PLANTS

Common Reed *Phragmites australis*

Ecology: *P. australis*, better know locally as *Phragmites* or common reed, is a tall, perennial, sod forming grass or reed (Uchytil 1992; Amsberry et al. 2000). Long pointed leaves grow from thick vertical stalks and flowers form dense clusters that create a plume-like flower head tawny in color (ISSG 2006). The common reed forms dense monodominant stands along marshes and shorelines (Uchytil 1992). These dense stands of tall reeds crowd native plants, displace native wetland vegetation and alter nutrient cycling (Saltonstall 2002; Windham and Ehrenfeld 2003). These changes alter the structure and function of some marshes and can threaten wildlife populations (Roman et al. 1984).

The common reed reproduces both by seed and vegetative means. Seeds are dispersed by wind and water and can persist in the marsh following a draw down as part of the seed bank. Most reproduction, however, is vegetative through the use of an extensive network of rhizomes and stolons (Smith and Kadlec 1983).

Distribution: *Phragmites* is native to North America and found in every U.S. state (U.S. Army Corps of Engineers 2004). The rapid increase of *Phragmites* in North American wetlands, however, is due to colonization by a more aggressive European variant of the plant (Saltonstall 2002). *Phragmities* is now common to wetland areas and canals throughout most of Utah (USDA, NRCS 2008) and is known to inhabit all counties in Utah.

Pathways of Introduction: Once established, *Phragmites* spreads rapidly by means of rhizomes or stolons (Uchytil 1992). *Phragmites* can spread up to 15 or 20 feet per year from vegetative spread alone. The flooding of the Great Salt Lake in the 1980's is believed to be an important factor in the dramatic increase of *Phragmites* around the eastern shore of the Great Salt Lake (Pers. Comm. Val Bachman. 2008. Waterfowl Management Area Superintendant, Utah Division of Wildlife Resources). Increased physical disturbances in marshes can initiate and accelerate expansion such as disturbances by foot traffic and floating debris (Amsberry et al. 2000).

Management Considerations: Currently there are 26 herbivores in North America known to attack *P. australis* (Tewksbury et al., 2002). Only five of these herbivores are believed to be native. Within this group only the Yuma skipper *Ochlodes yuma*, a dolichopodid fly in the genus *Thrypticus*, and a gall midge *Calamomyia phragmites*, are considered native and monophagous on *P. australis* (Tewksbury et al. 2002). Possible biocontrol species are being tested, but are not currently available (Blossey 2003).

Only mechanical and chemical control methods are available at this time for management of *Phragmites*. Mechanical control includes plowing, crushing, mowing, dredging and burning. Mechanical control methods that break up plant matter should be used with caution as they have the potential to increase vegetative spread. Prescribed burning can be successful only if root burn occurs. Burning is recommended during the summer when

carbohydrate reserves in the plant are low and when the soil is dry for maximum root burn (Uchytil 1992). Burning removes accumulated *Phragmites* leaf litter, allowing the seeds of other species adequate area to germinate (Marks et al. 1993). Complete removal of *Phragmites* by burning alone, however, is difficult and the practice is typically coupled with herbicide treatment and/or water draw downs.

The U.S. Army Corps of Engineers suggests a glyphosphate such as Rodeo® or Imazapyr Arsenal® as possible herbicide control. Rodeo® should be applied during late summer or fall when plants are actively growing and in full bloom. Arsenal® is nonselective and will kill other desirable plants. The 2, 4-D herbicides (SEE 2, 4-D, Weed Rhap A-6D, and Weedar 64) are also registered for use on canals or ditch banks in Utah (U.S. Army Corps of Engineers 2004). The Utah Division of Wildlife Resources is actively using a combination of glyphosphate herbicides and prescribed burning to control *Phragmites* along the eastern shore of the Great Salt Lake.

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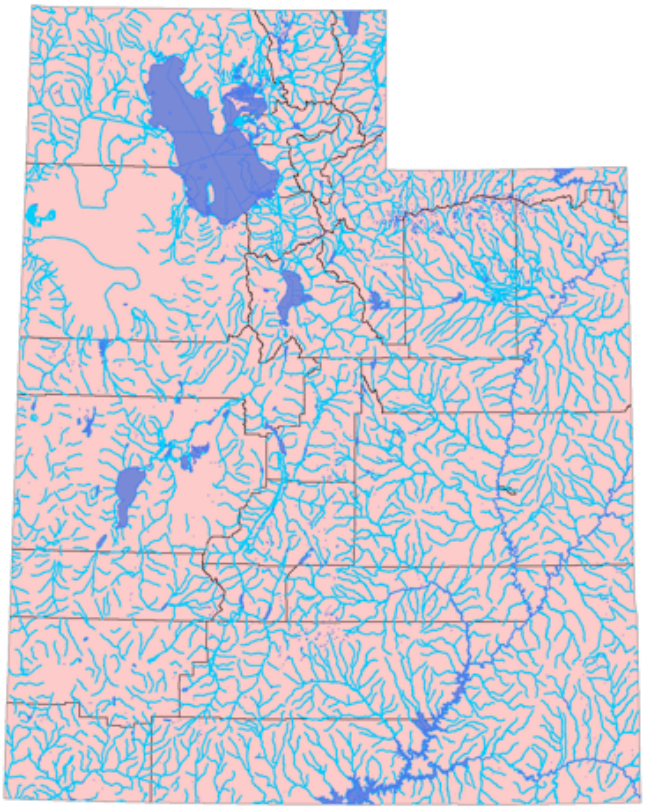
Common Reed

Counties the Common Reed is present.
Major Waterways



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