## Wetland Vegetation Establishment Research Needs

The following list summarizes key ares of research need that were identified as part of the development of the vegetion establishment section of this guide. This list will be added to as other research needs are identified.

- Appropriate rates of cover crops in wetland seed mixes
- Canada thistle control methods in diverse restorations
- Effectiveness of fall vs. spring seeding for uplands and wetlands
- Effectiveness of broadcast vs. drill seeding of individual wetland species
- Stratification methods for wetland species
- Long-term management strategies for mitigation wetlands
- Role of mulching in the establishment of vegetation
- Role of diversity in upland and wetland mixes to minimize maintenance needs
- Use of soil amendments and topsoil for gravel pit wetland restoration
- Role of packing wetland seed after broadcast seeding
- Reed canary grass removal methods as part of site preparation
- Reed canary grass control methods as part of site maintenance
- Strategies for direct seeding wetland trees and shrubs
- Wetland tree and shrub establishment strategies
- Role of peatland restoration for mitigation sites
- Role of mowing as a maintenace strategy for wetland vegetation
- Role of burning in wetland plant communities on native species establishment
- Role of burning wetland plant communities for invasive species control
- Role of diversity in wetland community stability
- Methods of establishing emergent, submergent and floating-leaved vegetation
- Role of local ecotype seed in restoration success
- Appropriate distance for seed sources for individual species in upland and wetland mixes

- Methods of depleting weed seedbanks in preparation of seeding
- Methods of analyyzing nutrient input sources for wetland restorations
- Methods of planning appropriate plant communities for restoration sites