Vermilion River watershed alliance

Vermilion River Watersheed

annual report

Two Hills

Vegreville





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12 June 2019





INTRODUCTION

The Vermilion River Watershed Alliance (VRWA) is comprised of local volunteers working side by side in the watershed (Figure 1). Members come from local towns and counties, federal and provincial governments, conservation groups, and the public. The VRWA also has a strong partnership with the North Saskatchewan Watershed Alliance (NSWA), who provides project management and administrative support..

The VRWA is guided by the goals, directions, and actions of the Vermilion River Watershed Management Plan (2012). This plan was designed with input from the public to define what the watershed means to those who live, work, and play here. The VRWA believes the watershed is the unit of management for human activities that affect the environment, including air, land, water, and wildlife.

VRWA Goals (as listed in the 2012 VRWMP)

- Develop capacity and knowledge in the watershed
- Improve reliability of surface water supply
- Improve and maintain surface water quality
- Improve and maintain water ecosystem health
- Protect and sustain groundwater quality and supply

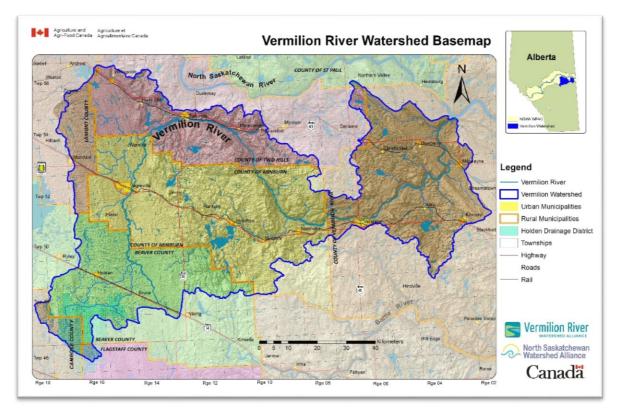


Figure 1: Vermilion River Watershed

2018-2019 BOARD OF DIRECTORS

The VRWA is governed by a Board of Directors elected from and by the membership to serve a minimum twoyear term. The Board is structured to represent all major stakeholder sectors. The current VRWA Board of Directors is comprised of the following individuals/organizations:

Position	Name	Sector - Organization
Chair	David Berry	Municipal - Town of Vegreville
Vice-Chair	Richard Yaceyko	Municipal - Town of Vermilion
Treasurer	Elaine Sorochan	Municipal - Town of Two Hills
Secretary	Chris Elder	Non-profit - Alternative Land Use Services
Director	Candace Vanin	Federal - Agriculture and Agri-Foods Canada
Director	Murray Phillips	Municipal - County of Two Hills
Director	Kevin Bentley	Municipal - County of Minburn
Director	Stacey Hryciuk	Municipal - County of Vermilion River
Director	Ed Parke	Member-at-large
Director	Barry Bruce	Municipal - Beaver County
Director	Jessica Hryciuk	Education - Lakeland College
Director	Gary Walsh	Provincial - Alberta Environment & Parks
Director	Ralph Boe	Agriculture
Director	Bryon Wolters	Non-profit - Ducks Unlimited Canada
Director	Al Corbett	NSWA; Alberta Drainage Council
Director	Carlin Soehn	Provincial - Alberta Environment & Parks
Director	Jordan Smith	Municipal - Counties of Minburn/Vermilion
Director	Tim Knudsen	Holden Drainage District
Student observer	Grace Turner	Lakeland College

Thank you to the following board members who have stepped down as of 2018-19

- Gary Walsh (Alberta Environment & Parks)
- Jordan Smith (Minburn County)
- Grace Turner (Lakeland College, student observer)
- Roger Konieczny (Minburn County)

The VRWA board is supported by the following NSWA staff for the 2018-19 year:

- Leah Kongsrude, Executive Director
- Mara Erickson, Extension & Stewardship Coordinator
- Grace Turner, Watershed Planning Intern



VERMILION RIVER WATERSHED RESTORATION & ENHANCEMENT PROJECT

Since 2016, the VRWA has partnered with the North Saskatchewan Watershed Alliance (NSWA) to restore and enhance wetlands and riparian areas in the Vermilion River watershed (VRW; Figure 1) as part of the Vermilion River Watershed Restoration & Enhancement Project (VRWREP). As of March 2019, the alliances—in partnership with local landowners—have completed three years of on-the-ground restoration and enhancement activities as well as accompanying outreach events and educational initiatives.

With 2016-2018 funding from Environment & Climate Change Canada and current funding from the Watershed Resiliency and Restoration Program (WRRP, Government of Alberta) (Table 1), activities as part of this multi-year initiative are collectively managed by the NSWA as the VRWREP.

Funding Source	Deliverables	Goals	Grant (\$)	Funding Period
Watershed Resiliency & Restoration Program (WRRP), Government of Alberta	Restore degraded or lost, or enhance existing wetland and riparian areas in the Vermilion River watershed: Wetlands = 40 ha total Riparian areas = 10 km total (20 ha equivalent)	Improve watershed resiliency to floods and drought	1,445,000	2015-2021
National Wetland Conservation Fund (NWCF), Environment Canada	Restore degraded or lost wetlands in the Vermilion River watershed = 24 ha total	Improve biodiversity and watershed function	534,254	2015-2018
EcoAction Community Funding Program (EcoAction), Environment Canada	Restore degraded riparian areas in the Vermilion River (main stem) = 2 km (equivalent 4 ha), and conduct a survey of aquatic species & habitat	Improve water quality, assess aquatic condition	100,000	2015-2018

Table 1: VRWREP Funding Sources, deliverables, goals and **total** grant amounts. Grants are held, managed and reported on by the NSWA

VRWREP Funding Source Summary

This year marked the close of two grants from Environment and Climate Change Canada: 1) the EcoAction Community Funding Program (EA) and 2) the National Wetland Conservation Fund (NWCF). Funding sources for the VRWREP in 2018-19 included WRRP, the NSWA (cash and in-kind) and the VRWA (in-kind).

The NSWA received an extension on its VRWMP-affiliated WRRP grant through the fiscal year 2021. The extension will allow for continuation of riparian and wetland restoration/enhancement projects, provide more opportunities for partnership building, and increase wetland/riparian-related communications activities in the basin.

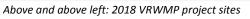


The number/type of applications received and accepted during the 2018-19 application round was as follows:

- → 11 project proposals received (5 riparian enhancement, 6 wetland enhancement) from 10 landowners.
- → 8 projects accepted (4 riparian, 4 wetland). Projects not accepted were either 1) ineligible as per the conditions of the grant or 2) withdrawn by the landowner.
- ightarrow 8 projects commenced
- → 5 [new-as-of-2018] projects completed (2 riparian, 3 wetland enhancement)

In addition to the five new projects that

2018-19 Projects Completed



were completed this year, 11 projects from previous years were completed. These 16 projects resulted in 6.5 km of riparian areas and 74.2 hectares of wetlands enhanced in the 2018-19 project season. Where applicable, a post-works assessment was done for projects that were completed in prior years.

VRWREP Summary

To date (i.e., 2016, 2017, and 2018), 13 riparian and 22 wetland projects have been completed, resulting in the enhancement of approximately 16 kilometers of riparian areas and 153 hectares of wetlands, including 24 ha of wetland restoration (Figure 3). In addition to these, there are five projects in progress. Projects have been implemented by over 30 landowners in the region.

VRWREP Landowner Projects

As the VRWREP grant holder, the NSWA received 11 new project proposals from 10 landowners in the 2018-19 project season. Eight proposals were approved by the VRWREP selection committee.

Accepted projects were located in two municipalities in the Vermilion River Watershed, within the parkland natural region (Figure 2). Six projects were in either native or tame pasture, while two were located within a crop system and included seeding a perennial mix adjacent to the crop to provide a larger buffer between the cropped area and waterbody. A pre-works health assessment was completed for each new project.



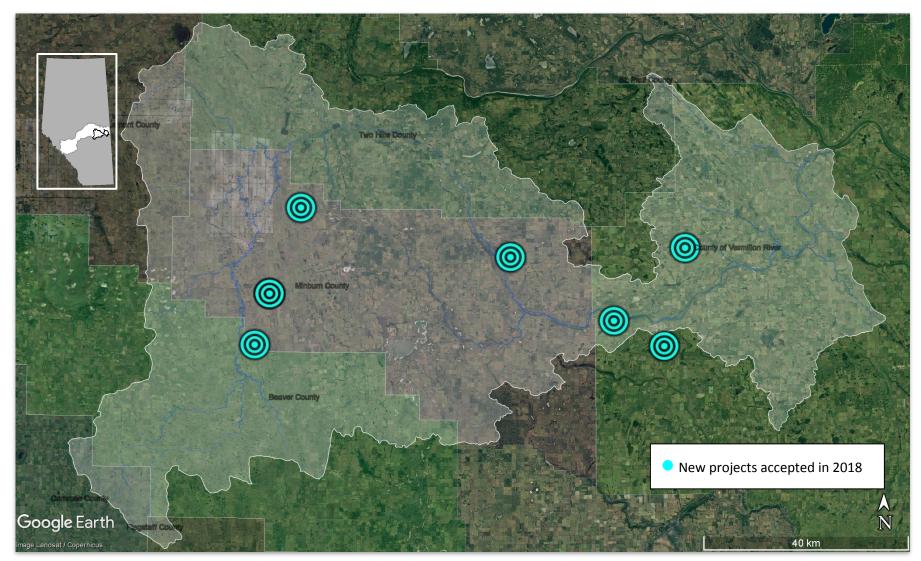


Figure 2: Locations of eight new VRWREP projects accepted during the 2018-19 application round. The Vermilion River Watershed is bounded in white on the large map and black on the inset map. Counties are represented by different colours within the watershed boundary.

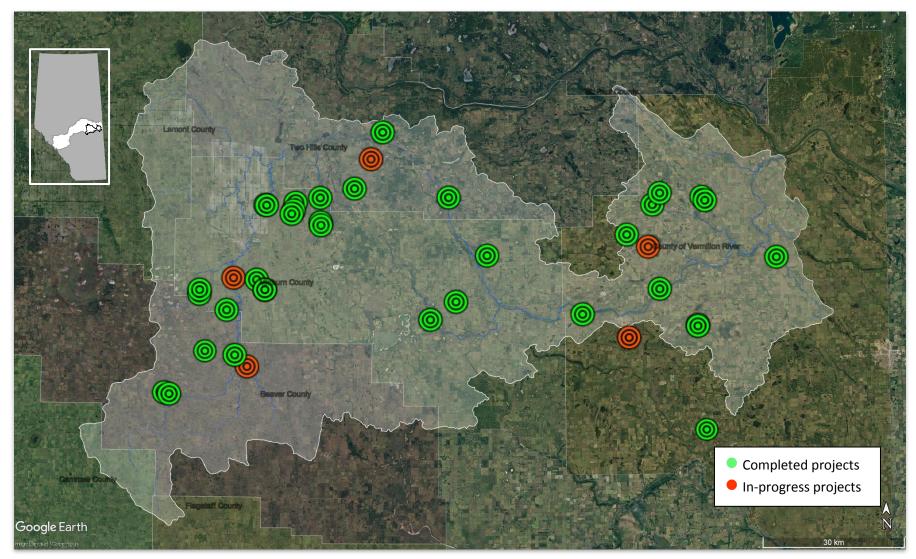


Figure 3: Completed (green) and in-progress (orange) VRWREP projects from 2016 – present. The Vermilion River Watershed is bounded in white on the large map and black on the inset map. Counties are represented by different colours within the watershed boundary.

VRWREP Evaluation 2015-18

The VRWREP has had a positive effect on both the local community as well as riparian and wetland ecosystems in the watershed. For VRWREP landowner participants, the access to funding to implement projects they have been wanting to incorporate into their operation has been appreciated. For instance, when asked what motivated a project participant to apply, they responded:

> "Maintaining and enhancing riparian areas and waterways makes so much sense, but isn't always the easiest to do financially."

> > -VRWREP participant, Minburn County

The high promotional component of the VRWREP has raised the profile of the VRWA in the community. As well, these projects have helped to solidify partnerships with other restoration organizations in the area who are keen to collaborate on projects, such as ALUS, Cows & Fish, and the Agroforestry Woodlot Extension Society.

"The dedication shown by [the program team] towards the Vermilion River Watershed Restoration project was very influential for me to become interested in being a partner and improving the water quality in the Vermilion River."

-VRWREP participant, Minburn County



ALCES HYDROLOGIC MODELLING PROJECT

A project by the ALCES Group Ltd.—funded through a WRRP grant held by the NSWA—includes the identification and evaluation of strategic priorities for watershed resiliency & restoration in the Vermilion River Watershed. The goal is to take a comprehensive, cumulative effects modelling approach to further guide watershed management and restoration efforts.

ALCES completed the hydrologic modelling and conservation/restoration scenario aspect of the project. Four conservation and restoration strategies (forest restoration, grassland restoration, wetland protection, wetland restoration) were assessed to determine potential effects of a particular strategy on pre-determined hydrologic indicators such as peak stream flow, annual water yield, and low flow. Results included as a series of maps that show the relative desired effectiveness of a strategy on an indicator (see Figure 3). A final report currently is in draft form for completion during the summer of 2019.

Project results also will be made available within an online, public web platform that will allow for easy viewing and comparison of strategies within delineated subbasins of the VRW. This online "web portal" will be freely available for stakeholders, land use planners, and other interested parties to use.

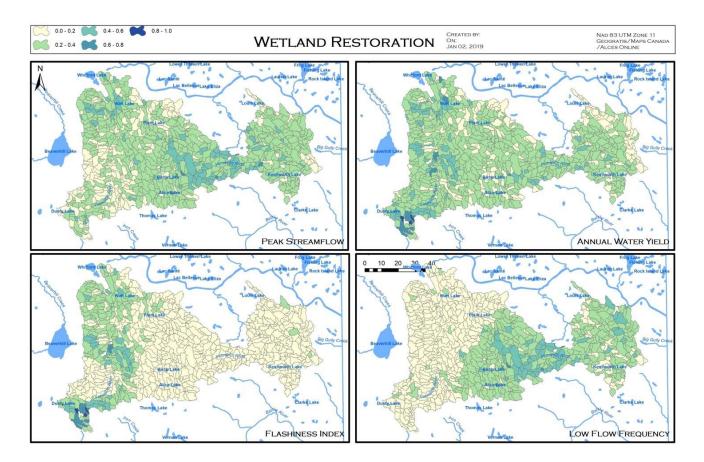


Figure 3: Example of a hydrologic model scenario result: Effectiveness (where beige is 'low' and blue is 'high') of wetland protection on peak streamflow, annual water yield, flashiness index, and high flow frequency in subbasins of the VRW.

SOCIETY BUSINESS

During the 2018-19 fiscal year, the VRWA hosted its third Annual General Meeting in Viking (June 2018) and held three regular board meetings (April 2018 – Vermilion, October 2018 – Innisfree, January 2019 – Two Hills.) The board approved a letter to distribute to watershed municipalities, encouraging the consideration of the Vermilion River Watershed Management Plan in Intermunicipal Development Plans and/or land use planning initiatives.

EDUCATION AND ENGAGEMENT

Education and engagement is a major focus of the VRWA; both facets are incorporated in each of the five goals within which the Alliance operates. To both cultivate watershed knowledge and encourage participation of stakeholders in improving watershed health, the VRWA participated in the following events in 2018-19:

- Two Hills Trade Show (April 2018): This event was hosted by the Two Hills & District Agricultural Society. The VRWA had a booth and provided information about the VRWREP and upcoming projects.
- Riparian Health Assessment Training (July 2018): In partnership with Cows & Fish, the NSWA & VRWA hosted a riparian health assessment training day at a VRWREP project site. Interested landowners, partner agencies, and municipalities attended.
- NSWA Educational Forum "Riparian health in the NSR Watershed" (October 2018): This free event was hosted by the NSWA with an audience of approximately 130 people including municipal representatives, industry, and the public. The NSWA's Mara Erickson along with VRWA board member Grace Turner gave a presentation on Vermilion watershed resiliency and VRWREP projects to date. More information at:
- https://www.nswa.ab.ca/resource/presentations/ Prairie Conservation and Endangered Species Conference
- (PCESC; February 2019): This tri-annual conference highlights research, trends, and issues in prairie and parkland landscapes. The audience of ~300 included the public, NGOs, Indigenous groups, provincial and federal environment, community and farm-based organizations. Representing both the VRWA and NSWA, Mara Erickson presented on WRRP-funded projects and program successes.



Mara Erickson presents at the 2019 PCESC

 Lakeland College Conference on Environmental Management (February 2019): Lakeland College in Vermilion held its 1st annual Conference on Environmental Management on 26 February 2019. In addition to presentations from students in the Bachelor of Applied Science in Environmental Management program, plenary speakers included Fuse Consulting, Syncrude, Nature Conservancy of Canada, and the NSWA (Mara Erickson). Erickson presented an overview of the role of watershed groups in Alberta and highlighted the VRWREP. Grace Turner (NSWA, Lakeland Co-op student; VRWA, board



member) presented her final capstone paper based on VRWREP riparian restoration projects. The audience included Lakeland students and instructors, industry and non-profit representatives, and student host agencies.

In addition to in-person events, the VRWA was promoted through print media, TV (Newcap news), Radio (County 106.5, 'Call of the Land'), and online (municipal newsletters, NSWA & VRWA websites).

FINANCIAL INFORMATION

Vermilion River Watershed Alliance Financial Statement for the year ending March 31, 2019:

Statement of (unrestricted) Revenues and Expenditures

Revenue	\$0.00
Expenditures	\$0.00

Statement of Financial Position

Assets	\$5,429.10
Liabilities	\$0.00

Including board meetings, event and committee participation, and mileage, the value of VRWA's in-kind services & travel support for 2018-19 was \$53,869.









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