Alkali or seacoast bulrush (*Bolboschoenus maritimus)*

Range

- West coast of US east to Minnesota & south to Louisiana. (1)

Climate, elevation

- Low to mid elevations. (1)

Local occurrence (where, how common)

- Found in all six counties surrounding Puget Sound.

Habitat preferences

- Marshes, transient wet spots, pond margins & backwater areas. (1)

Plant strategy type/successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional)

- Perennial, rhizomatous wetland obligate. Forms dense stands in alkaline or saline sites. (1)
- Can occur on freshwater sites but is usually a pioneering species that will be replaced over time with more permanent species. (1)

Associated species

- *Potentilla anserina* (Pacific silverweed) (3)
- *Carex lyngbyei* (Lyngbyei's sedge) (3)

May be collected as: (seed, layered, divisions, etc.)

- Seed & wild transplants. (1)
- Division in spring. (2)

Collection restrictions or guidelines

- Seeds ripen in late August to October & may be collected by stripping the seeds from the plant by hand or clipping the seed head using a pair of hand shears. A power seed harvester may also be used. (1)
- The bracts, which are found in the seed heads, are very irritating to the skin so gloves & protective eyewear should be worn when harvesting. (1)

Seed germination (needs dormancy breaking?)

- Germination rate may be increased by wet pre-chilling the seed in a mixture of water & sphagnum moss for 30 days. (1)

Seed life (can be stored, short shelf-life, long shelf-life)

- Seeds can remain viable for up to 20 years if kept in a dry place at room temperature. (1)

Recommended seed storage conditions

- Dry & at room temperature.

Propagation recommendations (plant seeds, vegetative parts, cuttings, etc.)

- Propagation of seed under green house conditions. Planted in the field as plugs or wild transplants. (1)
- Propagation by division in spring. Larger divisions can be planted directly on site. Smaller divisions should be kept under green house conditions & planted on site once they are well established in the summer. (2)

Soil or medium requirements (inoculums necessary?)

- Adapted to soil textures from fine clay to silt loams to sands. (1)
- PH up to 9.0. (1)

Installation form (form, potential for successful outcomes, cost)

- Seeds need light, moisture & heat for germination. Seed should be placed on soil surface (not covered) with good soil contact. Germination within 1-2 weeks. Maintain moisture until plants are transplanted. (1)
- Planting plugs (either from the greenhouse or wild transplants) is the most successful way to establish this species. (1)
- Wild transplants can be collected & planted directly into desired site. (1)

Recommended planting density

- Plug spacing of 30-45 cm will fill in within one growing season. (1)

Care requirements after installed (water weekly, water once etc.)

- Soils should be kept saturated. Fluctuating water levels during the first year will increase spread. (1)

Normal rate of growth or spread; lifespan

- Tends to spread & reproduce when the water table is within 10cm of the surface. Spreads by seed & rhizome growth. (1)
- Pioneering species that is replaced over time with more permanent species. (1)

Sources cited

1. USDA, NRCS. 1994. Interagency Riparian/Wetland Project, Wetland Plant Fact Sheet, http://plant-materials.nrcs.usda.gov/pubs/idpmcfselpa3.pdf

2. Plants for a Future-Species Database. Last Updated: 2000. http://www.ibiblio.org/pfaf/cgi-bin/arr_html?Scirpus+maritimus

3. Guard, B. Jennifer. Wetland Plants of Oregon and Washington. Lone Pine Publishing. Vancouver, B.C. 1995.

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