

Annual Report

2012 – 2013



YOUR WATERSHED

YOUR VOICE

March 31, 2013

NORTH SASKATCHEWAN WATERSHED ALLIANCE SOCIETY

ANNUAL REPORT 2012 – 2013

The North Saskatchewan Watershed Alliance (NSWA) is a multi-stakeholder watershed protection and improvement partnership formed in 1997 and incorporated as a non-profit society in 2000.

The NSWA provides a forum to recognize and address issues affecting the North Saskatchewan River (NSR) watershed in Alberta. It also initiates and supports activities that impact the watershed positively.

NSWA membership includes individual citizen members and organizational members. Organizational membership categories are: federal, provincial, and municipal governments; industry; utility; agriculture producer groups; environment and conservation groups; recreation, culture, and tourism groups; and education and research institutions.

In 2005, the NSWA was recognized by the Government of Alberta as the Watershed Planning and Advisory Council (WPAC) for the North Saskatchewan River watershed in Alberta. As a partner in *Water for Life: Alberta's Strategy for Sustainability* (2003), the NSWA was given a mandate by the government to report on the State of the Watershed (completed in 2005) and to prepare an Integrated Watershed Management Plans (IWMP – completed in 2012). The IWMP provides watershed management advice to address issues raised by stakeholders and to achieve the three goals of the *Water for Life* Strategy: safe, secure drinking water; healthy aquatic ecosystems; and reliable, quality water supplies for a sustainable economy.

NSWA's VISION

"People working together for a healthy and functioning North Saskatchewan River watershed – today and tomorrow."

NSWA'S MISSION

"To protect and improve water quality, water quantity and the health of our watershed by: seeking, developing and sharing knowledge; facilitating partnerships and collaborative planning; and working in an adaptive management process."

NSWA MEMBERSHIP

The NSWA collaborates with as many stakeholder groups as possible and encourages all sectors, user groups and interested citizens from across the watershed to become involved in the watershed management planning process. During 2012-13 the NSWA continued to engage individuals, municipal jurisdictions and other stakeholders throughout the watershed on NSWA projects and activities (see complete listing at end of this report). As of March 31st 2013, 52 individuals and 104 organizations were NSWA members.

Board members are elected at the Annual General Meeting and commit to two years of service from the date of the AGM. The following individuals served on the NSWA Board during 2012-13. We acknowledge and appreciate their dedicated efforts to support watershed planning in Alberta.

Position	Name	Sector Representation
President	Dr. Les Gammie	Utility
Vice-President	Pat Alexander	Municipal
Treasurer	Robert Kitching	Municipal
Secretary	Candace Vanin	Government of Canada
Director	Dr. Fayi Zhou	City of Edmonton
Director	Bill Fox	Agriculture
Director	Tracy Scott	NGO
Director	Vacant	Alberta Government
Director	Andrew Schoepf	Alberta Government
Director	Dr. Naomi Krogman	Member at Large
Director	Aaron Rognvaldson	Petroleum
Director	Shirley Benson	Métis
Director	Vacant	First Nations
Director	Dr. Laurie Danielson	Industry
Director	Rod Kause	Utility
Director	Bob Winship	Forestry
Director	Patrick Gordeyko	Municipal
Director	Vacant	NGO

NSWA STAFF

The NSWA employed five staff and one contractor during 2012-13: David Trew (P. Biol.), Executive Director; Billie Milholland, B.A., Communications Manager; Gordon Thompson (P. Eng.), Technical Program Coordinator; Melissa Logan, (P.Biol.), Basin Planner; Meghann Matthews, BBA, Administrative Assistant, and Eleanor Kneffel, B.Sc., Project Manager.

FINANCIAL OVERVIEW

An audited financial statement for the fiscal year April 1, 2012 to March 31, 2013 was prepared for NSWA by Lim and Associates, Certified General Accountants, Edmonton.

The NSWA began the fiscal year on April 1, 2012 with \$306,609 in total assets, and completed the fiscal year on March 31, 2013 with \$217,006 in total assets. Full details are available in the audited financial statement, which has been posted to www.nswa.ab.ca.

PARTNER CONTRIBUTIONS

We thank the City of Edmonton for continuing to provide significant in-kind support to NSWA operations during 2012-2013. This support includes: office space, furniture, equipment, supplies and computer support for our operations. Members of our Board of Directors and the Vermilion River Watershed Management Project (VRWMP) Steering Committee also provided in-kind support in terms of their time, expertise and travel costs. NSWA gratefully acknowledges the contributions of these individuals and their respective organizations. Total in-kind support to NSWA in 2012-13 has been estimated at \$366,902.

We also thank: Alberta Environment and Sustainable Resource Development; Alberta North American Waterfowl Management Plan (NAWMP) Partnership; EPCOR; the City of Edmonton; Alberta Beef Producers; Agriculture and Agri-Food Canada; Penn-West and numerous Rural and Urban Municipalities (including Beaver, Brazeau, Camrose, Clearwater, Leduc, Lac Ste Anne, Minburn, St. Paul, Two Hills, Vermilion River Counties; the Towns of Devon, Drayton Valley, Elk Point, Gibbons, Rocky Mountain House, St. Paul, Smoky Lake, Tofield, Vegreville and Vermilion; the Cities of Edmonton, Ft. Saskatchewan, St. Albert; and the Village of Spring Lake) for providing direct cash contributions to support both NSWA operations and projects during the past fiscal year. NSWA also appreciates the continued commitment from our volunteers to support our work.

STRATEGIC PLANNING

The NSWA Board of Directors and staff developed a three-year Strategic Plan (April 1, 2013 to March 31, 2016) for the organization. This Strategic Plan provides goals and strategies required to achieve the Vision and Mission of the NSWA. A more detailed operational plan is developed annually for the organization. The four major Strategic Goals for the North Saskatchewan Watershed Alliance, for the period 2013-16, are as follows:

1. Provide leadership in regional watershed planning through the provision of well supported information and advice.
2. Facilitate watershed research to address issues and inform management actions within the basin.
3. Establish an ongoing collaborative planning and management framework for the basin.
4. Establish a strong operational model for the NSWA and ensure the organization is sustainable, with sufficient capacity and funding.

The NSWA's primary initiative for 2013-14 is the implementation of the *Integrated Watershed Management Plan* (IWMP) for the North Saskatchewan River. Work continues to develop the long-term collaboration required to achieve the goals of the IWMP and to implement the recommended actions. The NSWA has expanded its role as a bridging organization, bringing people together to discuss and develop implementation initiatives.

Municipal Watershed Partnerships and Expert Working Groups will be formed to address priority IWMP tasks. Municipal Watershed Partnerships will be comprised of municipal leaders from the key sub-watersheds. The Expert Working Groups will operate under the guidance of the NSWA Board. The Expert Working Groups will identify knowledge gaps and research needs; develop detailed work plans; review pertinent legislation and policy; and identify best management practices. The NSWA will provide technical secretariat support to both the Municipal Watershed Partnerships and Expert Working Groups.

PROGRAM OVERVIEW

Major NSWA strategic initiatives and projects in 2012-13 included:

- Completion of the *Atlas of the North Saskatchewan River Watershed in Alberta*
- Completion and distribution of the *Integrated Watershed Management Plan for the North Saskatchewan River Watershed in Alberta*
- Supported the completion and distribution of the *Vermilion River Watershed Management Plan* (authored by the VRWMP- Steering Committee)
- Completion of a water quality assessment for Lac St Cyr
- Completion of a creative sentencing project (Alberta Justice) on the regulation of water use in Alberta
- Organization of the 2013 provincial CWRA/WPAC conference in Red Deer - March 2013
- Participation in the annual WPAC summit in Lethbridge
- Assessment of water use in the oil and gas industry in both the Ram and Modeste sub watersheds
- Evaluation of Alberta Biodiversity Monitoring Institute Gravel Pit Mapping Data
- Participation in the implementation of the Water Management Framework for the Industrial Heartland and Capital Region
- Participation in the AESRD *Water Conversations*
- Collaboration with municipalities and watershed stewardship groups in watershed management initiatives (Vermilion and Sturgeon rivers; Mayatan and Wabamun lakes)
- Finished mapping, identified illustration needs, continued research and initiated a year-long photography project with Images Alberta for the *Living in the Shed* project
- Participation in the City of Edmonton Biodiversity Committee
- Launched a new website
- Expanded the reach of Twitter and Facebook accounts.
- Improved membership newsletter
- Collaborate regularly with other *Water for Life* partnerships (WPACS and AWC)
- Completed a governance review for the NSWA Board

Strategic Goal 1: Provide leadership in regional watershed planning through the provision of well-supported information and advice.

INTEGRATED WATERSHED MANAGEMENT PLAN (IWMP)

The *Integrated Watershed Management Plan for the North Saskatchewan River in Alberta* was approved by the Board and submitted as advice to Alberta Environment and Sustainable Resource Development in accordance with NSWA's WPAC mandate. The report was also printed and mailed to over 500 decision-makers, members and stakeholders, and distributed at events throughout the watershed. After the distribution of the report, briefings of key sectors were initiated. Implementation concepts require finalization by the Board and commitments from the Government of Alberta. Many future projects are embedded in the IWMP recommendations. Implementation will begin with the formation of Municipal Watershed Partnerships and Expert Working Groups.

VERMILION RIVER WATERSHED MANAGEMENT PROJECT (VRWMP)

The Vermilion River Watershed Management Project (VRWMP) is a collaborative initiative between the North Saskatchewan Watershed Alliance, the Alberta North American Waterfowl Management Plan Partners (AB-NAWMP) and the North East Alberta Water Management Coalition (NEAWMC). The project was initially conceived under *Water for Life: Alberta's Strategy for Sustainability* as an opportunity to apply watershed management concepts and activities at a subwatershed scale. The Vision for the VRWMP is that *"the Vermilion River Basin is a healthy and sustainable watershed"*, and the mission of the VRWMP is to *"Complete a locally-developed and supported watershed plan that balances social, economic, and environmental needs of the watershed community."*

A Steering Committee for the VRWMP was established with participation and in-kind contributions from: four rural municipalities (Beaver County, County of Minburn, County of Two Hills No. 21, and County of Vermilion River); two urban municipalities (Town of Vegreville and Town of Vermilion); the Vermilion River Operations Advisory Committee; Holden Drainage District; Alberta Environment Water Management Operations; Alberta NAWMP; Lakeland College; and the NSWA.

The NSWA provided coordination, technical assistance and Board oversight to the project. NSWA was present at all monthly steering committee meetings for the project during 2012-13. During spring 2011, the VRWMP-SC completed a document entitled *"Vermilion River Watershed Management Plan: Draft Plan for Discussion"*, which was released for public review in summer 2011. The plan was completed in 2012 and distributed to over 400 watershed residents and stakeholders. NSWA will continue to support implementation planning for the VRWMP during 2013-14.

Strategic Goal 2: Facilitate watershed research to address issues and inform management actions within the basin.

LAC ST CYR WATER QUALITY STUDY

The North Saskatchewan Watershed Alliance was contracted by *Alberta Environment and Sustainable Resource Development* in 2012 to summarize and evaluate all available water quality information for Lac St Cyr, and to determine what impact, if any, the annual water diversions from the North Saskatchewan River have had on the lake. Diversions from the river began in 1978, and occur annually between November and March. The report contains a review of historic water quality monitoring and related studies at Lac St Cyr, plus an update on the current hydrology of the lake.

Lac St Cyr has taken on the chemical and hydrological characteristics of an off-stream reservoir, as the water quality is nearly equivalent to that of the river and the system has a higher hydrological flushing rate than most central Alberta lakes. Long-term management of river water quality and prudent land use management of the watershed were strongly recommended to ensure the safety of the drinking water supply for the Town of St. Paul and other municipalities.

MODESTE AND RAM SUBWATERSHEDS WATER USE REPORTS

The quantities and sources of water used by the upstream oil and gas industry, particularly for the rapidly growing practice of fracking, is a particular concern for stakeholders in the upstream portion of the NSR watershed. To provide background information on this issue, a project was undertaken to update estimates of water use for upstream oil and gas, as well as for all the other major water use sectors, in the Modeste and Ram sub-watersheds.

NSWA received a donation of \$20,000 for this project from a Penn West program designed to provide funding to WPAC's. Information on the number and type of wells drilled and water use information was provided by the Energy Resources Conservation Board. Alberta Environment and Sustainable Resource Development provided current information on water licenses and reported water use.

ATLAS OF THE NORTH SASKATCHEWAN RIVER WATERSHED IN ALBERTA

The *Atlas of the North Saskatchewan River Watershed in Alberta* was developed as an educational publication, as well as a fundraiser for the NSWA and contains information on several watershed themes. The content was gathered from a number of sources, including technical studies prepared by the NSWA. The information provides a broad overview of the North Saskatchewan River watershed's natural attributes and the scope and scale of human activities. The goal for the Atlas is to broaden the understanding of watershed characteristics and raise awareness about challenges associated with managing and protecting this watershed.

WATER MANAGEMENT FRAMEWORK FOR THE INDUSTRIAL HEARTLAND and CAPITAL REGION (IH-WMF)

The purpose of the Water Management Framework for the Industrial Heartland and Capital Region is to improve water quality and manage water quantity over the long term in the Devon to Pakan reach of the North Saskatchewan River. It takes a regional, cumulative effects approach to managing the impacts on the River of both existing and future municipal and industrial development in the Capital Region, and complements NSW's IWMP for the whole watershed. NSW is represented on the IH-WMF Implementation Steering Committee by Dr. Les Gammie and on the Baseline Science, Engineering and Governance sub-committees by Gordon Thompson, P. Eng.

During development of the IH-WMF a number of studies were done to update information on water quality, sediment quality, and the aquatic ecosystem health of the North Saskatchewan River in areas both upstream and downstream of the Capital Region. This work was summarized in an AESRD Synthesis Report prepared for the Steering Committee.

The engineering study of a range of options for providing water supply and wastewater treatment for current and future industry was completed in 2012. While it found there were no technical barriers to building regional systems to recycle treated industrial and municipal wastewater for industrial supply, the economics and risks involved were not favourable.

Communication on progress achieved and examination of next steps is ongoing. This includes a wide range of topics, from data collection programs and a further engineering study, to investigation of policy tools around subjects such as regional development and waste load contaminant trading programs.

Strategic Goal 3: Establish an ongoing collaborative planning and management framework for the basin.

MAYATAN LAKE AND STURGEON RIVER SUBWATERSHED

State of the Watershed reports were completed in 2012 for Mayatan Lake (by NSW) and for the Sturgeon River (by the City of St. Albert). The Mayatan Lake Management Association (MLMA) and the City of St. Albert are supportive of developing management plans for their respective watersheds. During 2012-13 NSW worked with the MLMA, AESRD and the County of Parkland to explore lake watershed management needs and processes. NSW will also encourage and support the development of a Municipal Watershed Partnership for the Sturgeon River basin.

PROVINCIAL ACTIVITIES

The NSW continues to work with the other key partnerships established under *Water for Life: Alberta's Strategy for Sustainability*. The NSW occupied the seat as the WPAC representative on the Alberta Water Council from October 2010 to October 2012. The NSW was also active on a number of project teams of the Alberta Water Council, including: the Conservation, Efficiency and Productivity (CEP) Team; the AWC-WPAC-WSG Communications team; and the Non-Point Source Runoff Team.

The NSWA actively contributes to discussions regarding watershed planning mandates and capacities in Alberta, and hopes to contribute significantly to forthcoming regional planning activities under the Land Use Framework.

The Executive Directors of all WPACs continued to meet quarterly to discuss mutual progress, operational concerns and organize the Annual WPAC Summit.

Alberta WPACs and Canadian Water Resources Association held a joint Watershed Management Planning Conference in Red Deer in March 2013, which brought together representatives from all 11 WPACs, watershed stewardship groups, scientists, educators, municipalities and other stakeholders from across Alberta to discuss the current state of watershed management.

SOCIAL MEDIA AND WEBSITE

In 2012, NSWA staff continued to use social media to raise awareness about the organization's activities. The NSWA Twitter feed was started in May 2010, and by March 31, 2013 the organization had accumulated 1017 followers (up from 730 followers in 2011-12), ranging from environmental organizations, news media, non-profit groups, individuals and other WPACs. The Twitter feed has been used to disseminate news from other local environment groups and raise awareness about activities within the watershed. The monthly newsletter entitled *InStream* was published on a regular basis and posted to the NSWA website as a further initiative at keeping NSWA members informed about issues, events, and activities. The NSWA website was renewed and continually updated to increase content and promote events and news.

Strategic Goal 4: Establish a strong operational model for NSWA and ensure the organization is sustainable, with sufficient capacity and funding.

The NSWA Board of Directors established a sub-committee in 2011-12 to review governance issues and to support the future growth of the NSWA Society. The sub-committee continued work into 2012-13 and recommended new organizational approaches for the NSWA, with the development of new governance protocols for the Board of Directors and new accountabilities for staff. These changes reflect the evolution and organizational learnings of the NSWA since being appointed the WPAC in 2005 and are designed to improve overall effectiveness. They are also reflective of the changing policy and planning environment in Alberta. A key organizational goal for NSWA is to strengthen its role as the primary watershed planning forum for the NSR basin.

OUTREACH HIGHLIGHTS FOR THE YEAR ENDING MARCH 31, 2013

APRIL 2012

- April 4 – Presentation at Alberta Institute of Agrology Conference, Banff
- April 10 – Meeting with Wabamun Watershed Management Council to discuss State of the Watershed Report project
- April 18 – Eco-Expo at Alberta Agriculture
- April 24 – Beaver River Watershed Alliance Annual General Meeting

MAY 2012

- May 2-3 – NSWA Board Retreat
- May 7 – Provincial WPAC managers' meeting
- May 8 – Briefing to Rocky Mountain House Town Council on NSWA activities
- May 13 – Sturgeon River Clean-up
- May 23 – Briefing to Gibbons Town Council on NSWA activities
- May 25 - AESRD Water Caucus Meeting
- May 26 – Athabasca Watershed Council AGM, Barrhead
- May 30 – Industrial Heartland Level 2 Report Review Meeting

JUNE 2012

- June 6 – WPAC Forum, Leduc
- June 17-22 – International Symposium on Society and Resource Management at University of Alberta
- June 19 – Presentation to Edmonton Gyro Club, Mayfair Golf and Country Club
- June 20 – NSWA Annual General Meeting, Nisku
- June 7 – Industrial Heartland Steering Committee Meeting
- AESRD Aggregates Coalition Meeting

JULY 2012

- July 25 – Alberta Water Council riparian workshop

AUGUST 2012

- August 7 – Beaver County BBQ
- August 8 – Presentation to Wabamun Watershed Management Council
- August 9-10 – Integrating Water Innovation Forum - University of Alberta's Centre for Sustainable Rural Communities (ACSRC), Camrose
- August 24 – North Saskatchewan River Valley Alliance event
- August 25 – Pigeon Lake Watershed Association meeting

SEPTEMBER 2012

- September 4 – Frog sub watershed tour with draft “Living in the Shed” maps
- September 12 – Vermilion sub watershed tour with draft “Living in the Shed” maps
- September 12 – AESRD Maximum Allowable Loadings workshop
- September 17 – 18 Alberta Lake Management Society workshop
- September 20 – City of Edmonton Biodiversity Committee Meeting
- September 25 – 27 WPAC Summit, Milk River
- September 28/29 – Brazeau & Clearwater sub watershed tour with draft “Living in the Shed” sub watershed maps

OCTOBER 2012

- October 9 – City of Edmonton Biodiversity Committee Meeting
- October 12 – Water Quality Monitoring Group Meeting
- October 22 – AESRD Water Caucus Meeting
- October 30 – Industrial Heartland Steering Committee Meeting

NOVEMBER 2012

- November 8 - Water Quality Monitoring Group Meeting
- November 15 - South Saskatchewan Regional Plan Open House, Edmonton
- November 17 – Alberta Environment Network AGM, Edmonton
- November 29 – Stewards in Motion workshop, co-hosted with LSCC, in Drayton Valley

DECEMBER 2012

- December 4 – Central Region AESRD and Central region WPAC meeting, Wetaskiwin
- December 7 – Briefing to NDP caucus, Edmonton
- December 13 - City of Edmonton Biodiversity Committee Meeting
- December 13 – Briefing to Canadian Bar Association, Edmonton
- December 14 – VRWMP Committee meeting with AB Agriculture and Rural Development and ESRD - Growing Forward 2 program
- December 21 – Meeting with faculty of King’s College to set up student project work

JANUARY 2013

- January 17 - Industrial Heartland Monitoring Workshop
- January 19 – AEN Water Caucus Meeting
- January 29 – Briefing to Capital Region Caucus MLAs, Edmonton
- January 30 – St. Albert - NAIT’s Sturgeon River Research Project Open house

FEBRUARY 2013

- February 6 – Briefing to Leduc Town Council
- February 14 - AESRD Aggregate Coalition Meeting
- February 22 – Meeting with City of St Albert re: Sturgeon River Watershed Management Plan.
- February 26 – VRWMP Committee meeting in Vermilion
- February 27 – NSWA supported Water Conversations, Edmonton

MARCH 2013

- March 5 – Alberta NAWMP wetland forum
- March 6 – Meeting with City of St Albert re: Sturgeon River Watershed Management Plan.
- March 12-14 – CWRA/WPAC Joint Conference on Watershed Management Planning in Alberta
- March 13 – Thorsby - AESRD Water Conversation
- March 14 – City of Edmonton Biodiversity Committee Meeting
- March 20 – Briefing to Bruderheim Town Council