

The QP Perspective

How to Be Prepared for the Drainage Application Process

If you are considering applying for a drainage approval, a QP may be a good resource to guide you through the application process. It is important to note that the Ag Water Management Policy is still in development phase. This can directly impact your project and the functionality of the QP.

What is a QP? Qualified Persons (QPs) are individuals recognized by the regulations and by the Water Security Agency (WSA) as capable of assisting clients with drainage applications based on a combination of education, experience, and certification.

What is the Role of the QP? The QPs role is to assist the farmer in completing the application process through understanding the project, producing accurate maps, evaluating flow controls, temporary holdbacks and erosion control measures, calculating tile and culvert size, dealing with land control, working with WSA on identifying the adequate outlet (AO), putting together the final application document and in general facilitating discussions with all stakeholders.

The assistance of a QP is not required, landowners may also choose to undertake the application process on their own.

Following is information from the QP perspective on how to best be prepared when beginning the drainage application process.

1. Understand the new regulations and how they will apply to your land:
 - **Approvals are required for ALL drainage works. Pre-1981 grandfathering no longer exists.**
 - If the application will involve more than your land before the water reaches an adequate outlet, a Joint Application or formation of a Conservation and Development Area (C&D), or Watershed Association is required for land control.
 - Flow control is required on all drainage works.

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2. Know the definitions of Drainage and Adequate Outlet (AO):
 - Agriculture drainage, both surface and subsurface, is an important management tool to improve the productivity of the land, maintain soil health, promote uptake of nutrients by a growing crop and to provide access to land, in areas of excess moisture. Drainage is any action taken to remove, consolidate or lessen the amount of water from the land. This includes the deepening, straightening, widening and diversion of the water course, maintenance of wetlands/sloughs, as well as the construction of dykes.
 - **NOTE - AO policy is still in development phase.** An adequate outlet is a water body (creek, river or lake) that can handle the flow of water from the incoming drainage without significantly impacting downstream flow, water levels, exceeding the bank or causing erosional issues.
 - A QP will work with WSA to ensure that an AO is available. Cumulative effects of drainage will determine if the outlet is adequate for the expected flow.
 - Consolidation of water is an option in the event of no AO.
 - The final decision of the AO lies with WSA. A formula may be used to determine the maximum flow rate at the AO.

 3. Land Control is required all the way to the AO:
 - Land control is permission from a landowner to drain across or onto a parcel of land owned by that landowner, all the way to the AO.
 - Land Control exists for the term of the approval.
 - Shared wetlands (i.e. wetlands that cross the boundary of your land onto someone else's land) can only be drained if land control is obtained from all parties who share the wetland. Shared wetlands fall under common law, not WSA policy.
 - Drainage easements are a more secure form of land control as land control expires when the drainage permit expires.
 - It is your job as the applicant to obtain approvals / signatures for all parties involved (joint applications).
 - The QP can be a neutral proponent for the project with all land control issues.

 4. Transparency and open communication are important. Full disclosure will assist the QP in understanding the project and will prevent delays.

 5. Communication and relationships are very important, for all participants involved in the project:
 - All landowners involved in the water passage.
 - Make sure RM councillors and reeves are included in all discussions on the project.
 - Urban municipalities, if involved, need to be part of the discussions on the project.
 - Railways and Department of Highways, if involved, need to be part of the project discussions
 - Be aware of Ducks Unlimited Canada (DUC) or Ministry of Environment or other "special interest" land that may be impacted by your proposed works.
 - The QP can assist / serve as a coordinator in keeping everyone informed.
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6. The drainage map and field tours are critical to the success of the project:
 - Guided tours save days if not weeks.
 - The map is the visual representation of the process.
 - Farmers know how the water flows on their land better than anyone.
 - Getting the flows connected between all landowners takes a bit of time for the QP.
 - There may be a good case for both surface drainage and tile drainage in one network.
 - Field visits are essential for the QP to understand the system and help WSA to understand the issues for the network.
 - Controls are sized based on the number of acres they are draining.
 - The map should identify all the constructed works whether surface or subsurface.

7. What to consider when designing control structures:
 - Flow control is step one - you cannot manage what you cannot control.
 - Flow control does not prevent water flowing onto another quarter before the water is flowing off that quarter, temporary holdbacks may be required:
 - Downstream owners expect fair treatment and equitable benefit from the water management network and may insist on holdbacks.
 - Always being the last to seed will not be considered fair for the landowner at the creek.
 - Damage to Municipal Infrastructure can be mitigated by holdbacks in extreme events.
 - Holdbacks are an essential tool in the Water Management toolkit and may be the best option for meeting AO flow restrictions.
 - The QP can assist landowners in developing an equitable holdback strategy as part of a Working Agreement.
 - Be aware of where all the road culverts are located that may affect your project.
 - Controls needs to be compacted clay with a crown above the culvert to allow the water to run off rather than soak into the control.
 - Often controls can be located where the water will by-pass before it overtops the control.
 - Erosion mitigation may be needed at the control in special cases.
 - Use rip-rap, vegetation or geosynthetics if there is a high risk of failure.

8. Working Agreements and Approvals:
 - WSA approvals accept either a collective working agreement signed by all members of the network or an agreement that everyone will be responsible for their own land.
 - Make your own agreement that works for you with the assistance of the QP.
 - QPs will coordinate with WSA on the final application details required for the approval.
 - Be patient as this process may require multiple exchanges of information.
 - Once approved an interest is registered on title for the length of the approval.
 - Approval to Construct and an Approval to Operate will be granted, conditions must be met and maintained to ensure your approval remains valid.