

Washington Rare Plant Care and Conservation
Rare Plant and Pollinator Field Data Sheet
Box 354115, Seattle, Washington 98195-4115 ♦ 206-616-0780

Rec paper ___n/a___/___ Rec elec_6/13/14__Track__11/26/14__
Waiting for _____
Enter db__11/26/14__ Scan_n/a___/___ WNHP___/___/___
Land mgr___Dan Friesz___12/8/14__
Land mor___/___/___

SECTION 1 – GENERAL – Whether or not population was found, please complete this entire section

Species Found? Yes

Element Code (ElCode): (11)

[EO ID: 100097

Taxon Name: (5) *Isoetes nuttallii*

EO Number: (12)

[K01]

☐ Unknown or new

Common Name: Nuttall's Quillwort

Shape IDs monitored (if any)

Status: Sensitive

Comments: New EO

Date(s) of Visit (MM-DD-YYYY): (2) 06-05-2014

Survey Site Name: (3) Youngs Wetlands

Report Preparer's Name: (9) Paul Slichter

Managed Area: (16,17) Columbia Land Trust

Other people in attendance: (9) Susan Saul

County: (14) Klickitat

Land Manager's Name: Lindsay Cornelius

How did you contact land manager? By email

Comments: Here is Lindsay's E-mail Address: Lindsay Cornelius <lindsayc@columbialandtrust.org>;

LOCATION (88) *Include detailed directions, distances, landmarks.*

If you **did NOT find** the population, provide detailed directions to your search area. If you **visited multiple sites**, give directions to each and label according to Shape ID if known (plus you can use Section 7 if you want).

Drive east of Goldendale on the Glenwood-Goldendale Highway. Pass the road to the Klickitat Fish Hatchery (which veers left) and pass over Outlet Creek. You will soon see mile marker 4 on the right. Continue to about mp 4.4 where you should see a faded red flag on a tree limb on the south side of the road (GPS: 0640127E 5097202N - NAD27). I find the best place to park about 100 meters east at a wide, flatter shoulder next to large rocks on the north side of the road. From the flagging, walk south about 50 meters, crossing the private haul road. Look for a barb wire gate to pass through. Upon passing through the gate, continue south along a dirt road for about 1/3 mile. You will see a stout gate that is locked. Cross the good barb wire fence via wooden steps on the west side of the gate. ISNU is located in wetlands about 2-300 meters E of the main north gate and about 50-60 meters south of the north boundary fence. The GPS reading should get you fairly close to both known ISNU sites, although the plants are small and will be difficult to search for.

SECTION 2 – MAPPING – Whether or not population was found, please complete this entire section

Legal Description: (83) T6N R13E S16, SW1/4 of the NE1/4; (OR)

(Monitoring Hdbk Sect 2) T R S , 1/4 of the 1/4; (OR)

Additional:

USGS Quad Name: (80)

Altitude: (41) 1795 to 1810 feet

Check ALL that apply – On the 8-1/2 x 11" WNHP map (NOT the USGS quad map):

☒ I have marked the location and extent of the population that I **found**;

☐ I have marked the extent of my search area where I **did not find** plants.

In the EO Map legend (lower right corner), draw symbols for areas where plant was "Found" and/or "Searched Area."

Taxon Name: *Isoetes nuttallii*

EO Number:

If population FOUND

Check one:

- ☒ I am confident that I have accurately located and mapped the population at map scale.
- ☐ I'm NOT confident that I have mapped the population to scale, but I am confident that the population is within the general area that I have indicated on the map.

Have you mapped the entire extent of the population? ⁽¹⁸⁾

☐ YES ☐ NO ☒ UNKNOWN

If no or unknown, explain: New EO. A large area of wetlands remains to be searched for this species.

Is the population in the same location as listed on the EO record? ☐ YES ☐ NO ☐ UNKNOWN

If no or unknown, explain:

If population NOT FOUND

Are you confident that you are in the same location listed on the EO record? ☐ YES ☐ NO ☐ UNKNOWN

Please explain:

Did the written directions match the map?

☐ YES ☐ NO

If no, please explain:

Take at least 4 UTM readings along the perimeter of the population (if population found) - *or* - the area you searched (if population not found).

GPS Make and Model: ⁽⁸⁶⁾ Garmin GPS 60 **GPS Datum:** ⁽⁸⁵⁾ NAD 27 **Zone:** ⁽⁸⁵⁾ 10

Easting: **Northing:** **Description:** ⁽⁸⁵⁾

640642 5096740 Site #1

640637 5096746 Site #2

Easting: **Northing:** **Description:** ⁽⁸⁵⁾

SECTION 3 – POPULATION & POLLINATORS – Whether or not population was found, complete top section. Complete Population Condition & Pollinators only if population was found.

Taxon Name: *Isoetes nuttallii*

EO Number:

If population FOUND

Total Number all sites: ^(25,26) 61 Individuals

Comment: 58 plants in Site #1, 3 plants in Site#2.

Estimated? ⁽²⁷⁾ No **Distribution:** ⁽³²⁾ Scattered-patchy

Total Area of the Population: ^(19,20) 2 squ meters

If multiple visits, date count was made: 06-05-2014

(Multiple sites? See Section 7.)

Phenology Write number & check "%" or "plants" (% is preferred)

⁽³¹⁾ **Vegetative only** 100 ☒ % ☐ plants

Flowering

Fruiting

Flowering & Fruiting

Seedling

Senescent

If multiple visits, date determined:

Comments: ⁽³²⁾

If population NOT FOUND

Might it be too early or too late in the season to see the species in bloom and therefore to make a positive ID?

Please explain:

Is there any sign of habitat alteration that may be a factor in the species' absence from this site?

☐ YES ☐ NO

If yes, please explain:

Population Condition & Pollinators - If population was FOUND, please complete this section

NOTE THE CONDITION OF TARGET PLANTS: ^(33,34) If you answered Yes to any items at left, please explain:

Evidence of disease? ☐ YES ☒ NO

Evidence of herbivory? ☐ YES ☒ NO

Evidence of injury? ☐ YES ☒ NO

Other evidence of stress? ☐ YES ☒ NO

POLLINATOR OBSERVATION: Note any pollinators you observe on the flowers of the rare plant species.

Time of observation: Start Time: Finish Time:

Insects observed (ID family if possible): ^(35,36)

Pollinator Comments: ⁽³⁷⁾ It is a species that is not pollinated.

SECTION 4 – HABITAT & SITE DESCRIPTION - Whether or not population was found, complete top section. Complete Site Physical Characteristics only if population was found.

If population FOUND

ASSOCIATED SPECIES – List species found at site. Put asterisks by dominant species: **If multiple sites**, you could list most common species & amend in Section 7: ⁽⁶⁶⁾

*Carex nebrascensis, Hypericum anagalloides, Montia linearis

If population NOT FOUND

ASSOCIATED SPECIES – If population was not found, are its original associates (listed on the EO Record) present? ☐ YES ☐ NO

If yes, please list which of the original associates are present:

HABITAT DESCRIPTION: ⁽⁵²⁾ (Even if population was not found, describe habitat of location where population was supposed to be.)

Site #1: Small pool about 2' x 4' with flat, muddy bottom about 6-8" deeper than surrounding sedge meadow and about 3' east of N-S stream. Site #2 is in shallow side channel of small stream about 6 meters NW of Site #1. Plants

Taxon Name: *Isoetes nuttallii*

EO Number:

both slightly submerged and out of water.

INVASIVE SPECIES – Whether or not the population was found, are invasive species present? (59)

☒ **YES** ☐ **NO** If yes, please explain and list species

Comments: (59) Extensive stands of *Hieracium caespitosum* are spreading through the wetlands. I believe Columbia Land Trust is making some long range plans about weed management on its properties, but I don't know how easy it will be to control this weed.

List Invasive Species: (70) *Hieracium caespitosum*

Site Physical Characteristics: (Complete only if population was FOUND)

Soil: (46) Sedimentary deposits plus decomposing plant materials

Substrate: (43) Basalt, but unknown how deep.

Moisture Regime: (45) ☐ inundated ☒ wet ☐ mesic
☐ dry ☐ xeric

Slope: (38) ☐ flat ☒ 0-10° ☐ 10-35°
☐ >35° ☐ vertical

Light: (48) ☒ open ☐ filtered ☐ shade

Aspect: (40) (i.e. N, SE, flat) nearly flat

Management Comment:

Hydrology impacts? ☐ YES ☒ NO
Evidence of disturbance? (57) ☐ YES ☒ NO
Adjacent land use threats? (60) ☒ YES ☐ NO

If you answered Yes to any items at left, please explain:
(58,60)

DNR lands outside the Youngs Wetlands Preserve are grazed fairly heavily.

SECTION 5 – COMMENTS, IMAGES & DETERMINATION

COMMENTS (90) (Protection needs, general observations, discrepancies of EOR):

This is definitely a quillwort, and the habitat fits that of Nuttall's quillwort, but I can't say it isn't another quillwort with similar habitat (*I. howellii* or *I. bolanderi* ?, which would be R1 status).

Revisit Needed: (28,30) ☒ YES ☐ NO If yes, Why? To search more extensively for ISNU both within suitable habitat at Young' Wetlands and on DNR lands downstream to the north.

Rare Care use only: Next year's list? ___No___

PHOTOGRAPHS/IMAGES (77,78)

Images?

Digital sent by email (preferred)

Photographer name: Paul Slichter

Please label each image and note quantity:

Whole plant (1 max): 1

Close-up with diagnostics (3 max): 1

Insect (1 of each insect):

Other—threats, etc (be selective): 1

Volunteer pictured: WriteName

DETERMINATION (Please note references)

- ☐ **Keyed Reference(s):**
- ☐ **Compared w/specimen** (location):
- ☐ **Compared w/photo:**
- ☐ **Compared w/drawing:**
- ☐ **Personal authority**
- ☐ **Other:**

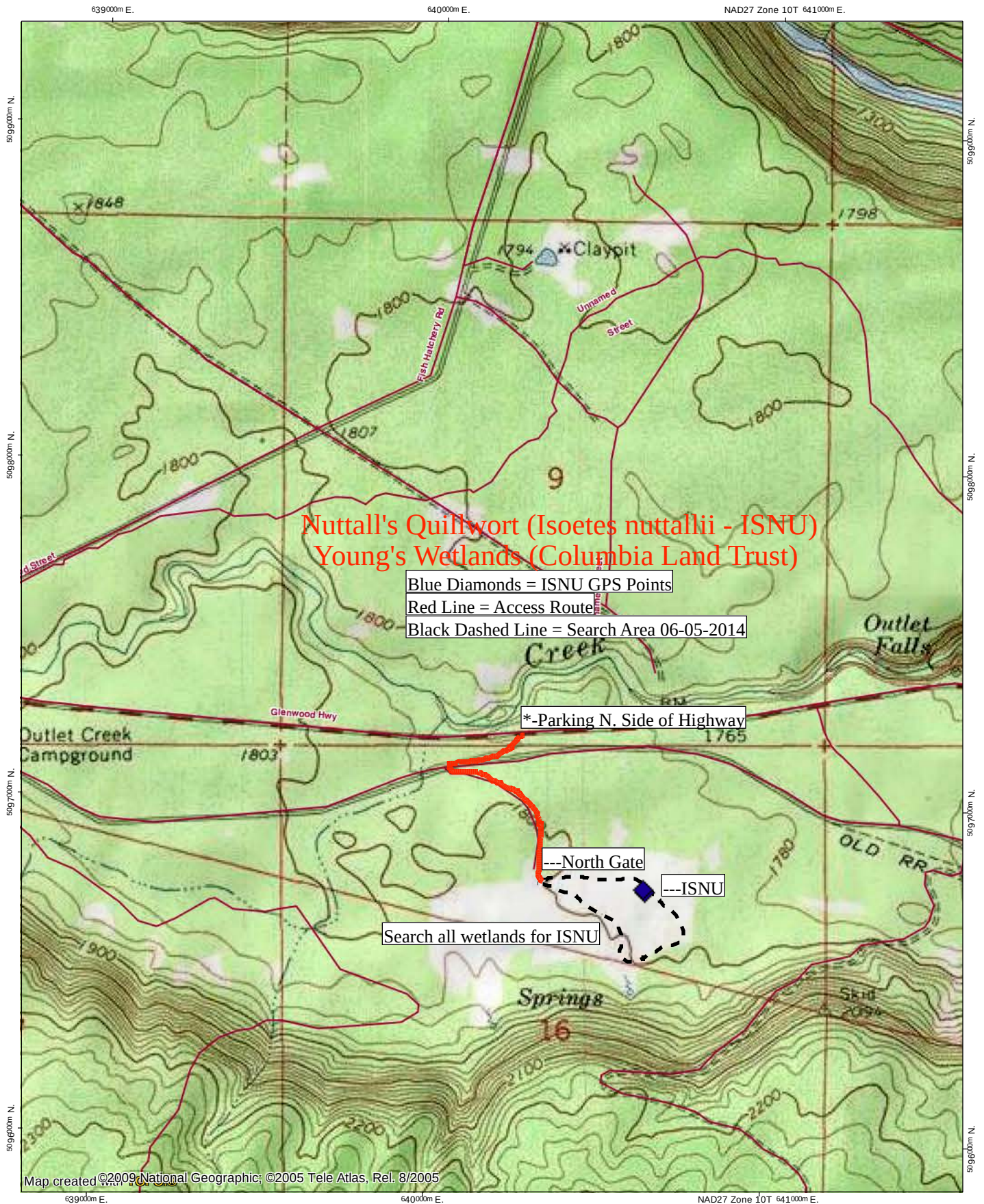
Key diagnostic features noted (please list): Tufted form, bulbous leaf base, emergent habitat.

VOUCHER **Only collect if requested on assignment sheet

*ISNU at Young's Wetlands
Columbia Land Trust*

Slichter 2014





Nuttall's Quillwort (*Isoetes nuttallii* - ISNU) Young's Wetlands (Columbia Land Trust)

Blue Diamonds = ISNU GPS Points

Red Line = Access Route

Black Dashed Line = Search Area 06-05-2014

*-Parking N. Side of Highway

---North Gate

---ISNU

Search all wetlands for ISNU

Map created with ©2009 National Geographic; ©2005 Tele Atlas, Rel. 8/2005

