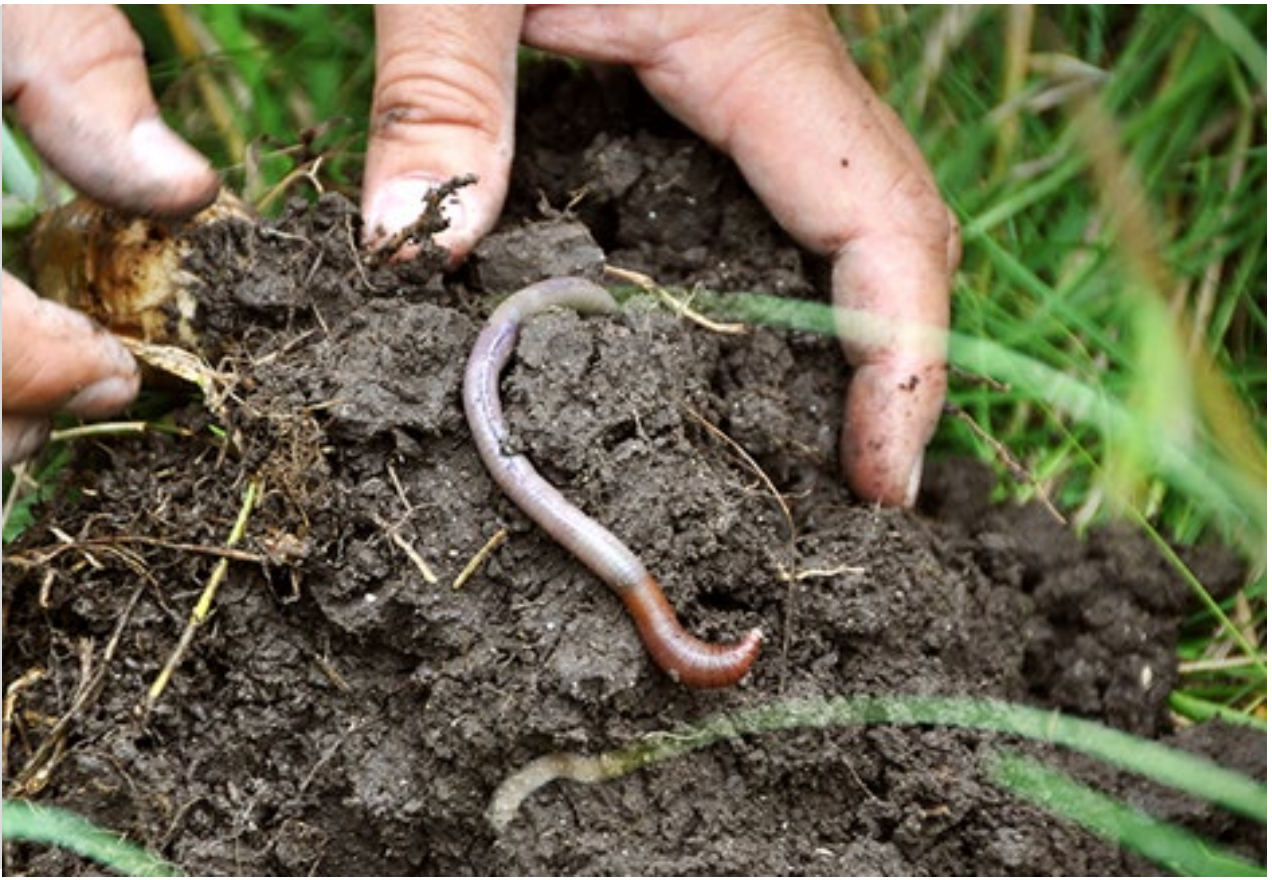
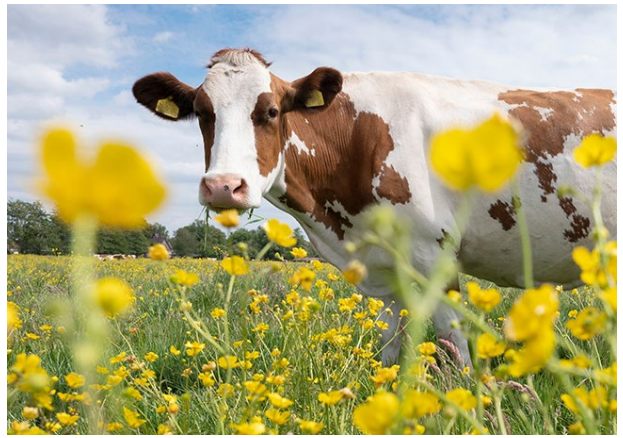
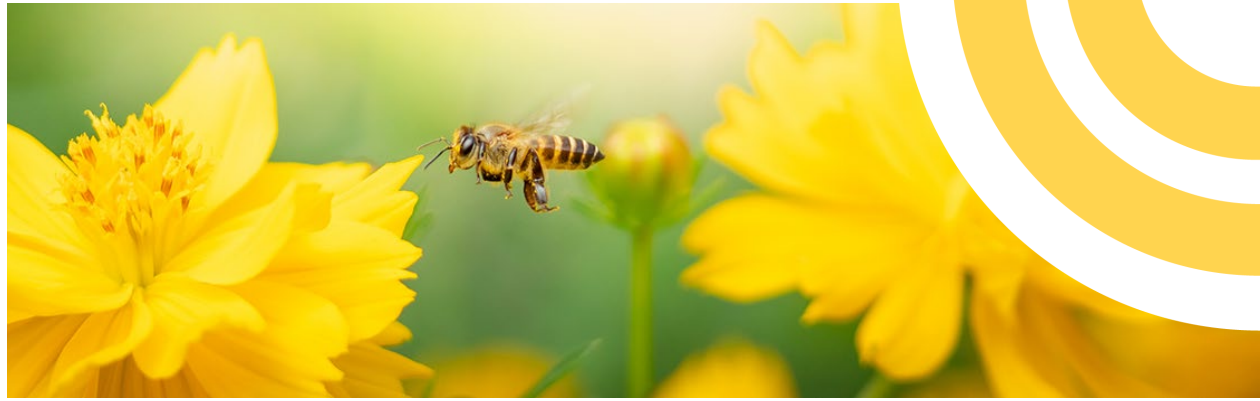
USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE







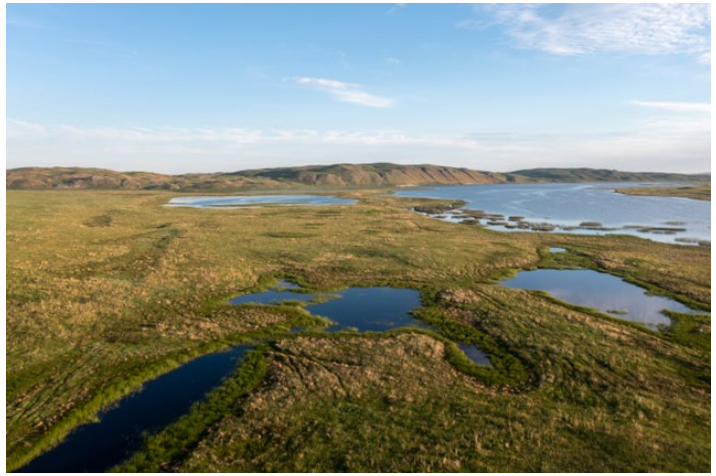
WRE & WREP Opportunities

Patrick Lantis & Kaycee Zuschlag – USDA-NRCS Area Easement Specialists

FARM PRODUCTION AND CONSERVATION
FSA | NRCS | RMA | Business Center

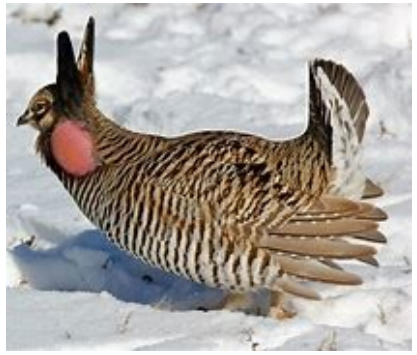
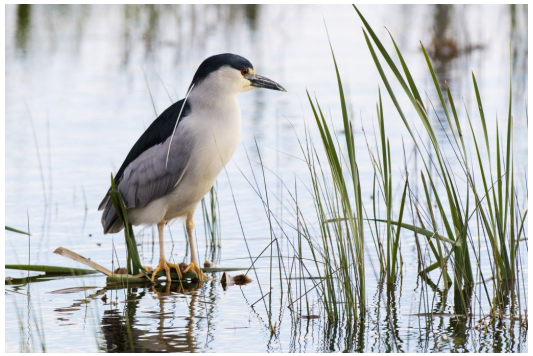
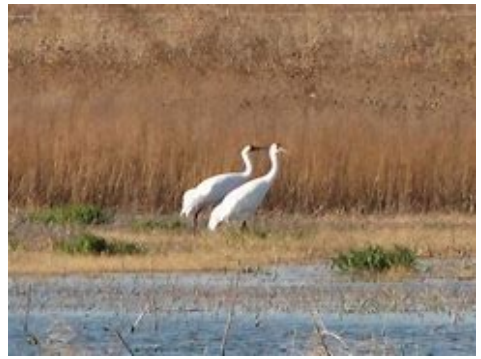
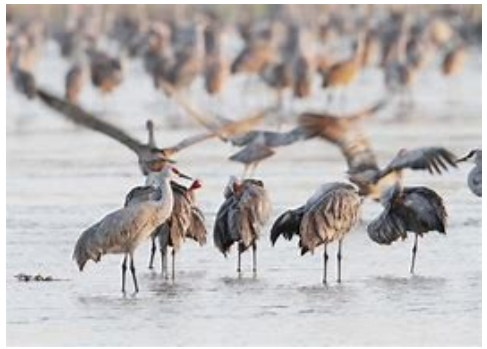
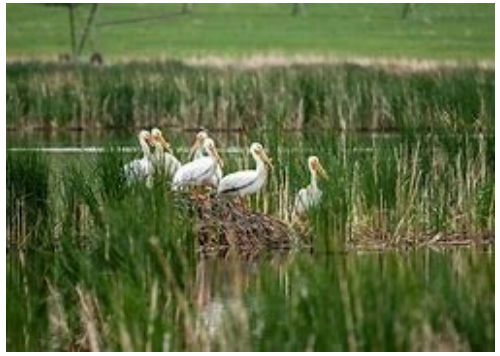
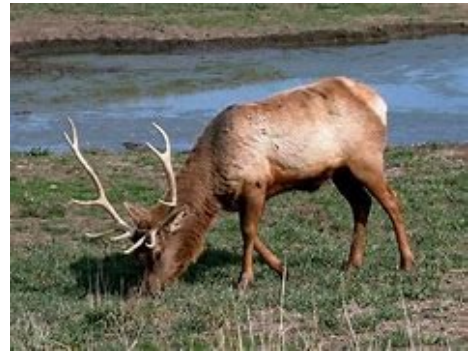
Management Types

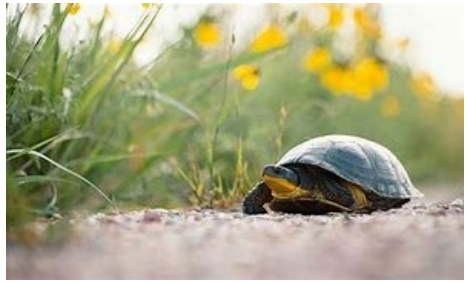
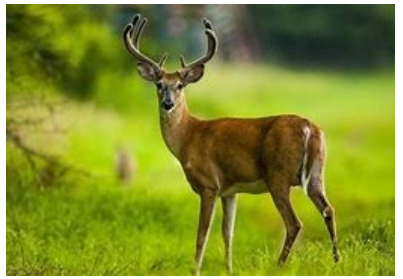
- Compatible Use Agreements (CUA)
  - Are for landowner management using approved practices
- Customer Program Contract (CPC)
  - Are for using stewardship funded management practices
- Landowner Agreement
  - Through RWBJV that allows landowners to complete management with cost share
- RWBJV Management
  - Allows certain management practices to happen on the easement with no cost to the landowner



Management Techniques Used

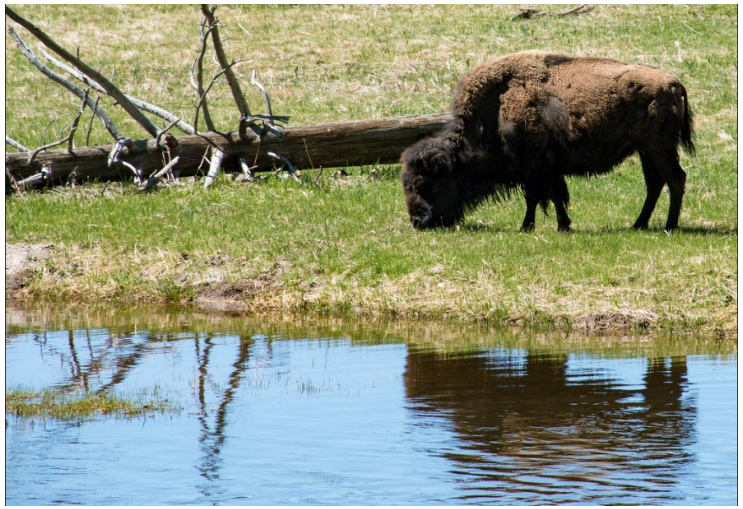
- Grazing
- Burning
- Herbicide Treatment
  - Wetlands
  - Uplands
- Brush Management
- Haying
- Beaver Dams
- Water Control Structures
- Discing
- Reseeding/Interseeding
- Pumping
- Pivot Modifications

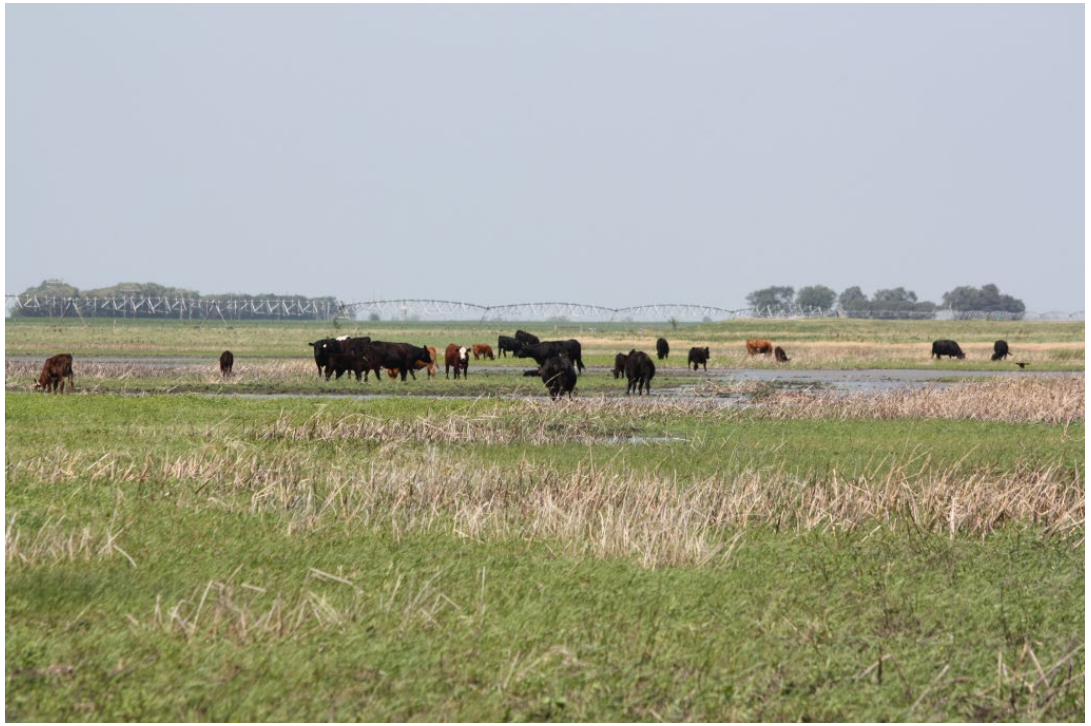

Grazing

- Trampling of wetlands that create openings and exposed mud flats that some wildlife species desire
- Graze during the months of April - November
  - Depending on producer and easement
  - Continuous VS Rotational
- Higher stocking rate on wetland acres
- Effective at reducing plant stand height, as well as creating structural and species diversity
- Reduce cover/root systems of invasive species



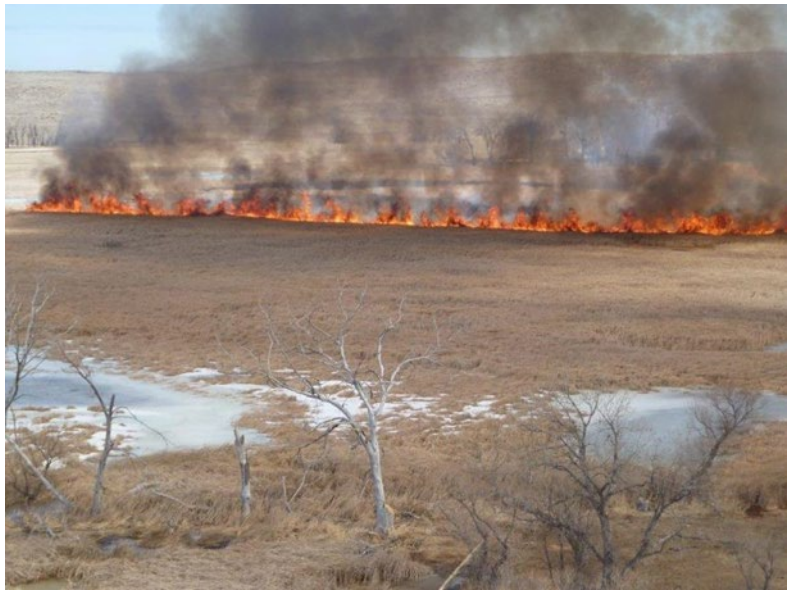
Grazing

- Trampling can create seedbed for annual plants
- Grazing can make other management tools more effective
- Grazing has an income benefit
- Timing considerations for nesting birds and T&E Species
- Need CUA Agreement
- Focus Grazing on Invasive/Noxious weeds
    - Fencing out these areas
    - Higher stocking rate or Longer time during important timeframes



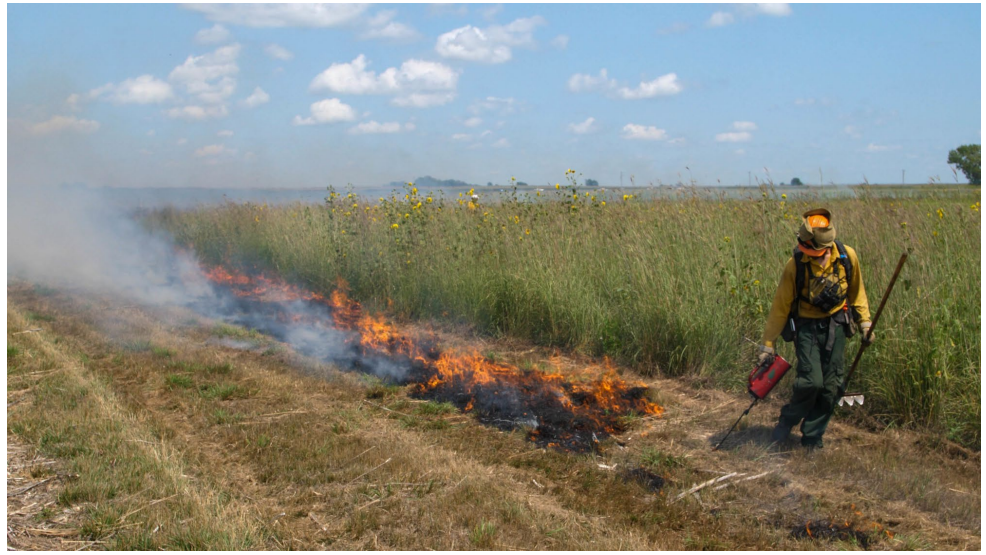
Prescribed Burning

- Reduce/Eliminate invasive species
- Remove excess thatch that's accumulated
- Recycle nutrients back into the system
- Need additional management
- Help reduce woody species
- Tool to use ahead of grazing or spraying



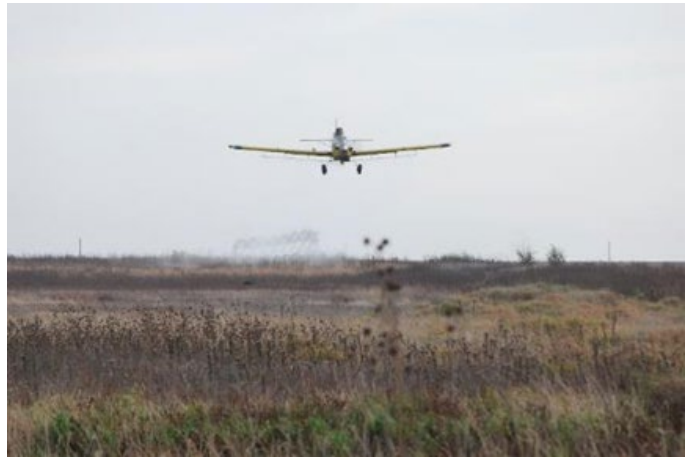
Management with Prescribed Burning

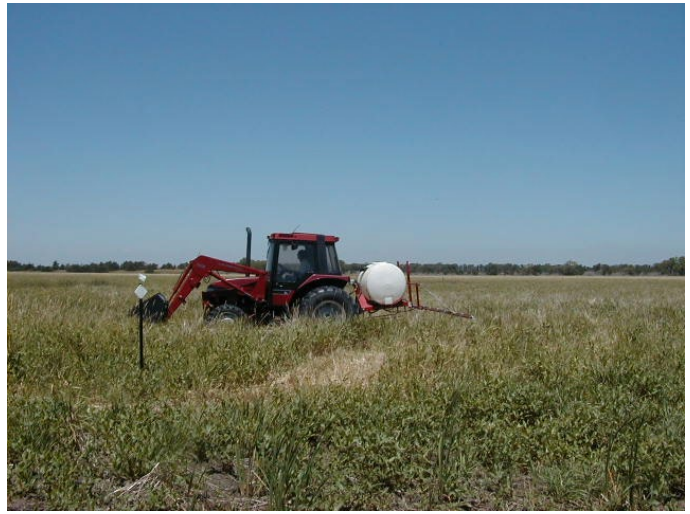
- Use of fire will treat the areas of phragmites that are thick and have dense dead stems
  - Help locate & spot treat regrowth
  - Herbicide treat before burning
    - Due to fires encouraging rhizome growth
- Multiple management techniques are needed
  - Herbicide, grazing, burning



Herbicide Treatment

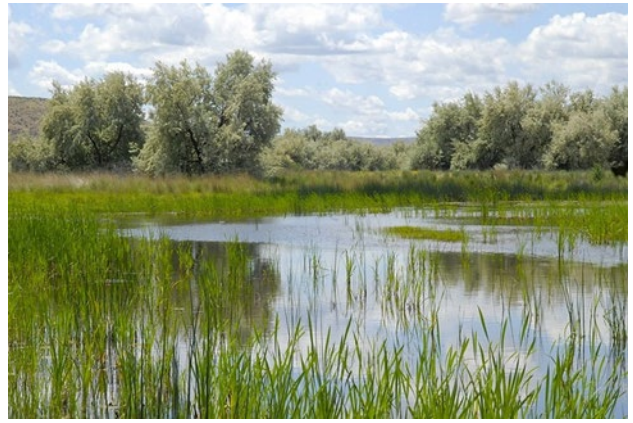
- Need to consider potential impacts to other plants, crops and wildlife
- Follow all label directions for both aquatic and upland herbicides
- Very efficient for control of monotypic stands of invasive plants, if the right chemical is applied according to the directions
- Can be expensive





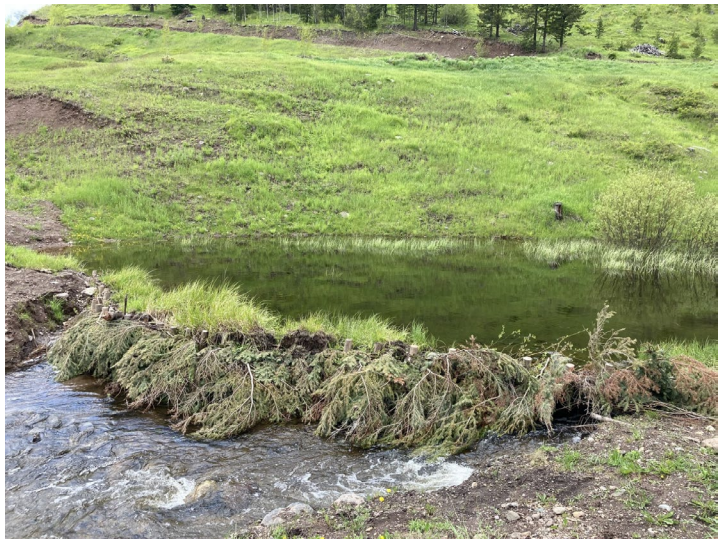
Brush Management

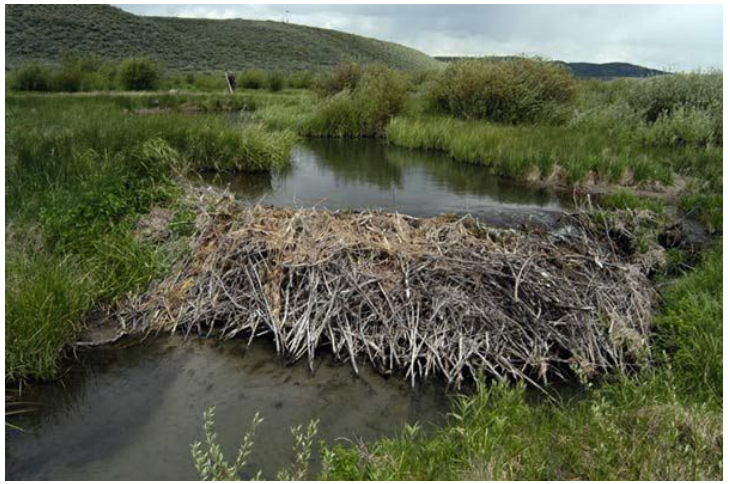
- Timing considerations for nesting birds and T&E Species
- Fire, Grazing and Haying can help control small brush
- Easier to treat woody invasion when plants are smaller
- Smaller woody plants can be shredded or sheared
- Herbicides can be used, especially in uplands for help with brush management
- Deciduous trees will need to be cut/ground down and treated
    - For cedars, stumps do not need treated



Beaver Dam

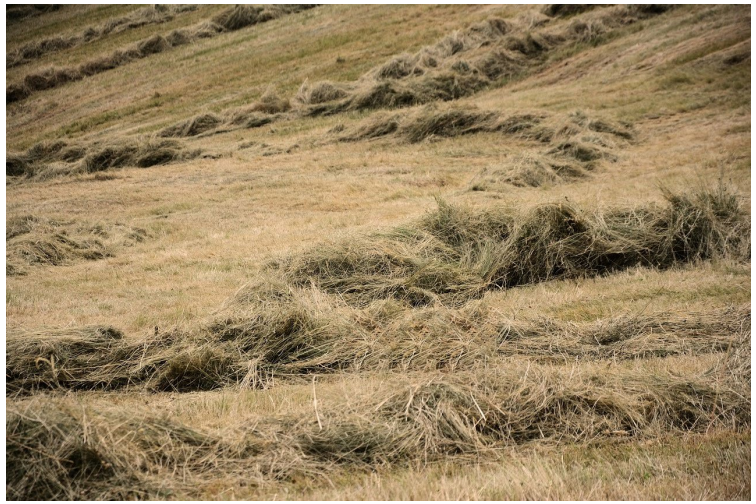
- Restoration of Riverscapes
  - Beaver Dam Analogues (BDA) or Post-Assisted Log Structures (PALS)
    - BDA – hand-built structures that promote the process of beaver dam activity
      - Mix of woody debris and fill material to promote temporary ponding
    - PALS – hand-built structures that promote wood accumulation
      - Woody material of various size are pinned together with untreated wood posts that are driven into the soil
  - Process – based restoration of rare and declining steam conditions
  - Structures are used to mimic, promote, and sustain the natural process of bever dam activity and wood accumulation
  - Intended to kick-start natural maintenance of healthy and functioning streams
  - Self sustaining process





Haying

- Timing considerations for nesting birds and T&E Species
- Limited removal on invasive herbaceous plants, but will reduce woody plant invasion.
- Can make other types of management more effective.
- Haying/Shredding will affect the plant community
- Has a benefit of creating income.

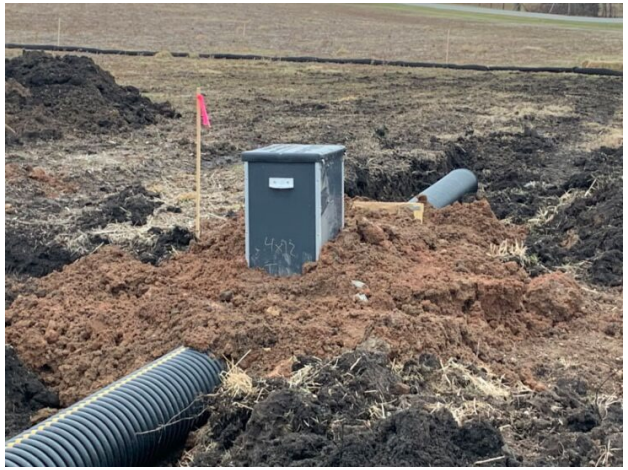


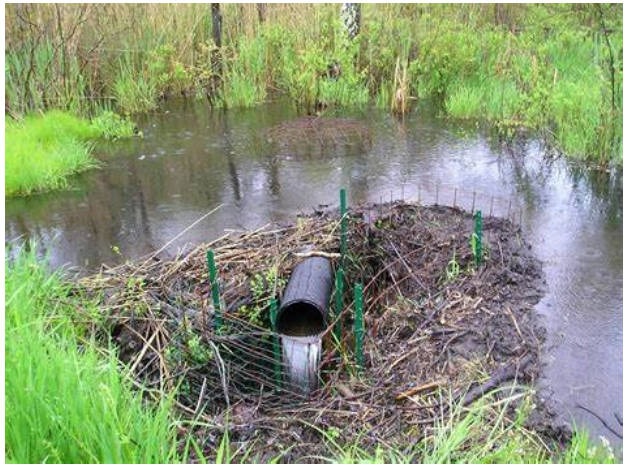
Water Control Structures

- Wetlands are not supposed to be wet year round
- Well adapted to wet/dry cycles – simulate through water level management
- Should be done in conjunction with other treatments
- Can manipulate vegetation
- Draw-downs are needed for wetland seeds to germinate
- Structures need constant maintenance

Management with WCS

- Phragmites/Reed canarygrass is intolerant of persistent flooding
  - Increase in water level alone is not effective in controlling
- Draw-downs should be in late summer
  - (mid/late July early August)
  - Maintain and promote native vegetation
  - Avoid reestablishment of Phragmites





Discing

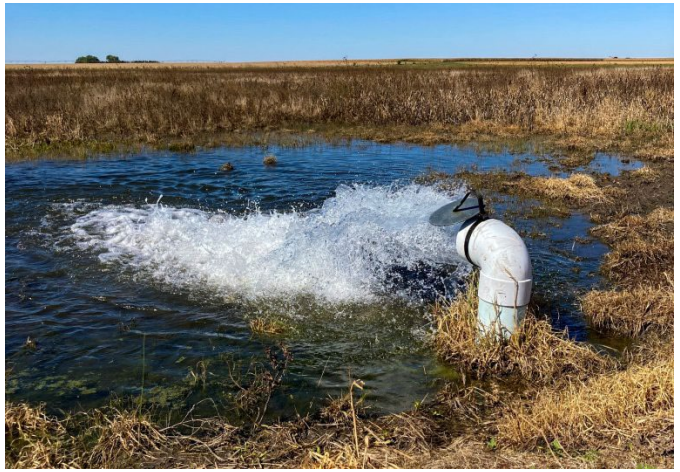
- Used when dealing with an extreme amount of invasive plants
  - Never to be done in natural wetlands
- Not a tool to use if the plant community is desirable
  - Other management treatments will help
- Creates bare ground for moist soil, helps plants with germination
- Can be effective alone if followed by hot/dry weather
- Can be expensive as it needs multiple passes
  - Multiple times of reseeding during dry conditions

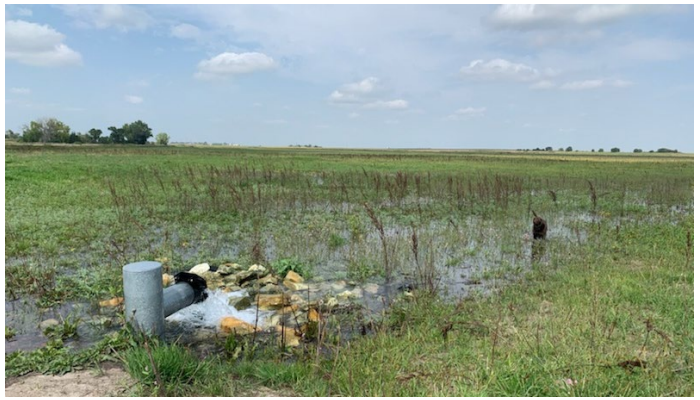
Reseeding/Interseeding

- Native seed collection
- Reseeding areas for management purposes
- To be used with a CUA, allowing Cattle on headed out grassed areas

Pumping

- Useful when a watershed has been altered and the original hydrology has been limited
- Pumping can be used to achieve desired plant community
  - Flooding out invasive species
  - Create moist soil profiles
- Can provide water at critical times when water or access to food may be limited
  - Migration
- Can enhance the landowner's property for hunting
  - If it doesn't inhibit desired vegetation
- Can be expensive
  - Wetlands are not always wet
- New WEDs prohibit any ground disturbance for utility lines
  - If well/line was previously there it can be utilized



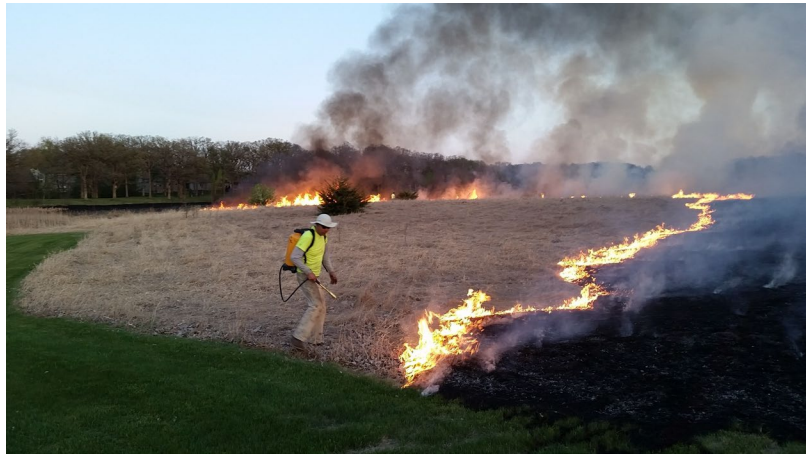


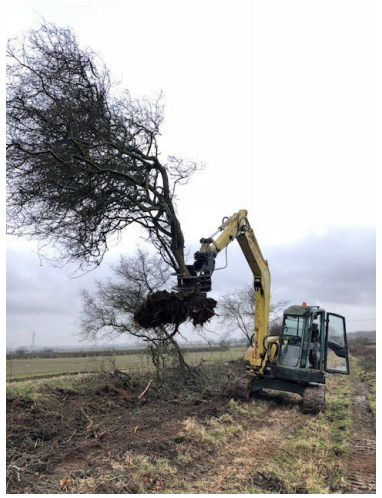
Pivot Modifications

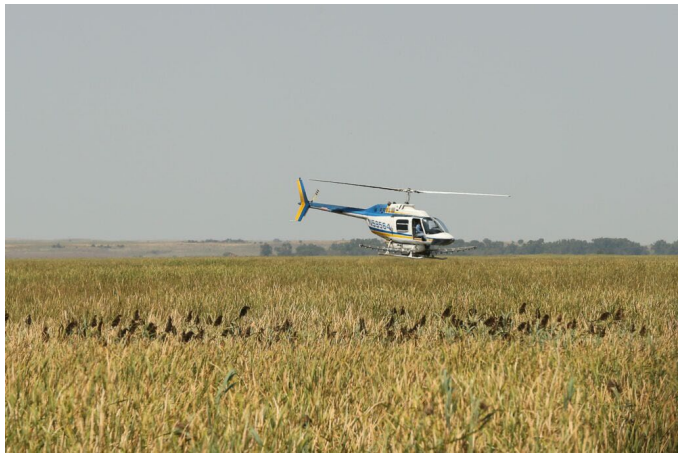
- Pivot bridges
  - Allow there to be a fence for grazing
  - Complete circle
  - Machinery crossings (4 wheelers/UTV)
- Flotation Tires
  - No ruts
  - No flat tires
  - Increased traction
- VRI
  - Maximize irrigation efficiency within fields that contain wetlands
  - Eliminate inputs over wetland acres
- Soil Moisture Sensors
  - Maximize irrigation efficiency cost
  - Eliminate excess inputs of water
- Funding through Landowner Agreement

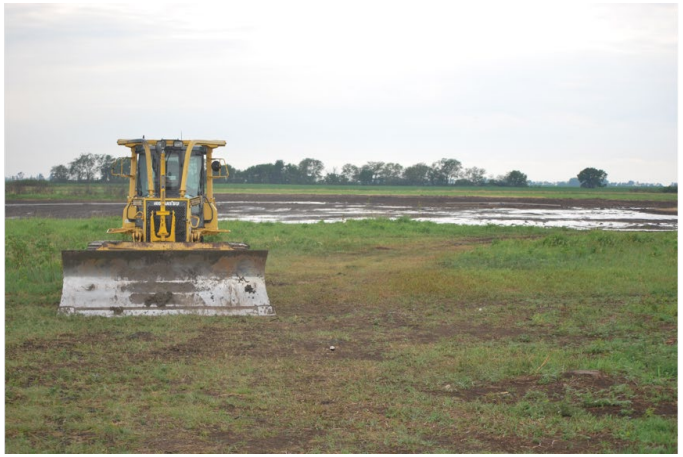
CPC

- Management that can be paid for
- Area Easement Specialist thinks would benefit easement
- Funding through Stewardship funds received by the state
- Used for Restoration



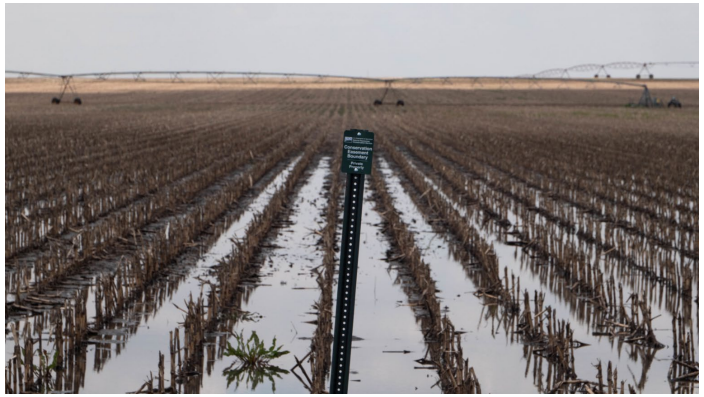


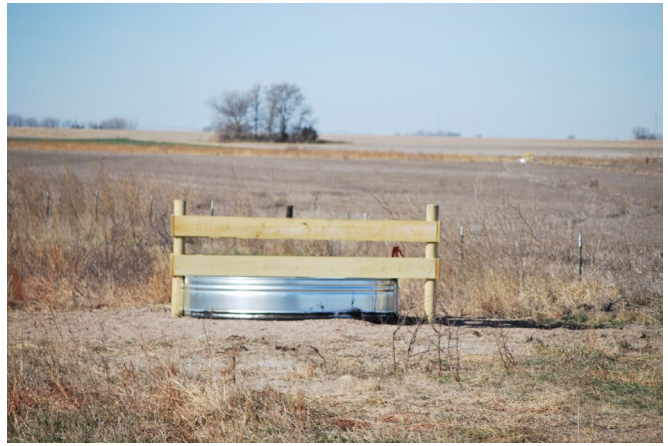




Landowner Agreement

- Agreement between Landowner and RWBJV
- Has a term of agreement based on practices completed
- Has cost share attached to the agreement
- Main practices:
  - Livestock Watering system
  - Grazing Infrastructure
  - Pivot Modifications (WREP)





RWBJV Management

- Following practices are available:
  - Herbicide Treatment
  - Prescribed Burning
    - Tree pile burning
  - Tree Removal
- The projects are bid out together based on practices
- Area Easement Specialist can put you on that year's list for management needed