
Drainage activity: Rules and regulations

Presented to SARM Mid-term Convention
November 9, 2010
Ministry of Environment
Saskatchewan Watershed Authority
Fisheries and Oceans Canada

Intent of Presentation

- Provide clarity on current legislation
 - Improve understanding and prevent misunderstandings
- Discuss opportunities to resolve current issues
- Address any questions you may have

What do we mean by “drainage”?

- “any action taken or intended for the **removal or lessening of the amount of water from land....**”

(The Saskatchewan Watershed Authority Act, 2005)

Examples of “drainage”

- **clearing, deepening, widening or straightening a watercourse**
to move more water or to move water more quickly
- **creating a channel**
to redirect a watercourse
- **creating a ditch**
to remove water from a wetland or other surface water body
- **infilling a wetland or water body**
to remove or reduce the depression where water collects
- **installing tile drainage**
to drain sub-surface water
- **building a structure to prevent flood waters**
from entering all or part of a floodplain
- **placing culverts and constructing ditches**
alongside or under roads

Concerns about drainage

- Loss of habitat / ecological services
- Increased localized flooding
- Changes in water flow (timing, quantity)
- Erosion of land and of receiving watercourses
- Sediment loading in watercourses, water bodies, and structures downstream
- Nutrient loading in watercourses and water bodies
- Shallow groundwater recharge and public concerns about wells and water quality

Current requirements

- ❑ In most cases, **when drainage activity leads to water leaving a person's land,** two provincial approvals are required
 - Saskatchewan Watershed Authority
 - Ministry of Environment

- ❑ **If fish or fish habitat will be impacted,** federal authorization is also required
 - Fisheries and Oceans Canada

Saskatchewan Watershed Authority

➤ Approval to Construct and Operate Works

- ❑ Focused on hydrological function and impacts:
 - Basin / watershed scale
 - ❑ Is water being diverted from its natural outlet?
 - ❑ Are there any other significant or cumulative hydrological impacts?
 - Local scale
 - ❑ Is there an adequate outlet?
 - ❑ Are directly affected neighbours agreeable?

SWA Approval Process

1. Obtain an “Application for Approval to Construct and Operate Works” from local SWA office or online.
2. Submit completed application form and application fee to local SWA office - \$25 for an individual project, \$50 for a group project and \$100 for all other projects (non-private proponent, e.g. CDA, corporation). Include the following information:
 - ❑ Project plan
 - ❑ Land locations affected
 - ❑ Length of works and size of area drained
 - ❑ Outlet into which works will discharge

SWA Approval Process

3. A preliminary evaluation of the proposed project will be made. The applicant may be advised that additional information is required.
4. Once required information is submitted, the project is reviewed for potential downstream effects. MoE may be consulted at this point.
 - ❑ Proponent may be required to advertise the intention to construct drainage works in the local post office, RM office and the newspaper.
 - ❑ SWA staff will discuss any feedback received with the applicant.

SWA Approval Process

- 5. It is the proponent's responsibility** to obtain land control from any landowners that may be directly affected by the drainage works. Acceptable land control is an interest registered on title (notice, certificate, or easement).
- 6.** Once all the legislated requirements have been met, SWA will issue and mail out an “Approval to Construct Works” and construction may begin.

SWA Approval Process

7. The proponent notifies SWA upon completion. SWA issues an “Approval to Operate Works” along with terms and conditions. SWA may inspect to confirm the project was built in accordance with the approved plan.
8. SWA then registers an interest with ISC against the applicant’s land title to tie the Approval to the land. ISC fees are assessed against the applicant.

Exemptions from SWA approval

- Works in existence on January 1, 1981.
- Works and water bodies located entirely on the owner's land, where the water drained **does not drain from the owner's land.**
- Works located entirely within the boundaries of an urban municipality, **where the drainage works do not divert water from the outlet through which the water would normally drain.**

Exemptions from SWA approval

- Works under, through or part of roads or other public utilities that:
 - are intended to accommodate surface water flows (e.g., culverts, bridges);
 - do not significantly inhibit the passage of the flows;
 - do not divert water from the outlet through which the water would normally drain.
- Land levelling and landscaping for the development of building sites, public parks and public recreation areas.

Exemptions from SWA approval

- Work that is undertaken to:
 - remove obstructions, including silt, blow dirt, beaver dams, debris, trees and shrubs from channels and water courses (channel clearing), or
 - control soil erosion, or
 - restore conditions when soil is suddenly displaced by erosion

as long as:

- water is not being diverted from the outlet through which the water would normally drain and
- there is no significant increase in downstream volumes.

Drainage Complaint Process

- Where a person alleges personal damage, loss or injury due to drainage activity, they may request assistance from SWA.
- SWA does a preliminary investigation
 - Is there a drainage work?
 - How are surface water flows affected?
 - Does it or will it cause damage?
- SWA makes a written, non-binding recommendation or dismisses the complaint with written reasons. In certain cases, SWA may recommend mediation or arbitration to resolve the complaint.

Drainage Complaint Process

- If not satisfied, either party may file a formal complaint.
- Upon completing a more detailed, formal investigation, SWA will render a Decision and Order.
- An Order may require corrective action.
- SWA does not have powers to determine liability or award damages or other compensation.
- The Water Appeal Board rules on appeals related to SWA decisions and orders

Ministry of Environment

■ Aquatic Habitat Protection Permit

- Addresses ecological concerns and water quality
 - Bed and riparian protection (habitat and function)
 - altering the bed, bank or boundary
 - moving, removing, or adding material to the bed, bank or boundary
 - removing vegetation from the bed, bank or boundary
 - Water quality
 - discharge of a harmful substance into a waterbody

MoE Permit Process

1. Obtain an “Aquatic Habitat Protection Permit Application” from local MoE office or online.
2. Submit a completed application form to local MoE office, including the following information:*
 - ❑ Affected water body or watercourse;
 - ❑ Description of proposed work, work site, and construction equipment, materials and schedule;
 - ❑ Plans to mitigate or prevent impact on aquatic and riparian habitats, including erosion and sediment control plans;
 - ❑ Plans for restoration after the proposed activity has been completed, including replacing or restoring vegetation;
 - ❑ Maps, plans, and photos that will assist staff in their review.

**(refer to The Water Regulations, 2002 Section 8)*

MoE Permit Process

3. MoE staff will review the application. Staff may:
 - ❑ ask the applicant to provide more details
 - ❑ conduct a field inspection
 - ❑ identify any potential for impacts to Species at Risk
4. Once all of the required information has been provided and the review is completed, a permit may be issued with conditions.
5. Applicants may be required to notify the local field office when work begins and ends. This allows for any necessary site inspections by MoE staff.

Exemptions from MoE permit

- Water bodies located entirely within the boundaries of the proponent's land where the water **does not flow into surface waters outside of the proponent's land.**
- Cultivation of intermittent watercourses that have been continuously cultivated without interruption commencing on or before December 5, 2002.

Exemptions from MoE permit

- Removal of beaver dams or beaver houses by use of hand tools or explosive.
- Removal of beaver dams by mechanical means, if:
 - it does not result in the alteration of the bed, bank or boundary.
- Excavation and replacement of existing culverts but only if the excavation or replacement:
 - is commenced and completed under dry conditions
 - **and** incorporates adequate erosion control measures.

Exemptions from MoE permit

- Cutting, mowing, haying or swathing
 - if work is commenced and completed under dry or frozen conditions.
- Burning of vegetation or plant material
 - if it does not occur between May 1st and August 1st of each year.
- Cutting or removal of vegetation by hand tools or hydro-axing to maintain existing
 - utility lines, road allowances, ditches designed to move urban storm water or ditches licensed or exempted under *The Drainage Control Regulations* if work is started and completed under dry or frozen conditions.
- Removal of vegetation or plant material
 - if related to excavating or replacing a culvert in the above circumstances.

Fisheries and Oceans Canada (DFO)

■ ***Fisheries Act***

- Goal is to protect fish and fish habitat.
 - Fish habitat cannot be harmed unless you are Authorized to do so under the *Fisheries Act*.
- DFO will review projects that are proposed in areas that contain fish habitat.
- *Fisheries Act* prohibits the deposit of deleterious substances into waters where there are fish – this includes sediment.

DFO Interest around Drainage

- Drainage can physically damage fish habitat, reducing spawning success for fish.
- Drainage can increase erosion which can deposit sediment downstream and cover fish habitat.
- Drainage can increase runoff, increase water velocity, and shorten runoff period which may reduce spawning success.

DFO review process

- 1. Will the project impact fish or fish habitat?** If no, a review is not required by DFO.
- 2. Does the project involve beaver dam removal?** If yes, an Operational Statement can be followed, and no further DFO review is required.
- 3.** If project will affect fish or fish habitat, project details should be sent to DFO office in Prince Albert or Regina. A Request for Review form guides the information we need.

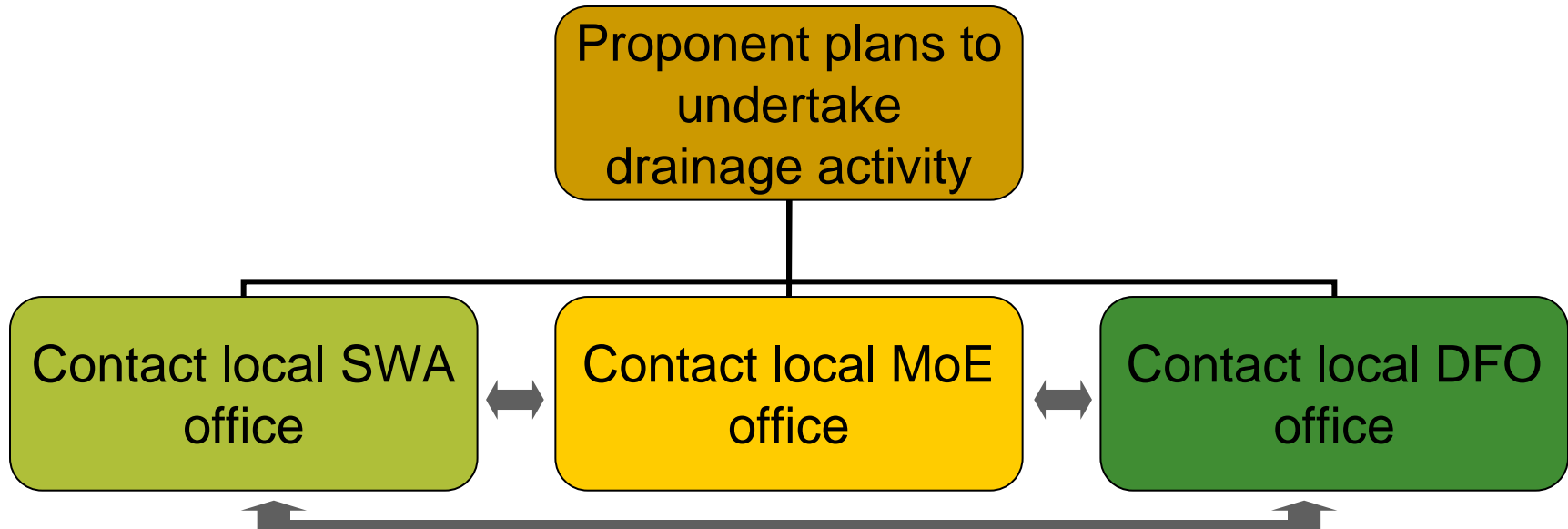
DFO review process

4. Projects received by DFO biologists will be reviewed to assess the possible impact of the project to fish and fish and habitat. Staff may recommend ways to minimize any harm.
5. If project cannot be done in a manner that does not harm fish or fish habitat, a *Fisheries Act* Authorization is required before work begins.
6. An environmental assessment must be completed before an Authorization is issued.

DFO review process - challenges

- Where exactly is the fish habitat?
 - Maps detailing the areas that are fish habitat are not available in Saskatchewan.
 - DFO can assist in advising which areas are considered to be fish habitat.
- Cumulative effects
 - How much drainage can occur in a watershed before runoff regimes are altered?

Overall process



- Staff from the three agencies regularly communicate and work together.
- **It remains the proponent's responsibility to obtain approvals from all three agencies, as necessary.**
- One approval does not exempt the need for another.

Overall Process

- The process can be expedited by:
 - contacting all agencies early
 - discussing proposed work and application requirements with staff
 - submitting applications with all of the required information in a suitable format
- The time required is dependent on:
 - the scale and potential impacts of the work
 - submission of adequate information with the application
 - staff workload

Issues and Opportunities

1. Complicated and confusing process

- ❑ Streamline the approval process
 - “one window” application point

- ❑ Simplify the requirements
 - best practices and standards to replace some of the approval requirements
 - MoE results-based reform

Issues and Opportunities

2. Level of compliance with and enforcement of permit requirements

- ❑ Provide information and education
 - what are the rules and why do we need rules?
- ❑ Streamline legislation
 - make compliance easier and more acceptable
- ❑ Target enforcement
 - focus on highest risks

Issues and Opportunities

3. Lack of clarity around approach to wetland conservation

- ❑ Steering Committee to develop policy guidelines related to wetland conservation on private and Crown lands
 - SARM board members
 - Agriculture, Environment, Watershed Authority
- ❑ MoE exploring EG&S incentives for private landowners

Questions?