Sierra Ecosystem Associates

August 4, 2022

Mr. Gage Dayton
R3X Group

Subject: Final Rare Plant Survey Report for Lake Tahoe Cable Removal Project

Dear Mr. Dayton

Sierra Ecosystem Associates (SEA) is pleased to submit the attached Final Report for the Lake Tahoe Cable Removal Project. The following changes were made to the report:

- The species list and TYC occurrence in Location #2 was modified
- Minor language change for location descriptions

We appreciate the opportunity to support you with this Project. Please feel free to contact me at (530) 626-1401 if you have any questions or comments regarding the above information or attachment.

Sincerely,

Jeremy Waites
Project Manager/Ecologist

Enclosure

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RARE PLANT SURVEY FOR TAHOE YELLOW CRESS

CABLE REMOVAL PROJECT



Prepared for:

R3X Group, Inc.

Prepared by:

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FINAL

AUGUST 4, 2022

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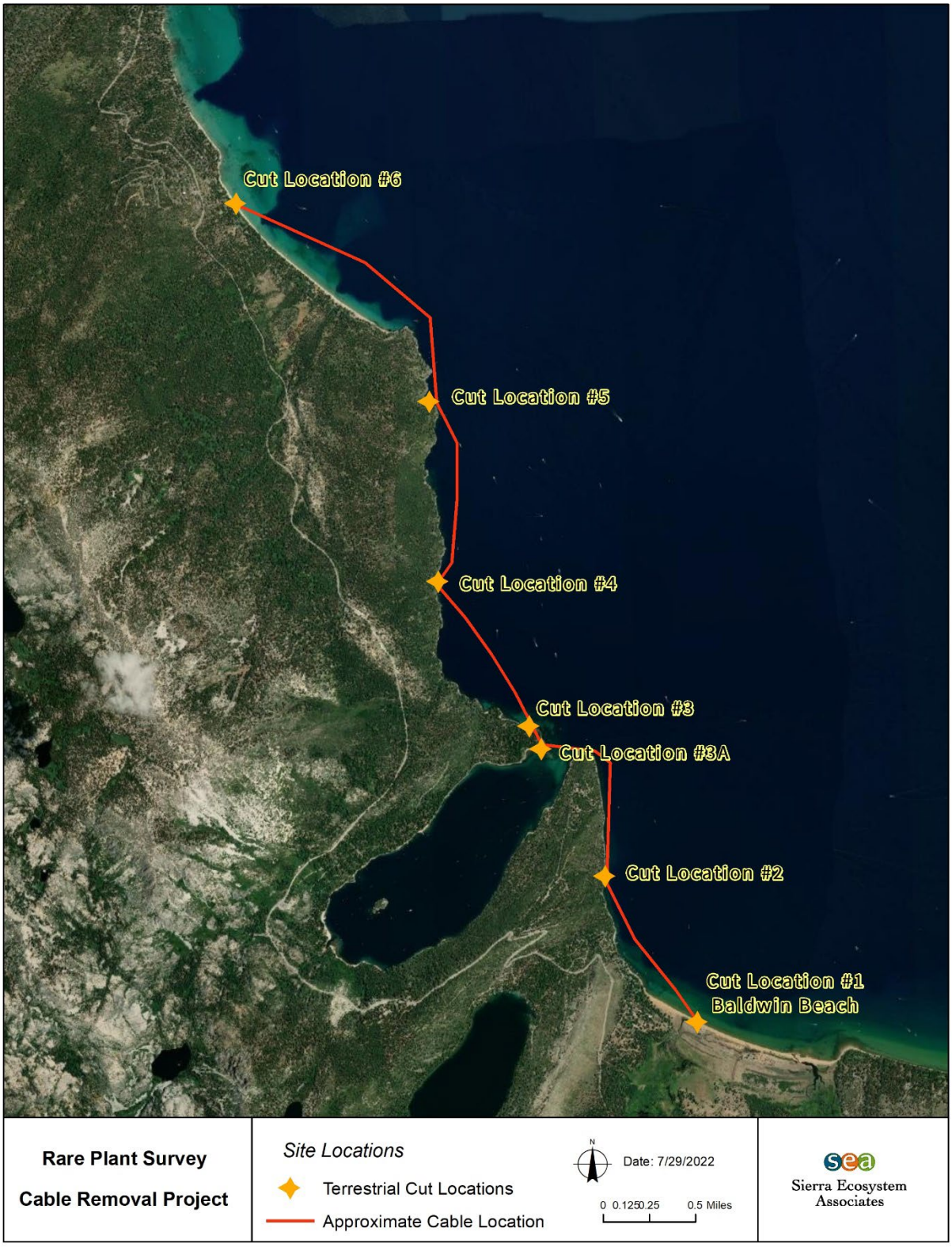
1.0 INTRODUCTION

The following sections address the R3X proposed Cable Removal Project (Project). The Project is located in South Lake Tahoe, California along the southwest shore of Lake Tahoe from north of D.L. Bliss State Park to Baldwin Beach. The project involves the removal of approximately 75 tons of lead cable from Lake Tahoe. The cable is mostly underwater but intersects the shoreline in 6 different onshore locations. An endemic plant species to the shores of Lake Tahoe, the Tahoe yellow cress (*Rorippa subumbellata*), has multiple occurrences nearby as shown in Figure 2. This Tahoe Yellow Cress is listed as endangered under the California Endangered Species Act and is a candidate for protection under the federal Endangered Species Act. A survey was completed to assess the nearby populations to determine the location of this species relative to Project disturbance areas.

Figure 1. Project Location



Figure 2. Survey Areas and Terrestrial Cut Locations



2.0 METHODOLOGY

Sierra Ecosystem Associates, Inc. (SEA) staff Senior Ecologist, Jeremy Waites (J. Waites), and Natural Resource Analyst, Summer Von Aesch (S. Von Aesch) visited the project site and completed a rare plant survey with a focus on Tahoe Yellow Cress (TYC) on July 21, 2022. The survey consisted of travelling along the shoreline of Lake Tahoe to each location and conducting a survey. The survey consisted of a floristic pedestrian survey from the water's edge to the high-water mark. The survey collected species information for all plants in the disturbance area and within 50 feet of the cable removal. If rare plants were found, information was collected on number of plants, size of population(s), and exact location of the rare plants and the cable using a sub-meter GPS unit. Pictures were taken of each rare plant occurrence as well as the overview of the site.

3.0 RESULTS

Following the completion of the field survey, SEA found Tahoe yellow cress in Location 1 and Location 4. An overview of each cut location and pictures of the Tahoe Yellow Cress found are recorded below.

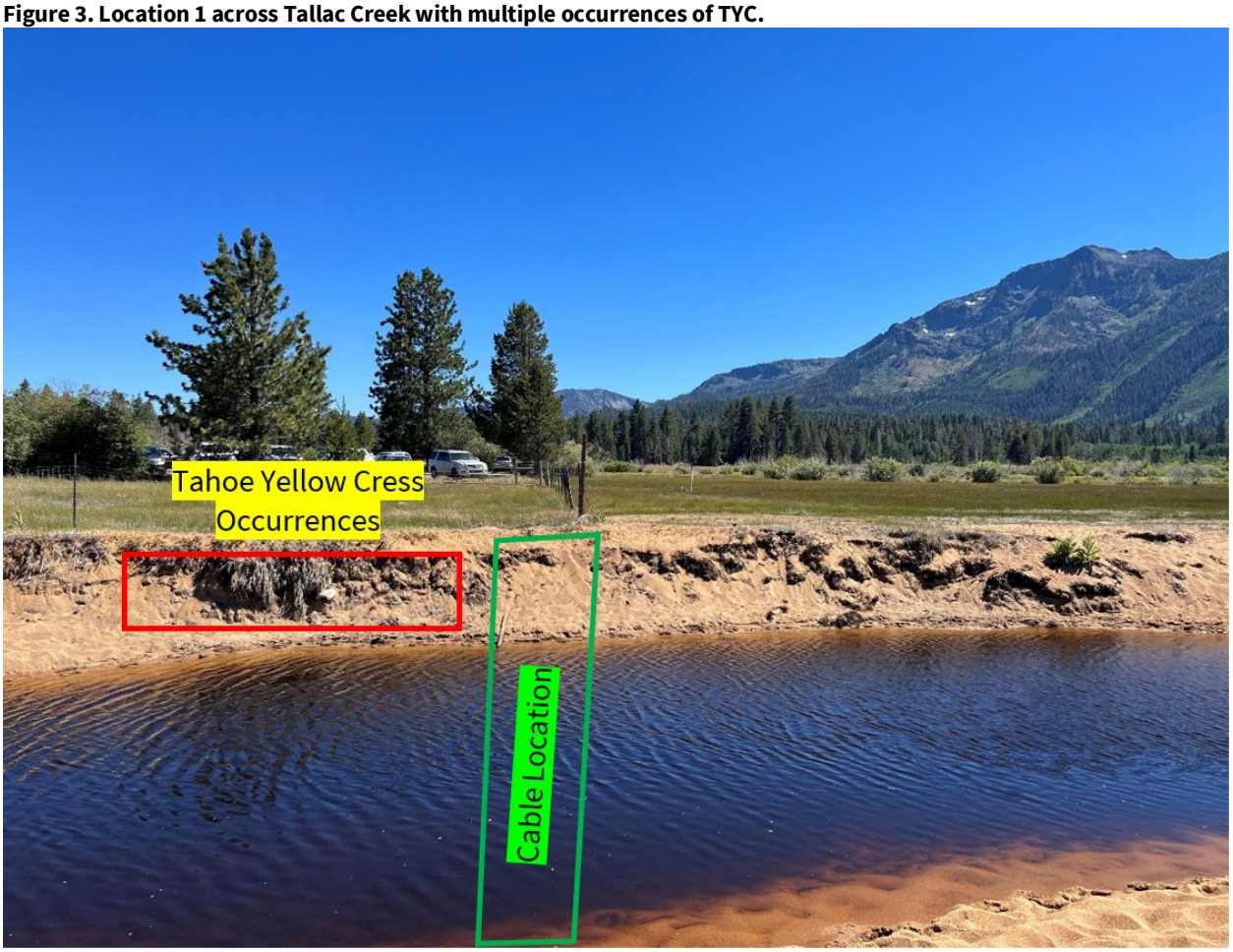
Location 1

Location 1 cuts across the mouth of Tallac Creek on Baldwin Beach. The vegetation around the site consisted of mullein, sedge species, lupine, and Tahoe Yellow Cress. Eight individual plants are located a few feet down stream of the removal location. The location of the plants in relation to the cable removal is shown in Figure 3.

Species Present

- *Rorippa subumbellata*
- *Verbascum thapsus*
- *Lupinus polyphyllus*
- *Carex nebrascensis*

Figure 3. Location 1 across Tallac Creek with multiple occurrences of TYC.



Location 2

Location 2 is on a rocky shore 0.75 mile south of the mouth of Emerald Bay. The vegetation around the site consists of various wetland plants such as willow, aspen, and alder. No occurrences of TYC were present.

Species Present

- *Populus trichocarpa*
- *Alnus incana*
- *Populus tremuloides*
- *Potentilla gracilis*
- *Pinus contorta*
- *Galium ssp.*
- *Salix lasiolepis*
- *Rorippa curvisiliqua*

Location 3
This site cuts across the low-lying peninsula on the north side of the mouth of Emerald Bay. The cable removal area is on a well vegetated rocky shore. The vegetation above the ordinary high-water mark (OHWM) is dominated by overstory trees consisting of sugar pine, Jeffrey pine, ponderosa pine, white fir, and black cottonwood. The understory was on the sandy shore was productive with No occurrences of TYC were found in this location.

Species Present
- *Quercus vacciniifolia*
- *Abies concolor*
- *Calocedrus decurrens*
- *Hieracium albiflorum*
- *Pinus lambertiana*
- *Pinus jeffreyii*
- *Pinus ponderosa*
- *Populus trichocarpa*
- *Potentilla gracilis*
- *Galium ssp.*
- *Deschampsia cespitosa*

Location 3A
The north side of the mouth of Emerald Bay where the cable removal is proposed is a heavily vegetated sandy shoreline consisting mostly of lupine and cinquefoil. No occurrences of TYC were found in this location.

Species Present
- *Hosackia pinnata*
- *Acmispon decumbens*
- *Lupinus polyphyllus*
- *Rumex triangulivalvis*
- *Verbascum thapsus*
- *Mentha canadensis*
- *Salix lasiandra*
- *Potentilla gracilis*
- *Hieracium albiflorum*

Location 4
This cable removal area is located north of Emerald Bay on a rocky shore. The vegetation consisted of mostly huckleberry oak. One occurrence of TYC was found adjacent to the cable and is shown in Figure 4.

Species Present

- *Pseudognaphalium californicum*
- *Hieracium albiflorum*
- *Carex ssp.*
- *Deschampsia cespitosa*
- *Potentilla gracilis*
- *Rorippa subumbellata*
- *Arctostaphylos patula*
- *Pinus lambertiana*
- *Quercus vacciniifolia*
- *Pinus jeffreyi*
- *Abies concolor*

Figure 4. Location 4 - One plant located approximately 12 inches from the cables.



Location 5

Location 5 is just to the south of Lighthouse Point. This site is on a steep rocky shore with little vegetation. No occurrences of TYC were found in this location.

Species Present

- *Ceanothus velutinus*
- *Galium ssp.*
- *Abies concolor*
- *Deschampsia cespitosa*

Location 6

Location 6 is 0.6 mile north of D. L. Bliss State Park. The site is on a sandy shore between private docks with almost no vegetation below the OHWM. No occurrences of TYC were found in this location.

Species Present

- *Ribes ssp.*
- *Salix lasiolepis*

4.0 SITE PHOTOS

Photo 1. A view of the stream bank on Tallac Creek where the Tahoe yellow cress is located at cut location 1.



Photo 2. An overview of cut location 2.



Photo 3. An overview of cut location 3.



Photo 4. An overview of cut location 3A.



Photo 5. Tahoe yellow cress at cut location 4.



Photo 6. An overview of cut location 5.



Photo 7. An overview of cut location 6.

