

Interstate 95 Bridge Replacement Projects Rare Plant Survey Report

Sidney and Waterville, Maine

Dinsmore Road Bridge (BR 5782): WIN 25473.00

Drummond Road Bridge (BR 5784): WIN 25469.00

Lyons Road Bridges (BRs 1463 & 5783): WIN 25465.00

Town Farm Road Bridge (BR 5785): WIN 27266.00

Trafton Road Bridge (BR 5812): WIN 26152.00



Prepared for:
Maine Department of Transportation

August 5, 2025

Prepared by:
Stantec Consulting Services Inc.

Project/File:
195603436

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1 Introduction

The Maine Department of Transportation is proposing the replacement of five bridges over Interstate 95 (I-95) in Sidney and Waterville, Maine. These include the following bridges:

- Dinsmore Road Bridge (BR 5782): WIN 25473.00
- Drummond Road Bridge (BR 5784): WIN 25469.00
- Lyons Road Bridges (BRs 1463 & 5783): WIN 25465.00
- Town Farm Road Bridge (BR 5785): WIN 27266.00
- Trafton Road Bridge (BR 5812): WIN 26152.00

Stantec Consulting Services Inc. was contracted by the Maine Department of Transportation to conduct a survey for species of plants listed as rare, threatened, or endangered (RTE) by the Maine Natural Areas Program (MNAP). The field survey was conducted on June 24, 2025, and documented occurrences of two RTE plants associated with the Lyons Road bridges, including:

- Pendulous bulrush (*Scirpus pendulus*), Special Concern
- Meadow sedge (*Carex granularis*), Endangered

No other RTE plants were observed. This report summarizes the results of the RTE plant field survey.

2 Methodology

The RTE plant survey was conducted within approximately 100 feet of the existing bridge locations, including the bridge superstructure and approaches that were safely accessible at the time of the field work (Figures 1–5). The survey was conducted by Matt Arsenault, a professional botanist and Certified Senior Ecologist, and consisted of a meander survey within the habitats associated with the bridge replacement locations. Data were recorded on existing natural community conditions including dominant and characteristic vegetation, as well as other notable plant species, hydrology, evidence of disturbances, and overall landscape context. Representative photographs were taken of existing conditions and RTE plant observations. A global positioning system (GPS) receiver capable of submeter accuracy was used to navigate and record the survey track. Observations of RTE species were located with the GPS and data were collected to prepare a MNAP Special Plant Survey form.

3 Results

The field survey was conducted on June 24, 2025, and documented occurrences of two RTE plants associated with the Lyons Road bridges: pendulous bulrush and meadow sedge (Figure 3). Representative photographs are included in Appendix A. MNAP Special Plant Survey forms are provided in Appendix B.



Pendulous bulrush occurs in open dry-mesic, mesic, and wetland habitats to the north of the existing bridge location along the southbound lane shoulder, the median, and in a cleared utility line corridor north of the existing eastern bridge approach. Over 425 genets were estimated in total with the largest concentration of plants (over 400 genets) occurring within the median. The habitat within the median consists primarily of a dry-mesic weakly calcareous meadow and early successional shrubland. Characteristic species include Kentucky blue grass (*Poa pratensis*), whorled bedstraw (*Galium mollugo*), Canada goldenrod (*Solidago canadensis*), meadow rye grass (*Schedonorus pratensis*), ox-eye daisy (*Leucanthemum vulgare*), purple loosestrife (*Lythrum salicaria*), red osier dogwood (*Swida sericea*), heart-leaved willow (*Salix eriocephala*), and dark-green bulrush (*Scirpus atrovirens*). The presence of pendulous bulrush, meadow sedge, Dudley's rush (*Juncus dudleyi*), and yellow-green sedge (*Carex flava*) indicate a slightly higher soil pH associated with this habitat. The habitat areas are periodically mowed as part of routine highway and utility line maintenance.

Meadow sedge is strongly associated with pendulous bulrush plants and over 170 plants were estimated in total. The highest concentration of plants similarly occurs within the median where over 115 plants were estimated. Morphological similar congeners including (*Carex pallescens*) and open-field sedge (*Carex conoidea*) are found throughout the occupied habitat area.

No other RTE plans were observed near the proposed bridge replacement locations. The habitat areas consist of generally open and disturbed roadside habitats including open meadows and fields, early successional shrublands, and mixed forest fragments. Evidence of calcareous habitat conditions similar to those observed at the Lyons Road bridges were not observed at the other proposed bridge replacement locations. Non-native invasive species including reed canary grass (*Phalaris arundinacea*), Japanese knotweed (*Fallopia japonica*), purple loosestrife, Canada thistle (*Cirsium arvense*), rambler rose (*Rosa multiflora*), European buckthorn (*Rhamnus cathartica*), Morrow's honeysuckle (*Lonicera morrowii*), and autumn-olive (*Elaeagnus umbellata*) were observed in multiple locations along the roadside between the bridge replacement locations.

4 Recommended Protection Measures

Avoidance of the pendulous bulrush and meadow sedge habitat areas is recommended during construction of the bridge replacement work. Additional measures to consider if full avoidance of the plants is not possible include conducting construction work during dormant conditions to the extent feasible (estimated from approximately October 1 through April 15) or minimizing ground disturbances within the occupied habitat areas through the use of temporary construction mats. Further consultation with MNAP is recommended to discuss bridge replacement construction plans and feasible plant protection measures.



Figures



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- Legend**
- Culvert
 - ▨ Potential Significant Vernal Pool
 - Wetland Boundary Line
 - ▨ Palustrine Forested Wetland
 - ▭ Approximate Rare Plant Survey Limit

0 2,000 4,000 Feet
(At original document size of 8.5x11)
1:2,400



Project Location
Sidney, Maine

Prepared by PWB on 2025-07-10
TR Review by KWH on 2025-07-11
IR Review by MPA 2025-07-11

Client/Project
MEDOT 195603436

Dinsmore Road Bridge (BR 5782) over I-95
(WIN 25473.00)

Figure No.

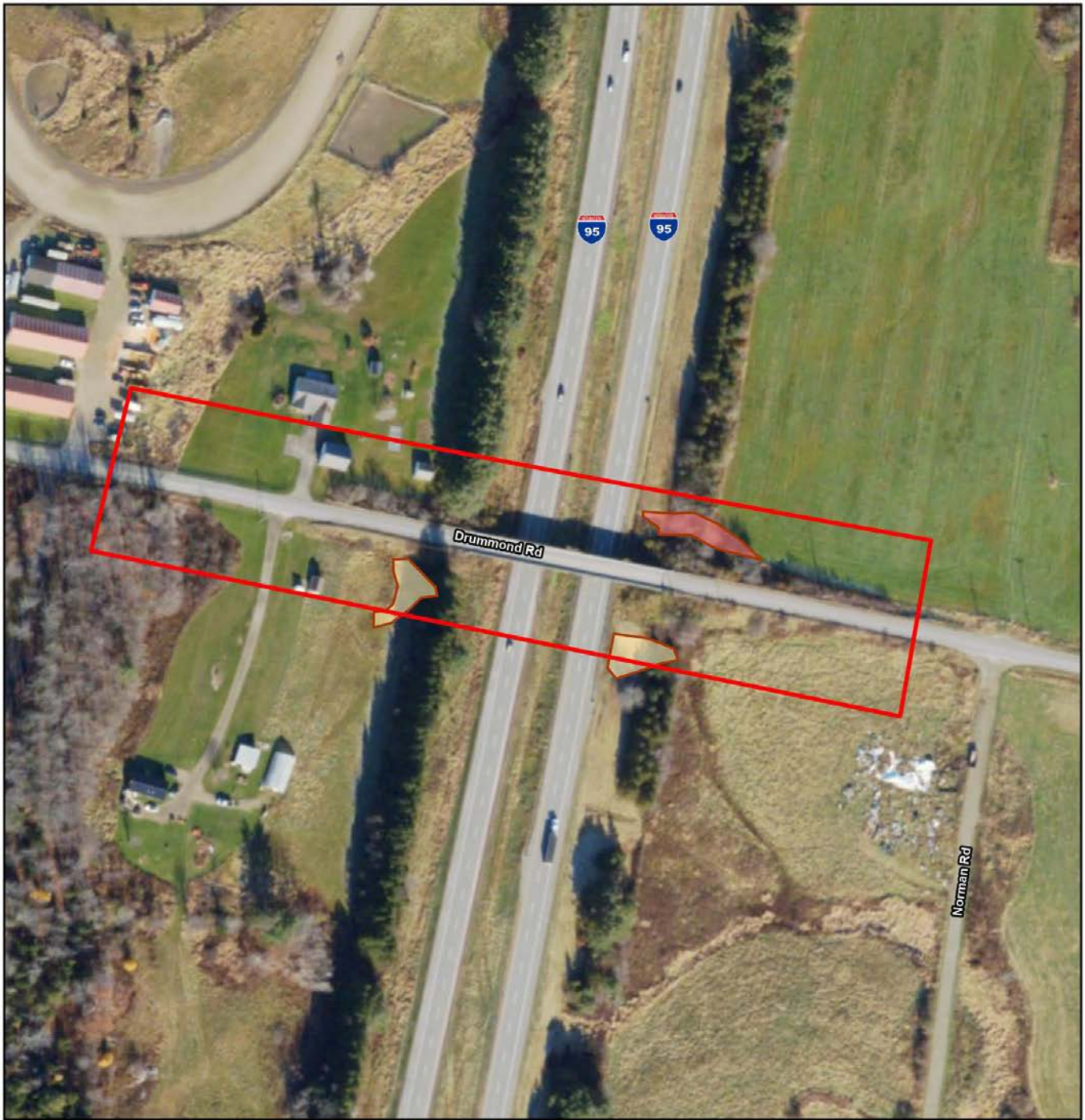
1

Rare Plant Survey Map

Notes

1. Rare plant survey performed by Stantec 06/24/2025. Observations were located utilizing an EOS Arrow GNSS/GPS Receiver. Expected accuracy of GPS data is within 1-2 meters of actual position.
2. Coordinate System: NAD 1983 UTM Zone 19N
3. Data Sources: MEGIS, Stantec
4. Background: Aerial imagery provided by National Agriculture Imagery Program (NAIP), Maine, 2022.

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.



- Legend**
- Wetland Boundary Line
 - Palustrine Emergent Wetland
 - Palustrine Forested Wetland
 - Approximate Rare Plant Survey Limit

0 2,000 4,000 Feet
(At original document size of 8.5x11)
1:2,400



Project Location
Sidney, Maine

Prepared by PWB on 2025-07-10
TR Review by KWH on 2025-07-11
IR Review by MPA 2025-07-11

Client/Project
MEDOT

Drummond Road Bridge (BR 5784) over I-95
(WIN 25469.00)

Figure No.
2

Title
Rare Plant Survey Map

Notes

1. Rare plant survey performed by Stantec 06/24/2025. Observations were located utilizing an EOS Arrow GNSS/GPS Receiver. Expected accuracy of GPS data is within 1-2 meters of actual position.
2. Coordinate System: NAD 1983 UTM Zone 18N
3. Data Sources: MEGIS, Stantec
4. Background: Aerial imagery provided by National Agriculture Imagery Program (NAIP) Maine, 2022.



- Legend**
- Wetland Boundary Line
 - Palustrine Emergent Wetland
 - Approximate Rare Plant Survey Limit

0 2,000 4,000 Feet
(At original document size of 8.5x11)
1:2,400



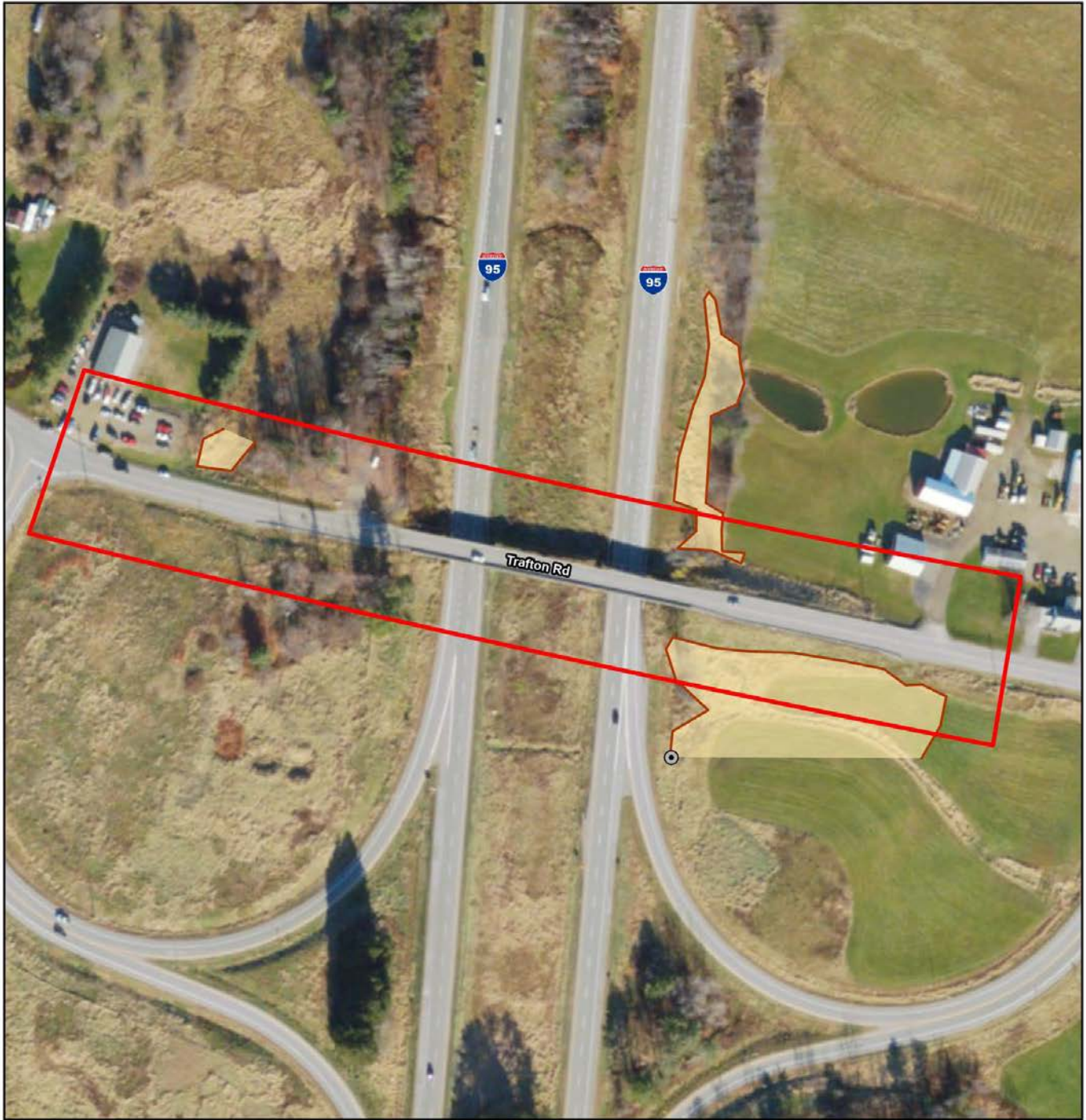
Project Location
Sidney, Maine

Prepared by PWB on 2025-07-10
TR Review by KWH on 2025-07-11
IR Review by MPA 2025-07-11

Client/Project
MEDOT
Town Farm Road Bridge (BR 5785) over I-95
(WIN 27266.00)

Figure No.
4
Title
Rare Plant Survey Map

- Notes**
1. Rare plant survey performed by Stantec 06/24/2025. Observations were located utilizing an EOS Arow GNSS/GPS Receiver. Expected accuracy of GPS data is within 1-2 meters of actual position.
 2. Coordinate System: NAD 1983 UTM Zone 19N
 3. Data Sources: MEGIS, Stantec
 4. Background Aerial imagery provided by National Agriculture Imagery Program (NAIP) Maine, 2022



- Legend**
- Culvert
 - Wetland Boundary Line
 - Palustrine Emergent Wetland
 - Approximate Rare Plant Survey Limit

0 2,000 4,000 Feet
(At original document size of 8.5x11)
1:2,400



Project Location
Waterville, Maine

Prepared by PWB on 2025-07-10
TR Review by KWH on 2025-07-11
IR Review by MPA 2025-07-11

Client/Project
MEDOT
Trafton Road Bridge (BR 5812) over I-95
(WIN 26152.00)

Figure No.
5

Title
Rare Plant Survey Map

Notes

1. Rare plant survey performed by Stantec 06/24/2025. Observations were located utilizing an EOS Arrow GNSS/GPS Receiver. Expected accuracy of GPS data is within 1-2 meters of actual position.
2. Coordinate System: NAD 1983 UTM Zone 19N
3. Data Sources: MEGIS, Stantec
4. Background Aerial imagery provided by National Agriculture Imagery Program (NAIP), Maine, 2022.

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Appendices



Appendix A Representative Photographs



Interstate 95 Bridge Replacement Projects Rare Plant Survey Report
Appendix A Representative Photographs



Photo 1. Pendulous bulrush and meadow sedge habitat within median at Lyons Road bridges. Stantec.
June 24, 2025.



Photo 2. Pendulous bulrush and meadow sedge habitat within median at Lyons Road bridges. Stantec.
June 24, 2025.



Interstate 95 Bridge Replacement Projects Rare Plant Survey Report
Appendix A Representative Photographs



Photo 3. Pendulous bulrush and meadow sedge habitat within median at Lyons Road bridges. Stantec.
June 24, 2025.



Photo 4. Pendulous bulrush and meadow sedge habitat along southbound lane shoulder at Lyons Road bridges. Stantec. June 24, 2025.



Interstate 95 Bridge Replacement Projects Rare Plant Survey Report
Appendix A Representative Photographs



Photo 5. Pendulous bulrush and meadow sedge habitat within existing utility line corridor along eastern approach at Lyons Road bridges. Stantec. June 24, 2025.



Photo 6. Pendulous bulrush and meadow sedge habitat within existing utility line corridor along eastern approach at Lyons Road bridges. Stantec. June 24, 2025.





Photo 7. Pendulous bulrush. Stantec. June 24, 2025.



Photo 8. Meadow sedge. Stantec. June 24, 2025.

Interstate 95 Bridge Replacement Projects Rare Plant Survey Report
Appendix A Representative Photographs



Photo 9. Trafton Road bridge existing meadow habitat in northwest quadrant. Stantec. June 24, 2025.



Photo 10. Trafton Road bridge existing meadow and shrubland habitat in southeast quadrant. Stantec.
June 24, 2025.



Interstate 95 Bridge Replacement Projects Rare Plant Survey Report
Appendix A Representative Photographs



Photo 11. Town Farm Road bridge existing meadow habitat in northeast quadrant. Stantec. June 24, 2025.



Photo 12. Town Farm bridge existing tall meadow and shrubland habitat in northwest quadrant. Stantec. June 24, 2025.



Interstate 95 Bridge Replacement Projects Rare Plant Survey Report
Appendix A Representative Photographs



Photo 13. Drummond Road bridge existing meadow habitat in southwest quadrant. Stantec. June 24, 2025.



Photo 14. Drummond Road bridge existing meadow habitat in northeast quadrant. Stantec. June 24, 2025.



Interstate 95 Bridge Replacement Projects Rare Plant Survey Report
Appendix A Representative Photographs



Photo 15. Dinmore Road Bridge existing mixed forested habitat along southeast quadrant. Stantec. June 24, 2025.



Photo 16. Dinmore Road Bridge existing meadow habitat in northeast quadrant. Stantec. June 24, 2025.



Appendix B MNAP Special Plant Survey Forms



SPECIAL PLANT SURVEY

Site Name: <u>I-95 Lyons Road</u> Quad Name: <u>Vassalboro</u> County: <u>Kennebec</u>	Survey Area: <u>Lyons Road bridge over I-95</u> Quad Code: _____ Town: <u>Sidney</u>
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PLANT NAME: <i>Carex granularis</i>	Occurrence Number:
Surveyors: Matt Arsenault	Date: 6/24/2025
EO Type: <input type="checkbox"/> New EO <input type="checkbox"/> Update to Existing EO <input type="checkbox"/> Not EO Quality	Sourcecode:

LOCATION (attach map showing location)**Coordinates:** 44.45338 / -69.71599 (median); 44.45363 / -69.71669 (SB shoulder); 44.45304 / -69.71466 (utility line)**Directions to Occurrence:**

Lyons Road over I-95. Plants occur in I-95 median immediately north of Lyons Rd bridge at toe of embankment, along southbound lane beginning 80 feet north of the bridge, and at base of northern road embankment within utility line corridor approximately 200 feet east of the bridge

Locational Uncertainty: ☐ Areal delimited ☒ Mapped to within 12.5 m of actual location ☐ Greater uncertainty _____ m / ft / km / miles**Confidence Extent:** ☐ Confident full extent of feature **IS** known ☒ Confident full extent is **NOT** known ☐ **Uncertain** if full extent is known**EO DATA**

Population: Number of Plants: _____ 170 <input checked="" type="checkbox"/> Individuals <input type="checkbox"/> Ramets Population Structure % Vegetative % Reproductive	Phenology: <input type="checkbox"/> In leaf <input type="checkbox"/> In bud <input type="checkbox"/> In flower <input type="checkbox"/> Immature fruit <input checked="" type="checkbox"/> Mature fruit <input type="checkbox"/> Seed dispersing <input type="checkbox"/> Dormant	Population Area: <input type="checkbox"/> 1 square yard <input type="checkbox"/> 1 – 5 square yards <input type="checkbox"/> 5 – 20 square yards <input type="checkbox"/> 20 – 100 square yards <input checked="" type="checkbox"/> 100 sq yds to 1 acre <input type="checkbox"/> 1 acre +	Type of reproduction? <input checked="" type="checkbox"/> Sexual <input type="checkbox"/> Asexual <input type="checkbox"/> Not Observed Vigor? <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Other than normal	Evidence disease, predation, etc.? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Photo Taken? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Specimen Collected? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Collection Number: Repository:	Comments:			

GENERAL DESCRIPTION**Associated Natural Community:** Maintained dry mesic, mesic, to wet open meadow / early successional shrubland habitat – moderately calcareous**Associated Plant Species:** *Poa pratensis*, *Schedonorus pratensis*, *Scirpus pendulous*, *Leucanthemum vulgare*, *Galium mollugo*, *Lythrum salicaria*, *Solidago canadensis*, *Scirpus atrovirens***Substrate/Soil Type:** Lamoine silt loam, Scantic silt loam**Threats to Population:** Succession although habitat is routinely maintained as part of roadway and utility line maintenance**Conservation/Management/Research Needs:** Plants likely continue beyond mapped areas, including along road shoulders and in wetland system northeast of Lyons Rd bridge.

Elevation:	Aspect	% Slope	Light	Topographic Position	Moisture
Min 200 ft	<input type="checkbox"/> N <input type="checkbox"/> NE <input type="checkbox"/> E <input type="checkbox"/> NW <input type="checkbox"/> S <input type="checkbox"/> SE <input type="checkbox"/> W <input type="checkbox"/> SW <input checked="" type="checkbox"/> Flat or NA	<input checked="" type="checkbox"/> Flat <input type="checkbox"/> 0-10 <input type="checkbox"/> 10-35 <input type="checkbox"/> 35+ <input type="checkbox"/> Vertical	<input checked="" type="checkbox"/> Open <input type="checkbox"/> Partial <input type="checkbox"/> Filtered <input type="checkbox"/> Shade	<input type="checkbox"/> Crest <input type="checkbox"/> Upper Slope <input type="checkbox"/> Mid-slope <input checked="" type="checkbox"/> Lower Slope <input type="checkbox"/> Bottom <input checked="" type="checkbox"/> Level Plain	<input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated (wet mesic) <input checked="" type="checkbox"/> Moist (mesic) <input checked="" type="checkbox"/> Dry-mesic <input type="checkbox"/> Dry (xeric)
Max ft / m					

LANDOWNER INFORMATION		
Landowner name/address for entire population (attach additional owner information on a separate sheet): State of Maine	Phone	Comments:
	Tax map #	
	Lot #	

EO RANKING		
<p>CURRENT CONDITION of the plant's immediate habitat. Is the habitat pristine or degraded? Note any disturbances within the plant habitat (check off, describe below to what degree these have altered natural ecological processes, or if they have any negative or positive effects on the population). Note how the disturbance(s) may influence success of the plant at the site.</p> <div> <input type="checkbox"/> Logging-most recently ~ yrs ago <input type="checkbox"/> Fire <input type="checkbox"/> Dumping or mining </div> <div> <input type="checkbox"/> Agriculture / Pasture <input type="checkbox"/> Impoundment <input type="checkbox"/> ORV / Vehicle disturbance </div> <div> <input type="checkbox"/> Animal effects (insect outbreaks, browsing) <input type="checkbox"/> Exotic plants <input type="checkbox"/> Trails / Roads </div> <div> <input type="checkbox"/> Wind or ice damage <input type="checkbox"/> Erosion <input checked="" type="checkbox"/> Other routine mowing </div> <div> <input type="checkbox"/> No Evidence of disturbance </div> <p>Describe: Habitat is routinely mowed and maintained as open meadow / shrubland for highway and utility line infrastructure</p> <p>Condition Rank</p> <div> <input type="checkbox"/> A – No apparent signs of human disturbance (or long enough ago that effects are no longer visible or are extremely minor) <input type="checkbox"/> B – Some signs of human disturbance or degradation, but habitat generally intact </div> <div> <input type="checkbox"/> C – Signs of human disturbance or degradation, and habitat compromised in some significant way <input type="checkbox"/> D – Highly disturbed (multiple impacts causing habitat to be drastically altered) </div> <div> <input checked="" type="checkbox"/> Other / Habitat disturbed, consistent with needs of species / Explain: Maintained road shoulder and utility line </div>		
<p>SIZE & QUALITY of the population.</p> <p>How large is this population relative to typical populations of this species? Very large population compared to other known sites in New England</p> <p>Does it appear to be capable of maintaining itself if its habitat remains basically intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: Large population, likely one of the largest in Maine. Roadway maintenance actions appear to be maintaining favorable habitat</p> <p>Size & Quality Rank <input checked="" type="checkbox"/> A – Excellent <input type="checkbox"/> B – Good <input type="checkbox"/> C – Fair <input type="checkbox"/> D – Poor</p>		
<p>LANDSCAPE CONTEXT of the area surrounding the plant habitat. What land uses and/or natural communities surround the observed area? Is the habitat fragmented? To what degree can the population be protected from effects of adjacent land uses?</p> <p>Describe: Plants are located on the side of the interstate in disturbed habitat. The occurrence appears native and calcareous habitat is consistent with occurrences elsewhere in New England. Colonization of robust native and non-native perennials such as Schedonorus spp, Cirsium arvense, Solidago canadensis, or Securigera varia could outcompete with Carex granularis due to its relatively small stature within the habitat</p> <p>Landscape Rank</p> <div> <input type="checkbox"/> A – Population surrounded by > = 1000 acres of undisturbed landscape <input type="checkbox"/> B – Population surrounded by fairly intact landscape, though there may be cuts nearby </div> <div> <input type="checkbox"/> C – Population surrounded by fragmented forest or rural landscape <input checked="" type="checkbox"/> D – Surrounding area developed </div> <div> <input type="checkbox"/> Other / Explain: </div>		

OVERALL RANK for EO based on your experience					
<input type="checkbox"/> A – Excellent	<input type="checkbox"/> B – Good	<input checked="" type="checkbox"/> C – Fair	<input type="checkbox"/> D – Poor	<input type="checkbox"/> E – Extant	
Comments: Current roadway maintenance actions appear to be maintaining favorable habitat however succession of habitat / continued colonization of robust weedy perennials could outcompete <i>Carex granularis</i> .					
MNAP VERIFIED RANK:					
<input type="checkbox"/> A – Excellent	<input type="checkbox"/> B – Good	<input type="checkbox"/> C – Fair	<input type="checkbox"/> D – Poor	<input type="checkbox"/> E – Extant	
Date:					
Reviewer:					
Rationale:					

SPECIAL PLANT SURVEY

Site Name: <u>I-95 Lyons Road</u> Quad Name: <u>Vassalboro</u> County: <u>Kennebec</u>	Survey Area: <u>Lyons Road bridge over I-95</u> Quad Code: _____ Town: <u>Sidney</u>
---	---

PLANT NAME: <u>Scirpus pendulous</u>	Occurrence Number:
Surveyors: <u>Matt Arsenault</u>	Date: <u>6/24/2025</u>
EO Type: <input type="checkbox"/> New EO <input type="checkbox"/> Update to Existing EO <input type="checkbox"/> Not EO Quality	Sourcecode:

LOCATION (attach map showing location)**Coordinates:** 44.45338 / -69.71599 (median); 44.45363 / -69.71669 (SB shoulder); 44.45304 / -69.71466 (utility line)**Directions to Occurrence:**

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Locational Uncertainty: ☐ Areal delimited ☒ Mapped to within 12.5 m of actual location ☐ Greater uncertainty _____ m / ft / km / miles**Confidence Extent:** ☐ Confident full extent of feature **IS** known ☒ Confident full extent is **NOT** known ☐ **Uncertain** if full extent is known**EO DATA**

Population: Number of Plants: <u>425</u> <input checked="" type="checkbox"/> Individuals <input type="checkbox"/> Ramets Population Structure % Vegetative % Reproductive	Phenology: <input type="checkbox"/> In leaf <input type="checkbox"/> In bud <input type="checkbox"/> In flower <input type="checkbox"/> Immature fruit <input checked="" type="checkbox"/> Mature fruit <input type="checkbox"/> Seed dispersing <input type="checkbox"/> Dormant	Population Area: <input type="checkbox"/> 1 square yard <input type="checkbox"/> 1 – 5 square yards <input type="checkbox"/> 5 – 20 square yards <input type="checkbox"/> 20 – 100 square yards <input checked="" type="checkbox"/> 100 sq yds to 1 acre <input type="checkbox"/> 1 acre +	Type of reproduction? <input checked="" type="checkbox"/> Sexual <input type="checkbox"/> Asexual <input type="checkbox"/> Not Observed Vigor? <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Other than normal vigorous	Evidence disease, predation, etc.? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Photo Taken? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Specimen Collected? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Collection Number: Repository:	Comments:			

GENERAL DESCRIPTION**Associated Natural Community:** Maintained dry mesic, mesic, to wet open meadow / early successional shrubland habitat – moderately calcareous**Associated Plant Species:** *Poa pratensis*, *Schedonorus pratensis*, *Carex granularis*, *Leucanthemum vulgare*, *Galium mollugo*, *Lythrum salicaria*, *Solidago canadensis*, *Scirpus atrovirens***Substrate/Soil Type:** Lamoine silt loam, Scantic silt loam**Threats to Population:** Succession although habitat is routinely maintained as part of roadway and utility line maintenance**Conservation/Management/Research Needs:** Plants likely continue beyond mapped areas, including along road shoulders and in wetland system northeast of Lyons Rd bridge.

Elevation:	Aspect	% Slope	Light	Topographic Position	Moisture
Min 200 ft	<input type="checkbox"/> N <input type="checkbox"/> NE <input type="checkbox"/> E <input type="checkbox"/> NW <input type="checkbox"/> S <input type="checkbox"/> SE <input type="checkbox"/> W <input type="checkbox"/> SW <input checked="" type="checkbox"/> Flat or NA	<input checked="" type="checkbox"/> Flat <input type="checkbox"/> 0-10 <input type="checkbox"/> 10-35 <input type="checkbox"/> 35+ <input type="checkbox"/> Vertical	<input checked="" type="checkbox"/> Open <input type="checkbox"/> Partial <input type="checkbox"/> Filtered <input type="checkbox"/> Shade	<input type="checkbox"/> Crest <input type="checkbox"/> Upper Slope <input type="checkbox"/> Mid-slope <input checked="" type="checkbox"/> Lower Slope <input type="checkbox"/> Bottom <input checked="" type="checkbox"/> Level Plain	<input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated (wet mesic) <input checked="" type="checkbox"/> Moist (mesic) <input checked="" type="checkbox"/> Dry-mesic <input type="checkbox"/> Dry (xeric)
Max ft / m					

LANDOWNER INFORMATION		
Landowner name/address for entire population (attach additional owner information on a separate sheet): State of Maine	Phone	Comments:
	Tax map #	
	Lot #	

EO RANKING		
<p>CURRENT CONDITION of the plant's immediate habitat. Is the habitat pristine or degraded? Note any disturbances within the plant habitat (check off, describe below to what degree these have altered natural ecological processes, or if they have any negative or positive effects on the population). Note how the disturbance(s) may influence success of the plant at the site.</p> <div> <input type="checkbox"/> Logging-most recently ~ yrs ago <input type="checkbox"/> Fire <input type="checkbox"/> Dumping or mining </div> <div> <input type="checkbox"/> Agriculture / Pasture <input type="checkbox"/> Impoundment <input type="checkbox"/> ORV / Vehicle disturbance </div> <div> <input type="checkbox"/> Animal effects (insect outbreaks, browsing) <input type="checkbox"/> Exotic plants <input type="checkbox"/> Trails / Roads </div> <div> <input type="checkbox"/> Wind or ice damage <input type="checkbox"/> Erosion <input checked="" type="checkbox"/> Other routine mowing </div> <div> <input type="checkbox"/> No Evidence of disturbance </div> <p>Describe: Habitat is routinely mowed and maintained as open meadow / shrubland for highway and utility line infrastructure</p> <p>Condition <input type="checkbox"/> A – No apparent signs of human disturbance (or long enough ago that effects are no longer visible or are extremely minor)</p> <p>Rank <input type="checkbox"/> B – Some signs of human disturbance or degradation, but habitat generally intact</p> <p><input type="checkbox"/> C – Signs of human disturbance or degradation, and habitat compromised in some significant way</p> <p><input type="checkbox"/> D – Highly disturbed (multiple impacts causing habitat to be drastically altered)</p> <p><input checked="" type="checkbox"/> Other / Habitat disturbed, consistent with needs of species / Explain: Maintained road shoulder and utility line</p>		
<p>SIZE & QUALITY of the population.</p> <p>How large is this population relative to typical populations of this species? Very large population compared to other known sites in New England</p> <p>Does it appear to be capable of maintaining itself if its habitat remains basically intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: Large and vigorous population, likely one of the largest in Maine. Roadway maintenance actions appear to be maintaining favorable habitat</p> <p>Size & Quality Rank <input checked="" type="checkbox"/> A – Excellent <input type="checkbox"/> B – Good <input type="checkbox"/> C – Fair <input type="checkbox"/> D – Poor</p>		
<p>LANDSCAPE CONTEXT of the area surrounding the plant habitat. What land uses and/or natural communities surround the observed area? Is the habitat fragmented? To what degree can the population be protected from effects of adjacent land uses?</p> <p>Describe: Plants are located on the side of the interstate in disturbed habitat. The occurrence appears native and calcareous habitat is consistent with occurrences elsewhere in New England</p> <p>Landscape <input type="checkbox"/> A – Population surrounded by > = 1000 acres of undisturbed landscape</p> <p>Rank <input type="checkbox"/> B – Population surrounded by fairly intact landscape, though there may be cuts nearby</p> <p><input type="checkbox"/> C – Population surrounded by fragmented forest or rural landscape</p> <p><input checked="" type="checkbox"/> D – Surrounding area developed</p> <p><input type="checkbox"/> Other / Explain:</p>		
<p>OVERALL RANK for EO based on your experience <input type="checkbox"/> A – Excellent <input checked="" type="checkbox"/> B – Good <input type="checkbox"/> C – Fair <input type="checkbox"/> D – Poor <input type="checkbox"/> E – Extant</p> <p>Comments: The large size and vigorous plants supports a higher rank. Current roadway maintenance actions appear to be maintaining favorable habitat</p>		

MNAP VERIFIED RANK: ☐ **A** – Excellent ☐ **B** – Good ☐ **C** – Fair ☐ **D** – Poor ☐ **E** – Extant

Date:

Reviewer:

Rationale: