

Sturgeon River Watershed Alliance

Draft Watershed Management Plan



Sturgeon River Watershed Alliance



Outline:

1. Background on the SRWA
2. Work completed to date
3. Draft Watershed Management Plan
4. Next Steps



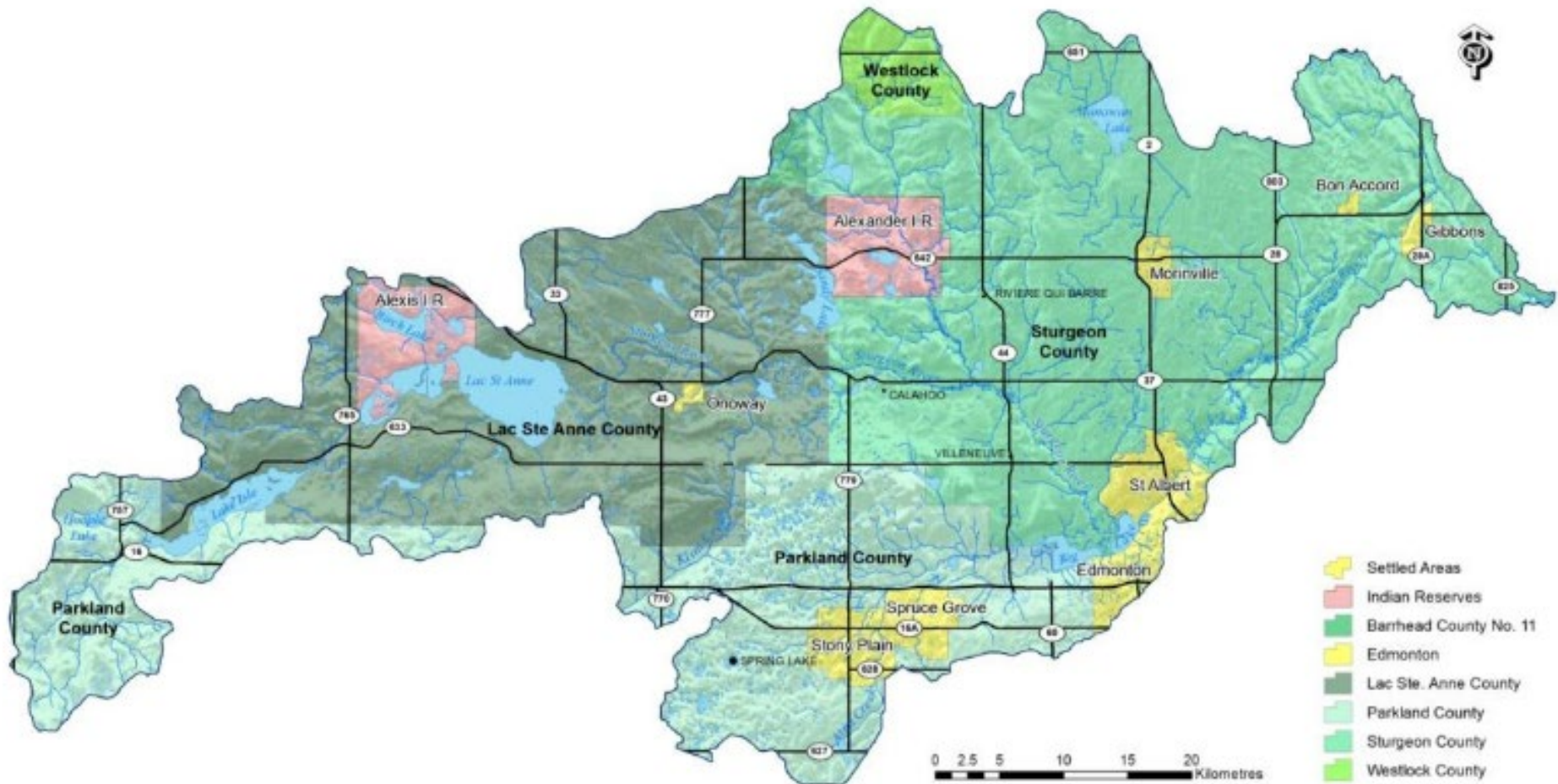
Sturgeon River

A small, precipitation and groundwater-fed prairie river

- 260 km in length
- Starts near Entwistle in Parkland County
- Flows through Isle Lake, Lac Ste. Anne, Matchayaw and Big Lakes
- Joins the North Saskatchewan River east of Gibbons

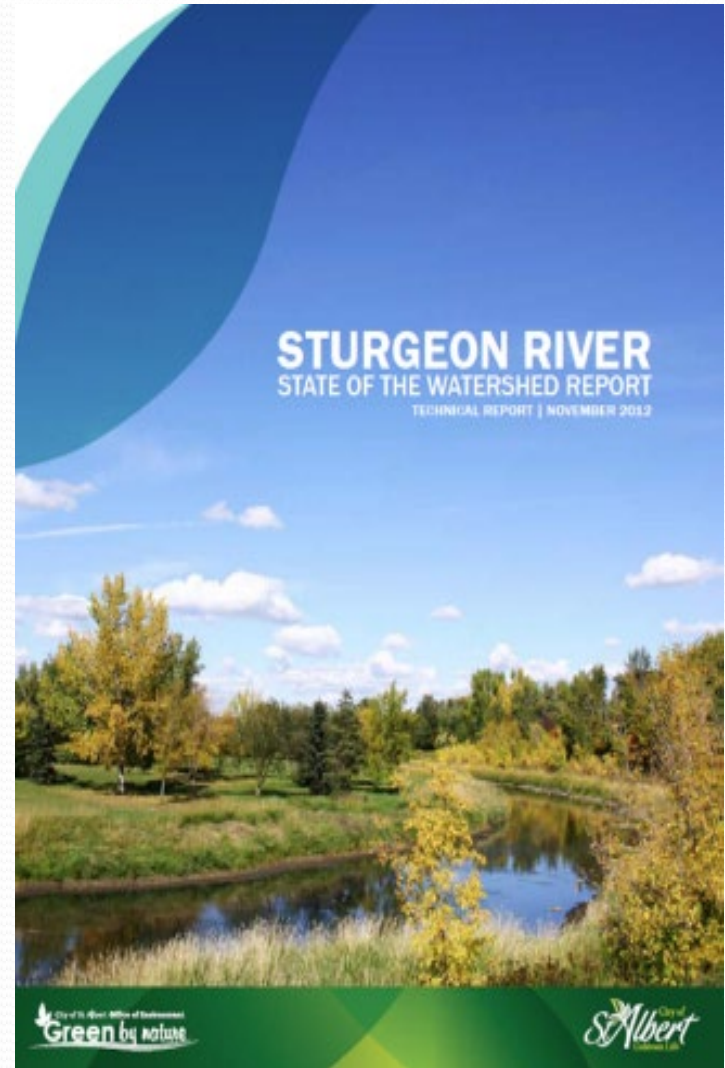


Sturgeon River Watershed



State of Report

- Completed in 2012 by the City of St. Albert.
- Provides a benchmark against which future activities and changes can be assessed.
- Evaluated current knowledge and documented data gaps.
- Assessed overall ecological health using 15 indicators and gave an overall grade of **FAIR**.





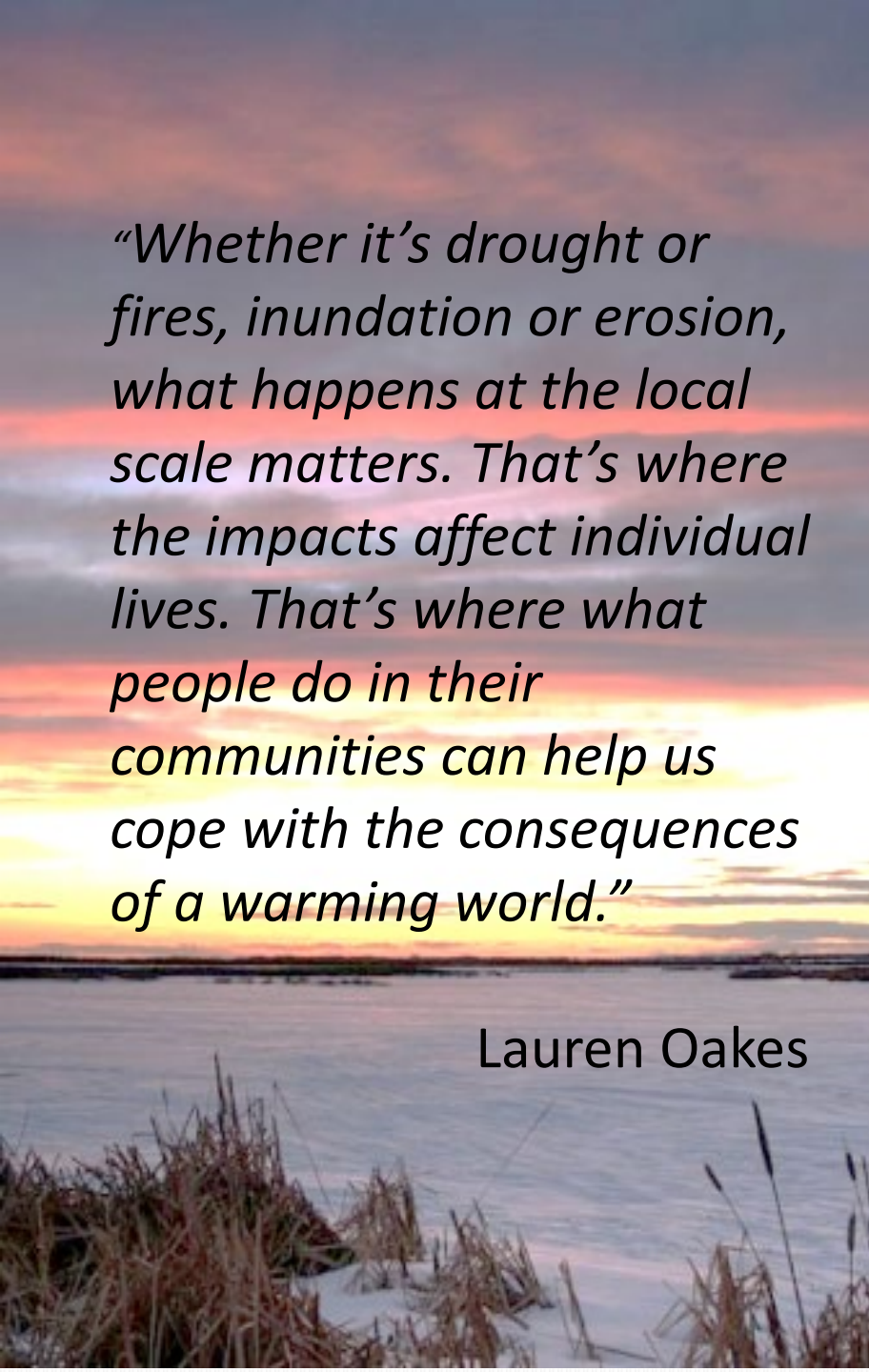
Challenges:

- Rapid urban development
- Agricultural intensification
- Loss of natural areas, riparian buffers and wetlands
- Low, fluctuating water levels
- High nutrient inputs and poor water quality
- Increase in stormwater runoff and pollution
- Blue-green algae, fish kills, invasive species

Report Recommended:

1. Establish a municipally led watershed group
2. Fill information gaps by completing technical studies
3. *Draft* an Integrated Watershed Management Plan
4. Implement!





“Whether it’s drought or fires, inundation or erosion, what happens at the local scale matters. That’s where the impacts affect individual lives. That’s where what people do in their communities can help us cope with the consequences of a warming world.”

Lauren Oakes

Sturgeon River Watershed Alliance

- SRWA formed in 2014
- Municipalities have significant influence on land development
- Watershed management at the sub-watershed level is more effective as *“local issues can be dealt with by local solutions”*.

Sturgeon River Watershed Alliance

- Lac St. Anne County
- Parkland County
- Sturgeon County
- City of Edmonton
- City of Spruce Grove
- City of St. Albert
- Town of Gibbons
- Town of Morinville
- Town of Onoway
- Town of Stony Plain
- Village of Alberta Beach
- Summer Villages of Lac Ste. Anne & County East
- Alexander First Nation
- Alexis Nakota Sioux Nation
- Metis Nation of Alberta
- *Alberta Conservation Association*
- *Alberta Environment and Parks*
- *Big Lake Environmental Support Society*
- *North Saskatchewan Watershed Alliance*
- *Wagner Natural Area Society*

Information Gaps

- SRWA partnership secured over \$500,000 in grants
- NSWA coordinated grants and consultants
- Municipal staff vetted reports and their implications
- All reports available on www.nswa.ab.ca



SRWA Technical Studies

Surface Water Quality

- Water quality historical review and recent sampling

Surface Water Quantity

- Water balance (inputs less outputs) studies for river, creeks and lakes

Groundwater

- Overview of what is currently known; connections to surface water



SRWA Technical Studies

Aquatic Ecosystem Health

- Riparian habitat condition assessment of river, creeks and lakes
- Fish habitat condition assessment including dissolved oxygen in winter

Land Cover / Land Use

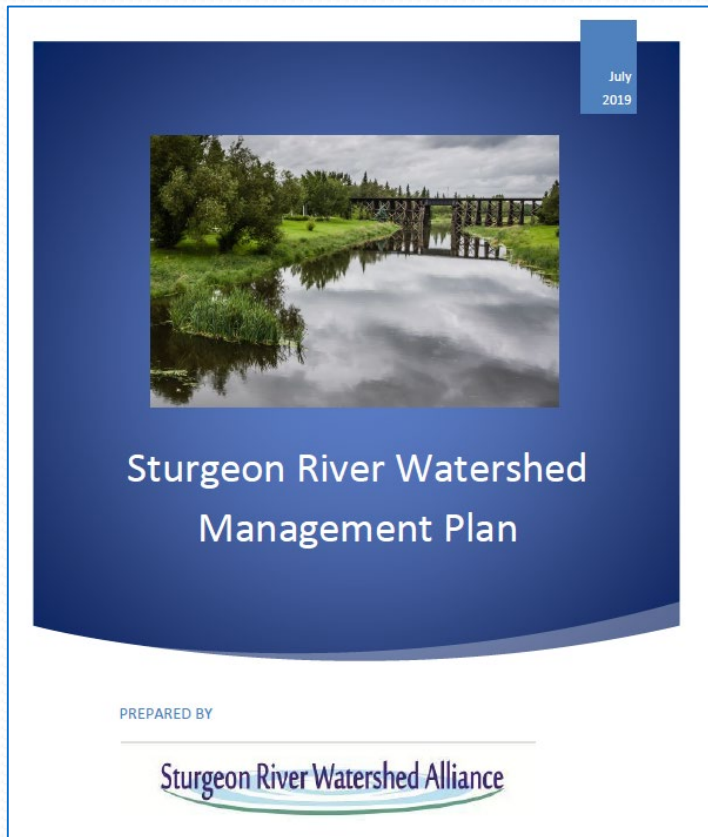
- Watershed modelling to show impacts on water flows from future development

Intermunicipal Policy Alignment

- Review of existing policies and legislation; recommendations for alignment



Draft Watershed Management Plan



- ✓ Provides a **watershed approach** to water management.
- ✓ An iterative and adaptive management process with **clear goals** and performance measures and ongoing monitoring to assess progress.
- ✓ Work towards the **voluntary** alignment of provincial, regional and municipal policies and plans as they affect water and watershed health.
- ✓ Coordinates **intermunicipal collaboration** and stakeholder involvement to ensure successful implementation of strategies and actions.
- ✓ Promotes projects. **local and regional stewardship**
- ✓ Encourages work to identify and address **knowledge gaps**.

Sturgeon River Watershed Vision

The Sturgeon River watershed is recognized and valued as a natural prairie river system that connects our communities and adds to our quality of life.

It is healthy, sustaining its ecological structure, processes, functions, and resiliency, within its range of natural variability.

It is collaboratively stewarded by rural landowners, urban residents and Indigenous communities, and is managed with knowledge and ecological integrity as the foundation for decision-making that balances our social/cultural, economic and environmental well-being.



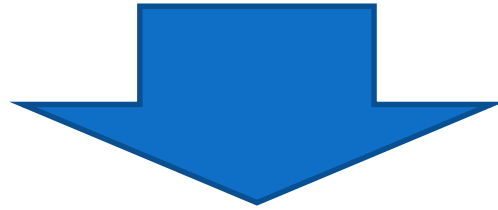
Key Outcomes

1. Well informed decision-making leads to aligned **policies and plans**, which in turn ensures a healthy watershed.
2. All residents have access to **safe, secure drinking water** supplies, whether they are on public or private systems that draw from surface or groundwater.
3. **Aquatic ecosystems**, including our rivers, lakes, wetlands and other waterbodies, are healthy.

Key Outcomes

4. Reliable, quality **water supplies** are available for a sustainable economy.
5. **Wise land use** ensures the cumulative effects of growth and development are mitigated for, the land is resilient to climate change, and individuals and communities are well prepared for flood and drought events.
6. Residents and stakeholders support the Sturgeon Watershed Management Plan and are willing to participate in **local and regional initiatives** to improve watershed health.

Watershed Management Plan Implementation



- ✓ Outcomes will be achieved via implementation of strategies and actions in a 10 year workplan.
- ✓ Plan will be 'evergreen'; reviewed every 5 years, updated as needed.
- ✓ Important to continue to support, collaborate, align.

Regional Planning Alignment



Guiding Principle

Protect natural living systems and environmental assets.

We will practice wise environmental stewardship and promote the health of the regional ecosystem, watersheds, airsheds, and environmentally sensitive areas.

Objectives

- 2.1 Conserve and restore natural living systems through an ecological network approach
- 2.2 Protect regional watershed health, water quality and quantity
- 2.3 Plan development to promote clean air, land and water and address climate change impacts
- 2.4 Minimize and mitigate the impacts of regional growth on natural living systems

Next Steps

Council Approvals

- Presented to 12 municipalities between Oct 2019 – Feb 2020
- Formal motions to:

“Accept the final Sturgeon River Watershed Management plan as information and to:

- *Continue to work collaboratively to implement the plan, and;*
- *Consider plan recommendations in the development of new or updated statutory documents and in the decision making of the municipality.”*

Next Steps

New Funding

- Alberta Community Partnership grant application for \$200,000

Next Five Years

- Prioritize implementation items with focus on policy alignment and 'quick wins'
- Continue to meet and collaborate!

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Thank You !

www.nswa.ab.ca



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