

Stewarding Agricultural Watercourses in British Columbia

PHASE 1 - ACTION PLAN





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Acronyms

AF	Ministry of Agriculture and Food
ALC	Agricultural Land Commission
ALCA	Agricultural Land Commission Act
ALR	Agricultural Land Reserve
BCIA	British Columbia Institute of Agrologists
BMP	Beneficial Management Practice
CAB	College of Applied Biologists
DFO	Fisheries and Oceans Canada
DFWT	Delta Farmland & Wildlife Trust
EMCR	Ministry of Emergency Management and Climate Readiness
EFP	Environmental Farm Plan
ENV	Ministry of Environment and Climate Change Strategy
FLA	Farmland Advantage
FOR	Ministry of Forests
FPA	Fish Protection Act
FPPA	Farm Practices Protection (Right to Farm) Act
IAF	Investment Agriculture Foundation
LG	Local Government including municipalities and regional districts
LGA	Local Government Act
LTA	Land Title Act
NGOs	Non-Governmental Organizations
QEP	Qualified Environmental Professionals
RALP	Resilient Agricultural Landscapes Program
SAW	Stewarding Agricultural Watercourses
MOTI	Ministry of Transportation and Infrastructure
WLRS	Ministry of Water, Land, and Resource Stewardship
WSA	Water Sustainability Act
WSR	Water Sustainability Regulation
WSS	Watershed Security Strategy

Introduction and Background

Over a period of decades, the B.C. Ministry of Agriculture and Food (AF) has worked with producers, Non-Governmental Organizations (NGOs), industry organizations, and government agencies to enhance stewardship of riparian areas threaded throughout agricultural lands.

Resources and funding available through B.C.'s Environmental Farm Plan (EFP) and Beneficial Management Practices (BMP) programs support producers in maintaining and enhancing riparian areas through tangible actions such as improved stream crossings, alternative watering sources, exclusion fencing, and re-vegetation. Yet, while many agricultural producers feel that they are effectively managing watercourses on their farms, provincial and federal regulatory agencies, regional/local governments, and some NGOs have observed that agriculture's role in watercourse stewardship could be further strengthened.

B.C.'s regulatory agencies have noted a continued decline in the health of watercourses across the province including declining fish stocks and loss of species diversity. Unhealthy riparian areas resulting from poor riparian management contribute to these impacts through erosion, nutrient runoff, and loss of wildlife habitat. Agricultural productivity can also be affected by unhealthy riparian areas through reduction of ecosystem services such as flood mitigation, water quality, water storage, erosion control, and pollination services.

AF initiated the [Stewarding Agricultural Watercourses \(SAW\)](#) project to identify key challenges and opportunities for AF to build on current programs, guidelines and tools, and further advance watercourse stewardship on agricultural lands. Phase 1 of the SAW project (February 2022 - March 2023) aimed to build awareness and initiate public discussion on the topic of riparian stewardship on agricultural land. The work focused on engaging and gathering input from key interested parties from the agriculture and watercourse/riparian sustainability sectors across B.C., including farmers, Qualified Environmental Professionals (QEPs), NGOs, government staff in AF, Fisheries and Oceans Canada (DFO), Ministry of Forests (FOR), Ministry of Water, Land and Resource Stewardship (WLRS) and regional/local government staff. Engagement methods included an online survey, interviews, and focus group sessions with findings summarized in a [What We Heard](#) document (2022).

Agricultural productivity can also be affected by unhealthy riparian areas through reduction of ecosystem services such as flood mitigation, water quality, water storage, erosion control, and pollination services.



Findings from this engagement resulted in the development of a [Discussion Paper](#) (2023) which identified a series of key directions which AF can take to help support agricultural producers in watercourse stewardship. The Discussion Paper was published online for public feedback which was incorporated into this Action Plan.

The Action Plan outlines a total of 11 objectives and 23 ongoing, short, medium, and long-term actions were identified to help make progress on these four themes:

- 1. Coordinate watercourse stewardship at a watershed level**
- 2. Create opportunities for communication and outreach**
- 3. Collaborate to improve permits, notifications, and authorization processes**
- 4. Connect producers with funding for watercourse stewardship**

Partnership and Engagement with Indigenous Peoples

The Declaration Act establishes the UN Declaration as the Province's framework for reconciliation. Implementing this framework involves taking a distinctions-based approach that acknowledges the specific rights, interests, priorities and concerns of First Nations, Métis and Inuit as Indigenous Peoples in Canada. The proposed second phase of the SAW project seeks to find pathways for improved partnerships and engagement with Indigenous Peoples and rights holders regarding agricultural watercourse stewardship and to determine how they would like to be engaged on activities occurring on private agricultural land.

Due to funding constraints, the first phase of the SAW project was required to be completed within a short timeframe and with a minimal project budget, which did not allow for meaningful conversation with Indigenous communities across the province. Moving forward, the SAW project will seek strategic opportunities to work with Indigenous partners on agricultural watercourse stewardship. This may take the form of community based or regional pilot programs or other approaches that respect the unique perspectives and needs of our Indigenous partners, with due regard for finite time and resources of all parties.

As the SAW project has been progressing, WLRS has been developing the B.C. Watershed Security Strategy (WSS), which is being

co-developed with First Nations. WLRS has received substantial feedback on this process from Indigenous Peoples, which was shared with AF staff and was used to inform the SAW project.

Input received through the WSS process to date has included the following examples directly relevant for consideration to the SAW project:

- ▶ Water is not a commodity;
- ▶ Action to prevent and rectify damage to watersheds is urgent and requires nature-based solutions;
- ▶ Effective water stewardship requires a whole watershed perspective and participation from cross-sectoral actors; and
- ▶ Education and knowledge sharing are necessary for effective watershed stewardship.

¹ All FOR staff engaged in this project moved to WLRS during a provincial government reorganization in 2023. For the remainder of this document, references to WLRS staff include both WLRS and FOR staff.



Ongoing initiatives being led by the Province include the **WILD SALMON STRATEGY**

Phase 2 and Next Steps

Phase 2 of the SAW project is targeted to begin in early 2024 and aims to move forward on the actions identified in this Phase 1 Action Plan as well as to develop solutions to address challenges raised by producers.

The focus of the work over the next two years will be:

- ▶ Creating or adapting education and outreach tools to clarify the role of agriculture in watercourse stewardship;
- ▶ Working with partner agencies on streamlining the [Change Approval](#)² authorization process for provincially funded projects; and
- ▶ Collaborating with Indigenous communities to determine ways that we can build trust and communicate effectively on stewardship projects on private agricultural land.

Other issues, such as ditch clearing and water storage, were also raised during engagement. Watercourse/channel maintenance can be a vital component of healthy watersheds and ecosystems, particularly for concerns related to flooding, water quality, and stream bank stability. These important water management components were outside the scope of Phase 1 of the SAW. However, they may be revisited during Phase 2.

² A Change Approval is written authorization to make complex [changes in and about a stream](#) under section 11 of the WSA.

Key Themes

Through our engagement, four key themes for recommendations emerged (order listed does not indicate priority). More detail on these themes can be found in the [SAW Discussion Paper](#).

THEME 1: Coordinate watercourse stewardship at a watershed level

Watercourses are interconnected and complex, and thus unsuited to siloed efforts for enhancement or management. Considering the multitude of factors that impact and influence the health and function of watercourses (including agriculture, residential or urban development, and other industries), approaching watercourse stewardship from a watershed level allows actions to be prioritized within different areas of a watershed for optimal outcomes. Inherently, this approach requires coordination and collaboration across all levels of government, across ministries, and among watershed users.

Several ongoing initiatives being led by the Province will inform Phase 2 of the SAW project, including:

- ▶ the [Watershed Security Strategy](#);
- ▶ the [Wild Salmon Strategy](#);
- ▶ the [B.C. Flood Strategy](#);
- ▶ the [Climate Preparedness and Adaptation Strategy](#);
- ▶ the [Coastal Marine Strategy](#); and
- ▶ the [Biodiversity and Ecosystem Health Framework](#).




THEME 2: Create opportunities for communication and outreach

Agricultural producers across B.C. hold a wealth of knowledge and expertise in land and water stewardship. Yet, provincial and federal policies and legislation governing watercourse stewardship can create confusion when producers are trying to conduct watercourse stewardship activities. There is a general lack of clarity on how the Federal Fisheries Act (FA) applies to private agricultural land in B.C. and how it interacts with provincial legislation such as the Water Sustainability Act (WSA) and the Fish Protection Act (FPA).

Although the WSA and the Water Sustainability Regulation (WSR) were developed with the needs of agricultural producers in mind, the general perception of producers is that the WSA limits or impedes stewardship actions on their farm; in particular, where authorizations are required for changes in and about a stream. This disconnect leads to distrust and frustration of both parties and is a barrier to moving forward.

The engagement process revealed that there is a need to communicate with and provide educational resources to QEPs and local governments (i.e., municipalities and regional districts), as well as provincial and federal government staff who interface with producers in matters of watercourse stewardship. Furthermore, increasing knowledge through educational outreach directly to producers will improve stewardship outcomes and provide clarity about expectations for producers operating around watercourses.



There is a need for collaboration between governments and across jurisdictions to determine appropriate actions and guidelines for producers around agricultural watercourse stewardship

THEME 3: Collaborate to improve permits, notifications, and authorization processes

Legislation exists at both the provincial and federal levels to protect fish and wildlife species and their habitats, as well as to protect water quality and supply. Local governments may have additional bylaws and development permit areas that affect projects occurring in and around streams, even on private agricultural land.

Producers, contractors, and local governments indicated that water authorizations and notifications processes are a detrimental bottleneck in progressing with watercourse stewardship projects on agricultural land, even when the objective is to provide a net benefit to ecosystem health. Streamlining the [Change Approval²](#) process would result in improved outcomes and allow for available funding to be fully utilized.

Local governments have limited legislative tools available to enact on private agricultural land, particularly lands within the Agricultural Land Reserve (ALR) or lands that are zoned for agriculture. The Farm Practices Protection (Right

to Farm) Act (FPPA) applies to practices such as land clearing for agricultural production, but the FPPA does not override local zoning bylaws. However, for local governments (municipalities and regional districts) to enact legislative tools on agricultural land they would need the support from their Councils or Board of Directors as well as the Agricultural Land Commission (ALC). As a result, local government staff indicated that they rarely enact tools to manage watercourse stewardship or restoration on private land.

Local watercourse regulations can be difficult to endorse and adopt if they are not seen to be aligned with similar regulations in neighbouring communities and watersheds (or overarching provincial guidance). As a result, there is a need for collaboration between governments and across jurisdictions to determine appropriate actions and guidelines for producers around agricultural watercourse stewardship such as riparian setback distances for agricultural activities (e.g. land clearing) not already covered by other pieces of legislation (e.g., the Code of Practice for Agricultural Environmental Management.)

² A Change Approval is written authorization to make complex changes in and about a stream under section 11 of the WSA.



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THEME 4: Connect producers with funding for watercourse stewardship

According to the 2021 Canadian Census of Agriculture, 56% of producers in B.C. had a total operating revenue of less than \$24,999 in 2021³. Most producers operate with very low revenues, whereas watercourse stewardship can be resource-intensive, requiring time, money, and energy. The cost of materials and contractors, the time required to undertake the application processes, and the physical work, as well as the possible loss of arable land if new or expanded riparian buffers are required can be barriers to producers proceeding with stewardship activities.

While these costs are borne by producers individually, actions taken to steward agricultural watercourses have benefits to society more broadly. As a result, watercourse stewardship on farms frequently falls to a lower priority due to competing demands on limited resources.

Funding opportunities to help producers cover the cost of stewardship activities and to have the restoration work undertaken on their behalf, are available through various programs such as the Resilient Agricultural Landscapes Program (RALP) – a Payment for Ecosystem Services (PES) program under the Sustainable Canadian Agriculture Partnership (Sustainable CAP) and delivered through Farmland Advantage and Delta Farmland & Wildlife Trust. Local governments and other provincial government ministries are also exploring PES options for stewardship activities on private land. There is an opportunity to collaborate on identifying consistent, long-term funding sources for these programs to further support the agriculture sector.

Other programs, such as the EFP and BMP programs provide cost-shared funding for farmers to undertake riparian restoration work after completion of a risk assessment. Improving awareness of these opportunities can help producers find resources to offset the cost of stewardship activities.

³ Statistics Canada. [Table 32-10-0239-01 Farms classified by total operating revenues, Census of Agriculture, 2021](#)

Action Tables

A total of 23 actions were identified to enable progress on the four themes. These actions are presented in four tables organized by theme and broken down into four timelines:

1. **Ongoing actions** (requires continued attention for actions already underway)
2. **Short term actions** (2 years or less to initiate and implement)
3. **Medium term actions** (2-5 years to initiate and implement)
4. **Long term actions** (more than 5 years to initiate and implement)

The following organizations that may provide support are identified as follows:

- ▶ Federal Government:
 - ▷ Fisheries and Oceans and Canada (DFO)
- ▶ Provincial Government:
 - ▷ Ministry of Agriculture and Food (AF) staff including Regional Agrologists
 - ▷ Ministry of Water Land and Resource Stewardship (WLRS)
 - ▷ Ministry of Environment and Climate Change (ENV)
 - ▷ Ministry of Transportation and Infrastructure (MOTI)
 - ▷ Ministry of Emergency Management and Climate Readiness (EMCR)
- ▶ Non-Treaty Indigenous Nations and Modern Treaty Nations
- ▶ Local Government (LG) including municipalities and regional districts
- ▶ Non-Governmental Organizations (NGOs):
 - ▷ Investment Agriculture Foundation (IAF)
 - Environmental Farm Plan and Beneficial Management Practices Programs
 - Farmland Advantage
 - ▷ Delta Farmland & Wildlife Trust (DFWT)
 - ▷ Stewardship Centre of BC
- ▶ Agricultural industry associations
- ▶ Qualified Environmental Professionals (QEPs)
- ▶ Professional associations
 - ▷ British Columbia Institute of Agrologists (BCIA)
 - ▷ College of Applied Biologists
- ▶ Academic institutes

All of the subsequent actions will be implemented in the context of agricultural lands, even if not explicitly stated.

Objectives and Actions Per Theme

THEME 1: Coordinate watercourse stewardship at a watershed level

OBJECTIVES	ACTIONS	TIMEFRAME
1.1 Support the development and implementation of the WSS.	1.1.1 Determine what kind of leadership and innovation role agriculture can play in moving the WSS forward and improving outcomes for agricultural watercourse stewardship in the future.	Ongoing
	1.1.2 Share the results of Phase 1 of the SAW with Indigenous peoples, DFO, relevant provincial Ministries (WLRS, ENV, EMCR, MOTI) and local governments, highlighting opportunities for collaboration.	Short
1.2 Ensure perspectives from the agricultural sector are heard in watershed planning initiatives.	1.2.1 Collaborate on watershed assessments and planning initiatives in agriculturally prevalent areas (e.g., local government planning initiatives, Water Sustainability Plans led by WLRS).	Medium - Long

*WLRS (Regional Authorizations)

THEME 2: Create opportunities for communication and outreach

OBJECTIVES	ACTIONS	TIMEFRAME
2.1 Improve understanding within the agriculture sector about legislation affecting watercourse stewardship on agricultural land.	2.1.1 Develop extension materials and website content identifying existing legislative requirements for on-farm watercourse stewardship and how these interact with farm practice protections under the Farm Practices Protection (Right to Farm) Act and the Agricultural Land Commission Act.	Ongoing
	2.1.2 Work with other Ministries to create educational materials that identify and elucidate any inconsistencies between existing pieces of legislation (e.g., differing definitions of streams and ditches).	Short
	2.1.3 Build the capacity of EFP Planning Advisors to act as ambassadors of information regarding the responsibilities of producers under the Fisheries Act, Water Sustainability Act and other legislation.	Medium - Long
2.2 Improve understanding within the agriculture sector of the benefits of watercourse stewardship on farmland.	2.2.1 Revamp the AF Riparian webpages to improve access to information regarding on-farm watercourse stewardship. Highlight the ecosystem services that result from protecting and establishing healthy riparian areas.	Short
	2.2.2 Ensure EFP Advisors have the knowledge and tools to understand and promote the benefits to producers of retaining healthy riparian areas and floodplains.	Short - Medium
	2.2.3 Promote and support projects under AF's Regional Extension Program focused on enhancing riparian health on agricultural land.	Ongoing

THEME 2: continued

OBJECTIVES	ACTIONS	TIMEFRAME
2.3 Improve and standardize QEP understanding of Change Approval application processes.	2.3.1 Develop and communicate clear criteria and expectations for QEPs on the process and requirements of submitting on-farm Change Approval applications.	Short - Medium
	2.3.2 Consult with WLRS authorizations staff to identify common concerns or deficiencies with Change Approval applications and identify possible solutions for streamlining the application process for producers and QEPs (e.g. guidance documents, self-assessment tool, etc.).	Short
2.4 Improve understanding within government departments about the intersection of agriculture and watercourse stewardship.	2.4.1 Provide information to provincial government staff on interaction of agriculture legislation ⁴ with watercourse stewardship; and to local governments on how federal and provincial legislation interact with relevant acts ⁵ .	Short
	2.4.2 Create webinars (live and/or pre-recorded) or information packages for regulators on agriculture and water. Some example topics to focus on are: <ul style="list-style-type: none"> • The role and mandate of AF in water stewardship • Common riparian and water stewardship activities on farms • Tools and funding available to support water and watercourse stewardship 	Short - Medium

⁴ Farm Practices Protection (Right to Farm) Act and the Agricultural Land Commission Act

⁵ Fisheries Act, Water Sustainability Act, Farm Practices Protection (Right to Farm) Act, Agricultural Land Commission Act, Local Government Act, and the Land Title Act.

Theme 3: Collaborate to improve permits, notifications, and authorization processes

OBJECTIVES	ACTIONS	TIMEFRAME
3.1 Improve guidance for agricultural producers on the Change Approval authorizations process	3.1.1 Create a simple tool to establish when and if a Change Approval authorization or Notification is needed for activities around watercourses.	Short
	3.1.2 Develop an inclusive agriculture-specific guide for the Water Sustainability Act and Change Approvals process including infographics and other visuals to help applicants navigate authorization application processes.	Short
3.2 Explore opportunities to improve the Change Approval authorization process for the agriculture sector.	3.2.1 Explore options to support producers in building relationships with First Nations to enable communication and collaboration in advance of an application for Change Approval.	Ongoing
	3.2.2 Seek opportunities to align application requirements between the environmental BMP program and the Change Approval authorizations process and determine if priority can be given to BMP applicants requiring a Change Approval.	Short
3.3 Increase professional reliance in watercourse stewardship across ministries.	3.3.1 Engage in discussions to understand the concerns around liability and legal responsibilities for: <ul style="list-style-type: none"> • QEPs working with agricultural producers • WLRS authorizations staff processing applications and making decisions 	Medium
	3.3.2 Work with WLRS to explore potential training or “certification” standards for QEPs that, if met, would equip authorizations staff to satisfy legal requirements and reduce barriers to producer applications.	Medium

THEME 3: continued

OBJECTIVES	ACTIONS	TIMEFRAME
3.4 Explore resources and tools that may be necessary to enforce watercourse protection on-farm.	3.4.1 Engage with the BC Flood Strategy and WSS teams to determine if there is complementary work being completed in this area.	Medium
	3.4.2 Explore the establishment of guidelines for minimum riparian setbacks for agricultural activities (such as land clearing) that are not addressed by existing legislation ⁶ .	Medium

⁶ Riparian Area Protection Regulation, Code of Practice for Agriculture Environmental Management, Organic Matter Recycling Regulation and local zoning bylaws and development permit areas.

THEME 4: Connect producers with funding for watercourse stewardship

OBJECTIVES	ACTIONS	TIMEFRAME
4.1 Increase knowledge of existing funding opportunities relevant to watercourse and riparian work in agricultural areas.	4.1.1 Investigate and amalgamate all relevant funding opportunities into a webpage that can be continually updated: <ul style="list-style-type: none"> • Riparian management Beneficial Management Practices (BMP) funding through the Environmental Farm Plan (EFP) and BMP Programs • Payment for Ecosystem Services programs (i.e. Farmland Advantage, Delta Farmland and Wildlife Trust) • Other riparian funding opportunities 	Short
	4.1.2 Work with industry associations, farmer's institutes, and other agriculture organizations to promote and disseminate information on funding opportunities.	Medium - Long

Resources

1. Working Around Water. BC Government Information Page.
<https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-licensing-rights/working-around-water>
2. FrontCounter BC. Change Approval For Work In And About A Stream. Authorization Application Portal.
<https://portal.nrs.gov.bc.ca/web/client/-/change-approval-for-work-in-and-about-a-stream>
3. A User's Guide for Changes In and About a Stream in British Columbia. Version 2022.01. Government of British Columbia.
www2.gov.bc.ca/assets/gov/environment/air-land-water/water/working-around-water/wsa-cias-users_guide.pdf