

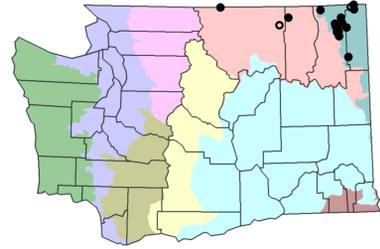
***Geum rivale* L.**

water avens

Rosaceae - rose family

status: State Sensitive, BLM sensitive, USFS sensitive

rank: G5 / S2S3



General Description: Perennial herb with short to extensive scaly rootstocks. Basal leaves several, somewhat rosette-forming, up to 3 dm long, interruptedly pinnately cleft, the leaflets mostly 7-15, with rounded to pointed teeth, 1-3 of them much larger than the others, the terminal one obovate, up to 10 cm long. Stem leaves 2-5, alternate, reduced, the stipules leafletlike, toothed to 3-lobed above.

Floral Characteristics: Flowering stems (3) 4-6 (8) dm tall, hairy. Inflorescence open, with 3-7 flowers nodding in bud but becoming erect. Calyx reddish purple, the lobes lanceolate, tips pointed, about 10 mm long, erect, the hypanthium broadly cup-shaped, shorter than the sepals. Petals yellow to pinkish, mostly (1) 2-3 mm shorter than the sepals. Stamens 100 or more. Styles strongly bent (jointed). Flowers late June through July.

Fruits: Mature achenes elliptic in outline, 3-4 mm long, strongly hairy, the lower (persistent) joint of the style 6-8 mm long, hairy below, hairless above, hooked at the tip, the upper segment ultimately deciduous, sparsely hairy, 3-4 mm long.

Identification Tips: Without flowers, *G. rivale* may be confused with *G. macrophyllum*. However, the flowering stem and sepals of *G. rivale* are reddish; those of *G. macrophyllum* are green.

Range: Newfoundland to B.C., south to NJ, IN, MO, SD, WA, and south in the Rocky Mts. to NM. Also in Eurasia.

Habitat/Ecology: Wet meadows, bogs, riparian zones along perennial streams, and moist old pastures; often associated with limestone. The species occurs in a variety of light regimes, but generally not under a complete canopy or heavy shrub cover. Associated species in WA include western redcedar (*Thuja plicata*), alder (*Alnus* spp.), resin birch (*Betula glandulosa*), willow (*Salix* spp.), largeleaf avens (*Geum macrophyllum*), horsetails (*Equisetum* spp.), Jacob's ladder (*Polemonium* spp.), sedges (*Carex* spp.), and rushes (*Juncus* spp.). Elevations in WA: 780-1960 m (2560-6440 ft).

Comments: Hydrologic change and grazing are the primary threats to the species. It is also rare in B.C., Labrador, WY, IN, OH, WV, and NJ.

References: Klinkenberg 2008.



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photo by Barb Benner