Invasive Species Inventory: Ashland County Parks and Properties



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Project Description

I conducted vegetation surveys on parks and properties owned by Ashland County and managed by the Ashland County Land and Water Conservation Department with the purpose of recording the abundances and locations of invasive species. In addition, I took qualitative notes on the native plant community types present at all of these sites. These data and the subsequent report are designed to be used by resource managers as well as community groups and citizens to control invasive plants in these areas. In some cases, the native community data can be used as a starting point for restoration projects. Data and notes were collected while considering that the report is intended to be used not just by ecologists and resource managers but by ordinary citizens and community groups. Because of the potential for a diverse set of users, this report is relatively qualitative in scope.

These data were collected between late August and the end of September in 2012 and may over-represent plants that are more easily identified at the later stages of the growing season. It is possible that a species of low abundance could have been missed at a given site but it is unlikely that anything with an abundance of 5% or greater was missed at any site.

Methods

I took an inventory of all invasive species present at each site and assigned them an abundance class (Table 1) based on the percent cover of that species. Percent cover was defined as the percent of the area that the species when foliated cover when viewed from above. Because some species grow under others, the total added percent cover of all species on a site is almost always more than 100%. All percent cover estimates are estimated as a percent of the total area in a site that is considered a "natural area," meaning an area that is not regularly mowed or maintained. Some sites have none of these areas while some are totally "natural" and others are a mix. Because some sites have separate natural areas they may have been inventoried separately. The details of areas inventoried at each site were well noted and is made clear in the site descriptions.

Almost all of this data was collected in August and September of 2012 however some of the site descriptions are derived from data I collected for a separate project in June of 2012 that covered some of the same sites. These previous data were collected using the same abundance classes as the data collected in August and June.

Table 1. Percent	cover c	lasses used	l to es	tımate p	lant a	bundances.
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Abundance Class	Percent Cover
Trace	<1%
Low	1-5%
Moderate	5-25%
Heavy	25-50%
Dominant	>50%

Anglers All

Area 1 – Natural areas adjacent to the shoreline of Lake Superior.

Native Community – The western half of the shoreline of this property is dominated by prairie plants like asters and grasses while the eastern half of the shoreline is inhabited by shrubby species like Willows, Red Osier Dogwood and Sumac.

Invasive Community

Scientific Name	Common Name	Abundance
Cirsium arvense	Canada Thistle	Low
Conium maculatum	Poison Hemlock	Trace
Coronilla varia	Crown Vetch	Trace
Euphorbia cyparissias	Cypress Spurge	Low
Melilotus spp.	Sweet Clover	Moderate
Tanacetum vulgare	Common Tansy	Low
Tyhpa spp.	Cattail	Trace

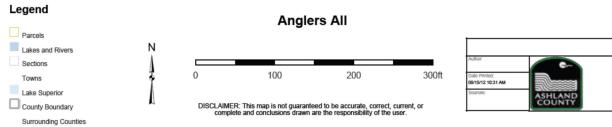
Area 2 – Small natural area to the south of the artesian well.

Native Community – This small area is inhabited by a mix of Willows, Ash, Red Osier Dogwood, asters and grasses.

Invasive Community

Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Trace
Cirsium arvense	Canada Thistle	Trace
Lonicera x bella	Exotic Bush Honeysuckle	Moderate
Rhamnus frangula	Glossy Buckthorn	Low
Tanacetum vulgare	Common Tansy	Trace





City of Ashland Streets

Ashland County Courthouse

Native Community – There are no natural areas on this property and few native landscape species.

Invasive Community – All invasives on this property have been planted or maintained as landscaping plants.

- Japanese Barberry There are 5 individuals planted on the most southernmost corner of the courthouse property. Seven additional individuals are located on the west side of the courthouse and there is one individual located on the western corner of the property.
- Exotic Honeysuckle There are 4 clusters of exotic honeysuckle at this site. One is located adjacent to the sidewalk leading to the highway and the other three are located off of the northern corner of the courthouse building.

Ashland County Fairgrounds

Native Community – The southern edge of this site is a forested area that is dominated by Sugar Maple and Ash with low amounts of White Spruce. There is a small area to the north of this forest that is not forested or mowed and it is dominated by prairie species.

Invasive Community

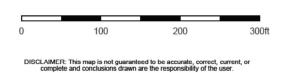
Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Low
Cirsium arvense	Canada Thistle	Low
Euphorbia cyparissias	Cypress Spurge	Low
Hieracium aurantiacum	Devil's Paintbrush	Low
Lonicera x bella	Exotic Bush Honeysuckle	Low
Phalaris arundinacea	Reed Canary Grass	Trace
Rhamnus cathartica	Common Buckthorn	Heavy
Verbascum thapsus	Mullein	Trace



Parcels

City of Ashland Streets

Ashland County Fairgrounds





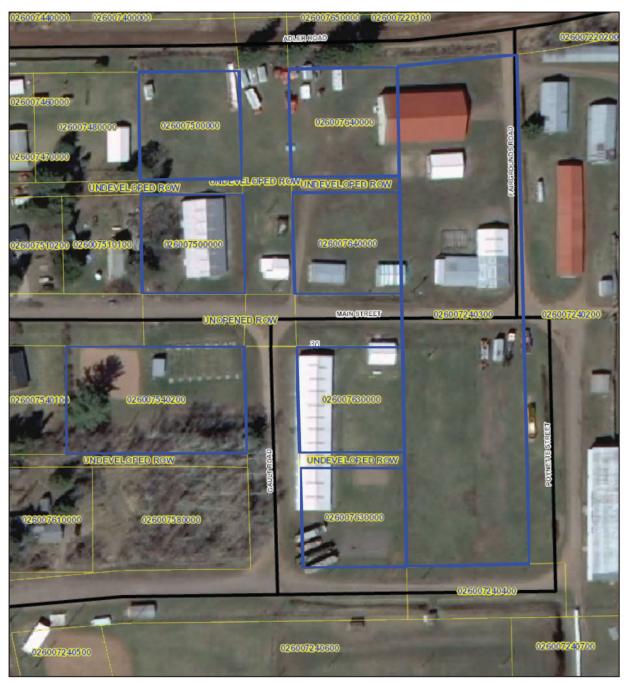
Ashland County Fairgrounds Exhibit Area

Area 1 – Natural forest areas on the western side of the property.

Native Community – The natural areas at this site are variable in their soil moisture and the native plant communities seem to follow this gradient. Most of the natural areas are dominated by an overstory of Quaking Aspen. The wetter parts of these areas are occupied by an understory of shrubby Willows. These natural areas are mostly fenced off from the rest of the fairgrounds.

Invasive Community – The understory of these areas is largely unvegetated but most of the vegetation that is established is occupied by invasive shrubs.

Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Trace
Cirsium arvense	Canada Thistle	Trace
Euphorbia cyparissias	Cypress Spurge	Trace
Lonicera x bella	Exotic Bush Honeysuckle	Low
Phalaris arundinacea	Reed Canary Grass	Trace
Rhamnus cathartica	Common Buckthorn	Moderate
Trifolium pratense	Red Clover	Low
Tyhpa spp.	Cattail	Trace



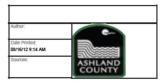
Parcels
Town Roads

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Ashland County Fairgrounds Exhibit Area



DISCLAIMER: This map is not guaranteed to be accurate, correct, current, or complete and conclusions drawn are the responsibility of the user.



Ashland County Fairgrounds Softball Field

Native Community – No native community present.

Invasive Community – No native community present.

Ashland County Fairgrounds Grandstand Area

Area 1

Native Community- The natural area east of the dirt track and on the east edge of the property is dominated by prairie plants like Asters, Grasses and Milkweed.

Invasive Community – Some of the invaders in this prairie strip have moved into the western edge of the Aspen forest adjacent to the site but many are sun loving prairie species that will not do well deeper in the shaded forest.

Scientific Name	Common Name	Abundance
Barbarea vulgaris	Yellow Rocket	Low
Centaurea biebersteinii	Spotted Knapweed	Low
Cirsium arvense	Canada Thistle	Low
Euphorbia cyparissias	Cypress Spurge	Moderate
Hieracium aurantiacum	Devil's Paintbrush	Low
Melilotus spp.	Sweet Clover	Moderate
Phalaris arundinacea	Reed Canary Grass	Moderate
Polygonum cuspidatum	Japanese Knotweed	Low
Tanacetum vulgare	Common Tansy	Heavy
Trifolium pratense	Red Clover	Trace

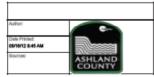


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Ashland County Fairgrounds Grandstand Area





Ashland Rail System – Sanborn Ave-Hot Pond

Area 1 – Natural area south of the lake trail and at the far west side of the site.

Native Community - This area contains a drainage wetland that is dominated by cattail and is also home to wetland species like Fox Sedge, Wool Grass, Horsetail and Jewel Weed. There is a slope above this wetland that is dominated by grasses and asters with some native shrubs like Red Osier Dogwood.

Invasive Community – The drainage wetland in this area contains native and non-native Cattail and like the rest of the lake trail west of Ellis Avenue has significant amounts of Reed Canary Grass and Poison Parsnip.

Additional Details – This site was inventoried in June of 2012 with more attention paid to specific native species. Because this inventory was conducted closer to the peak of the growing season, it is more likely that the resulting data is reflective of the actual assemblage of native and exotic communities. A report about this and other sites entitled "Invasive Species Inventory: City of Ashland Waterfront & Prentice Park" and associated files are available from Northland College through the same project contact as this report.

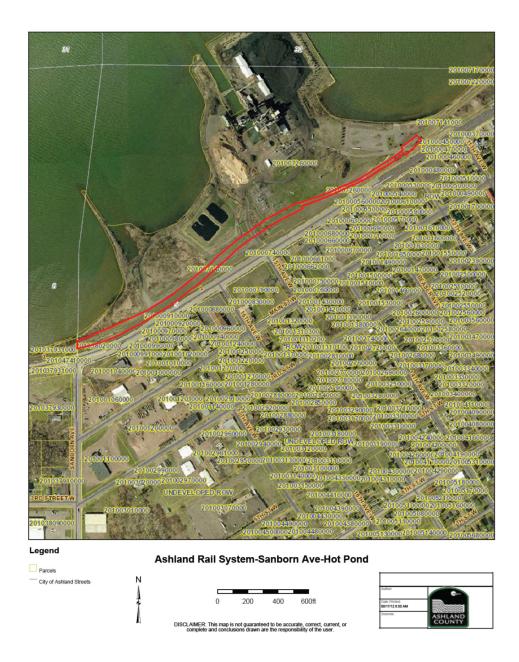
Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Trace
Cirsium arvense	Canada Thistle	Low
Pastinica sativa	Wild Parsnip	Low
Phalaris arundinacea	Reed Canary Grass	Low
Rhamnus cathartica	Common Buckthorn	Low
Rhamnus frangula	Glossy Buckthorn	Trace
Solanum dulcamara	Deadly Nightshade	Trace
Tanacetum vulgare	Common Tansy	Moderate
Tyhpa spp.	Cattail	Dominant

Area 2 – Natural areas east of Area 1 – Hot Pond

Native Community – Natural areas at this site are locally dominated by native shrubs like Red Osier Dogwood, Prickly Rose and Early Wild Rose as well as some Willows that may be native.

Invasive Community – Many areas at this site are totally dominated by Wild Parsnip while others are more dominated by Common Tansy and Canada Thistle. This site and the rest of the lakefront trail west of Ellis Avenue have a significant amount of area totally dominated by Wild Parsnip.

Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Low
Cirsium arvense	Canada Thistle	Low
Euphorbia cyparissias	Cypress Spurge	Trace
Melilotus spp.	Sweet Clover	Low
Pastinica sativa	Wild Parsnip	Heavy
Phalaris arundinacea	Reed Canary Grass	Trace
Rhamnus cathartica	Common Buckthorn	Moderate
Robinia pseudoacacia	Black Locust	Low
Solanum dulcamara	Deadly Nightshade	Low
Tanacetum vulgare	Common Tansy	Moderate



<u>Ashland Rail System - Hot Pond - Memorial Park</u>

Native Community – Like many other sites in Ashland, this large site is dominated by an overstory of Quaking Aspen, Ash and Box Elder with an understory of Red-Osier Dogwood. Many areas directly to the south of this trail are ditched zones that contain native sedges and other wetland species.

Invasive Community – Like the rest of the lakefront trail on this side of Ashland, this area is dominated by Wild Parsnip. Reed Canary Grass grows in most of the ditches described above and Common buckthorn and Exotic Honeysuckle dominate many shrubby zones although some areas have undergone control efforts directed at these two shrubby species.

Additional Details – This site was inventoried in June of 2012 with more attention paid to specific native species. Because this inventory was conducted closer to the peak of the growing season, it is more likely that the resulting data is reflective of the actual assemblage of native and exotic communities. A report about this and other sites entitled "Invasive Species Inventory: City of Ashland Waterfront & Prentice Park" and associated files are available from Northland College through the same project contact as this report

Ashland Rail System – 17th Ave W – Sanborn Avenue

Area 1 – Natural areas adjacent to the tri-county corridor between Sanborn

Native Community – Areas that are not mowed or maintained by the city are dominated by an overstory of Ash, Quaking Aspen and Box Elder. Willow and Dogwood shrubs dominate the understory especially on the north side of the walking path where invaders are less abundant.

Invasive Community – Exotic Honeysuckle is very abundant, especially on the south side of the walking path. Other invasive species are also more abundant on this side of the trail. It appears that some homeowners or other groups have been trying to control invasives species on the south side of the trail.

Scientific Name	Common Name	Abundance
Cirsium arvense	Canada Thistle	Trace
Daucus carota	Queen Anne's-lace	Trace
Euphorbia cyparissias	Cypress Spurge	Trace
Lonicera x bella	Exotic Bush Honeysuckle	Dominant
Melilotus spp.	Sweet Clover	Low
Pastinica sativa	Wild Parsnip	Trace
Phalaris arundinacea	Reed Canary Grass	Trace
Polygonum cuspidatum	Japanese Knotweed	Low
Polygonum sachalinense	Giant Knotweed	Low
Rhamnus cathartica	Common Buckthorn	Moderate
Tanacetum vulgare	Common Tansy	Moderate
Tyhpa spp.	Cattail	Low
Viburnum lantana	Wayfaring Tree	Trace

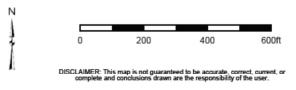


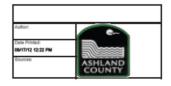


Railroads

City of Ashland 2009 Color Ortho

Ashland Rail Trail System-17th Ave W- Sanborn Ave





<u>Ashland Rail System – 9th Ave W – 17th Ave W</u>

Area 1 – 17^{th} Ave W – 15^{th} Ave W

Native Community – Natural areas are dominated by Quaking Aspen, Ash and Box Elder except for one area which has been planted with lines of White Cedar.

Invasive Community – Woody invaders are beginning to move towards the north side of the trail.

Scientific Name	Common Name	Abundance
Cirsium arvense	Canada Thistle	Trace
Elaeagnus angustifolia	Russian Olive	Low
Lonicera x bella	Exotic Bush Honeysuckle	Moderate
Polygonum cuspidatum	Japanese Knotweed	Low
Rhamnus cathartica	Common Buckthorn	Moderate
Tanacetum vulgare	Common Tansy	Moderate

Area 2 - 15th Ave W - 14th Ave W

Native Community – Natural areas are dominated by Ash trees and Cherry shrubs with Raspberry and Dogwood growing abundantly right next to the trail. Grape vines are abundant and are growing on native and invasive species.

Invasive Community – Areas with native shrubby vegetation (Dogwood and Cherry) are heavily invaded by Common Buckthorn and Exotic Honeysuckle when compared to other areas that are dominated native shrubs.

Scientific Name	Common Name	Abundance
Cirsium arvense	Canada Thistle	Low
Lonicera x bella	Exotic Bush Honeysuckle	Moderate
Rhamnus cathartica	Common Buckthorn	Dominant
Tanacetum vulgare	Common Tansy	Low

Area 3 – 14th Ave W – Beaser Ave on south side of trail

Native Community – Red-Osier Dogwood is dominant on the south side of the trail and Raspberry is present right next to the walking path. A few Hawthorne individuals are present.

Invasive Community – Natural areas are being heavily invaded by Common Buckthorn.

Scientific Name	Common Name	Abundance
Alianthus altissima	Tree-of-heaven	Low
Cirsium arvense	Canada Thistle	Low
Lonicera x bella	Exotic Bush Honeysuckle	Moderate
Rhamnus cathartica	Common Buckthorn	Heavy
Tanacetum vulgare	Common Tansy	Trace

Area 4 – Beaser Ave – 11th Ave W

Native Community – No native community present.

Invasive Community – No invasive community present.

Area
$$5 - 11^{th}$$
 Ave $W - 10^{th}$ Ave W

Native Community – The south side of the trail has a large line of planted White Spruce and natural areas dominated by Ash and Box Elder. The north side of the trail is dominated by Willow trees and shrubs as well as Elm, Box Elder and Red Osier Dogwood.

Invasive Community – The south side of the trail is being invaded heavily while the understory on the northern side of the trail seems to have been recently cleared of all vegetation.

Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Trace
Cirsium arvense	Canada Thistle	Trace
Hesperis matronalis	Dame's Rocket	Low
Lonicera x bella	Exotic Bush Honeysuckle	Moderate
Rhamnus cathartica	Common Buckthorn	Moderate
Robinia pseudoacacia	Black Locust	Moderate
Tanacetum vulgare	Common Tansy	Low

Area 6 –
$$10^{th}$$
 Ave W – 9^{th} Ave W

Native Community – Box Elder, Elm and Ash are dominant throughout the site and Grape vines dominate the southern side of the trail.

Invasive Community

Scientific Name	Common Name	Abundance
Cirsium arvense	Canada Thistle	Low
Euphorbia cyparissias	Cypress Spurge	Trace
Lonicera x bella	Exotic Bush Honeysuckle	Moderate
Rhamnus cathartica	Common Buckthorn	Dominant
Robinia pseudoacacia	Black Locust	Low
Viburnum lantana	Wayfaring Tree	Low



City of Ashland Streets Private Roads 200 400 600ft ate Printed: 18/17/12 12:11 PM County Roads DISCLAIMER: This map is not guaranteed to be accurate, correct, current, or complete and conclusions drawn are the responsibility of the user. State Highways US Highways + Railroads

Ashland Rail System – Ellis Ave – 9th Ave W

Area 1 - 9th Ave W – Chapple Avenue

Native Community - Some areas are shrubby and are dominated by Red Osier Dogwood while the rest are dominated by an Aspen colony with a few Crabapple individuals.

Invasive Community - Invasive species have not heavily invaded dense shrubby areas but are more prevalent in the open Aspen forested areas.

Scientific Name	Common Name	Abundance
Cirsium arvense	Canada Thistle	Trace
Coronilla varia	Crown Vetch	Trace
Loonier x bella	Exotic Bush Honeysuckle	Moderate
Polygonum cuspidatum	Japanese Knotweed	Low
Rhamnus cathartica	Common Buckthorn	Heavy
Solanum dulcamara	Deadly Nightshade	Trace
Tanacetum vulgare	Common Tansy	Low

Area 2 – Chapple Avenue – Vaughn Avenue

Native Community – Similar to area 1 of this site with some areas more dominated by Box Elder.

Invasive Community

Scientific Name	Common Name	Abundance
Cirsium arvense	Canada Thistle	Trace
Coronilla varia	Crown Vetch	Trace
Lonicera x bella	Exotic Bush Honeysuckle	Moderate
Pastinica sativa	Wild Parsnip	Trace
Rhamnus cathartica	Common Buckthorn	Dominant
Robinia pseudoacacia	Black Locust	Low
Tanacetum vulgare	Common Tansy	Trace

Area 3 – Vaughn Avenue- Ellis Avenue

Native Community – No native community present.

Invasive Community – No invasive community present.



Sections

City of Ashland Streets

Ashland Rail System-Ellis Ave-9th street W

200 400 600ft



Ashland Rail System - Stuntz Ave - Ellis Ave

Area 1 – Ellis Avenue -3rd Avenue East

Native Community – The small strip of natural vegetation is located near Ellis Avenue on the south side of the tri-county-corridor. Drier areas are almost totally dominated by Willow shrubs while a wetter area on the western edge of this strip is dominated by grasses and asters with a trace amount of a few different sedge species.

Invasive Community - There are few invasives present at this site and almost none in the shrubby zone.

Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Trace
Melilotus spp.	Sweet Clover	Low
Phalaris arundinacea	Reed Canary Grass	Trace
Rhamnus cathartica	Common Buckthorn	Low
Tanacetum vulgare	Common Tansy	Low
Trifolium pratense	Red Clover	Low

Area 2 – 3rd Avenue East – Prentice Avenue

Native Community – No native community present.

Invasive Community – No invasive community present.

Area 3 – Prentice Avenue – 5th Avenue East

Native Community – Grasses, Asters and other prairie species make up the native community in a small strip of natural vegetation on the south side of the trail closer to Prentice Avenue.

Invasive Community – The amount of natural area at this site is low and is not heavily invaded.

Scientific Name	Common Name	Abundance
Cirsium arvense	Canada Thistle	Trace
Euphorbia cyparissias	Cypress Spurge	Trace
Lotus corniculatus	Birds-foot Trefoil	Trace
Rhamnus cathartica	Common Buckthorn	Trace
Tanacetum vulgare	Common Tansy	Trace

Area 4 – 5th Avenue East – Willis Avenue

Native Community – No native community present

Invasive Community – No invasive community present

Area 5 – Willis Avenue – 7th Avenue East

Native Community – No native community present

Invasive Community – Several Exotic Honeysuckle shrubs are planted as hedge on the south side of the trail but they may be on private property.

Area 6 – 7th Avenue East –Stuntz Avenue

Native Community – No native community present.

Invasive Community – No invasive community present.



Legend Ashland Rail System-Stuntz Ave- Ellis Ave Sections City of Ashland Streets Private Roads County Roads County Roads State Highways US Highways DISCLAIMER: This map is not guaranteed to be accurate, correct, current, or complete and conclusions drawn are the responsibility of the user.

→ Railroads

<u>Ashland Rail System - Hodgkins Park - Stuntz Avenue</u>

Area 1 – Stuntz Avenue – County A

Native Community – The ravine of Bay City Creek is dominated by Willow and Ash trees and the areas outside of the ravine are mostly occupied by an Aspen colony. Box Elder, Red Osier Dogwood and a planted conifer mixture are also present next to the trail outside of the ravine.

Invasive Community – The ravine is heavily invaded with Common Buckthorn, almost to 100% cover. The Aspen Forest is being invaded by Common Buckthorn and Exotic Honeysuckle but hasn't been totally invaded yet. The planted conifers have not been invaded at all.

Scientific Name	Common Name	Abundance
Cirsium arvense	Canada Thistle	Trace
Coronilla varia	Crown Vetch	Trace
Euphorbia cyparissias	Cypress Spurge	Trace
Lonicera x bella	Exotic Bush Honeysuckle	Moderate
Melilotus spp.	Sweet Clover	Trace
Polygonum sachalinense	Giant Knotweed	Low
Rhamnus cathartica	Common Buckthorn	Heavy
Rhamnus frangula	Glossy Buckthorn	Low
Solanum dulcamara	Deadly Nightshade	Trace
Tanacetum vulgare	Common Tansy	Moderate
Trifolium pratense	Red Clover	Trace

Area 2 – County A – 14th Avenue East

Native Community – The small natural area at this site is located on the north side of the trail and at the eastern edge of the site, close to 14th Avenue East. It is dominated by a Quaking Aspen colony with some Balsam Poplar and grasses growing under the colony.

Invasive Community – Common Buckthorn is invading the Aspen colony.

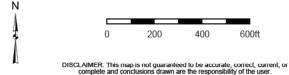
Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Trace
Euphorbia cyparissias	Cypress Spurge	Trace
Lonicera x bella	Exotic Bush Honeysuckle	Low
Polygonum cuspidatum	Japanese Knotweed	Low
Rhamnus cathartica	Common Buckthorn	Moderate
Tanacetum vulgare	Common Tansy	Low



Ashland Rail System-Hodgkins Park-Stuntz Ave

Sections

City of Ashland Streets





Ashland Rail System – 22nd Ave E – Hodgkins Park

Area 1 – 14th Avenue East – 17th Avenue East

Native Community – Quaking Aspen dominates this area but some older Box Elder trees grow here as well. Red Osier Dogwood is locally abundant in the forested area and the areas adjacent to the trail are dominant with Raspberry and grasses.

Invasive Community – Common Buckthorn is locally dominant throughout the site and has not spread to the entire site yet. The sunny areas where Common Tansy is usually abundant has a comparatively low amount of Common Tansy.

Scientific Name	Common Name	Abundance
Alianthus altissima	Tree-of-heaven	Trace
Centaurea biebersteinii	Spotted Knapweed	Low
Cirsium arvense	Canada Thistle	Trace
Conium maculatum	Poison Hemlock	Trace
Lonicera x bella	Exotic Bush Honeysuckle	Low
Rhamnus cathartica	Common Buckthorn	Dominant
Rhamnus frangula	Glossy Buckthorn	Trace
Tanacetum vulgare	Common Tansy	Low

Area 2 – 17th Avenue East – Western edge of Wastewater Treatment Plant

Native Community – Quaking Aspen is dominant in this area and Box Elder trees are dispersed throughout the site. There are trace amounts of sedges and other wetland species in a small Cattail marsh on the south side of the trail.

Invasive Community – There is a Cattail marsh on the south side of the trail which is surrounded by shrubby Willow species. There is a trace amount of Purple Loosestrife in this small marsh that will probably not become more abundant because the surrounding area is relatively dry.

Scientific Name	Common Name	Abundance
Alianthus altissima	Tree-of-heaven	Trace
Euphorbia cyparissias	Cypress Spurge	Trace
Lonicera x bella	Exotic Bush Honeysuckle	Moderate
Lythrum salicaria	Purple Loosestrife	Trace
Phragmites	Phragmites	Low
Rhamnus cathartica	Common Buckthorn	Dominant
Tyhpa spp.	Cattail	Low
Viburnum lantana	Wayfaring Tree	Trace

Area 3 – Corridor adjacent to Wastewater Treatment Plant

Native Community – No native community present.

Invasive Community – No invasive community present.

Area 4 – Eastern edge of Wastewater Treatment Plant – 22^{nd} Avenue East

Native Community – The forested areas at this site are a mix of Balsam Poplar and Quaking Aspen with some Box Elder individuals spread throughout. Some areas are more open and are dominated by grasses and asters.

Invasive Community

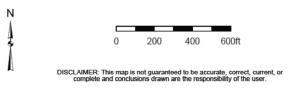
Scientific Name	Common Name	Abundance
Asparagus officinalis	Asparagus	Trace
Centaurea biebersteinii	Spotted Knapweed	Trace
Euphorbia cyparissias	Cypress Spurge	Trace
Lonicera x bella	Exotic Bush Honeysuckle	Heavy
Pastinica sativa	Wild Parsnip	Trace
Phalaris arundinacea	Reed Canary Grass	Trace
Rhamnus cathartica	Common Buckthorn	Dominant
Tanacetum vulgare	Common Tansy	Low
Tyhpa spp.	Cattail	Trace



Parcels

City of Ashland Streets

Ashland Rail System-22nd Ave E- Hodgkins Park





Ashland Rail System – 6th Street – 22nd Ave E

Area 1 – 22nd Ave East – 6th Street East

Native Community – A Quaking Aspen colony dominates this entire site which has high variability in soil moisture. Wetter areas at this site are dominated with an understory of Speckled Alder. Areas near the trail are occupied by Ash trees, Rose buses and Red Osier Dogwood.

Invasive Community - The wetter areas which are dominated by an understory of Speckled Alder are not heavily invaded when compared to areas at the same site which are drier.

Scientific Name	Common Name	Abundance
Asparagus officinalis	Asparagus	Trace
Centaurea biebersteinii	Spotted Knapweed	Trace
Cirsium arvense	Canada Thistle	Trace
Euphorbia cyparissias	Cypress Spurge	Trace
Lonicera x bella	Exotic Bush Honeysuckle	Low
Rhamnus cathartica	Common Buckthorn	Heavy
Robinia pseudoacacia	Black Locust	Trace
Tanacetum vulgare	Common Tansy	Low

Area 2 – 6th Street East – Wal-Mart

Native Community - Ash trees dominate the entire site with groups of Alder more dominant in the wetter areas. Most of the site seems like a fairly wet area.

Invasive Community

Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Trace
Cirsium arvense	Canada Thistle	Trace
Euphorbia cyparissias	Cypress Spurge	Trace
Lonicera x bella	Exotic Bush Honeysuckle	Low
Rhamnus cathartica	Common Buckthorn	Moderate
Rhamnus frangula	Glossy Buckthorn	Low
Robinia pseudoacacia	Black Locust	Trace
Tanacetum vulgare	Common Tansy	Trace



Parcels

City of Ashland Streets

Ashland Rail System-6th street-22nd Ave E





Ashland Rail System - Bay View Park - 6th Street

Area 1 – Southernmost corner of Wal-Mart parking lot – US Highway 2

Native Community – Ash trees dominate this site but some areas are locally dominated by colonies of Quaking Aspen. Like some nearby sites, the wetter areas of this site are dominated by Speckled Alder. There is a grassy prairie at the north end of the site adjacent to US Hwy 2.

Invasive Community – The wettest areas of the site are not heavily invaded but the open prairie zone is heavily invaded.

Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Moderate
Conium maculatum	Poison Hemlock	Low
Euphorbia cyparissias	Cypress Spurge	Trace
Lonicera x bella	Exotic Bush Honeysuckle	Heavy
Melilotus spp.	Sweet Clover	Moderate
Phalaris arundinacea	Reed Canary Grass	Trace
Rhamnus cathartica	Common Buckthorn	Heavy
Solanum dulcamara	Deadly Nightshade	Low
Tanacetum vulgare	Common Tansy	Moderate

Area 2 – US Highway 2 – 20th Avenue East

Native Community – The shoreline community here is a mix of Ash, Willow, Aspen, Cherry and Red Osier Dogwood. Raspberry, Grasses and Asters are more abundant right next to the trail.

Invasive Community – Crown Vetch and Cypress Spurge have heavily invaded areas adjacent to the trail however it appears that this area is mowed by the city at least once a year but not nearly as often as other grassy areas. These areas are probably cut every year but allow annual native and invasive plants to grow to maturity.

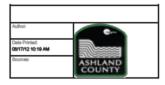
Scientific Name	Common Name	Abundance
Asparagus officinalis	Asparagus	Trace
Centaurea biebersteinii	Spotted Knapweed	Low
Cirsium arvense	Canada Thistle	Low
Coronilla varia	Crown Vetch	Dominant
Euphorbia cyparissias	Cypress Spurge	Heavy
Lathyrus latifolius	Everlasting Pea	Low
Melilotus spp.	Sweet Clover	Low
Pastinica sativa	Wild Parsnip	Trace
Polygonum cuspidatum	Japanese Knotweed	Low
Polygonum sachalinense	Giant Knotweed	Low
Rhamnus cathartica	Common Buckthorn	Moderate
Solanum dulcamara	Deadly Nightshade	Trace
Tanacetum vulgare	Common Tansy	Low



Parcels
City of Ashland Streets

Ashland Rail System-Bay View Park-6th stree





<u>Ashland Rail System - Oredock - Bay View Park</u>

Native Community – The shoreline and other areas at this site are largely dominated by Red Osier Dogwood and Willow Shrubs with some Ash, Elm and Balsam Poplar throughout.

Invasive Community – This portion of the waterfront is more heavily invaded by Exotic Honeysuckle than others and contains similar amounts of Common Buckthorn when compared to other shoreline areas. This site contains trace amounts of Wild Parsnip and Crown Vetch but the open sunny environment makes this area prime for invasion by these two sun-loving species.

Additional Details – This site was inventoried in June of 2012 with more attention paid to specific native species. Because this inventory was conducted closer to the peak of the growing season, it is more likely that the resulting data is reflective of the actual assemblage of native and exotic communities. This inventory was also done at a smaller scale so all abundances are likely to be more accurate for any given area. A report about this and other sites entitled "Invasive Species Inventory: City of Ashland Waterfront & Prentice Park" and associated files are available from Northland College through the same project contact as this report.

<u>Ashland Rail System - Marina Park - Oredock</u>

Area 1 – Rain garden adjacent to dock.

Native Community – This rain garden was constructed by the Sigurd Olson environmental Institute in 2010 and contains many high quality native species such as Evening Primrose, Black-Eyed Susan, Bergamot, Canada Anemone and more. These plants have been labeled with small plaques and can serve as a valuable educational tool

Invasive Community – Invaders like Cypress Spurge, Sweet Clover, Devils Paintbrush and Common Tansy are invading this rain garden. Careful control of these invasives should be a priority because of the educational potential of this particular site.

Area 2 – Shoreline west of Oredock

Native Community – The only natural area at this site is the rocky fill on the shoreline which is not regularly maintained or trimmed. Weedy prairie plants, Willows and Dogwood grow in this rocky fill.

Invasive Community – A variety of invaders inhabit the rocky shoreline.

Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Trace
Cirsium arvense	Canada Thistle	Trace
Euphorbia cyparissias	Cypress Spurge	Low
Lonicera x bella	Exotic Bush Honeysuckle	Trace
Melilotus spp.	Sweet Clover	Low
Pastinica sativa	Wild Parsnip	Trace
Rhamnus cathartica	Common Buckthorn	Low
Tanacetum vulgare	Common Tansy	Moderate

Area 3 – Areas East of Oredock

Native Community – A large stand of Staghorn Sumac dominates this area and few species grew under this stand. The understory of the sumac stand is dominant with grasses but some other forbs are present.

Invasive Community – This portion of the waterfront has heavy amounts of Exotic Honeysuckle and Common Buckthorn.

Additional Details – This site was inventoried in June of 2012 with more attention paid to specific native species. Because this inventory was conducted closer to the peak of the growing season, it is more likely that the resulting data is reflective of the actual assemblage of native and exotic communities. This inventory was also done at a smaller scale so all abundances are likely to be more accurate for any given area. A report about this and other sites entitled "Invasive Species Inventory: City of Ashland Waterfront & Prentice Park" and associated files are available from Northland College through the same project contact as this report

<u>Ashland Rail System - Memorial Park - Marina Park</u>

Native Community – The shoreline here is shrubby west of Ellis Avenue. This section of the shoreline is an active restoration site that has plantings of native species like White Cedar, Mountain Ash, Red Osier Dogwood, White Spruce and more. Many areas are covered in Mulch and there are many native grasses and forbs that were detailed well in the June 2012 report. This portion of this site east of the Ellis Avenue is out of the restoration site and is similar to the rocky shorelines elsewhere in the city. There are low amounts of Willow, Red Osier Dogwood and Grasses growing in the rocky fill.

Invasive Community – There are only trace amounts of invasive species present west of Ellis Avenue at this site because of control done over the past few years. The rocky shoreline east of Ellis Avenue is similar to other similar environments in the city and has low amounts of Cypress Spurge, Common Tansy, Spotted Knapweed and Exotic Honeysuckle.

Additional Details – This site was inventoried in June of 2012 with more attention paid to specific native species. Because this inventory was conducted closer to the peak of the growing

season, it is more likely that the resulting data is reflective of the actual assemblage of native and exotic communities. This inventory was also done at a smaller scale so all abundances are likely to be more accurate for any given area. A report about this and other sites entitled "Invasive Species Inventory: City of Ashland Waterfront & Prentice Park" and associated files are available from Northland College through the same project contact as this report.

Bass Lake

Invasive Community – This site has a moderate amount of Common Tansy and a moderate amount of Spotted Knapweed.

Bay City Park

Native Community – No native community present.

Invasive Community – No invasive community present.

Bayview Park

Native Community – The overstory here is dominated by Quaking Aspen, Ash and Box Elder. Some areas are locally dominated by Staghorn Sumac, Wild Plum and various species of Cherry. There are a few plantings of native conifers at the eastern edge of this site that should be maintained

Invasive Community – Much of this site is dominated by Exotic Honeysuckle and there are low to moderate amounts of Common Buckthorn. Reed Canary Grass is spotty throughout the site but is heavy in some areas. Invasives at this site are available in much greater detail in the June 2012 report.

Additional Details – This site was inventoried in June of 2012 with more attention paid to specific native species. Because this inventory was conducted closer to the peak of the growing season, it is more likely that the resulting data is reflective of the actual assemblage of native and exotic communities. This inventory was also done at a smaller scale so all abundances are likely to be more accurate for any given area. A report about this and other sites entitled "Invasive Species Inventory: City of Ashland Waterfront & Prentice Park" and associated files are available from Northland College through the same project contact as this report.

Beaser Park and Ballfields

Native Community – No native community present.

Invasive Community – No invasive community present.

Binsfield Road Property

Native Community – No native community present.

Invasive Community – No invasive community present.

Central Rail Yard Park

Area 1 – Drainage wetland at northernmost corner of site.

Native Community – Nearly the entire park consists of mowed grass except for a small drainage wetland near the northern corner of the site. There is some Narrow Leaved Cattail in this wetland and the wetland is bordered with some native Grasses and Asters.

Invasive Community – This drainage wetland is dominated by Cattail in its center with borders dominated by Common Tansy, Canada Thistle and Purple Loosestrife.

Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Low
Cirsium arvense	Canada Thistle	Moderate
Lythrum salicaria	Purple Loosestrife	Low
Tanacetum vulgare	Common Tansy	Moderate
Tyhpa spp.	Cattail	Dominant



Legend

Parcels

City of Ashland Streets

Central Rail Yard Park



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East End Playground

Native Community – No native communinty present.

Invasive Community – No invasive community present.

Ellis Park

Native Community – No native community present.

Invasive Community – No invasive community present.

Hodgkins Park

Native Community – Balsam poplar, willow and ash dominate the overstory of this site while the understory is dominated by red-osier dogwood and grasses.

Invasive Community

Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Trace
Cirsium arvense	Canada Thistle	Trace
Hesperis matronalis	Dame's Rocket	Trace
Lonicera x bella	Exotic Bush Honeysuckle	Low
Polygonum cuspidatum	Japanese Knotweed	Low
Rhamnus cathartica	Common Buckthorn	Moderate
Rhamnus frangula	Glossy Buckthorn	Trace
Robinia pseudoacacia	Black Locust	Trace
Tanacetum vulgare	Common Tansy	Moderate



Hodgkins Park Parcels City of Ashland Streets N 0 100 200 300ft Clais Partner Clais Partner Control Con

Hot Pond

Area 1 – Natural area on the pier adjacent to power plant

Native Community – The pier is dominated by Speckled Alder, Red Osier Dogwood, a number of Willow species that may be native or invasive as well as a diverse set of Asters and other prairie plants. The area is on Lake Superior and is fairly exposed and as such there are few tall trees at this site.

Invasive Community

Scientific Name	Common Name	Abundance
Cirsium arvense	Canada Thistle	Trace
Coronilla varia	Crown Vetch	Trace
Euphorbia cyparissias	Cypress Spurge	Low
Lathyrus latifolius	Everlasting Pea	Low
Melilotus spp.	Sweet Clover	Moderate
Polygonum cuspidatum	Japanese Knotweed	Low
Rhamnus cathartica	Common Buckthorn	Low
Robinia pseudoacacia	Black Locust	Trace
Tanacetum vulgare	Common Tansy	Moderate
Viburnum lantana	Wayfaring Tree	Trace

Area 2 – Shoreline east of power plant

Native Community – The shoreline of this area is part sandy beach and part wooded. The beach has sparse vegetation that includes Grasses and Beach Pea. The wooded areas of the shoreline are dominated by Willow trees and Red Osier Dogwood.

Invasive Community

Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Trace
Cirsium arvense	Canada Thistle	Trace
Daucus carota	Queen Anne's-lace	Trace
Melilotus spp.	Sweet Clover	Moderate
Phalaris arundinacea	Reed Canary Grass	Trace
Rhamnus cathartica	Common Buckthorn	Low
Tanacetum vulgare	Common Tansy	Moderate



Hot Pond Parcels City of Ashland Streets N 0 200 400 600ft DISCLAIMER: This map is not guaranteed to be accurate, correct, current, or complete and conclusions drawn are the responsibility of the user.

Krehr Park Boat Landing

Native Community – There are few natural areas at this site but some parts of the rocky shoreline have accumulated enough soil to allow for the growth of native plants. Red-osier dogwood, Box Elder and Ash grow on these rocks

Invasive Community – Common Tansy, Sweet Clover and Cypress Spurge have taken root on the rocky shoreline.



Lake Galilee

Invasive Community – This site has a moderate amount of Canada Thistle.



Locomotive Park

Native Community – No native community present.

Invasive Community – No invasive community present.

Long Lake

Invasive Community – No invasive community present.

Marina Park

Native Community – No native community present. The only natural areas are the rocky fill along the shoreline

Invasive Community –

Scientific Name	Common Name	Abundance
Coronilla varia	Crown Vetch	Trace
Euphorbia cyparissias	Cypress Spurge	Trace
Melilotus spp.	Sweet Clover	Trace
Tanacetum vulgare	Common Tansy	Low

Marina Scenic Overlook

Area 1 – Cattail marsh and open slope.

Native Community – The drainage wetland at the bottom of the slope has moderate amounts of native Rush species and low amounts of native sedges species. The slope leading down towards the wetland is dominated by native plantings being actively maintained as a restoration site. These tree plantings will be important to erosion control on this slope and should be maintained.

Invasive Community – The Cattail marsh at the bottom of the hill is dominated by invasive Cattail but performs a valuable ecosystem service and should not be modified to remove Cattail. The rest of this area has few invasives because of frequent control but sun loving invaders like Canada Thistle and Common Tansy are likely to keep returning to this area.

Area 2 – Forested restoration site fenced in on all sides

Native Community – A larges stand of planted White Spruce highlights the native assemblage of plants in this area. Native shrubs like Red-Osier Dogwood, Early Wild Rose, Prickly Rose and Buffalo Berry are also present. Some conifers were planted within the last five years as part of the restoration effort but they do not appear to be doing well in this area.

Invasive Community – There are few invaders in this area because of frequent and recent control but some Common Buckthorn and Exotic Honeysuckle are suckering from treated stumps.

Maslowski Beach

Native Community – Dry areas along the shoreline are dominated by Red-Osier Dogwood and Willow while the wet areas are dominated by Jewel Weed, Sedges and Cattail.

Invasive Community - Common Tansy and Cypress Spurge have invaded the open beach areas at the site.

Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Trace
Cirsium arvense	Canada Thistle	Low
Euphorbia cyparissias	Cypress Spurge	Low
Pastinica sativa	Wild Parsnip	Trace
Polygonum sachalinense	Giant Knotweed	Trace
Rhamnus cathartica	Common Buckthorn	Low
Rhamnus frangula	Glossy Buckthorn	Low
Tanacetum vulgare	Common Tansy	Low
Tyhpa spp.	Cattail	Moderate

Memorial Park

Native Community – No native community present.

Invasive Community – There are several groups of exotic bush honeysuckle that are maintained as hedges along the sidewalk and stairs at the park.

Mini Park - Ellis Ave Fountain and Main St.

Native Community – No native community present.

Invasive Community – There are 3 Japanese Barberry individuals planted at this site.

Mini Park – Parking Lot A

Native Community – No native community present.

Invasive Community – No invasive community present.

Mini Park - Parking Lot B

Native Community – No native community present.

Invasive Community – No invasive community present.

Mini Park - Parking Lot C

Native Community – No native community present.

Invasive Community – No invasive community present.

Mini Park - Parking Lot D

Native Community – No native community present.

Invasive Community – No invasive community present.

Mini Park – Parking Lot North US2

Native Community – The hillside at this site has been planted with Juniper and Sweet Fern.

Invasive Community – The areas on this hillside that were not planted with native species are heavily invaded by Common Tansy, Dandelion and Canada Thistle. These plants probably help to control erosion on the slope and if they are removed they should be replaced with species that will also aid the stability of the slope.

Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Moderate
Cirsium arvense	Canada Thistle	Low
Euphorbia cyparissias	Cypress Spurge	Trace
Solanum dulcamara	Deadly Nightshade	Trace
Tanacetum vulgare	Common Tansy	Moderate



Legend

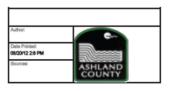
Parcels

City of Ashland Streets

Mini Park-Parking Lot North US2



DISCLAIMER: This map is not guaranteed to be accurate, correct, current, of complete and conclusions drawn are the responsibility of the user.



Mini Park - Post Office

Native Community – No native community present.

Invasive Community – There are 5 Japanese Barberry individuals planted at this site.

Oredock Park

Native Community – Most of the natural area at this site is dominated by Asters, Grasses and other prairie plants. The small section of the park that is forested is dominated by Box Elder and Ash.

Invasive Community - This site is more heavily invaded with Canada Thistle than any other, most of the prairie is dominant with Canada Thistle.

Scientific Name	Common Name	Abundance
Centaurea biebersteinii	Spotted Knapweed	Trace
Cirsium arvense	Canada Thistle	Dominant
Euphorbia cyparissias	Cypress Spurge	Trace
Euphorbia esula	Leafy Spurge	Trace
Melilotus spp.	Sweet Clover	Low
Polygonum cuspidatum	Japanese Knotweed	Trace
Polygonum sachalinense	Giant Knotweed	Low
Solanum dulcamara	Deadly Nightshade	Low
Tanacetum vulgare	Common Tansy	Low



Legend Oredock Park Parcels City of Ashland Streets Us Highways Disclaimer: This map is not guaranteed to be accurate, correct, current, or complete and conclusions drawn are the responsibility of the user

Pearson Plaza & 6th Ave. Beach Pavilion North US2

Native Community – Forested areas at this site are dominated by Quaking Aspen and Balsam Poplar, some Willows have grown to maturity here but they may not be native. Grape and Virginia Creeper are dominant and growing on all native and invasive shrubs.

Invasive Community – The Exotic Honeysuckle at this site has been cut but has begun coppicing. There are low amounts of Common Buckthorn but not many other invaders.

Additional Details – This site was inventoried in June of 2012 with more attention paid to specific native species. Because this inventory was conducted closer to the peak of the growing season, it is more likely that the resulting data is reflective of the actual assemblage of native and exotic communities. This inventory was also done at a smaller scale so all abundances are likely to be more accurate for any given area. A report about this and other sites entitled "Invasive Species Inventory: City of Ashland Waterfront & Prentice Park" and associated files are available from Northland College through the same project contact as this report.

Pearson Plaza & 6th Ave. Beach Pavilion South US2

Native Community – No native community present.

Invasive Community – A rocky area near the tunnel entrance has a trace amount of Common Tansy, Canada Thistle and Spotted Knapweed

Penn Park

Native Community – No native community present.

Invasive Community – No invasive community present.

Prentice Park

Native Community – This park is home to a diverse set of native communities. The Cedar swamp in the south central zone of the park is a rare non-regenerating community with some high quality wetland species in it. The eastern edge of the park is a lowland swamp consisting of Speckled Alder and Ash. The northern portion of the park is part of the Fish Creek Slough and is largely dominated by Cattail.

Invasive Community – Most of the park outside of the Cattail marsh is shaded and as result there are few herbaceous invaders. However, glossy buckthorn dominates large portions of the western side of the park and Common Buckthorn dominates more on the East Side. Like other Cattail marshes, this one consists mostly of invasive species but performs an important function and should be left as it is.

Second Landing

Native Community – No native community present.

Invasive Community – The shoreline has trace amounts of Common Tansy, Canada Thistle and Spotted Knapweed.

West End Skating Rink

Native Community – No native community present.

Invasive Community – No invasive community present.

10th Ave W Scenic Overlook Park

Native Community – This site is dominated by Red-Osier Dogwood, quaking Aspen and Box Elder with Grape and Virginia Creeper vines creeping throughout.

Invasive Community – It appears that some of the Exotic Honeysuckle at this site has been cut within the past few years but suckers are beginning to rise from the old stumps. Areas that may be mowed infrequently have moderate amounts of Wild Parsnip in them. Common Buckthorn is creeping from the edges of the natural area to the center

Scientific Name	Common Name	Abundance
Lonicera x bella	Exotic Bush Honeysuckle	Moderate
Pastinica sativa	Wild Parsnip	Low
Polygonum cuspidatum	Japanese Knotweed	Trace
Rhamnus cathartica	Common Buckthorn	Moderate
Tanacetum vulgare	Common Tansy	Low

Acknowledgements

I would like to thank Scott Caven for completing site inventories at the Bass Lake, Long Lake and Lake Galilee boat landings and for providing assistance through the entire project. I would also like to acknowledge Dr.Sarah Johnson for helping design protocol for the project. Finally I would like to thank Tom Fratt from the Ashland County Land and Water Conservation Department for his grant writing work and for initiating the entire project. This project was funded by the Ashland County Land and Water Conservation Department.