

Phragmites Overview



Recent Research

Recent research and planning work around the GSL has indicated there is a dire need to address Phragmites infestation. In the recently-revised Great Salt Lake Comprehensive Management Plan, the Division of Forestry, Fire and State Lands developed a management strategy that intends to target and treat Phragmites in GSL wetlands. The plan encourages collaborative efforts with other GSL resource managers to eradicate the invasive species. The 2012 Great Salt Lake Health Report released by the GSL Advisory Council reported that Phragmites is having an adverse impact on the health of GSL. A recently completed Research Prioritization Report, also commissioned by the GSL Advisory Council, indicates that there is a "high" urgency to improve the effectiveness and extent of Phragmites treatment. Further, the GSL Advisory Council is interested in minimizing the adverse impacts to wetland ecosystems by better understanding the drivers of invasion and testing control techniques.

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The occurrence of non-native *Phragmites* in the Great Salt Lake (GSL) ecosystem has increased rapidly over the last 30-40 years and currently dominates approximately one third of wetlands surrounding the lake. *Phragmites* is problematic to the GSL ecosystem for numerous reasons. In the GSL ecosystem, Phragmites displaces native emergent wetlands and their associated species by blocking sunlight to the soil surface.

Phragmites is of limited use as native wildlife habitat due to its dense growth. It also excludes plant species that are favorable for forage and nesting habitat and providing cover for non-native predators such as raccoons. This invasive species alters hydrology by trapping sediments and reducing water movement through wetland ecosystems. *Phragmites* stands can become so impenetrable, with stems every 4 inches, that it prevents public access in many areas.



Recreation, survey and search and rescue access via boat or foot is substantially impaired or impossible in GSL *Phragmites* stands.

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Future Treatment Opportunities

The longer treatment of existing stands is delayed, the more insurmountable the task of *Phragmites* management becomes. While total eradication of the species is likely infeasible due to the extent of its current distribution and the difficulty of controlling existing stands.

Management actions should target aggressive stands of the non-native strain that threaten to displace other wetland communities and limit habitat diversity for water-associated birds.

With additional GSLAC-supported funding and cooperative treatment efforts on behalf of state and local agencies management actions could include:

- Prioritizing treatment areas
- Providing sufficient seasonal staffing treat priority areas
- Implementation of a range of management techniques, including:
 - Mechanized treatments – Including increased use of the Truxor, an amphibious aquatic weed cutter and vegetation harvester
 - Herbicide – Aerial and on-the-ground application of herbicide in the fall months
 - Grazing – Use of goats and cattle to graze select stands

