



UTAH DEPARTMENT OF NATURAL RESOURCES

Divisions of Forestry, Fire & State Lands and Wildlife Resources

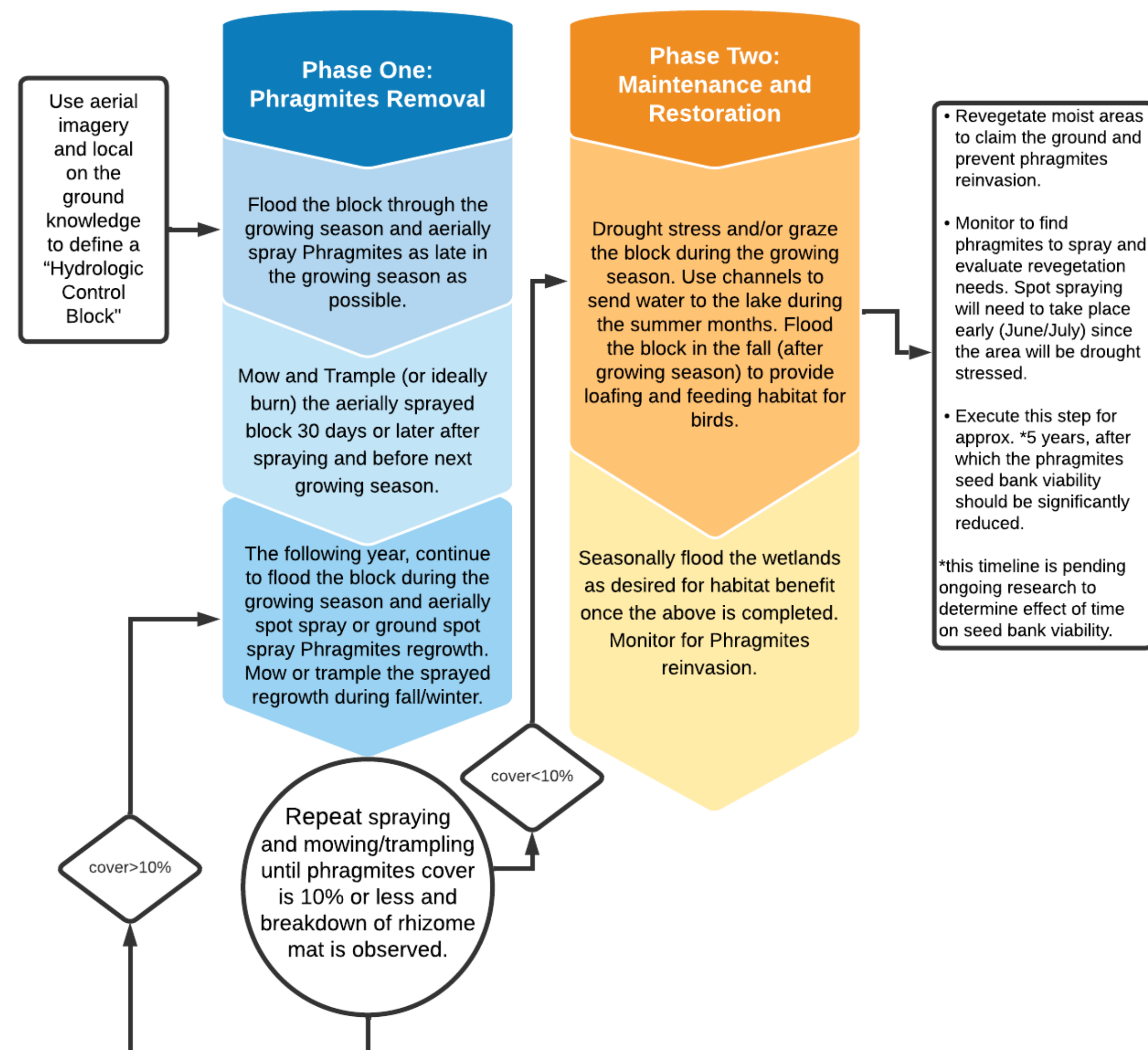
Great Salt Lake Phragmites Control and Restoration

Keith Hambrecht, FFSL & Chad Cranney, DWR

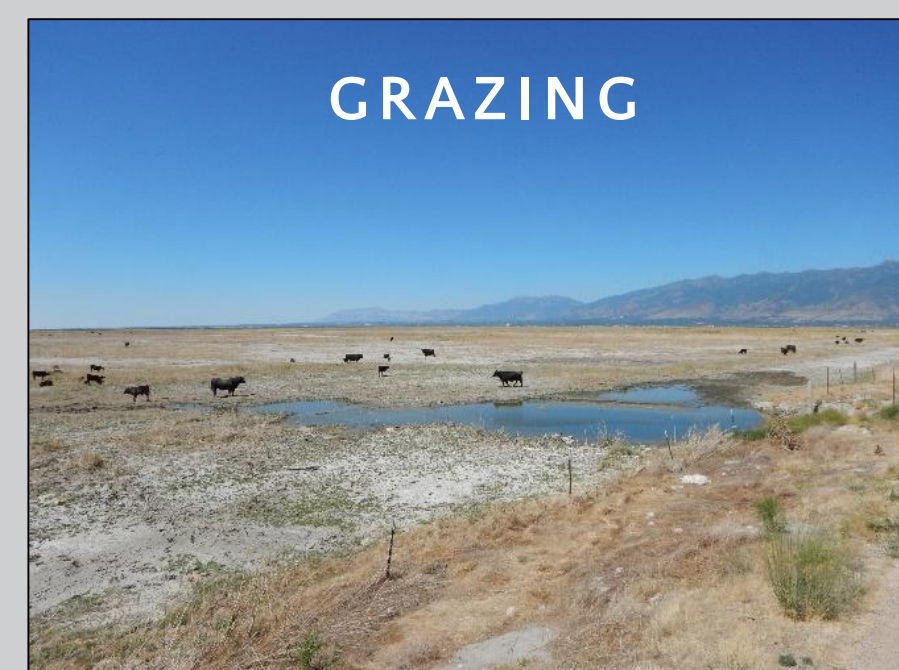


TREATMENT PROTOCOL

PHRAGMITES TREATMENT PROTOCOL



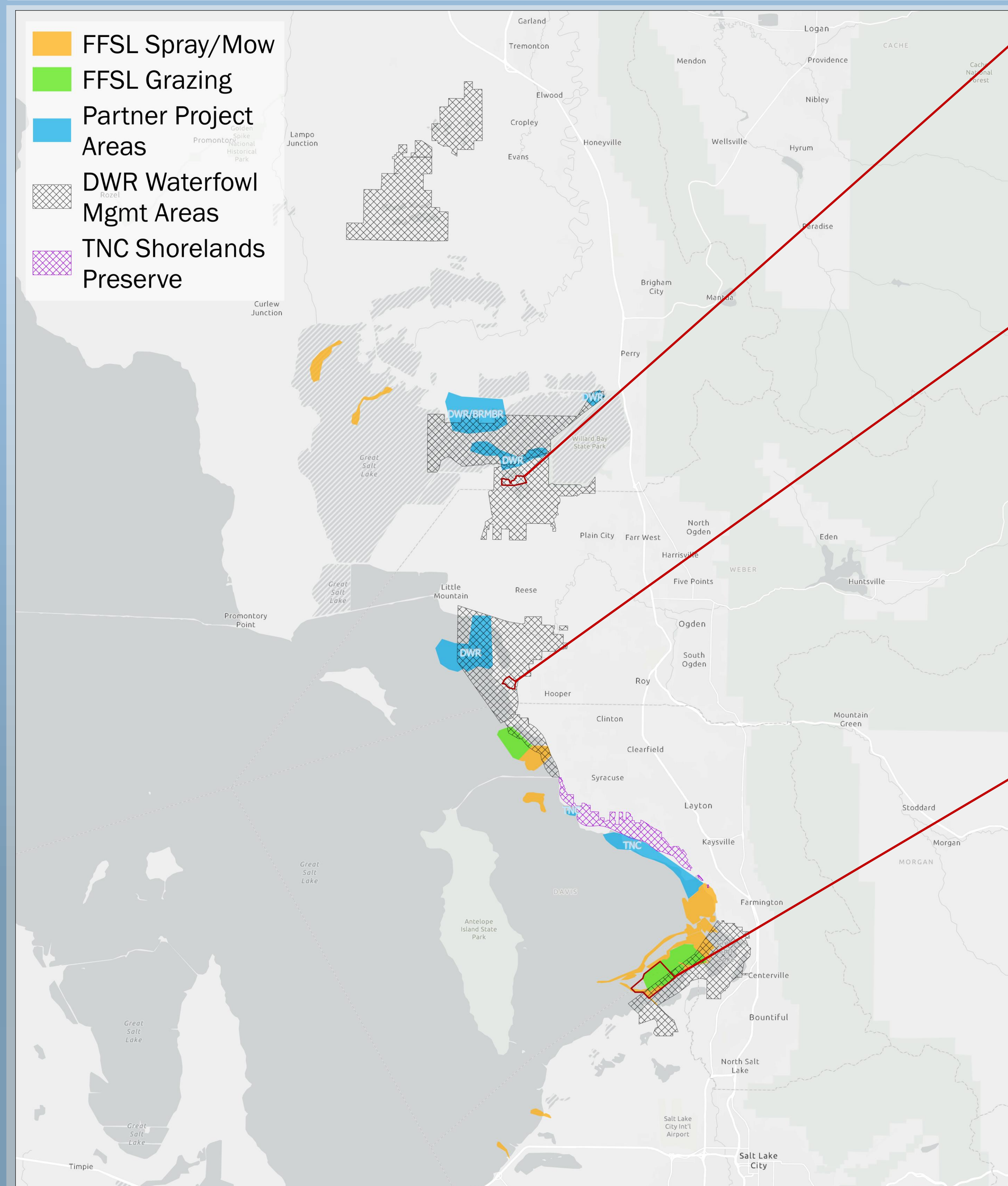
TREATMENTS



THE PROBLEM

- Non-native, invasive Common Reed (Phragmites) covers approximately 23,000 acres of Great Salt Lake Wetlands, as of 2012.
- Phragmites disrupts hydrology and sediment transport – reducing water availability for Great Salt Lake wetlands.
- Phragmites converts diverse native habitat of sparse, patchy, low-lying vegetation and open water to impenetrable, dense, homogenous, fire-prone 12 foot tall vegetation with no open water – decimating migratory bird habitat.
- Phragmites significantly impedes access for recreation and rescue.

PROJECT AREAS



CURRENT PHASE ONE PROJECT ACRES

FFSL 2021 Treatments

Aerial Spray: 3,532 acres
Ground Spray: 111 acres covered
Mowing: 3,258 acres

FFSL 2022 Proposed Treatments

Aerial Spray: 5,245+ acres
Mowing: 4,800 acres

DWR 2021 Treatments

Aerial Spray: 1,765 acres
Ground Spray: 3,660 acres covered
(463 acres actually treated)
Mowing: 200 + acres

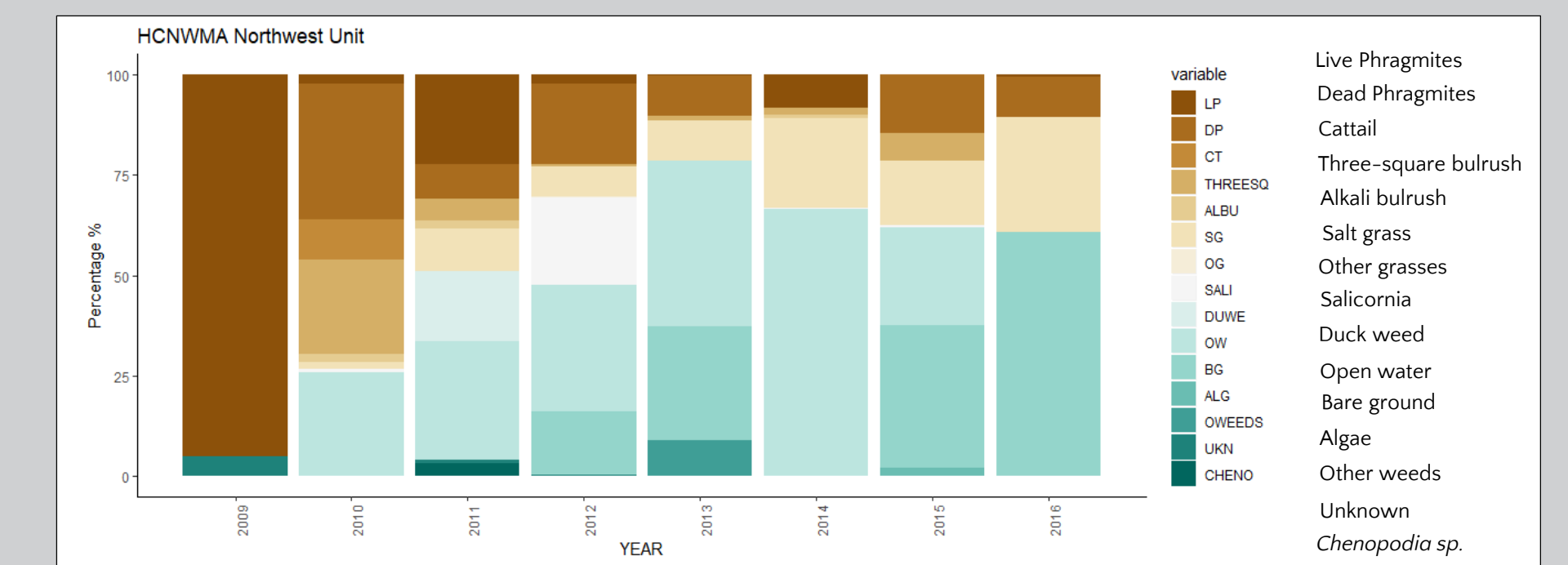
DWR 2022 Proposed Treatments

Aerial Spray: 3,000 acres
(Over 1,000 acres on the Willard Spur WMA)
Ground Spray: 450 acres
Mowing: 600–800 acres

SUCCESSSES

DWR PROJECT SUCCESSES

Harold Crane Northwest Unit



Harold Crane northwest unit species composition. Line-point intersect transects were used to collect species composition data. Pre-treatment (2009) data was collected by visual estimation of Phragmites vs. all other species.

Ogden Bay South Bachman Unit



Ogden Bay, South Bachman Unit 2017. Photo was taken after first initial herbicide treatment (Fall 2016) and trampling treatment Spring (2017).

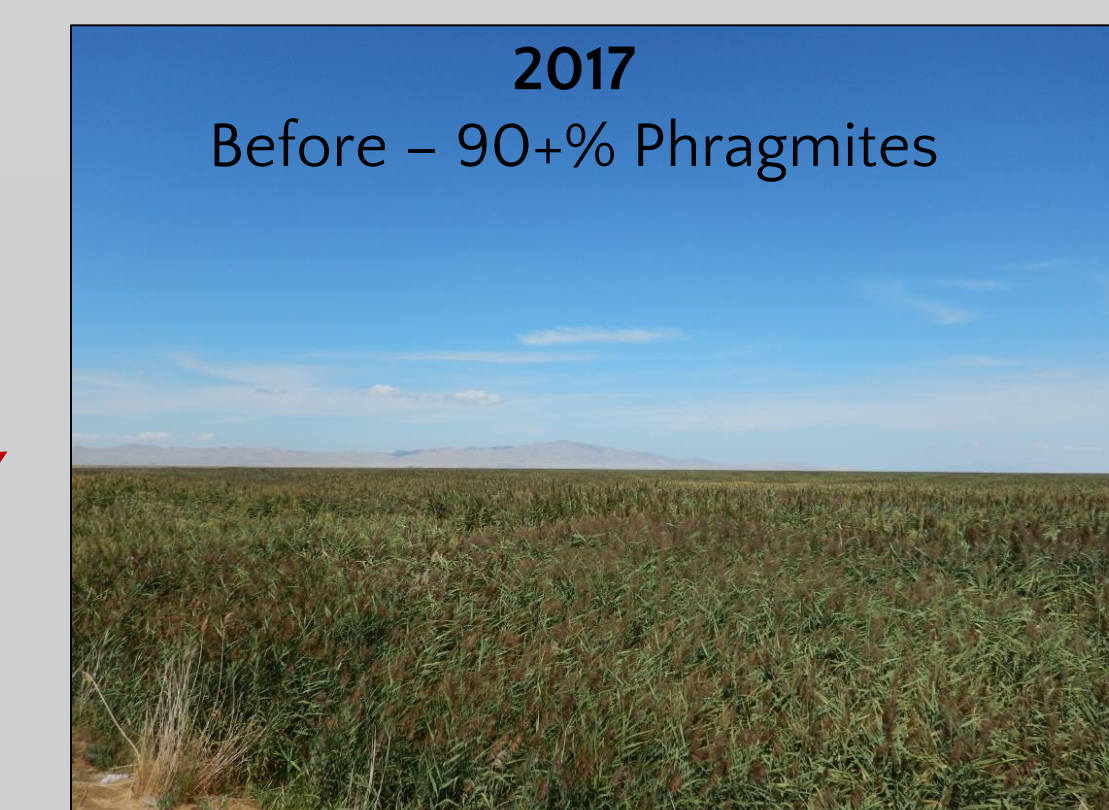


Ogden Bay, South Bachman Unit 2021. After 5 years of treatments.

FFSL PROJECT SUCCESS

Turpin West

1,500 acres adjacent to Division of Wildlife Resources Farmington Bay Waterfowl Management Area Turpin Unit

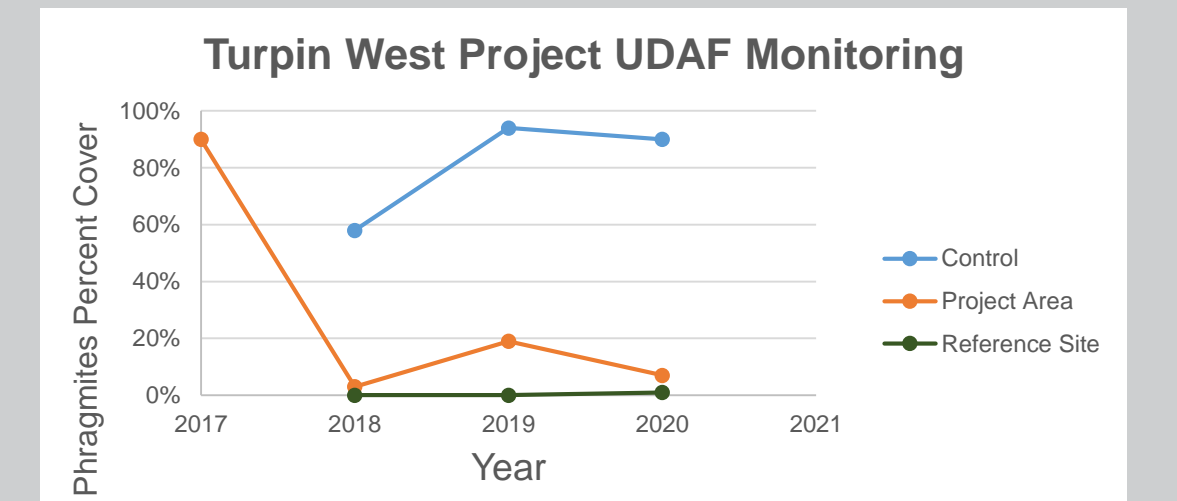


2017
Before – 90+% Phragmites



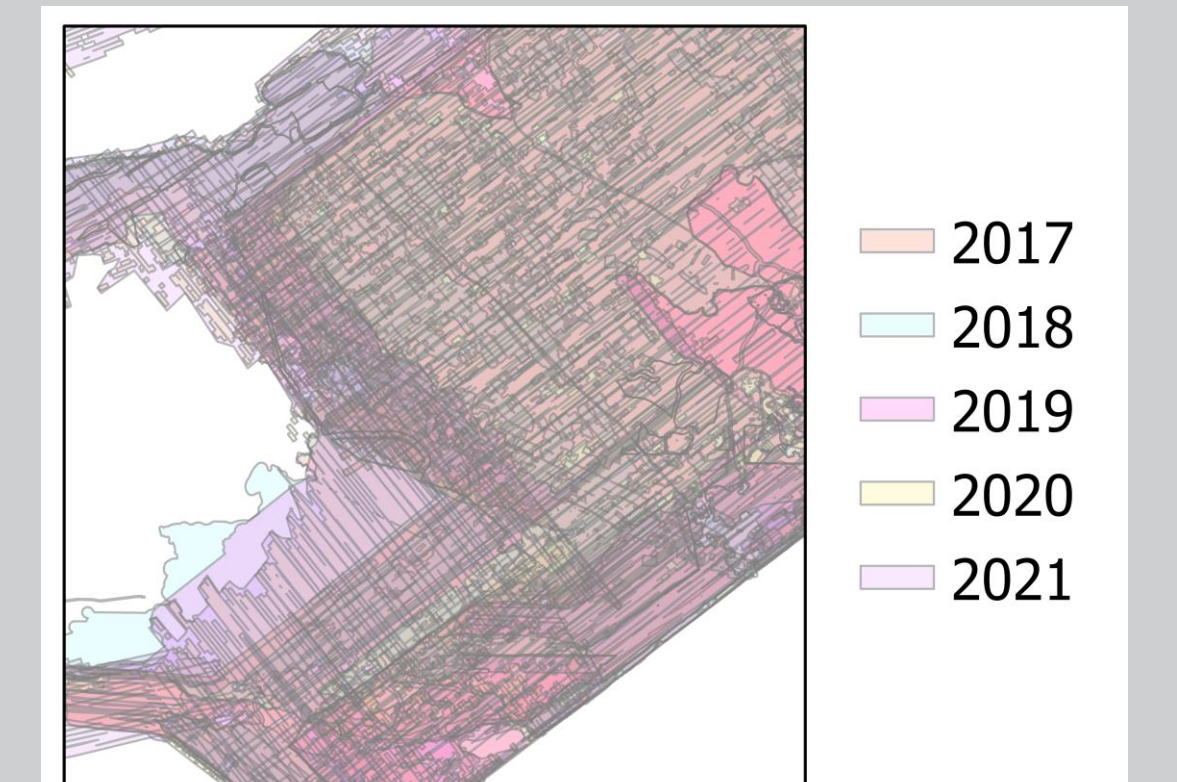
2021
After – 90+% Desirable Vegetation

After 3 years of treatment, the Phragmites cover is 6.8%, on average, in this project area, which exceeds our goal of <10% average cover. Compare this to the untreated control area that has 90% Phragmites cover.



Treatment History

- 2017 August – Aerial Spray
- 2018 March – Flail Mow
- 2018 August – Aerial and Ground Spray
- 2019 February – Flail Mow
- 2019 June – Hydroseed
- 2019 August – Aerial and Ground Spray
- 2020 February – Trample
- 2020 April – Broadcast Seed
- 2020 Summer – Graze
- 2021 Summer – Graze



Map showing treatment data used to track and manage these projects

PROJECT PARTNERS

Utah State University Wetland Ecology Lab
The Nature Conservancy
Nation Audubon Society
Bear River Migratory Bird Refuge
Utah Dept. Of Agriculture And Food
DNR Watershed Restoration Initiative

Central Davis Sewer District
North Davis Sewer District
Cache County
Box Elder County
Weber River Watershed CWMA
Wasatch Wigeons