Agricultural Water Management Strategy
What wetland policy & legislation exists in Saskatchewan?:

  • Agricultural Water Management Strategy (aka drainage policy)
  • Responsibility for Aquatic Habitat
    • *Environmental Management and Protection Act, 2010*
  • Replace 1995 wetland policy
  • Ministry of Environment Mitigation Principles and Standards for Fish & Wildlife Habitat *(in development)*
New Agricultural Water Management Strategy

• The Water Security Agency is implementing the **Agricultural Water Management Strategy**

• The Strategy seeks to balance the impacts with the benefits of drainage.

• The aim is not to close or shut down drainage, but allow it to continue in a responsible manner.
New Agricultural Water Management Strategy

Previous Saskatchewan approach

- Supported drainage through C&D development
- Pre-1981 drainage works did not require permits
- To reduce workload focus was on resolving complaints about impacts
- Difficult Land Control requirements
- Very low permitting compliance (<5%)

New Approach

- All drainage works, including pre-1981, must be approved or closed
- Applies to all wetland sizes and classes
- Directs WSA to address the impacts of drainage (quantity, quality, habitat)
- Focus on agriculture
Why a New Approach?

• Drainage has been a key part of settling Saskatchewan. It has made land available for communities, roads, crops and resource development. However, poorly designed projects have negative impacts, including:
  • downstream flooding on a local or basin scale and infrastructure damage.
  • degraded water quality from erosion and increased nutrients.
  • negative impacts on wildlife habitat.
• Many of these problems can be avoided or mitigated.
Agriculture Water Management Strategy

The New Approach

The Agriculture Water Management Strategy will move Saskatchewan toward **Responsible Drainage** by:

- Rule of Law Approach requiring approvals
- Streamlining the regulatory system (eg. Land Control)
- Effectively addressing risk of drainage impacts in the approval process, and
- Enabling development of sustainable drainage projects with more long-term certainty for producers.
Agricultural Water Management Strategy

• By the end of 2015, we had regulatory direction for the new approach but needed a way to achieve compliance.

• Questions remained:
  – How to get producers to engage with approval process?
  – How to coordinate drainage among producers?
    • Particularly if there is long standing conflict
  – How can landowners acquire-land control?
  – How to mitigate drainage impacts?
Innovation: Network Approach

• What are drainage networks?
  – Networks are mini-watersheds.
  – Extensive systems of wetland drainage ditches crossing multiple parcels and landowners before emptying into a natural or modified water course (Adequate Outlet)
  – Regulation of individual parcels do not address potential impacts given upstream effects on downstream.
  – The network approach reviews all drainage by all landowners, and associated cumulative impacts, together at the same time.
Innovation: Network Approach
Innovation: Network Approach

• Projects succeed when local landowners:
  – Take ownership of the project and find ways to make it successful and work for everyone.
  – Groups are supported through administrative and technical processes of regulatory system

• Network Approach
  – Landowners work together to operate coordinated drainage projects that flow to an adequate outlet
  – Submit a joint application for all drainage works
  – Considers All existing and new works
    • Evaluation of Risk/Impact
    • Application of Mitigation on network scale

• Qualified Persons
  – Hired by landowner group to organize them, act as liaison with regulator and assist in preparing the application.
New Approach – Adequate Outlet

- Is the point downstream of the network at which there is no longer out of bank flooding caused by drainage.
- Upstream drainers require Land Control from downstream owners to move water across their lands where out of bank flooding occurs.
- Provides the end point to network
New Approach – Land Control

• What is Land Control?
  – Approval for drainage works requires “proof of land control satisfactory to the WSA”.
  – Land control is the permission or right to use land for drainage purposes to the point of an adequate outlet.

• Various forms of land control include

  Four types of land control options

  • Ownership  
    Most Secure
  • Registered Easement
  • Joint Application
  • Written Agreement  
    Least Secure
New Approach – Land Control

• Network approach allows landowners:
  – To coordinate drainage and acquire land control for all drainage downstream to point of adequate outlet.
  – To utilized joint application
    • Reduces need for registered easements previously required
    • Reduces redundancy of numerous written agreements
    • Registered to title
New Approach – **Risk Assessment**

- **1st** step in Mitigation Approach
  - Provides criteria to evaluate flooding, water quality and habitat impacts at the Network Scale.

- **Risk** – is potential for flooding, water quality and habitat impacts.

- To assess this risk, 2 elements are considered:
  - *Where* the project takes place (i.e. watershed)
  - *Size/Permanence* of the individual project

**Higher Risk = More Mitigation Required**
New Approach – Impact Mitigation

• Mitigation Objective is:
  – Flooding, Water quality, and Habitat impacts of drainage are mitigated

• What is an Impact?
  – Effects **due to drainage** that result in a change in the resource such that there is a **reduction in the ability to use the resource** or there is **unreasonable harm** to other landowners.
New Approach – **Impact Mitigation**

- Impact focuses on use of the resource.
  - Flooding – Impact to people and infrastructure
  - WQ – drinking water, recreation, irrigation etc.
  - Habitat – support game species, fishing resources etc.

- The Network Approach allows:
  - Mitigation to be designed and applied at Network Scale
  - Thus, allowing the Regulatory process to move beyond a individual wetland approach to consider wetland complexes and cumulative impacts
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• We have learned that producers engage in the approval process and succeed when support for:
  – organization, leadership and communication are provided

• Ag Producers are particularly good at making decisions with respect to their own operations but at times ...
  – Need help coordinating actions among producers
  – the leadership needs people experienced in project development and communication
  – the project needs technical support
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Qualified Persons

- Assist landowners in development of high quality applications by providing:
  - Administrative support
  - Liaison for communication between:
    - Landowners
    - Landowners and Regulators
    - Landowners and RMs, NGOs other stakeholders
  - Coordination between landowners in a network
  - Technical support
    - Level of support dependent on project risk
  - How landowners hire QPs, average cost?
Dry Lake Approval
Saskatchewan Approach in Action
Agricultural Water Management Strategy

• Dry Lake
  – Proactively identify networks with high risk
    • Historic conflict among farmers
    • Past unresolved drainage complaints
  – 113 Quarter Sections
  – 73 Landowners
  – Included all Existing & New drainage
    • Equality; most recent drainer not penalized
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- **Dry Lake**
  - Mitigation
    - High Vulnerability Watershed
    - Project Risk = High
    - Results in High Risk project
  - High Risk = More Mitigation
  - Mitigation
    - Land Control
    - Erosion Conditions
    - Flow Controls
    - Retention/Drainage
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What was the process?

• All Landowners in network received a letter
  – Included NGOs, RM\s, Producers
  – Element of equitability

• Compliance Plan developed

• Outlined timelines and expectations for compliance
  – Outcomes of approval or closure

• Network Landowner Meetings
  – Enforcement officer present
  – Introduce Qualified Person
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Initial Buy In?

- Initially 80% of individuals were interested
- 8% Maybe willing or ‘On the Fence’
- 12% Not willing to cooperate

Tools to bring 100% into compliance?

- Develop & implement compliance plan
  • Included targeted phase-in closure of works
- Qualified Persons worked in networks for 14 mo:
  • Coordinated community members in the network
  • Provided leadership, coordination and support
  • Provided technical support
  • Communicated expectations and timelines
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Did we achieve compliance?

• All 73 landowners signed application
  – Included producers, RMds and NGOs

• Approved 113 - ¼ Sections
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Did we achieve compliance?

• Approval Details:
  – 10 Year Term
  – Approved loss of:
    • 358 acres existing loss
    • 228 acres new loss

• Included Mitigation
  • 33.7 acres wetlands restored
  • 21.2 acres of wetland retained
  • 30 flow controls installed
Saskatchewan network Approach

- Illustrated that:
  - We can get producers into and through the regulatory process
  - Producers can coordinate and work together
    * Even in areas of high conflict
    * Develop & implement solutions
  - Impact mitigation, including wetland retention, is acceptable
  - Qualified persons are key supports for producers and WSA
    * Communication
    * Coordination
    * Administrative
    * Technical
Where are we now?

• Implementation is in early phases
  – WSA is 1 year in to implementation
  – Launched Implementation of the New Approach March 1 2017
    • 688 ¼ sections Meet Regulatory Requirements
      – Approval (635 ¼ sections)
      – Closures (53 ¼ sections)
    • QP Program Launched April 1 2017
      – 173 taken QP Training Workshop
      – 86 QPs currently listed by WSA
    • New application form and on-line portal
Where are we now?

• Additional **10 Priority Networks** in approval process
  – 1,000 ¼ sections of approval early this year
  – Planning underway for next priority networks

• Policy development continues
  – Working towards approval to apply full suite of tools for mitigation
  – Agricultural and NGO Stakeholders engaged in development (AWMPAC)
  – Finalize compliance policy and procedures
Key Components of Achieving Compliance:

• Producers value and lead the shift to Responsible Drainage
• The regulatory process depends on engaging:
  • Producers/Landowners
  • Local Communities
    • Identifying Local Leaders
  • Identifying other Stakeholders
Key components of Achieving Compliance – Areas for improvement

- **Government, producers, stakeholders and citizens understand and endorse our approach**
- **Understand:**
  - We need to develop more effective communication to ensure:
    - Landowners and stakeholders understand the approach
    - Effective education of compliance approach and requirements
- **Endorse:**
  - Further engage agricultural producers as partners in the shift
  - Seek feedback from key partners and stakeholders and adapt as necessary
Next Steps

**Education and Communication:**
- We need to understand how to effectively communicate:
  - The downstream impacts of drainage and why producers should be concerned or and incorporated into their planning.
  - Messaging regarding wetlands and the regulatory process that meaningful to a producer?
    - Understanding producer values, including wetlands, so that our messaging and communication can be improved.
    - Understand the producer operational decision making processes so that mitigation and regulatory process can be tailored to be more effective.
  - Understand producer perception of mitigation.
Next Steps

- Engage producers and stakeholders:
  - Proactive compliance by WSA currently provides driver for clients;
    - Ultimately system needs producers to value approval and voluntarily seek approval. How do we successfully market, communicate and educate producers?
    - What are the most effective tools to engage clients or influence operational or network scale decisions? (Communication, Market Based etc.)
Questions