

**Susitna-Watana Hydroelectric Project
(FERC No. 14241)**

**Rare Plant Study
Study Plan Section 11.8**

**Initial Study Report
Part B: Supplemental Information (and Errata) to
Part A (February 3, 2014 Draft Initial Study Report)**

Prepared for

Alaska Energy Authority



SUSITNA-WATANA HYDRO

Clean, reliable energy for the next 100 years.

Prepared by

ABR, Inc.—Environmental Research & Services

June 2014

**PART B: SUPPLEMENTAL INFORMATION (AND ERRATA) TO PART A
(FEBRUARY 3, 2014 DRAFT INITIAL STUDY REPORT)**

Part A Reference	Description
Passim	As explained in the ISR Overview and depicted in Figure 1, following release of the draft ISR in February 2014, AEA added a new north-south transmission and access corridor alignment from the dam site to the Denali Highway. This new alignment is referred to as the Denali East Option. For clarity, the north-south alignment studied to date (and historically referred to as the Denali Corridor) is now referred to as the Denali West Option. Hence, all references in Part A to the “Denali Corridor” are referencing the newly designated Denali West Option.
Section 5, Results: p. 5, 1 st sentence of 3 rd paragraph.	<p>In the sentence that follows, Subarctic Lowland Sedge Wet Meadow should be changed to Subarctic Lowland Sedge-Bog Meadow, as indicated; this reflects a correction to the classification of that vegetation type. “<i>Eriophorum viridicarinatedum</i> was found growing in a Subarctic Lowland Sedge-Bog Meadow wetland surrounded by Open White Spruce-Black Spruce Forest (Figure 5-3).”</p> <p>Table 5-2 was revised to include the additional Level IV vegetation class of Viereck et al. (1992) (Subarctic Lowland Sedge-Bog Meadow) and to indicate on which field transects that type was surveyed. The entry for the closely related vegetation type, Subarctic Lowland Sedge Wet Meadow, was revised to reflect the reassignment to Subarctic Lowland Sedge-Bog Meadow in those cases in which the vegetation type was incorrectly assigned in the field. A footnote was added clarifying the origin of one of the transects surveyed.</p> <p>The caption for Figure 5-4 was revised to reflect the revisions to Subarctic Lowland Sedge-Bog Meadow as noted above.</p>

Table 5-1. Vegetation Types Sampled During the Survey for Rare Plants in the Susitna-Watana Hydroelectric Project Area, 2013.¹

Level I	Level II	Level III	Level IV	Survey Transect No. ²
I.Forest	A. Needleleaf Forest	(1) Closed Needleleaf Forest	J. White Spruce	1, 39
I.Forest	A. Needleleaf Forest	(2) Open Needleleaf Forest	E. White Spruce	1, 20, 23, 37, 39, 43
I.Forest	A. Needleleaf Forest	(2) Open Needleleaf Forest	F. Black Spruce	20, 23
I.Forest	A. Needleleaf Forest	(2) Open Needleleaf Forest	G. Black Spruce-White Spruce	20, 23, 25, 43
I.Forest	A. Needleleaf Forest	(3) Needleleaf Woodland	C. White Spruce	10, 20, 25, 39, 40
I.Forest	A. Needleleaf Forest	(3) Needleleaf Woodland	D. Black Spruce	1, 17, 20, 25
I.Forest	B. Broadleaf Forest	(1) Closed Broadleaf Forest	D. Paper Birch	1, Gold Creek Camp
I.Forest	B. Broadleaf Forest	(2) Open Broadleaf Forest	A. Paper Birch	1, 20, Gold Creek Camp
I.Forest	B. Broadleaf Forest	(2) Open Broadleaf Forest	B. Quaking Aspen	10, 20
I.Forest	B. Broadleaf Forest	(2) Open Broadleaf Forest	C. Balsam Poplar	10, 17, 20, 35, Gold Creek Camp
I.Forest	C. Mixed Forest	(2) Open Mixed Forest	A. Spruce-Paper Birch	1, 23, 25, 35
II.Scrub	B. Tall Scrub	(1) Closed Tall Scrub	A. Willow	23, 25
II.Scrub	B. Tall Scrub	(1) Closed Tall Scrub	B. Alder	1, 4, 10, 17, 37, 43
II.Scrub	B. Tall Scrub	(2) Open Tall Scrub	B. Alder	39
II.Scrub	B. Tall Scrub	(2) Open Tall Scrub	C. Shrub Birch	4
II.Scrub	B. Tall Scrub	(2) Open Tall Scrub	D. Alder-Willow	1, 4, 10, 37, 43
II.Scrub	B. Tall Scrub	(2) Open Tall Scrub	E. Shrub-Birch Willow	17, 20, 30, 35
II.Scrub	C. Low Scrub	(2) Open Low Scrub	C. Mesic Shrub Birch-Ericaceous Shrub	17, 25, 28, 30, 35, 37, 39, 40, 43, 128
II.Scrub	C. Low Scrub	(2) Open Low Scrub	J. Sweetgale-Graminoid Bog	25
II.Scrub	D. Dwarf Scrub	(1) Dryas Dwarf Scrub	A. Dryas Tundra	4, 10, 28, 35, 39, 43
II.Scrub	D. Dwarf Scrub	(1) Dryas Dwarf Scrub	C. Dryas-Lichen Tundra	4
II.Scrub	D. Dwarf Scrub	(2) Ericaceous Dwarf Scrub	A. Bearberry Tundra	4, 37, 43
II.Scrub	D. Dwarf Scrub	(2) Ericaceous Dwarf Scrub	B. Vaccinium Tundra	4, 10, 28, 35, 37, 128
II.Scrub	D. Dwarf Scrub	(2) Ericaceous Dwarf Scrub	D. Cassiope Tundra	4, 10, 35, 128
II.Scrub	D. Dwarf Scrub	(3) Willow Dwarf Scrub	A. Willow Tundra	4, 128
III. Herbaceous	A. Graminoid Herbaceous	(1) Dry Graminoid Herbaceous	B. Dry Fescue	30

Level I	Level II	Level III	Level IV	Survey Transect No. ²
III. Herbaceous	A. Graminoid Herbaceous	(2) Mesic Graminoid Herbaceous	A. Bluejoint Meadow	1
III. Herbaceous	A. Graminoid Herbaceous	(2) Mesic Graminoid Herbaceous	B. Bluejoint-Herb	4, 30, 35, Gold Creek Camp
III. Herbaceous	A. Graminoid Herbaceous	(2) Mesic Graminoid Herbaceous	H. Sedge-Willow Tundra	30, 43
III. Herbaceous	A. Graminoid Herbaceous	(3) Wet Graminoid Herbaceous	C. Wet Sedge-Herb Meadow Tundra	17, 23, 30, 40, 43, 128
III. Herbaceous	A. Graminoid Herbaceous	(3) Wet Graminoid Herbaceous	E. Fresh Grass Marsh	1, 30, 40, 128
III. Herbaceous	A. Graminoid Herbaceous	(3) Wet Graminoid Herbaceous	F. Subarctic Lowland Sedge Wet Meadow	17, 20, 25, 28, 30, 40, 128
III. Herbaceous	A. Graminoid Herbaceous	(3) Wet Graminoid Herbaceous	J. Subarctic Lowland Sedge-Bog Meadow	28, 20, 30, 35, 40, 43
III. Herbaceous	A. Graminoid Herbaceous	(3) Wet Graminoid Herbaceous	K. Subarctic Lowland Sedge-Moss Bog Meadow	1
III. Herbaceous	B. Forb Herbaceous	(1) Dry Forb Herbaceous	A. Seral Herbs	4, 20, 23, 25, Gold Creek Camp
III. Herbaceous	B. Forb Herbaceous	(1) Dry Forb Herbaceous	C. Alpine Herbs	4, 25, 37, 128
III. Herbaceous	B. Forb Herbaceous	(2) Mesic Forb Herbaceous	A. Mixed Herbs	10, 20, 23, 25, 35, 39, 128
III. Herbaceous	B. Forb Herbaceous	(2) Mesic Forb Herbaceous	D. Ferns	Gold Creek Camp
III. Herbaceous	B. Forb Herbaceous	(3) Wet Forb Herbaceous	C. Subarctic Lowland Herb Bog Meadow	1, 40
III. Herbaceous	D. Aquatic Herbaceous	(1) Freshwater Aquatic Herbaceous	A. Pondlily	17, 20
III. Herbaceous	D. Aquatic Herbaceous	(1) Freshwater Aquatic Herbaceous	B. Common Maretail	28, 30, 35, 37, 43
III. Herbaceous	D. Aquatic Herbaceous	(1) Freshwater Aquatic Herbaceous	C. Aquatic Buttercup	30, 35, 40, 43, 128
III. Herbaceous	D. Aquatic Herbaceous	(1) Freshwater Aquatic Herbaceous	D. Burreed	30, 40, 128
III. Herbaceous	D. Aquatic Herbaceous	(1) Freshwater Aquatic Herbaceous	F. Fresh Pondweed	23, 28, 40, 43

Note:

1. Hierarchical vegetation types, Levels 1 through IV as defined in the *Alaska Vegetation Classification* (Vioreck et al. 1992).
2. Transect 128 was designated for the surveys for wildlife habitats and wetlands (Studies 11.5 and 11.7), and was surveyed for rare plants as an alternate for a rare plant transect that was not accessible due to inclement weather.



(A)



(B)

Figure 5-1. *Eriophorum viridicarinatum* (Engelm.) Fernald: (A) Close-up of Plant, (B) Sedge-Bog Meadow Community Where it was Found, 2013.