Rorippa columbiae (S. Watson) Howell

synonym: Rorippa calycina (Engelm. ex Hayden) Rydb. var.

columbiae (S. Watson) Rollins persistentsepal yellowcress Brassicaceae - mustard family

status: State Threatened, Federal Species of Concern,

BLM sensitive, USFS sensitive

rank: G3 / S1S2

General Description: Low-growing rhizomatous perennial, finely hairy to papillate throughout. Stems 1-4 dm long, much-branched, generally decumbent, sometimes erect. Leaves pinnatifid to lyre-shaped pinnatifid, the lower ones with petioles, the upper ones sessile to clasping.

Floral Characteristics: Flowers borne on the ends of the stems and in the leaf axils; pedicels spreading to ascending, 4-8 mm long. Petals 4, yellow, about 4 mm long. Sepals not saclike at the base, tending to persist after flowering. Phenology is closely tied to the water regime of its habitat. In WA it flowers April to October, but most often in the late summer and fall.

Fruits: Siliques ascending to erect, nearly oblong, usually somewhat curved, $4-7 \times 2-2.5 \text{ mm}$, soft-hairy.

Identification Tips: *R. columbiae* can be distinguished by its fruits, which are densely covered with elongated hairs and have expanded stigmas; densely hairy sepals and styles; and axillary racemes, which have ascending pedicels and are longer than 2.5 cm when mature.

Range: Along the Columbia River in WA and OR and in southcentral OR to northern CA.

Habitat/Ecology: Riverbanks, permanent lakes, snow-fed lakes and streams, internally-drained lakes with extended periods of dryness, wet meadows, and ditches. All known sites are inundated for at least part of the year. The species is adapted to periodic flooding and unstable substrates; prior to the construction of hydroelectric dams, its habitat was scoured most years by spring floods. Soil types include clay, sand, gravel, sandy silt, cobblestones, and rocks. All sites in WA occur along the Columbia River, in the lowest vegetated riparian zone.

Comments: Much of its historical habitat along the Columbia River has been submerged due to the construction of the dam/reservoir system. Current management includes frequent, short-term inundation during the growing season, which may decrease seed production. Even under dry conditions seed production is sometimes very low. This species is also rare in OR and CA.

References: Sauer & Leder 1985; Stuckey 1972.





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