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# Added to California Rare Plant Rank 4.3 of the CNPS Inventory on July 6, 2016

Rare Plant Status Review: *Micranthes marshallii*Proposed Addition to California Rare Plant Rank 4.3, G5 / S3
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# **Background**

Micranthes marshallii (Greene) Small is a perennial rhizomatous herb in the Saxifragaceae that grows in the Klamath and North Coast Ranges of California, as well as Oregon. It was included in *The Jepson Manual* (Elvander 1993) as *Saxifraga marshallii*, and is included in *The Jepson Manual*, *Second Edition* (Park 2012) and the *Flora of North America, Vol. 8* (Brouillet and Elvander 2009). It was originally described as *S. marshallii* from the type locality in Hoopa Valley (Humboldt County) by Greene (1888), and was moved to the genus *Micranthes* by Small (1905). *Micranthes marshallii* is a fairly inconspicuous plant, and has sometimes been confused with other taxa. *Micranthes marshallii* can also co-occur with *Saxifraga mertensiana* (D. Imper pers. comm. 2015). The single specimen of *Saxifraga rufidula* from California was recently annotated to *M. marshallii* (M. Park pers. comm. 2015), and *S. rufidula* is concurrently being proposed for deletion from California Rare Plant Rank (CRPR) 2B.3 of the CNPS Inventory.

Micranthes marshallii grows on rocky streambanks in riparian forests. Some of the occurrences are on ephemeral streams (B. Hayashi pers. comm. 2015), while others are found along perennial creeks (e.g., *Tracy 17987*, Consortium of California Herbaria 2015). In California, *M. marshallii* occurs at an approximate elevation of 90 to 2,130 meters, and blooms from March to August.

There are only fourteen known occurrences of *Micranthes marshallii* in California, ranging from the Klamath Ranges near the Oregon border to the North Coast Ranges in Mendocino County. Of these occurrences, eight are on National Forest lands (Klamath and Six Rivers National Forests), five have an unknown landowner, and one is on Green Diamond Resource Company lands. Only five of these occurrences have recent documentation. An additional Butte County collection by M.M. Boney from 1897 (Boney s.n., POM354597) lacks any further locality information, other than the habitat modifier "montane" (Consortium of California Herbaria 2015). We cannot map this specimen out to the USGS 7.5' quadrangle level, so we intend to only treat the Butte County occurrence as questionable until more information is available. Another specimen collected by D. Taylor (7540B, deposited at UC/JEPS) is currently treated as S. rufidula in Calflora (2015), but that name was applied due to a database error; it is actually Saxifraga rivularis (D. Taylor pers. comm. 2015). Both the inconspicuous nature of this plant and the remote area of its range suggest a strong likelihood of additional California occurrences being discovered in the future. Most of the botanists that we corresponded with noted that it was not known as a significant plant to survey for until 2015.

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Several sources disagree on the distribution of *Micranthes marshallii* outside of California. While Park (2012) and Brouillet and Elvander (2009) only note it as occurring in California and Oregon, the Consortium of Pacific Northwest Herbaria (2015) also lists specimens from Idaho, Montana, and Washington. While this does not affect the plant's distribution and conservation status in California, it could affect its Global Rank.

Threats to *M. marshallii* in California are not well-known. At one occurrence, D. Imper (pers. comm. 2015) speculated that dense encroachment by alders and conifers, or possibly competition from *Saxifraga mertensiana*, could be a threat. Fire suppression could be a possible threat. Wildfire could potentially alleviate threats from encroachment (C. Sanville pers. comm. 2015).

Based on the available information, CNPS and CNDDB recommend adding *Micranthes marshallii* to CRPR 4.3. Although the plant is known from a small number of occurrences in California, its inconspicuous nature, remote distribution and range, and lack of substantiated threats suggest that it is best kept on a watch list until more surveys for it can be conducted. If more information on *M. marshallii* becomes available in the future, we will re-evaluate its status at that time.

#### **Recommended Actions**

CNPS: Add *Micranthes marshallii* to CRPR 4.3 CNDDB: Add *Micranthes marshallii* to G5 / S3

## **Draft CNPS Inventory Record**

Micranthes marshallii (Greene) Small Marshall's saxifrage Saxifragaceae CRPR 4.3

Idaho?, Montana?, Oregon, Washington?

Butte?, Del Norte, Humboldt, Mendocino, Siskiyou, Trinity

Mount Dana (453B) 3711982, Noble Butte (600B) 3912386, Leggett (600C) 3912386, Piercy (601A) 3912387, Salyer (670A) 4012385, Willow Creek (670B) 4012386, Trinity Mtn. (686C) 4112314, Bald Hills (688B) 4112328, Ukonom Lake (720D) 4112353,

Devil's Punchbowl (738C) 4112376, Gasquet (739C) 4112378

Riparian forest / rocky streambanks; elevation 90 to 2130 meters

Perennial rhizomatous herb. Blooms March to August.

Possibly threatened by fire suppression. Previously identified as *Saxifraga rufidula*, which does not occur in California. See *Saxifraga marshallii* in *TJM* (1993). See *Pittonia* 1(9):159-160 (1888) for original description and *North American Flora* 22(2):145 (1905) for taxonomic treatment.

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## **Literature Cited**

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Elvander, P.E. 1993. *Saxifraga*. Pp. 1009-1010 *in* Hickman, J.C. (ed.), The Jepson Manual: Higher Plants of California. University of California Press, Berkeley.

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