



FORESTRY, FIRE & STATE LANDS
REQUEST FOR GRANT APPLICATION
Cover Sheet



Project Title	Techniques for revegetation of native plants in Great Salt Lake wetlands to prevent <i>Phragmites</i> reinvasion and restore avian habitat		
Lead Project Sponsor	Utah State University		
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Project Description / Abstract	<p>Native wetland plants—particularly those that support avian habitat valued by managers—do not readily return following invasive <i>Phragmites</i> removal. Thousands of acres of Great Salt Lake wetlands need to be actively revegetated to reestablish desirable native species, to prevent <i>Phragmites</i> reinvasion, and to restore avian habitat. However, effective seeding methods for native plants need to be developed to overcome a number of challenges. What abiotic conditions (salinity, temperature, moisture) likely limit seedling survival? What are techniques to remove the thick <i>Phragmites</i> litter that remains after control efforts, ensure that native seeds do not wash away, and maintain moist soil conditions despite rapidly falling water levels in wetlands? Across five Great Salt Lake wetland restorations, we will conduct large-scale seeding trials and monitor abiotic conditions to determine factors limiting seedlings. In a field experiment at Farmington Bay, we will evaluate the effectiveness of <i>Phragmites</i> litter removal treatments, an adhesive tackifier, and the use of moisture-enhancing mulch on native plant seedling survival. In growth chamber experiments, we will assess seed surfactant coatings to improve seedling survival across varying water levels. Research results can be used by managers to achieve desired habitat and <i>Phragmites</i> management goals.</p>		
Project Funding	<i>Amount requested</i> \$49,936	<i>Matching funds</i> *USU does not allow listing of matching funds unless <i>required</i> by the granting agency.	<i>Total project cost</i> \$49,936 *See Section 6.3C re: project leveraging