Rare Plant Status Review: *Carex klamathensis*Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDB) February 13, 2008

Background

Carex klamathensis is a perennial, rhizomatous species in the Cyperaceae. This species was recently described by Barbara L. Wilson et al. in the Journal of the Botanical Research Institute of Texas (J. Bot. Res. Inst. Texas 1(1):69-77. 2007). Although not included in the current *Jepson Manual* (1993), the species will be included in the upcoming edition (M. Weatherwax, pers. comm. 2008). *C. klamathensis* closely resembles *C. hassei. C. klamathensis* is primarily distinguished by consistently having flowers with three stigmas, and by being, "a taller, more robust plant with wider staminate spikelets" (Wilson, et al. 2007). In addition, several specimens housed in California herbaria (and at herbaria in other states) that were previously labeled as *C. livida* are now considered to be *C. klamathensis*.

C. klamathensis is currently known from three occurrences in Colusa, Lake and Tehama counties and from 12-15 populations in Josephine County, Oregon. At this time, no information about the demographics of the populations of *C. klamathensis* has been reported.

Carex klamathensis occurs in California on ultramafic soils at elevations between 1000-1140m. It is known from serpentine seeps and springs with other herbaceous plants as near associates and surrounded by chaparral with cypresses, grey pine, and typical chaparral shrubs. In Oregon, the species grows on similar soils, but surrounded by woodland, such as Jeffrey pine woodland. Extensive searches for *C. klamathensis* in the inner North Coast Ranges by Lawrence Janeway from Hwy 20 north to Hwy 36 and in serpentine habitats from Hwy 299 north to the Oregon border by the Oregon Carex Working Group have failed to locate additional populations (L. Janeway, pers. comm. 2008).

The occurrences of *C. klamathensis* in Colusa and Lake Counties occur on lands managed by the Mendocino National Forest. The occurrence in Tehama County occurs on private land. Populations of *C. klamathensis* are threatened by mining, recreational activities, road construction, and off-road vehicles. Wilson et al. (2007) report that more than one half of one of the California populations has been, "destroyed in recent years by bulldozing associated with mining." Based on the information currently available the CNPS and CNDDB recommend that *Carex klamathensis* be added to List 1B.

Recommended Actions

CNPS: Add to CNPS List 1B.2 CNDDB: Add to CNDDB as G2 / S1.2

Please review the draft CNPS Inventory record below, respond Yes or No on the proposal to add this species to the Inventory and CNDDB, and provide any edits/comments. If responding No, please provide supporting information.

Draft CNPS Inventory Record

Carex klamathensis B.L. Wilson & Janeway

Cyperaceae

List 1B.2

Colusa, Lake, Tehama

548A [3912225/Hough Springs], 612C [4012216/Raglin Ridge]

Meadows and seeps, chaparral, cismontane woodland / serpentinite; elevation 1000-1140 meters. Perennial herb (rhizomatous).

Known from only three occurrences. Threatened by mining, recreational activities, road construction, and vehicles. Not in *The Jepson Manual* (1993). See J. Bot. Res. Inst. Texas 1(1): 69-77 (2007) for original description.