

Chapter 12

Water Security Agency – Regulating Drainage

1.0 MAIN POINTS

Saskatchewan has over 1,800 miles of organized drainage ditches, draining an estimated 4.5 million acres of farmland. The Water Security Agency estimates approximately 1.6 million to 2.4 million acres of land have unapproved drainage works.

The Agency is responsible for regulating drainage on agricultural lands in Saskatchewan. In 2015, the Agency began implementing a new Agricultural Water Management Strategy to encourage effective drainage while protecting the environment, and bring unapproved drainage works into compliance with the law.

The Agency is in the early stages of implementing its new strategy. It has identified four strategic priorities as critical to its success: strong public education campaign, success in implementing the new strategy in the watershed basins it assessed as highest risk to demonstrate the strategy works, completing and implementing policies that support the strategy, and strategic enforcement.

This chapter reports on the Agency's processes to regulate the drainage of water on agricultural lands in the geographic areas assigned to the Yorkton and Weyburn regional offices. These areas have the highest risk of flooding. While the Agency is doing some things well, this chapter identifies four key areas for improvement. The Agency needs to:

- Finalize, approve, and follow its policies for bringing unapproved drainage works into compliance
- Have robust policies for assessing water quality and wetland retention
- Have a prioritization plan to address existing high-risk unapproved drainage works
- Report its progress in regulating drainage on agricultural lands

Leaving unapproved drainage works in high-risk areas increases the risk of flooding of neighbouring farmland and the receiving water body, water quality issues in the receiving water body, and loss of wetlands.

2.0 INTRODUCTION

Under *The Water Security Agency Act*, the Water Security Agency is responsible for managing, administering, developing, controlling, and protecting water, watersheds, and related land resources in the province.¹ The Agency's goal is to develop an approach to drainage that would allow and facilitate drainage while protecting the environment at the same time.

¹ *The Water Security Agency Act*, s. 5(a).



The Water Security Regulations, which came into effect in 2015, require the Agency to approve all existing and new drainage works in the province. The Regulations allow the Agency to impose terms and conditions on drainage approvals (e.g., approval term length, construction periods, and habitat protection).

Drainage works are any human-made activity intended to remove or reduce water on land or just below the land surface.² This includes deepening, straightening, widening and diversion of the course of a stream, creek or other watercourse; constructing or using dykes, drains, ditches, canals, pipes or tiles for carrying or conducting water; pumping to remove water; infilling or draining wetlands; and consolidating sloughs.³

In 2014, the Agency began developing a new Agricultural Water Management Strategy with the assistance of the Ministry of Agriculture and the Ministry of Environment. The Agency's Integrated Water Services Branch is responsible for regulating drainage. This Branch has five regional offices located in Yorkton, Weyburn, Nipawin, North Battleford, and Swift Current.

2.1 Drainage in Saskatchewan

History of Drainage

Drainage regulation has occurred in the province for the last 100 years, but the enforcement of these regulations was not effective. Historically, it was believed that the only issue drainage presented was whether landowners were flooding their neighbours. There was also a widespread belief in the agricultural community that drainage was a right of land ownership.

In 1981, because of the volume of unapproved drainage works in the province, the Government of the day decided any unapproved drainage works constructed prior to 1981 did not require approval.

The Drainage Control Act implemented the first drainage complaint system in 1981. This complaint system was in place from 1981 to 2015. It allowed anyone whose land experienced negative impacts of drainage to complain, regardless of the year the drainage works were constructed. A series of wet years beginning in 2010 resulted in hundreds of complaints, each costing the Agency between \$10,000 and \$30,000 to investigate, and often taking about two years to resolve.

Importance of Proper Regulation

Saskatchewan has the greatest area of watersheds with no natural outlets in all of Canada. This means agricultural drainage often moves water into local lakes, sloughs, or wetlands instead of river systems. When water remains in a watershed and there is increased precipitation levels, there is an increased risk of high water levels and flooding.⁴

² Water Security Agency, *25 Year Saskatchewan Water Security Plan*, p. 29.

³ *The Water Security Regulations*, s.2(2).

⁴ Water Security Agency, *25 Year Saskatchewan Water Security Plan*, p. 21.

Saskatchewan has over 2,900 km (1,800 miles) of organized drainage ditches, draining an estimated 4.5 million acres of farmland.⁵ As well, Saskatchewan has more arable agricultural land than both Alberta and Manitoba combined.^{6,7}

The majority of drainage works in the province are unapproved. The Agency estimates approximately 1.6 million to 2.4 million acres of land in the province have unapproved drainage works.⁸

In addition, numerous drainage networks exist involving thousands of acres with multiple landowners in different watersheds. These often include unapproved drainage works. For example, the Quill Lakes area has numerous networks of mostly unapproved drainage works. The Quill Lakes have been experiencing significant flooding in the last several years with a corresponding loss of agricultural land adjacent to the Lakes.

Unapproved drainage can reduce wetlands. Wetlands improve water quality by removing sediments, nutrients (e.g., phosphates and nitrogen in the water runoff from farmland), and pathogens before the water reaches main water bodies (e.g., lakes).

It is now understood that flooding your neighbour is not the only drainage issue, and that drainage has a cumulative effect on flooding further downstream, water quality, wetland loss, and increased greenhouse gas emissions. In addition, the drainage network as a whole must be considered when approving drainage works to avoid unintended consequences.

The Agency has identified areas in the province at risk of flooding. See **Figure 1** for areas in the province with a naturally higher risk of flooding, water quality issues, and erosion. Drainage can further increase these risks. Flooding can affect farmland, residential areas, and infrastructure (e.g., roadways).

The darker shading in **Figure 1** shows the eastern portion of Saskatchewan is at higher risk of flooding and drainage issues (i.e., water risk is assessed as high and extreme). The Agency's Yorkton and Weyburn regional offices are responsible for regulating drainage in this area.

⁵ Water Security Agency, *Conservation and Development Area Authority: The Guide*, (2017), p. 6.

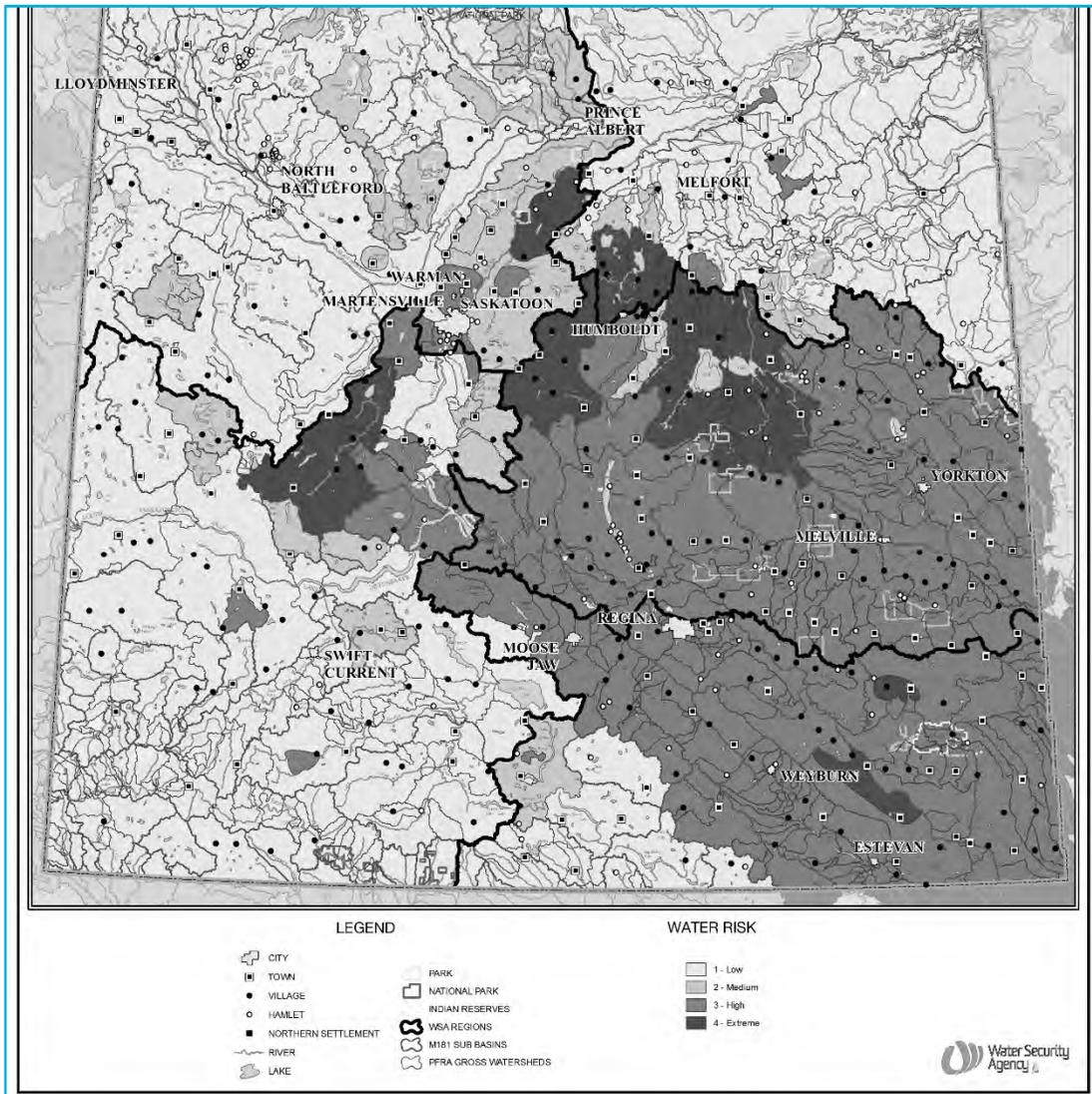
⁶ Arable refers to land used or suitable for growing crops.

⁷ Water Security Agency, *25 Year Saskatchewan Water Security Plan*, p. 29.

⁸ Information provided by Water Security Agency management.



Figure 1 – Saskatchewan Watershed Vulnerability Map at April 2018



Source: Water Security Agency.

While drainage increases arable land for farmers, inappropriate and unauthorized drainage can affect neighbouring landowners and bodies of water, and have unintended downstream impact.⁹ Without proper regulation of drainage, drainage works may flood neighbours' land or add water to a lake that cannot accept further water flows without causing downstream water quality issues or damage.

3.0 AUDIT CONCLUSION

At December 2017, the Agency was in the early stages of implementing its new strategy for regulating the drainage of agricultural land. This strategy reflects a significant change in the regulation of drainage of water in Saskatchewan; it requires a shift from viewing drainage as a landowner's right to considering the broader implications of drainage and water flows. Changes of this magnitude take time to implement.

⁹ Water Security Agency, *25 Year Saskatchewan Water Security Plan*, p. 29.

With this context in mind, we concluded that for the 12-month period ended December 15, 2017, the Water Security Agency had, other than in the following areas, effective processes to regulate the drainage of water on agricultural lands in the geographic areas assigned to the Yorkton and Weyburn regional offices.

The Agency needs to do the following:

- **Finalize, approve, and follow its policies for bringing unapproved drainage works into compliance**
- **Have robust policies for assessing water quality and wetland retention when assessing risks resulting from drainage works, and better document the results of its assessments**
- **Have a plan that sets by when high-risk existing unapproved drainage works will be in compliance or closed**
- **Report its progress in regulating drainage on agricultural lands**

Figure 2—Audit Objective, Criteria, and Approach

Audit Objective:

The objective of this audit was to assess whether the Water Security Agency had effective processes, for the 12-month period ending December 15, 2017, to regulate the drainage of water on agricultural lands in the geographic areas assigned to the Yorkton and Weyburn regional offices.

Audit Criteria:

Processes to:

1. Promote compliance
 - 1.1 Educate landowners on drainage works requirements and implications of non-compliance
 - 1.2 Co-ordinate drainage works compliance activities with other agencies (e.g., Agriculture, Environment, Government Relations)
2. Establish enforcement requirements
 - 2.1 Set a risk-based enforcement plan (e.g., risk of non-compliance, required resources, enforcement strategies)
 - 2.2 Maintain up-to-date policies for staff (e.g., assignment of responsibilities, key steps with expected timeframes, standardized forms, required qualifications)
 - 2.3 Establish criteria for approval of drainage works
3. Enforce compliance
 - 3.1 Approve drainage works consistent with requirements within reasonable timeframe
 - 3.2 Identify unapproved drainage works based on risk
 - 3.3 Respond to requests for assistance received within reasonable timeframe
 - 3.4 Take timely action on non-compliance (e.g., unapproved drainage works, drainage works constructed incorrectly)
 - 3.5 Escalate actions in event of continued non-compliance within reasonable timeframes
4. Monitor sufficiency of enforcement activities
 - 4.1 Track results of key enforcement activities (e.g., resolution of requests for assistance, identified non-compliance)
 - 4.2 Report results of enforcement activities to senior management
 - 4.3 Report non-compliance information to senior management and the public

Audit Approach:

To conduct this audit, we followed the standards for assurance engagements published in the *CPA Canada Handbook – Assurance* (including CSAE 3001). To evaluate the Water Security Agency's processes, we used the above criteria based on our related work, reviews of literature including reports of other auditors, and consultations with management. The Water Security Agency's management agreed with the above criteria.

We examined the Water Security Agency's policies, procedures, and records that relate to regulating drainage. We visited the Weyburn and Yorkton regional offices to perform testing and gain an understanding of the processes for regulating drainage. We tested a sample of drainage approvals and requests for assistance files at both regional offices to verify staff appropriately followed the Water Security Agency's processes. We consulted with an independent consultant with subject matter expertise.



4.0 KEY FINDINGS AND RECOMMENDATIONS

In this section, we describe our key findings and recommendations related to the audit criteria in **Figure 2**. Unless otherwise noted, references to the Agency refer to the Integrated Water Services Branch of the Water Security Agency.

4.1 Agricultural Water Management Strategy Recently Developed

The Agricultural Water Management Strategy

The Agency has adopted a new strategy that provides the Agency with clear direction on its management of water in Saskatchewan. This strategy reflects a significant change in the organizational direction of the Agency.

This new strategy reflects an approach to encourage effective drainage while protecting the environment. The strategy's goal is to streamline the regulatory system, effectively address risks associated with drainage, and develop sustainable drainage works.

This strategy changes how the Agency approves drainage works (new and existing) and changes the prior formal complaint process into requests for assistance.

Under this strategy, the Agency is using a new landowner drainage approval application and review process, and qualified persons to achieve this strategy.¹⁰ Use of qualified persons is a shift from having Agency staff complete all steps of the drainage approval process to use of outside professionals, known as qualified persons, to assist landowners in completing drainage approval applications.

Since 2015, all drainage works, regardless of the year constructed, require approval. Under the new strategy and recent Regulations, the Agency may issue one permit for several landowners to construct drainage works. The Agency can also issue a permit to a Conservation and Development Area Authority or a local watershed association that landowners form.¹¹ For example, in 2017, the Agency approved one permit encompassing 73 landowners and 18,000 acres of land for the Dry Lake Drainage Project.¹² Previously, the Agency generally issued drainage approval permits to each landowner.

As the 2015 Regulations require all drainage works in the province be approved, the Agency has also developed a new request for assistance process to help identify, in part, unapproved drainage works. When completed, the request for assistance process results in approved or closed drainage works. This process changes how the Agency handles complaints about drainage works.

¹⁰ Qualified persons are professional engineers, agronomists, or technologists who assist landowners in the preparation of drainage approval applications.

¹¹ Conservation and Development Area Authorities are individual landowners who form a group with a defined area boundary. These Authorities have the ability to construct, own, and maintain drainage works based on their membership in the Authority. www.wsask.ca/Global/Water%20Programs/Agricultural%20Drainage/Agricultural%20Water%20Management%20Strategy/C%20and%20D%20Development%20Guide%20Final%20low%20res%20for%20web.pdf (29 September 2017).

¹² www.wsask.ca/Water-Program/Agricultural-Drainage-/Dry-Lake-Drainage-Project/ (29 September 2017).

Strategic Priorities

The Agency acknowledges it is in the early stages of implementing its new strategy. It began to implement its new strategy in 2017.

To implement the new Agricultural Water Management Strategy, the Agency has identified several strategic priorities to make the strategy a success. The priorities are:

- Strong public education campaign
- Success in implementing the new strategy in the watershed basins it assessed as highest risk, to demonstrate the strategy works
- Completing and implementing policies that support the strategy
- Strategic enforcement

By December 2017, the Agency's focus was the educational component of the strategy, using a risk-based prioritization for resource allocation and network approvals, and resolving requests for assistance in a shorter timeframe (e.g., within three months).

4.2 Strategy Developed but Policies Need Approval and Implementation

The Agency had drafted policies and developed a compliance framework to support the new Agricultural Water Management Strategy, but had not approved and/or implemented many of them. In addition, a few were not yet complete.

The Agency has created policies to address many aspects of processes staff must complete under the new strategy. The most noteworthy policies are around assessing drainage risk and enforcement. For example:

- The Agency's policy on its Drainage Risk Framework helps staff to assess factors such as erosion, flooding, and habitat impacts and assign a risk level to each drainage approval application.

The same policy assisted the Agency in creating the Watershed Vulnerability Map shown in **Figure 1**.

- The Agency's Compliance Framework indicates that the Agency's compliance model is education, prevention, and enforcement. It notes how the Agency plans to move landowners toward compliance (e.g., building public confidence and support for its new drainage approach) and provides some expected targets for buy-in from the public at each stage of the process.

But we found this document was not complete and did not include concrete performance measures (e.g., percentage of compliance to be achieved by a certain date).



- The Agency's enforcement policies acknowledge the limited resources the Agency has and expects the Agency's enforcement to be targeted to the areas of the highest risk (i.e., using the risk assessments from the Drainage Risk Framework Policy).

The enforcement policies note that the Agency is planning to use enforcement (e.g., recommendation for closure) as a last resort and will be relying on voluntary compliance through education of landowners. Also, these policies acknowledge staff's lack of expertise in enforcement protocols and expect staff to work with Ministry of Environment Conservation Officers to receive training on how to work with landowners to obtain compliance.

In addition, one enforcement policy outlines enforcement options available to the Agency, and explains when to use each.

Of the 16 policies we examined, 8 were draft and not approved at February 2018. Also, they did not set out when the Agency expected to review them.

Including a clause stating the frequency of review (e.g., every five years) either within each policy or as a separate policy is good practice. Completing periodic reviews of policies helps to ensure they remain relevant.

Not having approved and/or implemented policies and a compliance strategy increases the risk of not having a consistent or clear direction. The importance of clear direction and prioritization increases when the Agency is going through significant organizational direction change.

1. We recommend that the Water Security Agency approve finalized policies related to its regulation of drainage of water on agricultural lands.

We expect the Water Security Agency to implement its policies related to its regulation of the drainage of water on agricultural lands once finalized and approved.

Staff and Qualified Persons Training Occurring

The Agency is actively training its staff and qualified persons on its new strategy and revised processes.

With the significant change in organizational direction and the new strategy, the Agency has created weekly webinars to train its staff on various components making up the strategy (e.g., preparing drainage approval applications, how to identify all landowners impacted by drainage approval applications). Since the regional office staff at the Agency are located in five regional offices (Yorkton, Weyburn, Swift Current, North Battleford, Nipawin), having webinars allows the Agency to provide consistent information for applying the new strategy across all regions.

The Agency routinely collects information on the number and name of attendants for each webinar. We found they were well attended.

At the time of our audit, although training sessions held to date had not yet addressed all aspects of the new strategy, the Agency had determined future webinar topics to cover the key outstanding areas (e.g., enforcement, use of wetlands to control water flows).

In addition, the Agency is using work plans to reinforce its expectations with respect to implementing the new strategy and revised processes. Each Branch and each Regional Office prepares an annual work plan. Our review of the 2016-17 Integrated Water Services Branch work plan found that it reinforces using the risk-based approach to bring unapproved drainage works into compliance.

To educate potential qualified persons, the Agency has created training sessions throughout the province. These training sessions outline the role of a qualified person in assisting landowners with the steps to complete drainage approval applications. The Agency tracks key information about these sessions (dates, attendees). During the 12-month period ended December 15, 2017 (our audit period), 123 individuals attended training sessions. There were 21 qualified persons in the province at December 15, 2017.

We found these training sessions included all necessary information for qualified persons to complete a drainage approval application, with the exception of information on water quality considerations. See **Recommendation 4** about developing policies on water quality.

Public Education Beginning

The Agency is starting to educate the public on its responsibility to obtain approval for both new and existing drainage works and how to obtain such approval.

Educating the public is important so the public understands the changes under the strategy. It also can help to shift the culture from landowners' thinking that operating unapproved drainage works is acceptable (old system) to making landowners recognize that they must get approval for all drainage works they operate. Landowners must also recognize that they must think beyond their own needs (e.g., consider the downstream impact of drainage works, wetland retention, etc.).

The Agency is aware there is a significant number of unapproved drainage works in the province. The Agency's current focus is to bring unapproved drainage works into compliance by having landowners voluntarily seek approval, preferably through the use of networks as opposed to individual landowner applications.

To educate the public, the Agency has undertaken several avenues to present information on its new strategy. It has posted several documents, called fact sheets, on its website. The fact sheets present information, at a high level, on topics such as explaining the drainage approval process and explaining the consequences of unapproved drainage works.

The Agency has also been meeting with landowners and stakeholders to present its new strategy and answer questions around the strategy. It tracks key details about meetings (dates, purpose/focus, number of attendees). The Agency attended 139 meetings or trade shows to present information on the new strategy during the 12-month period ended December 15, 2017.

The Agency also works with landowners to assist them in forming Conservation and Development Area Authorities when there is interest. It does this by providing guidance to the acting Boards of these Authorities, assisting with detailed analysis to determine the boundaries of the Conservation and Development Area Authorities, assisting in the petition and election process, and once established, providing ongoing planning and



governance support. There were 97 active Conservation and Development Area Authorities at December 2017.

Partners Identified and Assisting in Strategy

The Agency has identified key partners to assist in it achieving its strategy.

As part of its responsibilities, the Agency leads the implementation of its *25 Year Saskatchewan Water Security Plan*. The Plan includes actions related to drainage that the Agency, with assistance from the ministries of Agriculture, Environment, and Government Relations, plans to undertake to effectively address excess water on agricultural land, while maintaining wetlands and water quality. Some of these actions include assessing alternatives to manage drainage, developing a results-based drainage works approval process and enforcement strategy, and developing new strategies to address excess moisture on agricultural lands (e.g., drainage design).¹³

In addition to government ministries, the Agency works with other agencies—for example, Ducks Unlimited, Saskatchewan Conservation and Development Association, and the Saskatchewan Association of Rural Municipalities.

The ministries of Agriculture and Environment are also a part of the Agency’s internal committees used to develop policies and create fact sheets to distribute to the public on the new strategy. We noted it consulted with its partners on developing policies and implementation plans.

Management indicated that the Agency also uses these partners to identify unapproved drainage works in the province. We noted that the Agency has informed both the Ministry of Highways and Infrastructure staff and the Ministry of Environment’s Conservation Officers on what to look for to identify unapproved drainage works while working in the field.

In addition, the Agency has identified that, as of December 2017, it did not have the enforcement expertise required to exercise new enforcement options presented in its revised Act. To overcome this, the Agency’s draft enforcement policies and enforcement strategy include an expectation that the Ministry of Environment assist and educate Agency staff on enforcement. The Agency and Environment have entered into an agreement on enforcement training.

4.3 Policy Improvements Needed to Close Identified Gaps

Risk Assessment Processes Need Improvement

While the Agency has developed a risk assessment framework for identifying higher-risk drainage works, it had not clearly defined key aspects of the framework or approved it.

The risk assessment framework outlines principles for identifying higher-risk drainage works based on expected drainage impacts and known watershed risks related to

¹³ Water Security Agency, *25 Year Saskatchewan Water Security Plan*, (2012), p. 29.

flooding, water quality, and wildlife habitat. The Agency is to use this draft framework when assessing drainage approval applications.

Staff developed this framework using their internal knowledge. However, we found some of the information in this framework is unclear. We found that the risk policy framework had loose definitions (e.g., potential severity of drainage impacts) associated with it, which could result in subjective and at times, inconsistent decisions.

Our testing of 30 drainage approval files found the Agency often considered only the local impact of the proposed drainage works when assessing drainage approval applications. For example, we found it considered the local impact the proposed drainage works would have on the stream in which the draining water would flow (i.e., point of adequate outlet), instead of looking at all drainage works approved in the area and into what body of water the draining water ultimately ends up in. While staff may have considered watershed scale impacts, they did not document this consideration.

It is important for the Agency to consider all aspects of risk, both local and watershed scale, before approving proposed drainage works. Documenting this consideration enables its review. Lack of such consideration may result in the Agency approving proposed drainage that it should not. This could result in more water going to a receiving body of water than it can handle.

2. We recommend that the Water Security Agency require documentation of all aspects of watershed risk before approving applications for drainage works.

The Agency does not have a formal process to update its Watershed Vulnerability Map for key circumstances that affect water flow and levels. The Agency last updated its Watershed Vulnerability Map in April 2018. Its Watershed Vulnerability Map is not only used to assess risk of drainage works seeking approval, but the Agency also uses it to assign its limited resources to high and extreme risk areas.

The Agency used its risk assessment framework to develop the Watershed Vulnerability Map (see **Figure 1**).

Without periodic updates, the Agency may not identify the highest-risk areas and may not effectively allocate resources based on risk. The Watershed Vulnerability Map risk assessment process needs periodic review as circumstances (e.g., precipitation events) may change the risk rating of a particular area.

3. We recommend that the Water Security Agency formalize a process to periodically reassess watersheds in the province for risk of flooding.

Policies on Wetland Retention and Water Quality Needed

Even though the Agency informally considers water quality and wetland retention risks of proposed drainage works when reviewing drainage approval applications, the Agency has limited policies around wetland retention and water quality.



Wetland retention is important because wetlands help improve water quality (e.g., remove sediments from water). In some cases, wetlands help replenish aquifers.¹⁴ It is important to preserve wetlands since the majority of rural Saskatchewan gets its water from aquifers. Wetlands also provide habitat for waterfowl, insects, and aquatic animals (e.g., frogs).

Water quality is also important to consider, as staff should not be approving drainage works where water draining from agricultural land will reduce the water quality of the lake or river where water is being drained (e.g., increasing nutrients).¹⁵

By not having policies on wetland retention and water quality, the Agency increases the risk that staff may not adequately consider these aspects and approve drainage works that may negatively impact water quality and may reduce wetlands.

4. We recommend that the Water Security Agency develop policies on water quality and wetland requirements to use when assessing risks of drainage works.

Once these policies are developed and finalized, the Agency needs to provide training to both its staff and the qualified persons on the requirements.

Request for Assistance Resolution Timeframes Not Clearly Documented

The Agency has not set out clear expected timeframes for resolving requests for assistance about drainage works.

In March 2016, the Ombudsman of Saskatchewan released a report that contained several recommendations on the Agency's processes for dealing with complaints under the old system.¹⁶ While these recommendations relate to the previous complaint system, some are still good practice (e.g., setting expected timeframes for resolving complaints).

Our review of the Agency's policies and manual around requests for assistance found that none of the documents contained timeframes for how quickly staff should resolve requests for assistance received (e.g., order closure of unapproved drainage works). We noted that the 2016-17 work plan of the Integrated Water Service Branch expected staff to resolve requests for assistance in a short timeframe (e.g., within three months).

We did not see evidence that the Agency shared this timeframe with those making the requests for assistance.

Of the 32 request for assistance files we tested, 13 files had requests for assistance that had been outstanding for greater than 20 months. The longest outstanding file we tested had been in progress for 4 years.

Without clear, documented timeframes for resolution of requests for assistance, staff may not complete work to resolve requests for assistance timely. Untimely resolution of requests for assistance increases the risk of further damage to neighbouring farmland and downstream. In addition, keeping the party who requests assistance informed and being transparent during the process increases public confidence in the new strategy.

¹⁴ Aquifers are underground formations that can provide usable quantities of water.

¹⁵ Nutrients, such as phosphates and nitrogen, increase algal blooms causing undesirable consequences in lakes and rivers.

¹⁶ www.ombudsman.sk.ca/news/what-s-new/2016-06-10/delays-in-the-wsa-processing-complaints-about-drainage-disputes (09 November 2017).

5. We recommend that the Water Security Agency publish expected timeframes to resolve requests for assistance on unapproved drainage works.

The Agency noted it becomes aware of unapproved drainage works in the province mainly through the request for assistance process. Reports about unapproved drainage works can also come in through ministerial referrals (e.g., complaints to the Ministry of Environment), local knowledge (e.g., rural municipalities), and staff observations in the field.

We verified that the Agency tracks, by regional office, all requests for assistance it receives. Regional managers review this tracking spreadsheet to monitor progress on files and determine if any files have been outstanding for a significant period.

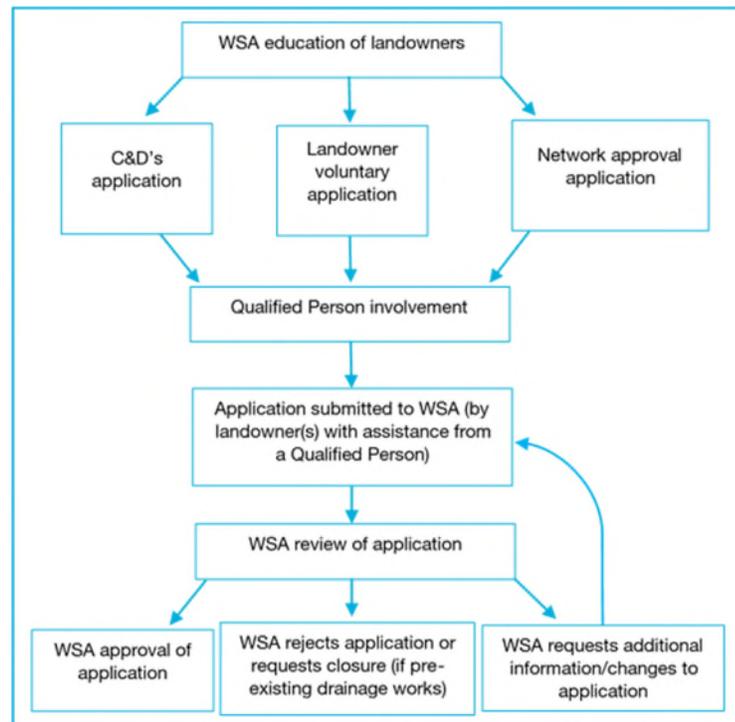
4.4 Policies Not Always Followed

Drainage Approval Processes Not Always Followed

The Agency has a well-defined process for its staff to assess the downstream local impact of a drainage works prior to approving a drainage approval application. However, documentation of the assessment was lacking or not always completed.

As shown in **Figure 3**, as part of the approval process, Agency staff review the application and related documentation. Staff determine if landowners have agreements with all neighbours impacted by the drainage works. Staff also assess if the location into which the water is draining can adequately accept the water being received.

Figure 3—WSA Regulatory System for Approvals under New Water Management Strategy



Source: Adapted by Provincial Auditor Saskatchewan.
WSA: Water Security Agency



The Agency has developed a template (technical review checklist) that staff are supposed to use to document their assessment of the risk of the potential drainage works based on several factors (e.g., erosion risk, surface drainage, watershed vulnerability).

In 11 of the 30 drainage approval applications we tested, we found that not all regional offices were using this template to complete their assessment of risk. We also found that documentation on how staff arrived at the risk level assessed was lacking.

6. We recommend that Water Security Agency staff consistently follow established processes to document risk assessments when reviewing applications for drainage works.

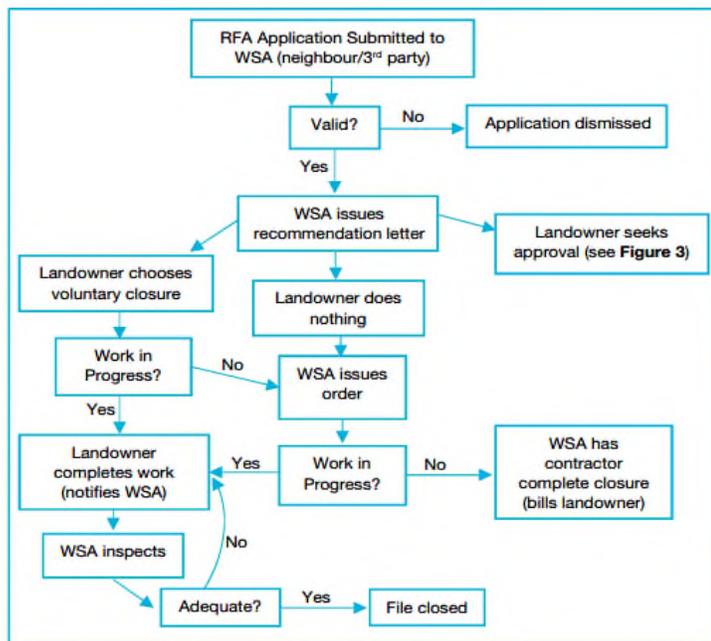
Once Agency staff approve applications for drainage works, the Agency includes operating conditions of the works in the approval. We found these operating conditions (e.g., how deep ditches must be, times of year when flood control gates must remain closed) were appropriate and were revised based on risk level of the works.

Staff Not Always Following Request for Assistance Policies

The Agency has established policies with clear processes to handle requests for assistance, but staff are not always completing the steps outlined in these policies.

As shown in **Figure 4**, when the Agency receives a request for assistance, policy states that staff are to determine if the request is valid (e.g., unapproved drainage works exist). Staff can do this by either performing a site inspection (e.g., going to the location to physically view the drainage works) or using aerial photos to compare water levels from various years. Aerial photos can show water levels declining year-over-year and thus suggest drainage is occurring. If staff cannot validate that there are unapproved drainage works, they are to dismiss the request for assistance.

Figure 4—Request for Assistance Process under the New Water Management Strategy



Source: Adapted by Provincial Auditor Saskatchewan.
WSA – Water Security Agency

The Agency handles past outstanding complaints using the revised request for assistance process.

In 8 of 32 request for assistance files we tested, we found files did not have support to show staff reviewed the validity of the requests. Without performing this review, staff who are already overwhelmed with a backlog of requests for assistance may be spending time and resources on requests that are not valid. For example, at December 2017, the Yorkton regional office had about 200 active request for assistance files. The longest outstanding file had been active for almost five years. Yorkton has eight staff members who are responsible for resolving these files, which means each staff member could have 24 active request for assistance files in addition to drainage approval applications. Staff at regional offices are also responsible for other programs such as assisting in flood mitigation programs.

Another policy requires staff to notify those landowners who have unapproved drainage works about how to obtain compliance (e.g., seek approval or closure including method of closure) via a recommendation letter.

In 4 of 32 request for assistance files we tested, we found files did not contain a recommendation letter. In all 4 instances, staff could not provide justification as to why a letter had not been prepared. Without providing a recommendation letter, landowners do not know the specific steps they must follow to achieve compliance for their unapproved drainage works.

Agency staff are to verify adequate closure of drainage once the landowner has finished.

Our testing of 32 requests for assistance found that Agency staff had not completed closure inspections as expected for five request for assistance files examined. Given the backlog of requests for assistance staff are experiencing, it is important to complete these inspections timely in order to close a file. Timely inspections also verify closure of the works according to requirements so that further damage to neighbouring landowners and the receiving water body will not occur.

7. We recommend that the Water Security Agency consistently follow established processes when assessing requests for assistance on unapproved drainage works.

Staff Not Always Following Enforcement Policies

The Agency developed policies around enforcement, but we found staff did not follow all aspects.

Enforcement policies included key responsibilities (both internal and external to the Agency), expected timeframes for key enforcement steps, and qualifications of staff responsible for enforcement.

Enforcement policies expect the following:

- Staff to take further action if a landowner is not complying with the terms and deadlines set in its recommendation letter (i.e., recommending closing drainage or obtain drainage approval). Staff may put added pressure on landowners to comply by issuing an Order as provided for in Section 62 of its Act.



Orders set a further deadline for landowners to complete work, prior to the Agency closing the drainage.

- Once the Agency issues an Order, staff are to create a Compliance Plan. A Compliance Plan sets out the steps the Agency is to take to try to reach compliance by the landowner (including key dates).

During our testing, we found that one file had an Order issued in June 2016, with a draft Compliance Plan in place at December 2017. We expected, based on the Agency's draft policies, drafting and finalization of Compliance Plans to occur at the same time as Order issuance.

Not taking timely enforcement action on unapproved drainage works increases the risk of landowners not achieving compliance or not changing the culture. In addition, further damage may occur to surrounding landowners and the receiving water body if resolution does not occur timely.

- 8. We recommend that Water Security Agency staff follow established processes to escalate identified actions on unapproved drainage works within a reasonable timeframe.**

4.5 Clearer Timelines for Bringing Unapproved High-Risk Drainage Works into Compliance Needed

While the Agency's policies and 2016-17 work plans reflect a focus on bringing high-risk unapproved drainage works into compliance, the Agency has not set out by when it expects all high-risk drainage works to be in compliance or closed.

With the significant amount of unapproved drainage works in the province (e.g., between 100,000 to 150,000 quarter sections), the Agency must undertake steps to identify unapproved drainage works.

The Agency has also prepared a document where it outlines the number of resources required to complete the new strategy. We noted that the Integrated Water Services Branch 2016-17 annual work plan set out high-risk drainage basins (based on risks outlined in **Figure 1**) on which the Branch expects regional offices to focus.

In practice, as of December 2017, the Agency primarily relied on the request for assistance process or the public reporting of unapproved drainage works to identify those in non-compliance. It did not have a clear timeframe in which it planned to more actively identify high-risk drainage works and take strategic enforcement actions to bring them into compliance or close them.

The Agency has started to use technology (e.g., drones, airplane flights, mapping tools) to collect information (e.g., aerial photographs) on high risk areas. It uses this information when assessing requests for assistance and drainage approval applications. It has not yet started to use this information specifically to identify and take action on unapproved drainage works.

Leaving unapproved drainage works in high-risk areas increases the risk of flooding of neighbouring farmland and the receiving water body, water quality issues in the receiving water body, and loss of wetlands.

9. We recommend that the Water Security Agency develop a prioritization plan to identify and bring unapproved high-risk drainage works into compliance.

4.6 Better Monitoring and Reporting of Actions Taken Needed

While the Agency routinely reports activity-based information to senior management, and periodically reports general information about its implementation of the new strategy, it does not report sufficient information to determine the Agency's progress in regulating high-risk drainage basins and bringing unapproved drainage works into compliance.

The Agency tracks key activity-based information on drainage approvals and requests for assistance (e.g., number of approvals to operate issued by region, number of requests for assistance received, requests for assistance under investigation, number of closed works). It provides this information to management on a monthly basis. Each regional office is responsible for tracking its drainage approval and request for assistance files. Monthly, regional offices send this information to a central contact who summarizes all of the information into a single document to provide to senior management.

Management indicated that it receives periodic verbal updates from staff about meeting targets set out in their annual work plans (e.g., eliminating requests for assistance backlog, processing requests for assistance within three months, processing 400 drainage approvals).

Senior management do not receive written reports on whether regional offices are meeting targets set out in annual work plans, analysis on enforcement activities related to high-risk basins, or the number of unapproved drainage works brought to compliance in high risk basins by location (e.g., through closure or approval). Such reporting would allow senior management to assess the effectiveness of enforcement actions taken and help them make resource allocation decisions.

10. We recommend that the Water Security Agency periodically report to senior management on actions taken to address non-compliance of unapproved drainage works.

The Agency also provides some reporting on its new strategy in its annual report. However, we found this information to be general. We expected the Agency to provide statistics to the public on the number of drainage approval applications received and approved, the number of requests for assistance received and resolved, and the average time to bring drainage works into compliance.

Improved reporting would help senior management determine if its strategies and staff's actions were focused in priority areas as it expects. Improved reporting to the public would help landowners and the public understand the importance of the new strategy and the Agency's progress in implementing its new strategy.



11. We recommend that the Water Security Agency report to the public on its regulation of the drainage of water on agricultural lands.

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