

The Sturgeon River Watershed Management Plan **2024 Progress Report**

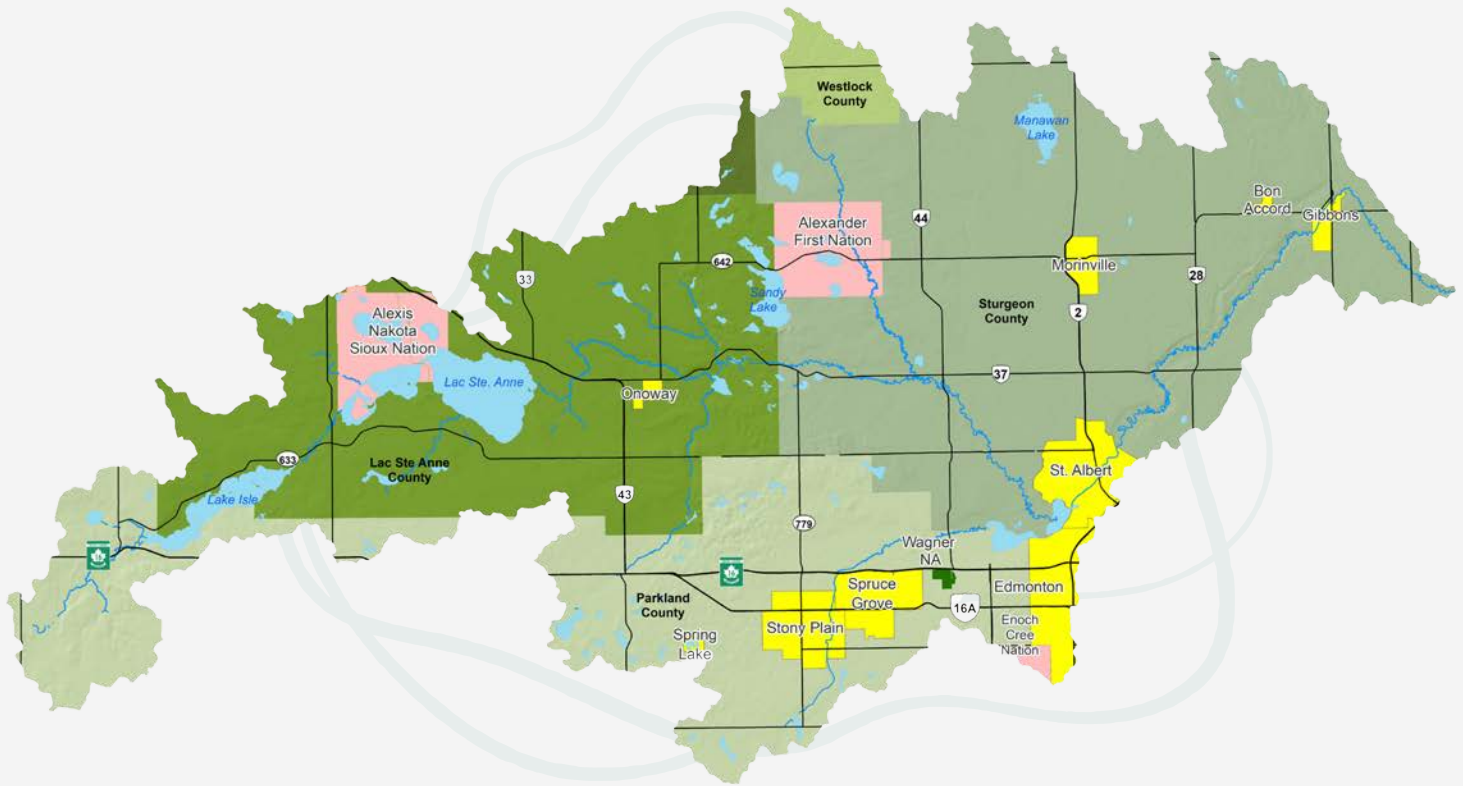


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The Sturgeon River watershed is recognized and valued as a natural prairie river system that connects our communities and adds to our quality of life. It is healthy, sustaining its ecological structure, processes, functions, and resiliency, within 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.

“We Are Sturgeon River Communities”

Introduction

The [Sturgeon River Watershed Management Plan](#) (SR WMP) was released in 2020 to address pertinent watershed issues identified in the 2012 [State of the Sturgeon River Watershed Report](#). The plan is presented as information and advice; to be voluntarily implemented over time, as resources allow and collaborations grow.

This watershed management plan puts in place an iterative and adaptive management process with clear outcomes, strategies, and actions. This plan is meant to be a tool to support alignment and clearly state needed efforts from multidisciplinary stakeholders. It is stated within the plan that the SRWA will prioritize strategies for implementation, progress reports, and review regularly or as needed.

Implementation success depends on the **continued support and collaboration** of the SRWA members. The SRWA recognizes that different members have varying capacities and shifting priorities, hence the plan uptake may occur at different rates across the watershed. In recognizing this, we still want to emphasize the need to have the environment and watershed planning at the top of mind during decision-making as many other priorities connect to a healthy environment.

To that end, the SRWA hosted a Strategic Planning and Alignment meeting on Oct 6th, 2023 to reconnect members, as well as share successes and concerns. We were fortunate to have representatives from varying sizes of municipalities and stewardship groups that provided much-needed insight into their implementation and how their overall efforts are supporting the health of the Sturgeon River watershed.

A survey was released before the Oct 2023 meeting to gather information on how SRWA members have utilized the SR WMP, and we received a total of 15 survey respondents. The survey responses have been summarized and are showcased within the overview of each outcome.

Into 2024, SRWA members should review the SR WMP and investigate how they can take on a role and responsibility for each. During meetings, we are encouraged to share priorities, issues, and successes and **disseminate information** to relevant contacts. Committed and engaged involvement during meetings will further the implementation of the plan.

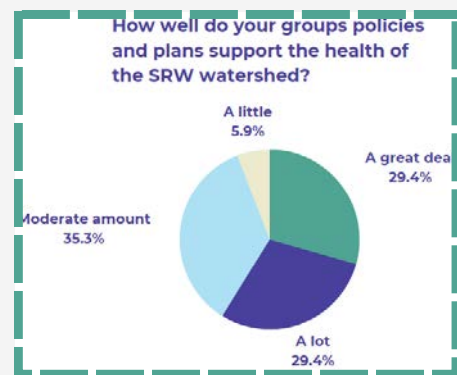
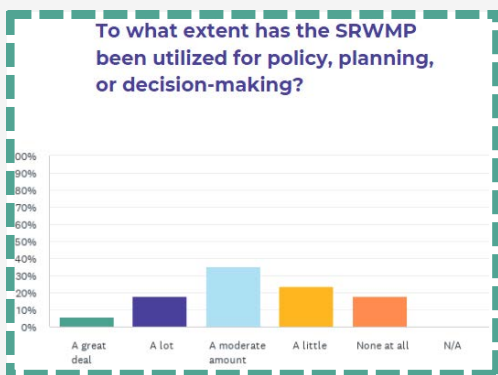
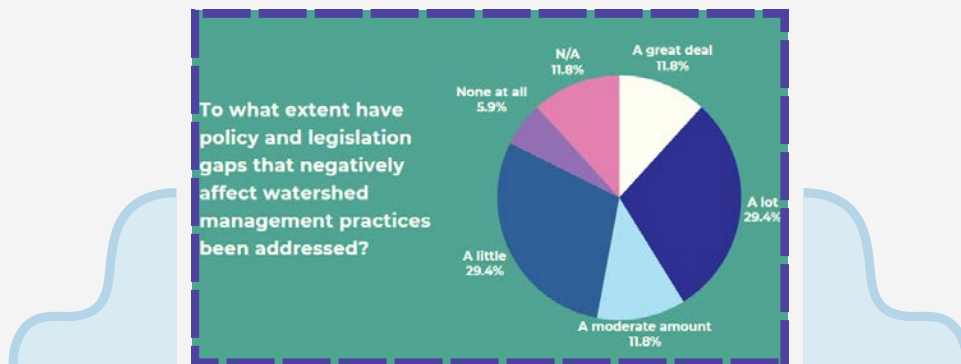
Outcome 1: Policies and plans are well-informed and align to support a healthy watershed



The first point is to acknowledge that the leadership for this outcome relies heavily on all levels of governing bodies addressing what's advised in the SR WMP, such as ensuring a **watershed 'voice'** is present in all policy and planning processes. Outcome 1 will also seek to ensure that decision-makers are knowledgeable about water issues and that technical and policy information gaps are addressed.

Survey responses indicate moderate progress under **Policies and Plans Supporting a Healthy Watershed**. Updating management mechanisms such as Municipal Development Plans, Bylaws, and Area Structure Plans can assist in accomplishing this outcome. SRWA members should utilize resources developed to **focus efforts** on updating old policies or regulations and identifying areas where new legislation is needed.

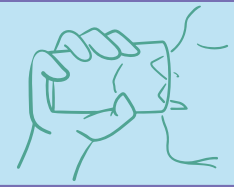
Another approach includes the incorporation of an environmental lens, scientific data, and evidence-based decision-making in all policies and reports. The SRWA should maintain and enhance the WMP performance measure of supporting community partnership and a **collaborative watershed approach**.



Garnering community and stakeholder participation opportunities in planning and decision-making processes will be an essential strategy moving forward. **Active engagement** ensures community feedback and priorities are heard and understood, demonstrating the need to stay informed and connected. The planning process must be transparent and open to all interested parties, building community buy-in and support for the process.

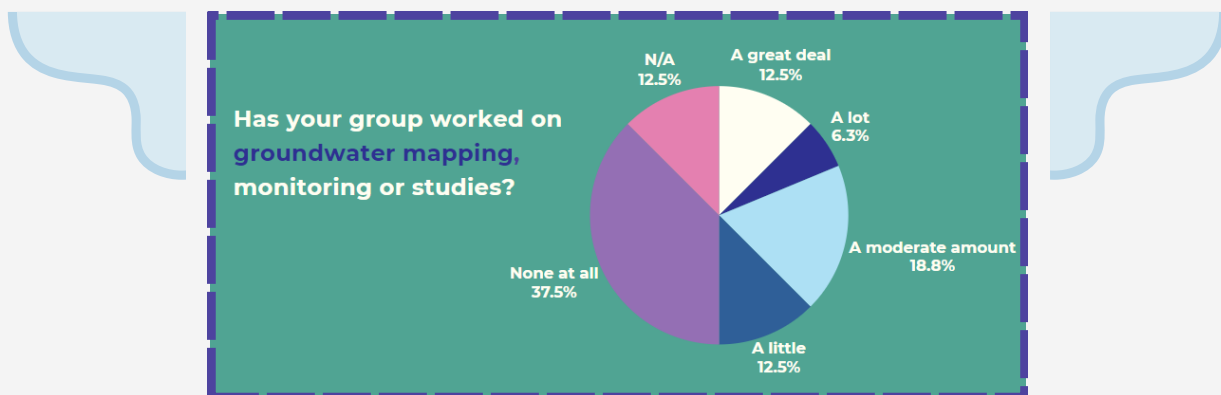
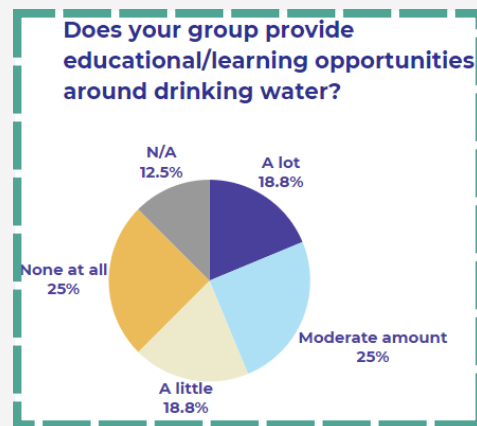
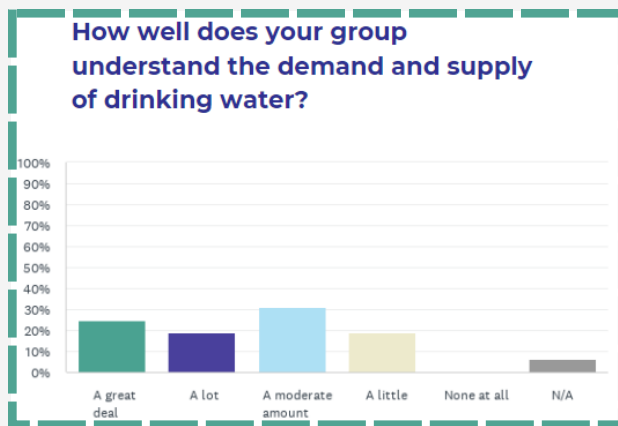
This Outcome will be further advanced by filling knowledge gaps and ultimately setting the example of responsible **stewardship**. Recognizing the varying capacities of each group emphasizes the need to maintain open lines of communication.

Outcome 2: All residents have access to safe, secure drinking water supplies



Safe, secure drinking water supplies are a fundamental, yet complex priority due to varying source-to-tap operations within the watershed. Water needs for residents are supplied by privately owned wells, water receptacles (cistern), or provided through a distribution system operated by a company mainly drawing from the North Saskatchewan River. Alberta Environment and Protected Areas regulate municipal and large public drinking water systems.

With that, the survey responses varied greatly from SRWA providing 'none at all' to a 'moderate amount' of education and awareness of water conservation. In addition, most member responses suggest there are slow advancements in groundwater mapping, monitoring, or studies. This elevates the need to safeguard this finite resource, as water scarcity becomes a growing concern in many regions.



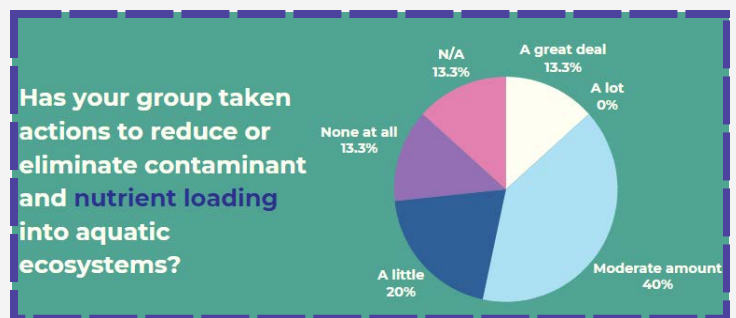
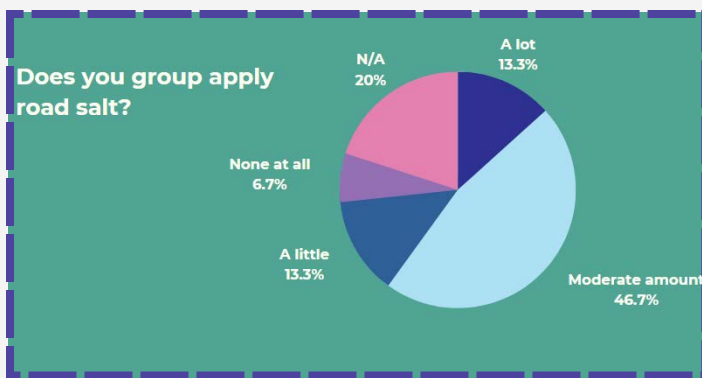
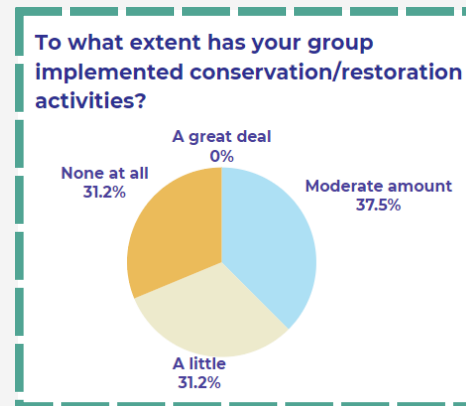
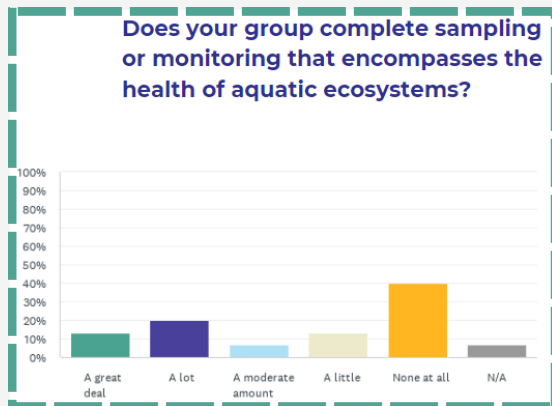
SRWA's role in this outcome will be to promote **water conservation** communications and share educational tools with residents. Ensure there are water management protocols that amplify the careful and sustainable use of water resources. We need to ensure anthropogenic contaminants do not impact domestic groundwater wells or recharge areas (add conserve). SRWA should increase mapping, planning, and knowledge-sharing on **groundwater** to lessen the chances of the above threat.

Outcome 3: Aquatic ecosystems, including our rivers, lakes, wetlands, and other water bodies, are healthy



This outcome requires that all members recognize the health of the Sturgeon River watershed is dependent on our **collective actions and efforts**. There have been numerous reports completed to assist SRWA in understanding the health of this region. Improvements to aquatic ecosystem components, particularly water quality, riparian areas, and wetlands have benefited other SR WMP outcomes.

An overarching focus for SRWA with this outcome should be to **conserve** healthy ecosystems and **restore** ones that have been impaired.



There has been a recurring discussion around **road salt management**, which relates to this outcome action: **Reduce sediment and salt loading**. As of late, there have been notable advancements around SRWA addressing the impacts of road salt. SRWA should maintain conversations and the sharing of best practices.

In addition, SRWA should encourage increased environmental monitoring (eg. Invasive species, water quality, fisheries, etc.). Acknowledging that this requires dedicated staff to have the expertise and members may require the pursuit of specific funding.

A handful of SRWA members steward **lake watersheds**; these systems are an important piece of the Sturgeon River system as they are intimately connected. There is a noted concern that human and climate pressures are causing earlier onset and more severe algae blooms. These lakes are naturally productive, however, we can lessen nutrients entering the waterbodies. It is advised that SRWA members investigate tools such as nutrient bylaws and programs (eg. ALUS) that can lessen **nutrient loading**.

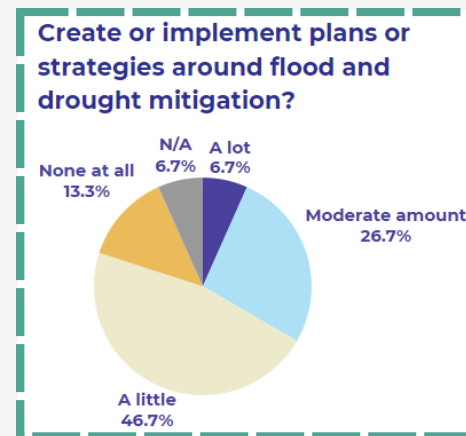
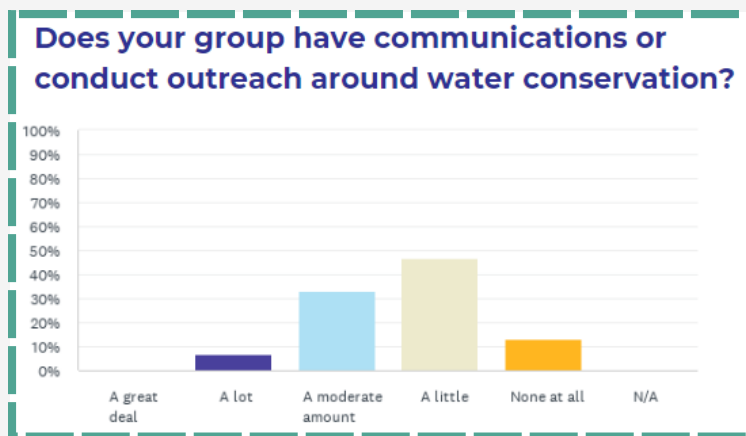
Outcome 4: The Importance of water quantity is recognized and reliable, quality water supplies are available



The river and its associated lakes and tributaries are an important water supply for agriculture, industry, and commercial enterprises. Outcome 4 seeks to actively balance the needs of people and the environment. Water allocations, withdrawals, and consumption are regulated by Alberta Environment under the *Water Act*.

The Sturgeon River water levels naturally fluctuate, and effective water management seeks to ensure there's an adequate **water supply** to meet immediate and future demands. This is of vital importance as we start to see uncertain weather patterns that may potentially affect system recharge. A priority discussion has been occurring as we neared the end of 2023 around "Low Flow: Water Shortage Advisories" being issued for select Water Management Areas.

There have been light discussions around improving lake conditions for recreational use, which in return supports the local economy, with an outlet structure (weir). SRWA has previously tried to investigate feasibility through grant applications with no success. After reflecting on former reports and having open discussions, there is a consensus on the significant effects that could occur, such as extreme downstream high and low water levels. SRWA should shift to increasing awareness of this system's natural variability and even the role of beaver dams in changing the water flow regime in rivers.



- Seek opportunities to increase communications and outreach efforts around **water conservation**. Some tools and methods include **water-efficient fixtures, rainwater harvesting, applying watering schedules, social media campaigns, and promoting conservation at both individual and industrial levels.**
- A core goal of this effort should be to educate people about the river's natural fluctuation patterns throughout the open-water season. Communicating the relationship between multi-year water deficits (rainfall, snowmelt) and a significant drop in water levels is especially important.

While they contribute less water, the Sturgeon and the Vermilion rivers are the most important additions of flow downstream of Edmonton

Following province-wide drought concerns in 2023-2024, municipalities have been urged to prepare for **drought** conditions. Considerations should be made to include **flood** planning as there are warnings of extreme rainfall and flash floods becoming more frequent. Making preparedness planning a year-round activity and encouraging producers to prepare for dry conditions will be essential moving forward.

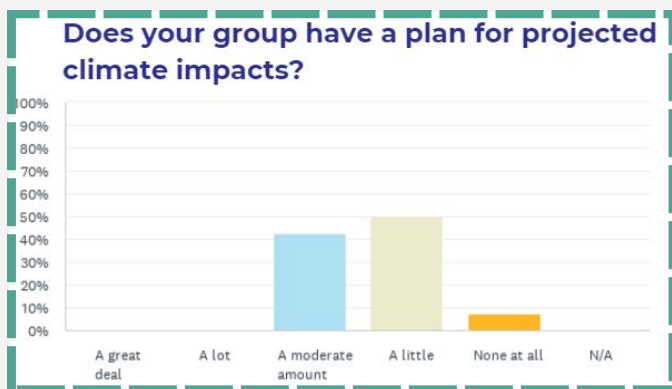
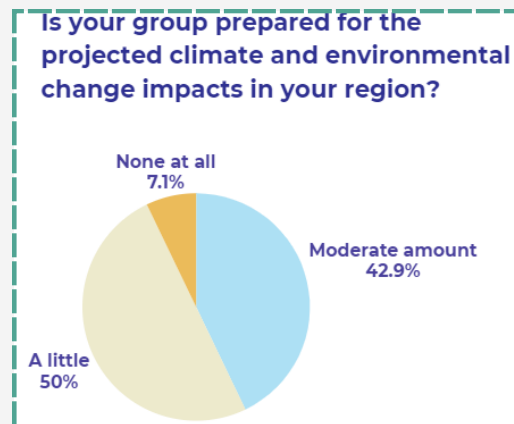
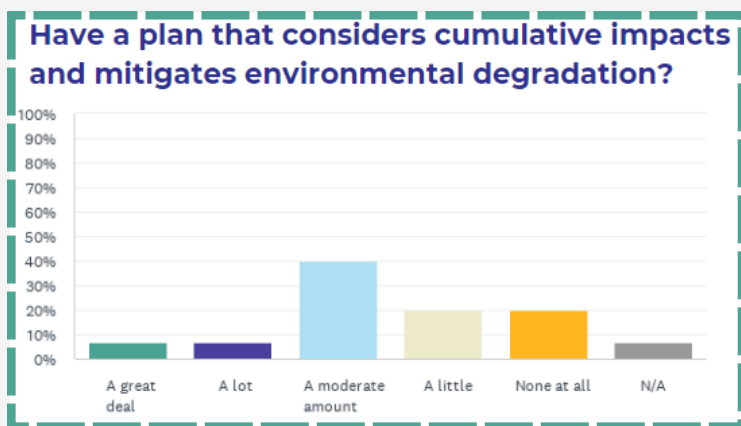
Outcome 5: Wise land use ensures resiliency and that the cumulative effects of growth are mitigated



Land cover and activities influence water resources (quality, quantity) and a community's resiliency to climate change. SRWA recognizes that land use decision-making is complex in itself. However, adopting sustainable and adaptive land use practices will be especially important in promoting long-term well-being.

Being mindful that SRWA members have varying priorities, capacity, and expertise, there still lies the opportunity to integrate land-use planning with other community planning efforts, such as economic development, transportation, and emergency management.

In reviewing the survey responses for this Outcome, there are proactive steps, rather than reactive ones needed to prepare for environmental changes by implementing comprehensive strategies that address various aspects of their communities. Focussing on risk assessment and planning, as well as emergency preparedness.



In 2019, approximately 20% of the land was under natural cover, and about 70% of the land was used for agricultural activities. The remaining 10% is developed.

- Work with neighboring municipalities, harness the knowledge of stewardship groups, and involve the community to create a holistic approach.
- Strengthen the environmental dialogue internally and between communities to enhance planning initiatives and pursue joint initiatives to make effective use of community facilities and programs.
- Incorporate nature-based solutions where applicable to ensure infrastructure resilience.

Outcome 6: Residents and stakeholders support the Sturgeon River Watershed Management Plan



Outcome 6 expresses that the SRWA is representative, well-attended, and effective at using a collaborative approach to implement the SRWMP.

Over 10 years ago, the 2012 State of the Sturgeon assessed the overall health as fair. As many people have noted, it took a long time for the Sturgeon River watershed to get into the condition it is in, and it will take a long time to address the many issues affecting it. This is especially due to the long residency time of water in the major lakes within the system, so when beneficial practices are implemented the system may take longer to improve. Ultimately, what we do now will be seen by future generations who choose to live, work, and play in the Sturgeon River Watershed.

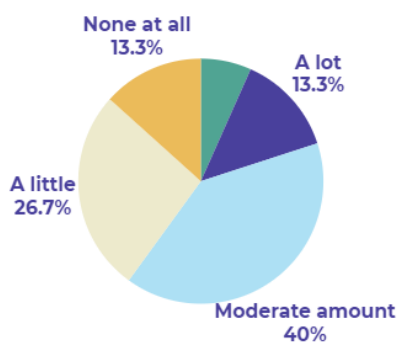
Progress should be made on all six key outcomes, as they are interrelated.

The Steering Committee has identified five basin-wide priority strategies including the following:

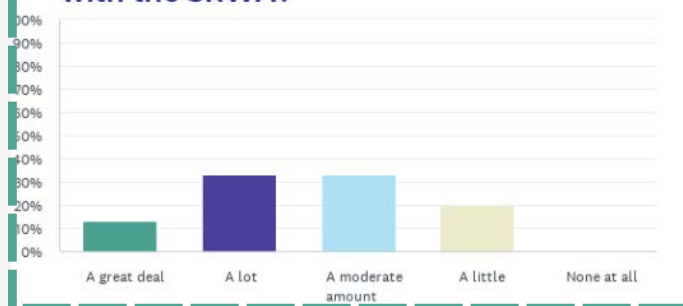
1. Undertaking policy review and alignment work.
2. Developing a watershed monitoring, evaluation, and reporting framework
3. Developing and implementing a riparian and wetland strategy
4. Striking a small working group to resolve water quantity knowledge gaps
5. Continuing to use the SRWA platform to engage others (Strategy 6.2.1).

The foundational piece that promotes the health of the Sturgeon River Watershed is strengthened appreciation for it, we can then integrate this appreciation into efforts and ultimately project it into the community.

Does your group educate internally and externally about watersheds or watershed management?



What is your group's level of involvement with the SRWA?



The survey responses indicate that there is room for improvement around watershed education. SRWA has also raised concerns about the public not always being aware of water issues and how their actions may impact the watershed.

- Showcase successes and good news stories; promoting a stewardship ripple effect.
- Align key messages and share materials on key watershed issues.

Projections for SRWA into 2024



- Joint Steering and Technical Committee meetings to lessen engagement fatigue.
- Four scheduled meetings (plan for at least one in-person meeting) and topic-specific working group discussions as needed.
- WMP implementation tracking and sharing of progress through communication materials and outreach.
- Updates on members' environmental initiatives and dissemination of related information internally.
- NSWA project updates that support SRWA's plan and its member's efforts.
- A dedicated SRWA webpage as a central hub for posting SRWMP updates, reports, information sheets, etc.

Funding Opportunities

- Advance on-the-ground efforts; such as habitat restoration, conservation, and monitoring.
- Enhance the understanding of how land use/cover is influencing water quality and quantity.
- Host educational workshops and in-person meetings to foster collaboration and enhance strategic planning.
- To explore and get out onto the river to cultivate connectedness and appreciation.
- Develop measurable WMP performance measures that can be inputted into an annual report card.

Sturgeon River Watershed Alliance

“We Are Sturgeon River Communities”

