

Phacelia minutissima Henderson (1900)**LEAST PHACELIA****FAMILY:** *Hydrophyllaceae*, the waterleaf family.**SYNONYMS:** *Phacelia foliosepala***STATUS:****Heritage Program SENSITIVE LIST, ranks: G3 S2****USFWS/ESA:** species of concern. **STATE OF NEVADA:** none. **BLM:** Special Status Species in Nevada.**USFS:** Humboldt-Toiyabe NF Sensitive Species. **NNNPS:** watch list.**POPULATION CENSUS (NEVADA):** **30 occurrences mapped** at 1.0 km (0.6 mi) separation, **OR 39 occurrences mapped** at 0.16 km (0.1 mi) separation; total estimated **individuals 28,000+**, total estimated **area 46.4+ ha (115+ ac)**.
TREND: unknown.**IMPACTS AND MAJOR THREATS (NEVADA):** Mineral exploration and development, livestock trampling, water developments and diversions, competition with invasive weeds.**INVENTORY EFFORT (NEVADA):** Surveys in Nevada have been locally extensive, but likely remain very incomplete. Most recent entered survey 1997, average year of last survey 1993. **Years since last entered survey** (percent of mapped records at various survey ages): **0-5 yrs:** 56.4%; **6-10 yrs:** 35.9%; **11-20 yrs:** 2.6%; **21-30 yrs:** 2.6%; **51+ yrs or unknown:** 2.6%.**LAND MANAGEMENT (NEVADA)** in decreasing predominance: Humboldt-Toiyabe National Forest, private lands, U. S. Bureau of Land Management.**RANGE:** Elko and Eureka counties, Nevada; also in ID, OR (extirpated), and WA. Maximum Nevada **range dimension 69.2 km (43.0 mi)** excluding most disjunct record. **Type specimen** collected in Idaho, Blaine (camas) co.**ELEVATIONS RECORDED (NEVADA):** 6240-8900 feet (1902-2713 meters).**HABITAT (NEVADA):** Vernal saturated, summer-drying, sparsely vegetated, partially shaded to fully exposed areas of bare soil and mud banks in meadows, at perimeters of *Veratrum californicum* (corn lily), *Wyethia amplexicaulis*, and/or *Populus tremuloides* (aspen) stands, in sagebrush swales, along creek bed high-water lines, or around springs, in flat to gently sloping areas. Aquatic or wetland-dependent in Nevada.**PHENOLOGY:** flowering late-spring to summer. Range of most frequent **survey months:** July-August.**LIFE-FORM AND HABIT:** small annual.**DESCRIPTION:** A dwarf, branching annual to 10 cm tall, with hairs on the herbage that are stipitate and glandular. The inflorescence is a helicoid cyme, meaning it uncurls like a fiddle neck. The small flowers are lavender, 2.4-4 mm long, surrounded by calyx segments that elongate unequally in fruit. The leaves are linear-oblong to oblanceolate, 10mm long by up to 4 mm wide (Brooks et al. 1991). **Distinguishing features:** The unequal calyx segments are the most distinctive feature of this plant.**PHOTOGRAPHS:** Smith and Curto (1995); Nevada Natural Heritage Program images web page (1998-present) and slide collection (1986-present).**ILLUSTRATIONS:** Cronquist et al. (1984), Hitchcock and Cronquist (1973), Hitchcock et al. (1959).**OTHER GENERAL REFERENCES** (listed separately): Kartesz (1987), Peck (1961).**SPECIFIC REFERENCES:**

- Curto, M. and F. J. Smith. 1996. Initiation of a long-term least phacelia (*Phacelia minutissima*) census within the Humboldt National Forest, Elko County, NV. Elko, Nevada: U. S. Department of Agriculture, Humboldt-Toiyabe National Forest.
- Frank, C. A., and Greystone. 1998. Sensitive plant surveys: Independence Mining Company, Inc., Elko County, Nevada, July 1997. Greenwood Village, Colorado: Greystone, prepared for Independence Mining Company, Inc., Elko, Nevada.
- Henderson, L. F. 1900. New plants from Idaho and from other localities of the Northwest. *Bulletin of the Torrey Botanical Club* 27: 342-359.
- Moseley, R. K. 1995. Conservation status of least phacelia (*Phacelia minutissima*). Boise: Idaho Conservation Data Center, Department of Fish and Game, prepared for the Bureau of Land Management, Boise District. 16 pages plus appendices.
- Steele, B., F. Johnson, and S. Brunsfield (editors). 1981. Vascular plant species of concern in Idaho. Moscow, Idaho: Forest, Wildlife and Range Experiment Station. 161 pages.