by Ecological Landscape (U= Unmapped large or diffuse area, A = Aquatic) For full COA reports for each ecological landscape go to: <http://dnr.wi.gov/topic/WildlifeHabitat/COA.html>

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
Superior Coastal Plain	High Quality Wetland Communities	1.01	Bibon Swamp	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SCP5_ImpPlaces.pdf
Superior Coastal Plain	Great Lakes and their Shorelines	1.02	Bad River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SCP5_ImpPlaces.pdf
Superior Coastal Plain	Great Lakes and their Shorelines	1.03	Apostle Islands	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SCP5_ImpPlaces.pdf
Superior Coastal Plain	Great Lakes and their Shorelines	1.04	Coastal Headlands and Estuaries	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SCP5_ImpPlaces.pdf
Superior Coastal Plain	Boreal Transition Forest	1.05	Brule Boreal Forest	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SCP5_ImpPlaces.pdf
Superior Coastal Plain	Boreal Transition Forest	1.06	Pokegama-Nemadji Wetlands	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SCP5_ImpPlaces.pdf
Superior Coastal Plain	High Quality Wetland Communities	1.07	Fish Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SCP5_ImpPlaces.pdf
Superior Coastal Plain	Extensive Grassland Communities	1.08	Lake Superior Grasslands	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SCP5_ImpPlaces.pdf
Northwest Sands	Large Sedge Meadows, Fens, and Prairies	2.01	Fish Lake	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NWS5_ImpPlaces.pdf
Northwest Sands	Pine-Oak Barrens	2.02	Crex Barrens and Wetlands	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NWS5_ImpPlaces.pdf
Northwest Sands	Pine-Oak Barrens	2.03	Namekagon Barrens	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NWS5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
Northwest Sands	Pine-Oak Barrens	2.04	Douglas and Bayfield County Barrens	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NWS5_ImpPlaces.pdf
Northwest Sands	High Quality Wetland Communities	2.05	Blueberry Swamp	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NWS5_ImpPlaces.pdf
Northwest Sands	Pine-Oak Barrens	2.06	Moquah Barrens	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NWS5_ImpPlaces.pdf
Northwest Sands	Pine-Oak Barrens	2.07	Fish Lake Barrens and Wetlands	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NWS5_ImpPlaces.pdf
Northwest Sands	Large Sedge Meadows, Fens, and Prairies	2.08	Amsterdam Sloughs	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NWS5_ImpPlaces.pdf
Northwest Sands	Large Sedge Meadows, Fens, and Prairies	2.09	Crex	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NWS5_ImpPlaces.pdf
Northwest Lowlands	Large Sedge Meadows, Fens, and Prairies	3.01	Northwest Lowlands Bogs	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NWL5_ImpPlaces.pdf
Northwest Lowlands	Medium-sized Rivers and Streams	3.02	St. Croix Ridge	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NWL5_ImpPlaces.pdf
North Central Forest	Large Blocks - Old Deciduous-Coniferous Forest (climate change resistant forest systems)	4.01	Gogebic-Penoque Range	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
North Central Forest	Large Blocks - Old Deciduous-Coniferous Forest (climate change resistant forest systems)	4.02	Medford Hemlock Hardwoods	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
North Central Forest	High Quality Wetland Communities	4.03	Bootjack Bog	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
North Central Forest	Large Blocks - Old Deciduous-Coniferous Forest (climate change resistant forest systems)	4.04	Sawyer-Ashland Hemlock Hardwoods	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
North Central Forest	Large Blocks of Predominately Older Northern Forest	4.05	Blue Hills	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
North Central Forest	Large Blocks - Old Deciduous-Coniferous Forest (climate change resistant forest systems)	4.06	Nicolet Hemlock Hardwoods	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
North Central Forest	Large Blocks of Predominately Older Northern Forest	4.07	Drumlin Hardwoods	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
North Central Forest	Large Blocks of Predominately Older Northern Forest	4.08	Diamond Roof	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
North Central Forest	Large Blocks - Old Deciduous-Coniferous Forest (climate change resistant forest systems)	4.09	Winegar Moraine-Moose Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
North Central Forest	Large Blocks of Predominately Older Northern Forest	4.1	Upper Flambeau Woods	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
North Central Forest	Large Blocks of Predominately Older Northern Forest	4.11	Skinner Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
North Central Forest	Northern Highland Kettle Lakes and Pine Forest	4.12	Rock Lake End Moraine	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
Northern Highlands	Northern Highland Kettle Lakes and Pine Forest	5.01	Trout Lake Pines	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NH5_ImpPlaces.pdf
Northern Highlands	Large Sedge Meadows, Fens, and Prairies	5.02	Wisconsin River Headwaters	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NH5_ImpPlaces.pdf
Northern Highlands	Large Sedge Meadows, Fens, and Prairies	5.03	Squirrel and Tomahawk Rivers	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NH5_ImpPlaces.pdf
Northern Highlands	Northern Highland Kettle Lakes and Pine Forest	5.04	Flambeau Headwaters	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NH5_ImpPlaces.pdf
Northern Highlands	Northern Highland Kettle Lakes and Pine Forest	5.05	Blackjack Springs	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NH5_ImpPlaces.pdf
Northern Highlands	Large Sedge Meadows, Fens, and Prairies	5.06	Manitowish Powell Peatlands	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NH5_ImpPlaces.pdf
Northern Highlands	Large Sedge Meadows, Fens, and Prairies	5.07	Big Swamp	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NH5_ImpPlaces.pdf
Northern Highlands	Large Sedge Meadows, Fens, and Prairies	5.08	Thunder Lake	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NH5_ImpPlaces.pdf
Northern Highlands	Northern Highland Kettle Lakes and Pine Forest	5.09	Chain-O-Lakes	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NH5_ImpPlaces.pdf
Western Prairie	Floodplain Forest Communities	6.01	Lower St. Croix Uplands	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WP5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
Western Prairie	Extensive Grassland Communities	6.02	Prairie Potholes	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WP5_ImpPlaces.pdf
Western Prairie	Bedrock Communities	6.03	Kinnickinnic River Gorge	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WP5_ImpPlaces.pdf
Central Sand Plains	Large Sedge Meadows, Fens, and Prairies	7.01	Cottonville Colburn Wetlands	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Central Sand Plains	Extensive Grassland Communities	7.02	Central Wisconsin Grasslands	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Central Sand Plains	Large Sedge Meadows, Fens, and Prairies	7.03	Quincy Bluff and Wetlands	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Central Sand Plains	Pine-Oak Barrens	7.04	Buckhorn	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Central Sand Plains	Large Sedge Meadows, Fens, and Prairies	7.05	Meadow Valley Sandhill	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Central Sand Plains	Pine-Oak Barrens	7.06	Robinson Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Central Sand Plains	Pine-Oak Barrens	7.07	Black River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Central Sand Plains	Large Sedge Meadows, Fens, and Prairies	7.08	Dewey Marsh	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Central Sand Plains	Pine-Oak Barrens	7.09	Eau Claire and Clark Barrens Restoration	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Central Lake Michigan Coastal	Medium-sized Rivers and Streams	8.01	Lower Wolf River Corridor	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CLMC5_ImpPlaces.pdf
Central Lake Michigan Coastal	Niagara Escarpment	8.02	Red Banks Alvar	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CLMC5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
Central Lake Michigan Coastal	Great Lakes and their Shorelines	8.03	Green Bay West Shores	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CLMC5_ImpPlaces.pdf
Central Lake Michigan Coastal	High Quality Wetland Communities	8.04	Hardwood Swamps	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CLMC5_ImpPlaces.pdf
Central Lake Michigan Coastal	Great Lakes and their Shorelines	8.05	Point Beach and Woodland Dunes	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CLMC5_ImpPlaces.pdf
Central Lake Michigan Coastal	Great Lakes and their Shorelines	8.06	Kohler-Andrae	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CLMC5_ImpPlaces.pdf
Central Lake Michigan Coastal	High Quality Wetland Communities	8.07	Kellner Lake	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CLMC5_ImpPlaces.pdf
Central Lake Michigan Coastal	High Quality Wetland Communities	8.08	Holland Red Maple Swamp	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CLMC5_ImpPlaces.pdf
Central Lake Michigan Coastal	Niagara Escarpment	8.09	Greenleaf Escarpment	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CLMC5_ImpPlaces.pdf
Central Lake Michigan Coastal	Niagara Escarpment	8.1	Red Banks Escarpment	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CLMC5_ImpPlaces.pdf
Southeast Glacial Plains	Large Sedge Meadows, Fens, and Prairies	9.01	Waterloo Wetlands	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Large Sedge Meadows, Fens, and Prairies	9.02	Lake Koshkonong Wetlands	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
Southeast Glacial Plains	Large Sedge Meadows, Fens, and Prairies	9.03	Jefferson Tamarack Swamp	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Large Sedge Meadows, Fens, and Prairies	9.04	Lake Mills Wetlands	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Floodplain Forest Communities	9.05	Lower Wolf Floodplain	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Diverse Aquatic Communities	9.06	Winnebago Pools	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Large Sedge Meadows, Fens, and Prairies	9.07	Rush Lake	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Kettle Moraine Features	9.08	North to Mid Kettle Moraine	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	High Quality Wetland Communities	9.09	Horicon Marsh	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Floodplain Forest Communities	9.1	Avon Bottoms	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Extensive Grassland Communities	9.11	Muralt Bluff	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Large Sedge Meadows, Fens, and Prairies	9.12	White River Marsh	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Large Sedge Meadows, Fens, and Prairies	9.13	Cedarburg Bog	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Niagara Escarpment	9.14	Oakfield Ledge	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Niagara Escarpment	9.15	Fond du Lac Ledge	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
Southeast Glacial Plains	Niagara Escarpment	9.16	Mayville Ledge	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Niagara Escarpment	9.17	Calumet Escarpment	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Bur Oak Openings	9.18	South Kettle Moraine	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Central Sand Hills	Large Sedge Meadows, Fens, and Prairies	10.01	Comstock Bog and Germania Marsh	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSH5_ImpPlaces.pdf
Central Sand Hills	Large Sedge Meadows, Fens, and Prairies	10.02	Puckaway and Grand River Marsh	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSH5_ImpPlaces.pdf
Central Sand Hills	Bur Oak Openings	10.03	Oxford Savanna	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSH5_ImpPlaces.pdf
Central Sand Hills	Large Sedge Meadows, Fens, and Prairies	10.04	Fox River Marsh	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSH5_ImpPlaces.pdf
Central Sand Hills	Floodplain Forest Communities	10.05	Pine Island	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSH5_ImpPlaces.pdf
Western Coulee and Ridges	Driftless Area Features	11.01	Lower Kickapoo and Kickapoo	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Driftless Area Features	11.02	Coon Creek Mesic	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Driftless Area Features	11.03	Coulee Forests	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Driftless Area Features	11.04	Buffalo County Oak Forest	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Bur Oak Openings	11.05	Otter Creek Oak Barrens	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
Western Coulee and Ridges	Bur Oak Openings	11.06	Lower Chippewa Savannas	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Bur Oak Openings	11.07	Fort McCoy Barrens and Oak Savanna	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Driftless Area Features	11.08	Green Sand Cuesta	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Driftless Area Features	11.09	Baraboo Hills and North Range	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Driftless Area Features	11.1	Snow Bottom	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Driftless Area Features	11.11	Dodgeville and Wyoming Oak Woodland/Savanna	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Driftless Area Features	11.12	Rush Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Large River Corridors	11.14	Lower Chippewa Bluffs and Floodplain	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Large River Corridors	11.15	Mississippi Bluffs and Floodplain	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Large River Corridors	11.16	Lower Wisconsin Bluffs and Floodplain	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Driftless Area Features	11.17	Millville-Sandy Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Large River Corridors	11.18	Rush River Bluffs and Floodplain	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Southern Lake	Great Lakes and their Shorelines	12.01	Chiwaukee Prairie	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SLMC5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
Michigan Coastal				
Southern Lake Michigan Coastal	Extensive Grassland Communities	12.02	Bong Grasslands	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SLMC5_ImpPlaces.pdf
Southwest Savanna	Large Sedge Meadows, Fens, and Prairies	13.01	Southwest Grasslands and Streams	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SWS5_ImpPlaces.pdf
Southwest Savanna	Large Sedge Meadows, Fens, and Prairies	13.02	Hardscrabble Prairie	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SWS5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.01	Rock Island	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.02	Detroit Harbor	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.03	Big and Little Marsh	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.04	Coffey Swamp	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.05	Jackson Harbor	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.06	Chambers Island	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan	Great Lakes and their Shorelines	14.07	Gardner Marsh	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
Coastal				
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.08	Potawatomi State Park	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.09	Bayshore Blufflands	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.1	White Cliff Fen and Forest	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.11	Thorp Pond	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.12	Baileys Harbor to Peninsula	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.13	Kangaroo Lake	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.14	Hibbard Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.15	Logan Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.16	Whitefish Dunes to Sturgeon Bay	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.17	Ellison Bluff	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.18	Door Bluff County Park	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.19	Mink River to Europe Bay	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.2	Boyer Bluff	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	High Quality Wetland Communities	14.21	Lake Noquebay	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	14.22	West Shore Green Bay	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Northeast Sands	Large Blocks of Predominately Older Northern Forest	15.01	Peshtigo River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NES5_ImpPlaces.pdf
Northeast Sands	High Quality Wetland Communities	15.02	Brazeau Swamp	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NES5_ImpPlaces.pdf
Northeast Sands	Large Blocks of Predominately Older Northern Forest	15.03	Nicolet Dry Forest	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NES5_ImpPlaces.pdf
Northeast Sands	High Quality Wetland Communities	15.04	Northeast Wisconsin Forest	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NES5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
Northeast Sands	Pine-Oak Barrens	15.05	Dunbar Barrens	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NES5_ImpPlaces.pdf
Northeast Sands	Pine-Oak Barrens	15.06	Athelstane Barrens	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NES5_ImpPlaces.pdf
Northeast Sands	Working Northern Forest Communities	15.07	Spread Eagle Barrens	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NES5_ImpPlaces.pdf
Northeast Sands	High Quality Wetland Communities	15.08	Coleman Lake	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NES5_ImpPlaces.pdf
Northeast Sands	High Quality Wetland Communities	15.09	Amberg	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NES5_ImpPlaces.pdf
Forest Transition	Large Blocks of Predominately Older Northern Forest	16.01	Menominee Forest	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/FT5_ImpPlaces.pdf
Forest Transition	Extensive Grassland Communities	16.02	Mead	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/FT5_ImpPlaces.pdf
Forest Transition	Large Blocks of Predominately Older Northern Forest	16.03	Straight Lake	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/FT5_ImpPlaces.pdf
North Central Forest	High Quality Wetland Communities	04.U1	North Central Bogs (unmapped)	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
Central Sand Plains	High Quality Wetland Communities	07.U1	Coastal Plain Marsh (unmapped)	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Central Sand Plains	Bedrock Communities	07.U2	Sandstone Buttes and Cliffs (unmapped)	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Southeast Glacial Plains	High Quality Wetland Communities	09.U1	High Quality Wetlands/SE Plain Marshes (unmapped)	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
Central Sand Hills	High Quality Wetland Communities	10.U1	Coastal Plain Marsh (unmapped)	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSH5_ImpPlaces.pdf
Western Coulee and Ridges	Driftless Area Features	11.U1	Driftless Area Remnant Features (unmapped)	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Northeast Sands	Bedrock Communities	15.U1	Northeast Sands Bedrock (unmapped)	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NES5_ImpPlaces.pdf
Superior Coastal Plains	Great Lakes and their Shorelines	A.01	Lake Superior	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SCP5_ImpPlaces.pdf
Central Lake Michigan Coastal	Great Lakes and their Shorelines	A.02	Lake Michigan	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CLMC5_ImpPlaces.pdf
Southern Lake Michigan Coastal	Great Lakes and their Shorelines	A.02 b	Lake Michigan	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Great Lakes and their Shorelines	A.02c	Lake Michigan	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Southeast Glacial Plains	Medium-sized Rivers and Streams	A.03	Milwaukee River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southern Lake Michigan Coastal	Medium-sized Rivers and Streams	A.03 b	Milwaukee River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SLMC5_ImpPlaces.pdf
Central Sand Hills	Diverse Aquatic Communities	A.04	Chaffee Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSH5_ImpPlaces.pdf
North Central Forest	Medium-sized Rivers and Streams	A.05	Upper Wolf River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
Southeast Glacial Plains	Medium-sized Rivers and Streams	A.05b	Upper Wolf River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Northeast Sands	Medium-sized Rivers and Streams	A.05c	Upper Wolf River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NES5_ImpPlaces.pdf
Forest Transition	Medium-sized Rivers and Streams	A.05d	Upper Wolf River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/FT5_ImpPlaces.pdf
Central Lake Michigan Coastal	Medium-sized Rivers and Streams	A.06	Wolf-Shioc-Embarass Rivers	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CLMC5_ImpPlaces.pdf
Northern Lake Michigan Coastal	Medium-sized Rivers and Streams	A.06b	Lower Wolf Rivers	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NLMC5_ImpPlaces.pdf
Forest Transition	Medium-sized Rivers and Streams	A.07	Little Wolf River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/FT5_ImpPlaces.pdf
Northeast Sands	Medium-sized Rivers and Streams	A.08	Peshtigo River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NES5_ImpPlaces.pdf
North Central Forest	Medium-sized Rivers and Streams	A.09	Pine-Popple Rivers	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
Western Coulee and Ridges	Large River Corridors	A.10	Mississippi River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Southeast Glacial Plains	Medium-sized Rivers and Streams	A.11	Mukwonago and Illinois Fox Rivers	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Diverse Aquatic Communities	A.12	Sugar Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Medium-sized Rivers and Streams	A.13	Turtle Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
Southeast Glacial Plains	Medium-sized Rivers and Streams	A.14	Bark River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Medium-sized Rivers and Streams	A.15	Oconomowoc River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Diverse Aquatic Communities	A.16	Raccoon Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Southeast Glacial Plains	Diverse Aquatic Communities	A.17	Sugar River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SEGP5_ImpPlaces.pdf
Western Coulee and Ridges	Large River Corridors	A.18	Platte River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Large River Corridors	A.19	Lower Wisconsin River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Forest Transition	Medium-sized Rivers and Streams	A.20	Middle Wisconsin River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/FT5_ImpPlaces.pdf
Central Sand Hills	Medium-sized Rivers and Streams	A.21	Wisconsin-Baraboo Rivers	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSH5_ImpPlaces.pdf
Western Coulee and Ridges	Medium-sized Rivers and Streams	A.21 b	Lower Baraboo Rivers	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Diverse Aquatic Communities	A.22	Baraboo Hills Streams	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Central Sand Plains	Diverse Aquatic Communities	A.23	Lemonweir River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Central Sand Plains	Diverse Aquatic Communities	A.24	Yellow River-Hemlock Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Forest Transition	Diverse Aquatic Communities	A.25	Plover River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/FT5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
Forest Transition	Medium-sized Rivers and Streams	A.26	Rib-Little Rib Rivers	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/FT5_ImpPlaces.pdf
Northern Highlands	Diverse Aquatic Communities	A.27	Squirrel-Tomahawk Rivers	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NH5_ImpPlaces.pdf
Western Coulee and Ridges	Large River Corridors	A.28	Bad Axe River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Central Sand Plains	Large River Corridors	A.29	Lower Black River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Central Sand Plains	Medium-sized Rivers and Streams	A.30	Robinson Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Central Sand Plains	Medium-sized Rivers and Streams	A.31	Halls Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Western Coulee and Ridges	Medium-sized Rivers and Streams	A.31 b	Upper Halls Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Central Sand Plains	Medium-sized Rivers and Streams	A.32	Morrison Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Central Sand Plains	Medium-sized Rivers and Streams	A.33	Wedges Creek	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Western Coulee and Ridges	Large River Corridors	A.34	Trempealeau River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Western Coulee and Ridges	Large River Corridors	A.35	Buffalo River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
North Central Forest	Medium-sized Rivers and Streams	A.36	Middle Chippewa River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
Western Coulee and Ridges	Large River Corridors	A.37	Lower Chippewa and Red Cedar Rivers	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
North Central Forest	Diverse Aquatic Communities	A.38	Blue Hills Streams	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
Central Sand Plains	Medium-sized Rivers and Streams	A.39	Eau Claire River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/CSP5_ImpPlaces.pdf
Western Coulee and Ridges	Medium-sized Rivers and Streams	A.39 b	Eau Claire River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
North Central Forest	Medium-sized Rivers and Streams	A.40	Jump-Lower Flambeau Rivers	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
North Central Forest	Diverse Aquatic Communities	A.41	Flambeau River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
Northern Highlands	Medium-sized Rivers and Streams	A.42	Trout-Manitowish Headwaters	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NH5_ImpPlaces.pdf
North Central Forest	Diverse Aquatic Communities	A.43	Upper Forks Chippewa River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
Northwest Sands	Medium-sized Rivers and Streams	A.45	Upper St. Croix-Namekagon Rivers	
Northwest Lowlands	Medium-sized Rivers and Streams	A.45 b	Upper St. Croix-Namekagon Rivers	
Western Prairie	Large River Corridors	A.46	Lower St. Croix River and Lower Apple River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WP5_ImpPlaces.pdf
Forest Transition	Medium-sized Rivers and Streams	A.46 b	Lower St. Croix River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/FT5_ImpPlaces.pdf
Northwest Sands	Diverse Aquatic Communities	A.47	Yellow River North	
Superior Coastal Plains	Diverse Aquatic Communities	A.48	White-Bad Rivers	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SCP5_ImpPlaces.pdf

Ecological Landscape	Ecological Feature	ID	COA Name	Online Map Link to Location
North Central Forest	Diverse Aquatic Communities	A.49	Chippewa Moraine Lakes	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
North Central Forest	Diverse Aquatic Communities	A.50	Birchwood Moraine Lakes	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
North Central Forest	Diverse Aquatic Communities	A.51	Harrison Hills Lakes	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
Superior Coastal Plains	Diverse Aquatic Communities	A.52	St. Louis Estuary	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SCP5_ImpPlaces.pdf
North Central Forest	Diverse Aquatic Communities	A.53	Brunet and Thornapple River	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/NCF5_ImpPlaces.pdf
Western Coulee and Ridges	Diverse Aquatic Communities	A.55	Little Platte River & Tributaries	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/WCR5_ImpPlaces.pdf
Southwest Sands	Diverse Aquatic Communities	A.55 b	Little Platte River & Tributaries	http://dnr.wi.gov/topic/landscapes/documents/ELMaps/SWS5_ImpPlaces.pdf

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Figure 5.1 Potential Additions to COAs Based on USFS Significant Ecological Areas within the Chequamegon-Nicolet Forest

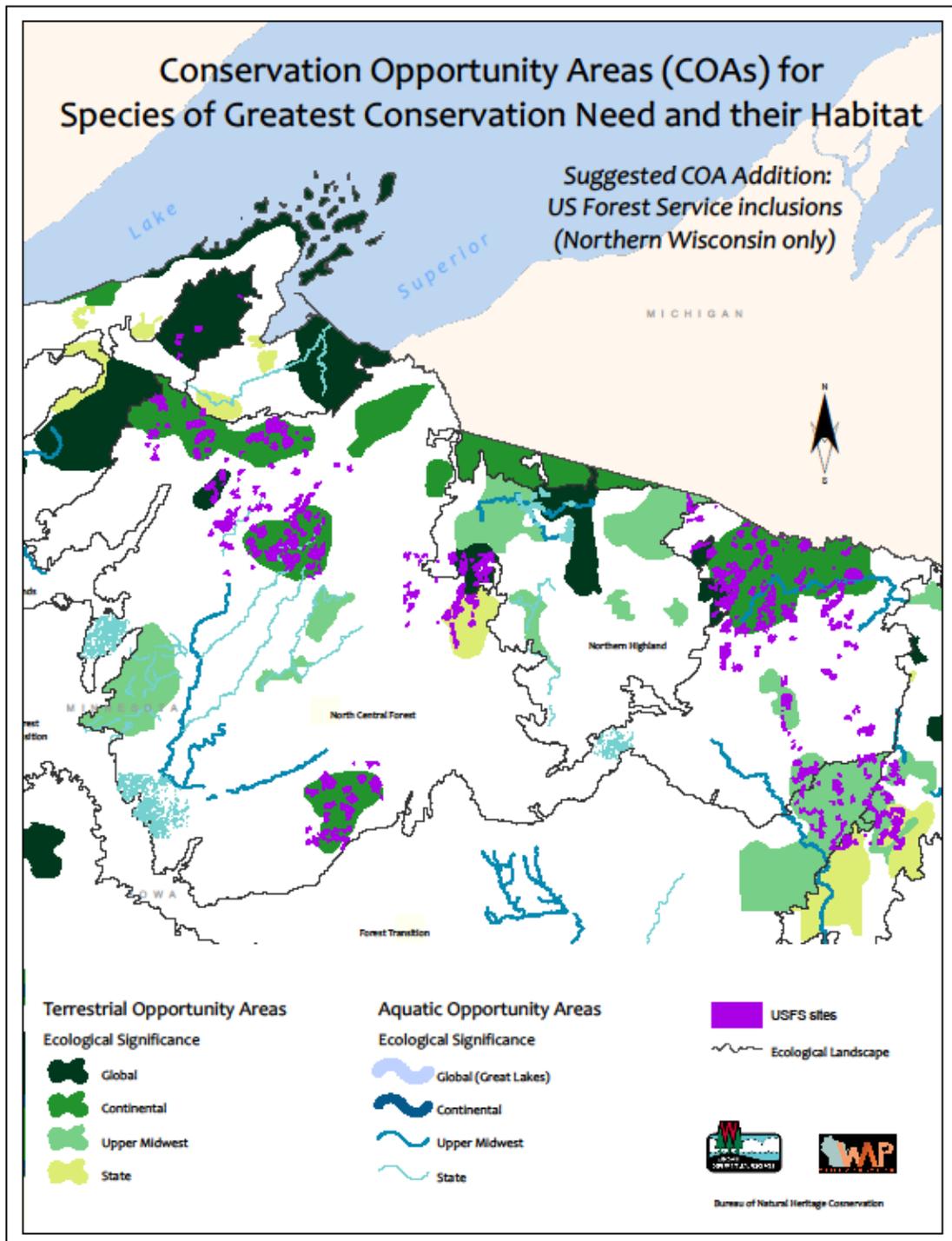


Figure 5.2 Portion of the Results from the First Phase of Filtering TNC Portfolio Lakes

