Case Study: “Restoring” a Stormwater Pond at the Meewasin Northeast Swale

Native Prairie Restoration and Reclamation Workshop
Regina, SK
February 9, 2017

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Meewasin Northeast Swale – September 2015
Leafy Spurge (Euphorbia esula)

Common Tansy (Tanacetum vulgare)

Absinthe (Artemisia absinthium)

European Buckthorn (Rhamnus cathartica)

Ornamental Escapes:
- Asparagus
- Broomrape
- Bird Vet
- Caragana
- Cuer Mistletoe
- Cottonwood
- Delphinium
- Dwarf Russian thistle
- Honeysuckle
- Ice (unknown)
- Leuc
- Mistletoe Cross
Assignment - Objectives

• You are to “restore” the stormwater pond (dry and wet ponds) over the next 10 years with the objectives of:
  – Ensure stormwater management is not impeded
  – Remove invasive species from the site
  – Provide functional habitat for wildlife
  – Provide interpretive opportunities for the general public
  – Protect the adjacent native fescue grasslands
  – Provide opportunities to improve water quality of the stormpond and water entering the South Saskatchewan River
Assignment – At Your Disposal

• Equipment
  – Quad, quad sprayer, backpack sprayers, quad harrows, small estate tractor, o-turn mower, native seed stripper, old Truax drill, prescribed burning equipment
  – Potential to beg, borrow or steal other equipment

• Native Plant Materials
  – Native grass, wildflower, and shrub plugs
  – Collection of small amounts of native wildflower, grass, shrub seed
  – Collection of aquatic plants and native willow stakes
  – Collection of larger amounts of native grass seed, but not enough for the planting

• Labour Pool
  – 2 field staff, 1 summer student, volunteers
Assignment

1. What are the major steps in the restoration process would you conduct each year, the equipment used, the timing and why?

2. What methods of weed control would you use?

3. How would you design the plantings?:
   - Seed mixes
   - Native plugs
   - Aquatics
   - Native trees, shrubs, willows

4. What are the long-term management options?

5. What would you focus on for short-term and long-term monitoring?