2018 Native Prairie Restoration/Reclamation Workshop

DUC – Wetland Restorations on Agricultural Lands in Saskatchewan

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Wetland Restorations

Why?

DUC and Wetlands

• habitat, food source, protection
  other species

• Water Quality, flood protection, and....
Wetland Restoration:

• Constant Threat of Loss
• Agriculture Lands increased value
• Improved efficiencies, larger equipment
• limited value in an annual cropped system
• topography, soil zone, moisture, adequate outlets
Drainage Ditching in the Assiniboine River Watershed
Wetland Restoration Program

Andjelic Lease

Legend
- Restored Wetlands: 85.3 ac. (154 basins)
- Wetland Complex: 62.6 ac.
- Tame Grass/Legume: 582.0 ac.
- Ditch Plugs

Ducks Unlimited Canada

RESCUE OUR WETLANDS
Wetland Restoration Program

• Strategies to Acquire
  • Forages (hay or pasture, water source)
  • Financial Incentive

• End User Requirements
  • DUC
  • Mitigation
Wetland Restoration Programs

- Over 3,000 restored basins
- Tagged to existing forage program (top up of $50 per acre) - 2006
- Reverse Auction – Price Discovery (2008-2011)
- Flat Rate on Incremental Wetlands (2013-2016)
- Purchase Lands to Restore Wetland (ongoing)
- Conservation Easements (ongoing)
Wetland Restoration Programs (Results)

- Term Programs on Private Lands
  (Partners – Local Watersheds, Lake Winnipeg Basin Stewardship Fund, National Wetland Conservation Fund)

30 landowners, 54 quarters, 475.3 acres (340 basins)

Average Price $1494/acre incentive payment – Fair Market Value for land approximately $750/acre, Cash rent < $50/acre

Low interest in the program
No interest in long term agreements
Wetland Restoration Programs (Results)

- Conservation Lands (Purchased, Conservation Easements)
  - Purchased and Retained
  - Purchased and Sold
  - Conservation Easements
  - <10 acres of restored wetland/quarter
- Over 2100 basins
Wetland Restoration:

Construction:
- Restore to natural level
- Adjoining neighbours, RM infrastructure
- Historical Photo
- Ground investigation
Wetland Restoration Programs

- Monitoring/Compliance Issues
  - Term agreements
  - Ditch Plug inspections
  - Livestock impacts

- Risk of low benefit
- Limited time for naturalization
Wetland Restoration Programs

- Monitoring/Compliance Issues
- Historical Levels (incremental flood zone)
  - Unmanned Aerial Vehicles (UAV – Drones)
Wetland Restoration Programs

- Monitoring/Compliance Issues
- Soil Characteristics
Wetland Restoration

- Evaluations
  - Naturalization
    - Impacts of years of cropping
    - Impact of drought
  - Vegetative community (competition from weeds annual/perennials)
- Other
- Compliance Annually, Monitoring 1 in 3 years
Wetland Restoration (Future)

Wetland Mitigation – Industry

As per the Proponent’s Environmental Impact Assessment Statement by Ministry of Environment (Requirement)

Saskatchewan encourages:
• Avoidance of impacts
• Minimization
• Compensation
Wetland Restoration

Rather than Fixed Ratio- Piloting a Debit:Credit Calculation

Considers:
• Type of wetland
• The amount of wetlands
• Method and type of compensation (restored, enhanced, secured)
• Type of securement
Wetland Restoration (Future)

Wetland Loss in Agriculture continues.
Wetland Restoration
Proposed Drainage Network
Wetland Restoration
Agriculture Opportunities

Agriculture
• yield mapping, data analysis, profit/loss per acre
• Sectional Control Seeding Equipment, GPS guidance systems
• Variable rate technology

• If not profitable, other options
Wetland Restoration
Agriculture Opportunities..
Wetland Restoration

• Continue to monitor and evaluate
• Predictive tool (opportunities), indicators to help early assessment
• Time & Patience
Thank You

DUC – Wetland Restorations in Agriculture Lands

PCAP

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