Exhibit CS-DB-2

Site Environmental Assessment Report

Environmental Assessment for:
2.0 MW Solar Photovoltaic Generation Facility
Chelsea Solar Project
Bennington, Vermont

Prepared by:
Arrowwood Environmental, LLC

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Environmental Assessment for:
2.0 MW Solar Electric Generation Facility
Chelsea Solar Project
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Environmental Assessment for:
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I. Summary Findings

Arrowwood Environmental, LLC (AE) conducted an environmental assessment for the proposed Chelsea Solar Project ("Project") over the timeframe of 2014 to 2017. AE concludes that the Project has been sited and designed to avoid undue adverse impacts to the following environmental resources: shorelines, outstanding resource waters, streams, floodways, wetlands, rare, threatened and endangered species and necessary wildlife habitat.

There are no streams, shorelines, floodways, outstanding resource waters, wetlands, necessary wildlife habitat, or rare or irreplaceable natural areas in the Project area. Thus, there will be no impact on these resources. A population of a rare plant species was documented within the Project area. The Project worked with Vermont Agency of Natural Resources to mitigate impacts to this resource. This mitigation plan (Exhibit CS-DB-3) has resulted in the Project having no undue adverse impacts to this species.

II. Introduction and Project Description

Arrowwood Environmental, LLC (AE) was retained to perform an environmental assessment for the proposed Chelsea Solar Project, a 2 MW solar electric generation facility located on Willow Road in Bennington, Vermont.

The Project is a ground-mounted solar PV array with an estimated generation capacity of 2.0 MWac. The purpose of the Project will be to convert solar radiation to electricity that will be sold to a local utility. Site preparation will involve clearing up to 9.64 acres. Some contour grading may be necessary in areas within the array. Public road access is planned off Willow Road at the southern boundary of the property. Construction, equipment delivery, and site operations traffic will access the site via a driveway entrance off Willow Road.

This report outlines AE's findings related to environmental criteria incorporated by the Public Utilities Commission (PUC) into the review of solar projects, including: streams, outstanding resource waters, floodways, shorelines, wetlands, rare and irreplaceable natural areas, necessary wildlife habitat, and rare, threatened and endangered species. Review of the Project Interconnection is included as Exhibit CS-DB-4. This environmental assessment involved both a remote review of available digital databases as well as field investigations in the Project area.

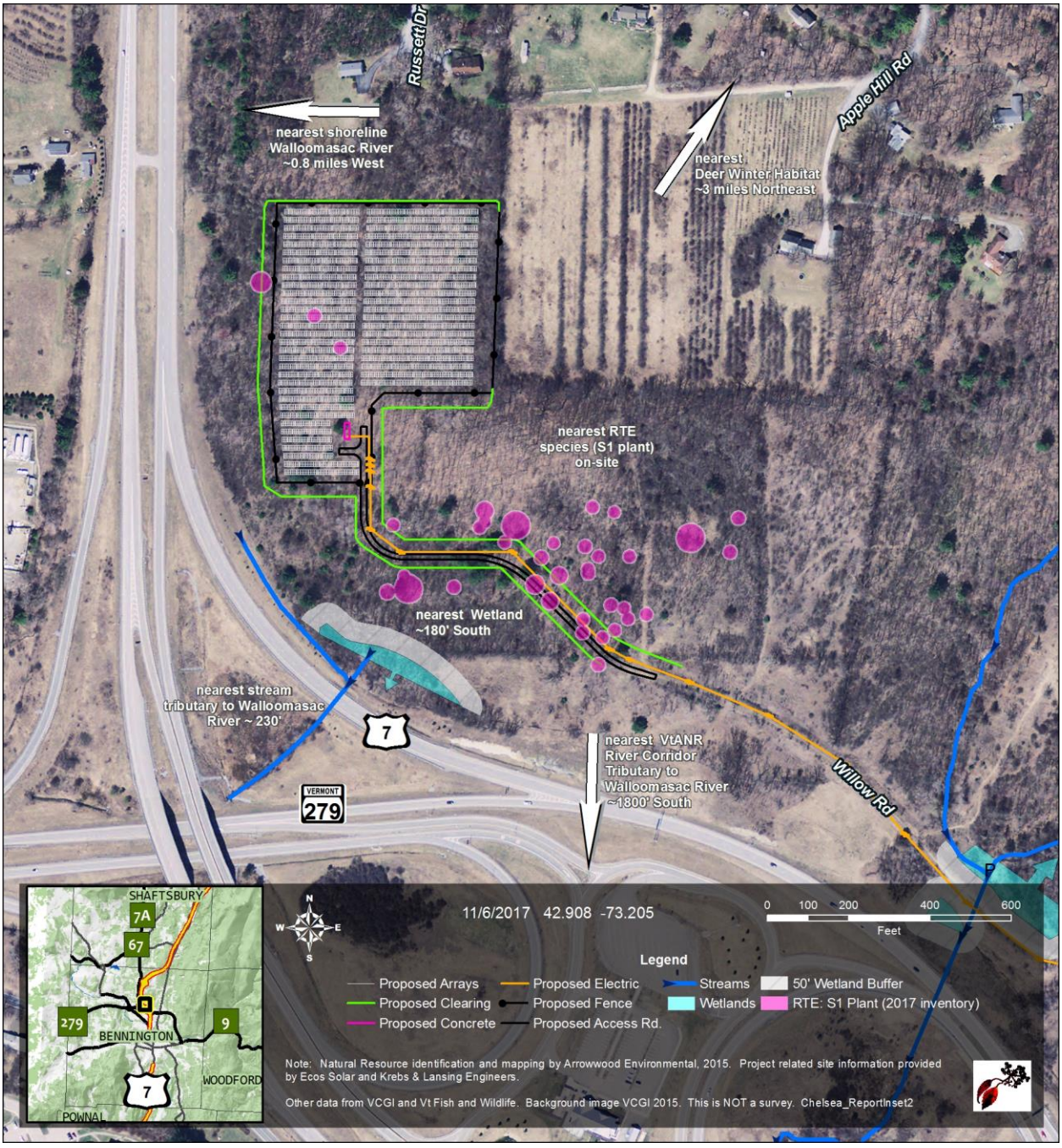

Figure 1: Resource Assessment Area Map

III. Site Characterization

The Project location is on a portion of a 27.3-acre parcel of land along the northeastern boundary of the Route 7/Route 279 interchange, north of Willow Road, and south of Apple Hill Road. Ecologically the Project is within the Vermont Valley biophysical region of the state (Thompson and Sorenson, 2000). The Project is located at approximately 700' in elevation and slopes generally southwestward toward the Rte 7 and Rte 279 interchange. The bedrock geology of the Project area is mapped as the Dunham Dolostone formation with dolostone rock types (Bedrock Geologic Map, 2011). The soils are primarily mapped as Georgia and Stockbridge soil series (NRCS Bennington County Soil Survey), which are loams. The Project site is primarily forested and generally characterized by a young overstory of bitternut hickory, red oak, red maple, and staghorn sumac. There is a dense understory of honeysuckle and buckthorn throughout much of the site. The site sits within a relatively developed landscape with residential development to the north, the Rte 7 corridor to the west, the Rte 7 and Rte 279 interchange and mixed and residential development to the south. The site lacks landscape connectivity to significant forest lands in the Green Mountain National Forest to the east and to undeveloped forest lands further to the west and southwest.

IV. Criterion 1(D) Floodways

AE reviewed the FEMA DFIRM (Digital Flood Insurance Rate Map Database) for Bennington County, Vermont. The site of the proposed Project is not located within a 100-year flood hazard area (zone A). The proposed Project is not located within a floodway or a floodway fringe and will not restrict or divert the flow of floodwaters or significantly increase the peak discharge of a river or stream within or downstream from the area of development. The closest FEMA flood hazard zone and ANR river corridor is approximately 1800' to the south of the Project and associated with a tributary to the Walloomsac River. The Project will have no impact on floodways or river corridors.

V. Criterion 1(E) Streams and Outstanding Resource Waters

The stream assessment involved both a remote review of the USGS topographic map, 303(d) List of Impaired streams and rivers and Priority Waters List for streams and rivers (ANR Resource

Atlas) and Vermont Hydrography Dataset (streams, rivers, and waterbodies) and a field investigation on May 30, 2014. There are no streams in the Project area. The closest stream is an unnamed tributary to the Walloomsac River, located approximately 230' to the south of the Project area. The Project will result in no clearing on the banks of this stream. This stream is not included on either the 303(d) List of Impaired streams and rivers or the Priority Waters List for streams and rivers. For these reasons, there will be no adverse impacts on streams.

The Water Resources Panel has listed four waterways as Outstanding Resource Waters: Batten Kill River in towns of East Dorset and Arlington; Pike's Falls/Ball Mountain in the town of Jamaica; Poultney River in the towns of Poultney and Fair Haven; and Great Falls, Ompompanoosuc in the town of Thetford. There are no Outstanding Resource Waters in the Project area and therefore there will be no impact on Outstanding Resource Waters.

VI. Criterion 1(F) Shorelines

AE reviewed USGS topographic maps, the Vermont Hydrography Dataset (streams, rivers, and waterbodies), and digital orthophotography. The site of the proposed Project is not located near a shoreline of a river, pond or lake. The closest shoreline is that of the Walloomsac River, approximately 0.8 miles to the west of the Project area. The Project will not result in any clearing of forest vegetation along the shores of the Walloomsac River. The proposed Project will result in no adverse impact to shorelines.

VII. Criterion 1(G) Wetlands

The wetland assessment involved both a remote review of available maps (including Vermont Significant Wetland Inventory Maps (VSWI 2010) and the NRCS Soil Survey) and a field inventory component conducted on May 30, 2014. Remote review of the VSWI maps for the area indicates that there are no mapped Class II wetlands within the Project area. AE identified and delineated a wetland approximately 180' to the south of the Project and for the purposes of this Project presumes that wetland to be Class 2. The Project as proposed will have no impact on the identified wetland resource or associated 50' buffer zone. For these reasons, there will be no adverse impacts on wetlands.

VIII. Criterion 8 Rare or Irreplaceable Natural Areas

The Rare or Irreplaceable Natural Areas (RINA) assessment involved both a remote review of available digital maps for the Project area and a field review. AE reviewed digital orthophotography, the Bennington County Soil Survey, the 2011 Bedrock Geologic Map of Vermont and the Natural Heritage Inventory (NHI) Rare, Threatened and Endangered Species digital database.

AE conducted site visits on January 17, 2014 and August 14, 2014 and identified an area of Mesic-Maple-Ash-Hickory-Oak forest within the northeastern Project area. It is likely that the entire site was this natural community prior to logging activities and colonization by invasive species of buckthorn and honeysuckle. High quality examples of the Mesic-Maple-Ash-Hickory Forest community are uncommon in the state, but where it occurs, can occupy tens or hundreds of acres. While there are a few mature trees at this site, the undisturbed community on this property is less than 3 acres in size, is in moderate-poor condition and sits within a largely fragmented landscape. Given its size and condition, it is our opinion that this forest would not qualify as a significant natural community or a Rare and Irreplaceable Natural Area. For these reasons, there will be no adverse impact on Rare and Irreplaceable Natural Areas.

IX. Criterion 8(A) Wildlife Habitat and Rare, Threatened and Endangered Species

The wildlife habitat assessment involved both a remote review of available digital maps for the Project area and a field inventory component. A remote review of available digital databases was conducted to identify and map necessary wildlife habitat within the Project area and within the vicinity of the Project area.

A site visit was conducted on May 30, 2014 to assess wildlife, wildlife habitats, and rare, threatened, and endangered animal species.

A. Necessary Wildlife Habitats

1. White-Tailed Deer Wintering Habitats

There are no mapped VT Fish and Wildlife Department white-tailed deer (*Odocoileus virginianus*) deer wintering areas (DWA) in the Project area. The closest State mapped DWA is

approximately 3 miles to the northeast of the Project site. The Project area is primarily forested and generally characterized by a young overstory of bitternut hickory, red oak, red maple, and staghorn sumac. There is a dense understory of honeysuckle and buckthorn throughout much of the site. AE identified an area of Mesic-Maple-Ash-Hickory-Oak forest within the northeastern Project area which is relatively free of the dense understory of invasive species. Field investigation confirmed that there are no deer wintering habitats in the Project area.

2. Black Bear Habitat

The forest comprising the Project area does not provide habitat for the black bear (*Ursus americanus*) and no sign of black bear was found at the Project site. The nearest "productive" black bear habitat mapped by the Vermont Fish and Wildlife Department is approximately 9,500' to the east of the Project and separated from the site by well-traveled paved roads.

B. Rare, Threatened and Endangered Species

The RTE species review involved a remote review of available digital maps for the Project area. AE reviewed digital orthophotography, the Bennington County Soil Survey, the 2011 Bedrock Geologic Map of Vermont and the Natural Heritage Inventory (NHI) Rare, Threatened and Endangered Species digital database.

Arrowwood Environmental conducted an RTE plant survey of the Project area on August 14, 2014. AE did a follow up survey on October 12, 2017. The following rare or uncommon species were found during the inventory: arrow-leaved American aster (*Symphyotrichum urophyllum*). Population locations recorded from the 2017 survey are generally shown on the resource map above. A plant species list for the 2014 and 2017 surveys is attached. Exhibit CS-DB-3 consists of the Rare Plant Mitigation Report which describes the steps taken to mitigate impacts to this species. This includes establishing a Conservation Area on the Project site and transplanting any impacted plants into this area. Given these mitigation measures, this Project would not have an undue adverse impact on this rare species.

Figure 2. Northern Long-eared Bat (*Myotis septentrionalis*) analysis map

The Northern Long-eared Bat (*Myotis septentrionalis*) became a federally listed endangered species in May of 2015. The State of Vermont has determined that project clearing constituting greater than 1% of the total forested area within a 1 square mile radius of a project triggers review for habitat loss of this endangered species. AE utilizes the most recent NAIP 2016 aerial photos (leaf-on) and runs a custom GIS based image classification for a 1-mile circle around the Project area. In this analysis, custom training samples are generated for different cover types and using an Interactive Supervised Classification routine, the computer classifies the imagery into forest cover, open land, developed land, and often some other categories to correctly isolate features such as water and shadows. This provides a custom landcover dataset for the 1-mile circle at the

resolution of the NAIP imagery (0.6 meters). The proposed Project will result in clearing of approximately 9.64 acres constituting 0.78% of the available forestland within 1 square mile of the Project. According to VT Fish and Wildlife Department standards, the proposed clearing is minimal in nature and acoustic bat surveys and restrictions on time of year of tree cutting are not necessary.

The Project is not in an area known to provide summer roosting habitat for Indiana bat, no old or abandoned buildings potentially providing roosting habitat for little brown bat are proposed for demolition, and there are no known bat hibernacula or maternity roosts within 1 mile of the Project site.

The Project will have no undue adverse impact on Rare, Threatened or Endangered species or necessary wildlife habitat.

X. References

Agency of Natural Resources. Natural Resources Atlas. https://anrmaps.vermont.gov/websites/anra5/

Argentine, Cindy Corlett. Vermont Act 250 Handbook. Putney Press. 2008.

Natural Resources Board. Vermont Wetland Rules. Effective August 1, 2010.

Natural Resources Conservation Service. Soil Survey Maps. Bennington County

Ratcliffe, N.M., Stanley, R.S., Gale, M.H., Thompson, P.J., and Walsh, G.J., 2011, Bedrock geologic map of the Vermont: U. S. Geological Survey Scientific Investigations Map 3184, scale 1:100,000.

Thompson, Elizabeth H. and Eric R. Sorenson. Wetland, Woodland, and Wildland: A Guide to the Natural Communities of Vermont. The Nature Conservancy of Vermont, 2000.

US Army Corps of Engineers. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, October 2009

ARROWWOOD ENVIRONMENTAL

Rare, Threatened and Endangered Plant Inventory

Report Date: 11/16/2017

Project Name Chelsea Solar

Botanist Michael Lew-Smith

Survey Date 10/11/2017

Description Species list includes both Chelsea Solar and adjacent Apple Hill Solar Projects. Inventory in August 2014 by Matt Peters was updated in October 2017 by Michael Lew-Smith. The following list includes species documented in both inventories.

Plant List

	Plant Name	Common Name	S-Rank	Plant Family
	Daucus carota	Queen Anne's lace		Apiaceae
	Pastinaca sativa	parsnip		Apiaceae
	Zizia aurea	golden Alexanders		Apiaceae
	Apocynum cannabinum	Indian hemp		Apocynaceae
	Apocynum sp.			Apocynaceae
	Asplenium platyneuron	ebony spleenwort		Aspleniaceae
	Ageratina altissima	white snakeroot		Asteraceae
	Anaphalis margaritacea	pearly everlasting		Asteraceae
	Arctium minus	lesser burdock		Asteraceae
	Cirsium arvense	Canada thistle		Asteraceae
	Doellingeria umbellata	tall white aster		Asteraceae
	Erechtites hieraciifolius	pilewort		Asteraceae
	Eurybia divaricata	white wood aster		Asteraceae
	Eurybia macrophylla	large-leaved aster		Asteraceae
	Packera obovata	running ragwort		Asteraceae
	Rudbeckia hirta	black-eyed Susan		Asteraceae
	Solidago altissima	tall goldenrod		Asteraceae
	Solidago bicolor	silver rod		Asteraceae
	Solidago gigantea	large goldenrod		Asteraceae
	Solidago juncea	early goldenrod		Asteraceae
	Solidago patula	swamp goldenrod	S3	Asteraceae
	Solidago puberula	downy goldenrod		Asteraceae
	Solidago rugosa	rough-leaved goldenrod		Asteraceae
	Symphyotrichum cordifolium	heart-leaved aster		Asteraceae
	Symphyotrichum lanceolatum	lance-leaved aster		Asteraceae
	Symphyotrichum novae-angliae	New England aster		Asteraceae
	Symphyotrichum pilosum	white aster		Asteraceae
!	*Symphyotrichum urophyllum*	arrow-leaved aster	S1	Asteraceae
	Athyrium filix-femina	lady fern		Athyriaceae
	Berberis thunbergii	Japanese barberry		Berberidaceae

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Rare, Threatened and Endangered Plant Inventory

Report Date: 11/16/2017

Plant Name	Common Name	S-Rank	Plant Family
Berberis vulgaris	common barberry		Berberidaceae
Betula papyrifera	paper birch		Betulaceae
Carpinus caroliniana	hornbeam		Betulaceae
Ostrya virginiana	hop-hornbeam		Betulaceae
Hackelia virginiana	Virginia stickseed		Boraginaceae
Alliaria petiolata	garlic mustard		Brassicaceae
Lobelia inflata	Indian tobacco		Campanulaceae
Lonicera morrowii	Morrow's honeysuckle		Caprifoliaceae
Valeriana officinalis	garden heliotrope		Caprifoliaceae
Dianthus armeria	deptford pink		Caryophyllaceae
Celastrus orbiculatus	Oriental bittersweet		Celastraceae
Cornus alternifolia	alternate-leaved dogwood		Cornaceae
Cornus racemosa	gray dogwood		Cornaceae
Juniperus communis	common juniper		Cupressaceae
Carex flava	yellow sedge		Cyperaceae
Carex gracillima	slender sedge		Cyperaceae
Carex granularis	meadow sedge		Cyperaceae
Carex laxiculmis	spreading sedge	S3	Cyperaceae
Carex laxiflora	loose-flowered sedge		Cyperaceae
Carex lurida	sallow sedge		Cyperaceae
Carex cf pensylvanica	Pennsylvania sedge		Cyperaceae
Carex radiata	stellate sedge		Cyperaceae
Carex swanii	swan's sedge		Cyperaceae
Carex tribuloides	blunt broom sedge		Cyperaceae
Carex virescens	greening-up sedge		Cyperaceae
Carex vulpinoidea	fox sedge		Cyperaceae
Scirpus atrovirens	dark bulrush		Cyperaceae
Scirpus pendulus	reddish bulrush		Cyperaceae
Dennstaedtia punctilobula	hay-scented fern		Dennstaedtiaceae
Dryopteris intermedia	intermediate woodfern		Dryopteridaceae
Dryopteris marginalis	marginal woodfern		Dryopteridaceae
Polystichum acrostichoides	Christmas fern		Dryopteridaceae
Polystichum braunii	Braun's holly fern		Dryopteridaceae
Equisetum arvense	field horsetail		Equisetaceae
Lyonia ligustrina	maleberry		Ericaceae
Lotus corniculatus	bird's-foot trefoil		Fabaceae
Robinia pseudo-acacia	common locust		Fabaceae

ARROWWOOD ENVIRONMENTAL

Rare, Threatened and Endangered Plant Inventory

Report Date: 11/16/2017

Plant Name	Common Name	S-Rank	Plant Family
Trifolium pratense	red clover		Fabaceae
Trifolium repens	white clover		Fabaceae
Fagus grandifolia	American beech		Fagaceae
Quercus macrocarpa	bur oak		Fagaceae
Quercus rubra	red oak		Fagaceae
Hypericum sp.			Hypericaceae
Carya cordiformis	bitternut hickory		Juglandaceae
Juglans cinerea	butternut		Juglandaceae
Juncus dudleyi	Dudley's rush		Juncaceae
Juncus tenuis	path rush		Juncaceae
Clinopodium vulgare	wild basil		Lamiaceae
Monarda fistulosa	wild bergamot		Lamiaceae
Origanum vulgare	wild marjoram		Lamiaceae
Dendrolycopodium obscurum	flat-branched tree clubmoss		Lycopodiaceae
Lythrum salicaria	purple loosestrife		Lythraceae
Tilia americana	basswood		Malvaceae
Fraxinus americana	white ash		Oleaceae
Ligustrum obtusifolium	Japanese privet		Oleaceae
Circaea canadensis	tall enchanter's nightshade		Onagraceae
Onoclea sensibilis	sensitive fern		Onocleaceae
Epipactis helleborine	helleborine		Orchidaceae
Larix decidua	European larch		Pinaceae
Pinus strobus	white pine		Pinaceae
Pinus sylvestris	Scotch pine		Pinaceae
Plantago lanceolata	buckhorn plantain		Plantaginaceae
Plantago major	plantain		Plantaginaceae
Platanus occidentalis	sycamore		Platanaceae
Agrostis gigantea	red-top		Poaceae
Andropogon gerardii	big bluestem		Poaceae
Bromus inermis	Hungarian brome		Poaceae
Dactylis glomerata	orchard grass		Poaceae
Dichanthelium acuminatum	woolly panic grass		Poaceae
Digitaria ischaemum	smooth crabgrass		Poaceae
Elymus repens	witch grass		Poaceae
Glyceria striata	fowl manna grass		Poaceae
Muhlenbergia glomerata	bog muhly		Poaceae
Muhlenbergia mexicana	wirestem muhly		Poaceae

ARROWWOOD ENVIRONMENTAL

Rare, Threatened and Endangered Plant Inventory

Report Date: 11/16/2017

	Plant Name	Common Name	S-Rank	Plant Family
!	*Muhlenbergia schreberi*	nimble will	S2	Poaceae
	Phleum pratense	Herd's grass		Poaceae
	Poa compressa	Canada bluegrass		Poaceae
	Poa pratensis	Kentucky bluegrass		Poaceae
	Schedonorus arundinaceus	tall fescue		Poaceae
	Schizachyrium scoparium	little bluestem		Poaceae
	Anemone virginiana	thimbleweed		Ranunculaceae
	Clematis virginiana	virgin's-bower		Ranunculaceae
	Frangula alnus	glossy buckthorn		Rhamnaceae
	Rhamnus cathartica	buckthorn		Rhamnaceae
	Agrimonia striata	roadside agrimony		Rosaceae
	Crataegus punctata	white haw		Rosaceae
	Crataegus sp.			Rosaceae
	Dasiphora fruticosa	shrubby cinquefoil		Rosaceae
	Malus pumila	wild apple		Rosaceae
	Rosa multiflora	multiflora rose		Rosaceae
	Rubus pubescens	dwarf raspberry		Rosaceae
	Spiraea alba	meadowsweet		Rosaceae
	Spiraea tomentosa	steeplebush		Rosaceae
	Galium verum	yellow bedstraw		Rubiaceae
	Zanthoxylum americanum	prickly ash		Rutaceae
	Populus tremuloides	quaking aspen		Salicaceae
	Salix bebbiana	Bebb's willow		Salicaceae
	Salix discolor	pussy willow		Salicaceae
	Acer platanoides	Norway maple		Sapindaceae
	Acer rubrum	red maple		Sapindaceae
	Acer saccharum	sugar maple		Sapindaceae
	Verbascum thapsus	common mullein		Scrophulariaceae
	Thelypteris palustris	marsh fern		Thelypteridaceae
	Ulmus americana	American elm		Ulmaceae
	Ulmus rubra	slippery elm		Ulmaceae
	Pilea pumila	clearweed		Urticaceae
	Viburnum dentatum	arrow-wood		Viburnaceae
	Viburnum lentago	nannyberry		Viburnaceae
	Viburnum opulus	guelder-rose		Viburnaceae
	Viola sp.			Violaceae
	Parthenocissus quinquefolia	woodbine		Vitaceae

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Rare, Threatened and Endangered Plant Inventory

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Plant Name	Common Name	S-Rank	Plant Family
Vitis riparia	riverbank grape		Vitaceae