Alisma triviale Pursh, NORTHERN WATER-PLANTAIN. Aquatic perennial herb, rhizomatous, fibrous-rooted, rosetted, 1-stemmed at base, acaulous, forming a tall, terminal inflorescence, in range to 190 cm tall from plant base; shoots with emergent and sometimes floating leaves, glabrous; with milky latex; rhizomes cormlike, short, < 20 mm diameter. **Leaves:** helically alternate, simple, in range to 900 mm long, long-petiolate, without stipules; petiole = water depth for floating leaves, to 750 mm long for emergent leaves, weakly sheathing with winglike projections at base or also approaching blade, in ×section mostly U-shaped and broadly ridged on lower side, hemi-cylindric approaching blade without ridges on lower side, in ×-section with spongy tissue (= aerenchyma); blade lanceolate to elliptic or ovate, 55−250(−350) × 15−135 mm (floating << emergent leaves; large blades in deep shade), ± truncate to rounded at base, entire, acute at tip, with well-defined midrib conspicuously raised on lower surface flanked by 2–3 pairs of finer primary veins (1–2 pairs basal + 1 pair above the base, not raised) arching to blade tip, with parallel secondary veins bridging midrib and other primary veins and tertiary veins parallel with midrib. **Inflorescence:** panicle, = plant height, of whorled branches and branchlets terminated by umbel-like cymes, open, ultimate cyme 3–5-flowered, with stalked flowers, bracteate, glabrous; peduncle cylindric, hollow; primary branches in 2–10 primary whorls of 3 or 6(9) branches, wiry; bract subtending each primary branch long-tapered, to 25 mm long decreasing upward, often with well-defined midrib and brown-papery margins; rachis internodes to 250 mm long; secondary branches (if present) in 1−3 whorls of 3, or secondary branches replaced with stalked flowers in cyme; cyme subtended by 1 papery bract + a 2-veined, awned structure (prophyll); pedicel ascending and divergent, slender, at anthesis 5−10+ mm long increasing to 20−30 mm long in fruit. **Flower:** bisexual, radial, ± 7 mm across, with a truncate-domed receptacle; hypanthium = a short, horizontal rim surrounding receptacle from which sepals, petals, and stamens arise; **sepals** 3, appressed, broadly ovate, 1.5–2.5 mm long, obtuse and cupped with small point at tip, having many reddish parallel veins, persistent; **petals** 3, obovate, in range 3–4 mm long, white, with only base persistent; **stamens** 6 in 3 pairs, free; filaments subequal, long-tapered, ± 1.5 mm long, thin, flat, membranous, 1-veined; anthers dorsifixed, dithecal, ovoid, ± 1 mm long, whitish, longitudinally and outwardly dehiscent; pollen whitish; **nectary disc** absent, nectar produced by ovary tissue (septal nectaries); **pistils** many (± 18), radiating from (lateral) the domed, elevated receptacle; ovary superior, ovoid and strongly compressed side-to-side with 2 flat faces and a 2-ribbed outer surface, 1.5−2.2 mm long, green sometimes with red on inner edge or along shallow groove on top, each pistil 1-chambered with 1 ovule; style curved-ascending, lateral on inward upper edge, < 0.3 mm long, pinkish. **Fruits:** achenes, many in wheel-like arrangement (fruit head), fruit head 2−4 mm across; achene obliquely compressed-ovoid, 1.5−2.2 mm long, dark brown, with shallow groove on edge and a very short ascending beak (style). **Seed:** compressed-oblong, 0.9−1.1 mm long; embryo strongly bent. Mid-June−early October.

Native. Uncommon perennial herb, a freshwater emergent occurring in quiet, shallow water and wet, shoreline mud of creeks on the northwestern SMM (Zuma Creek, Malibu Creek, and Triunfo Creek) and around margins of ponds and lakes. *Alisma triviale* was formerly called *A. plantago-aquatica*, a species now being treated as a Eurasian species with outposts in Alaska. Both species have the same distinctive leaf venation with a

midrib and ascending-arching lateral veins, but our species has very short styles. In range plants in Zuma Creek can be nearly two meters tall and have repeatedly three-forked branching in the inflorescence.

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