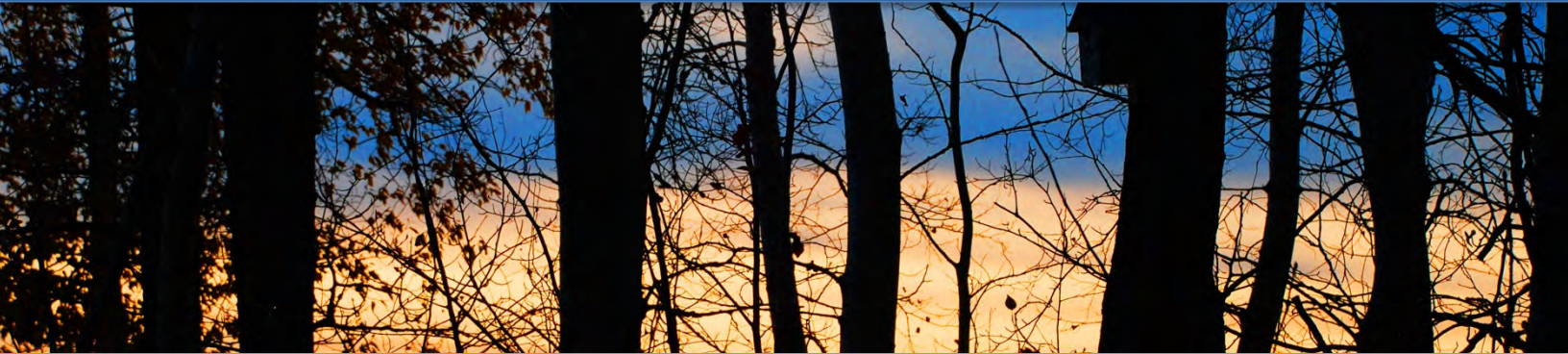


6.0 Land Use Classification and Statistics



Sturgeon County maintains five classifications of open space, including Water Body, EP – Environmental Protection, REC – Recreation, POS – Public Open Space and PU – Public Utility. The Land Use Bylaw outlines the general purpose, permitted and discretionary uses, relevant subdivision regulations and development regulations for each land use. Figure 13 - Zoning identifies the location of each land use parcel listed above.

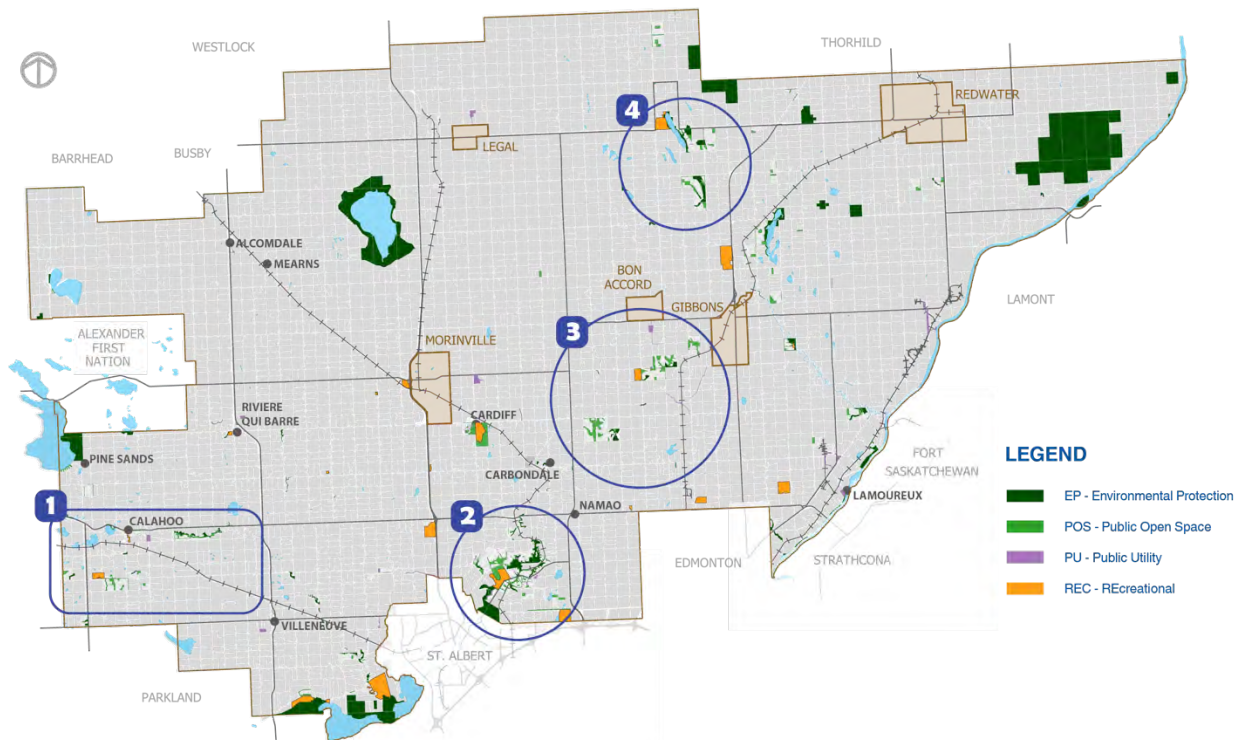


Figure 13 - Zoning

Table 1 - Land Use Zoning below identifies the number of parcels and their cumulative size for each of the land use classifications on Figure 13 - Zoning:

Table 1 - Land Use Zoning

No. of parcels	Zone	Area (ac)	Area (ha)
181	EP - Environmental Protection	132,406	53,583
238	POS - Public Open Space	16,437	6,652
133	PU - Public Utility	5,197	2,103
18	REC - Recreation	21,957	8,886

Overall, the distribution of open space in the County is difficult to appreciate at a County-wide scale. Generally, open space is more prevalent in areas of higher density of population. The distribution of open space is better represented in Figures 1 - 8 in Section 2.2. Figure 13, above (Zoning) identifies the need to more precisely assign land use to each of the parcels. Some large parcels that are designated as REC-Recreational, for example, would have more targeted management guidelines if they were broken into more detailed typologies such as ER and MR, which would provide the more sensitive areas of the parcel with enhanced protection against development and activities counter to ecological protection.



7.0 Demonstration Site Assessment

This plan provides three suggested demonstration projects for near-term implementation, as strong demonstration projects representing each of three primary categories on Figure 12 - Open Space Transect. The three projects can be described as follows:

- **Figure 14 - Demonstration Site 1: Riparian** – an area of land adjacent to Riverstone Pointe between dense urban residential development and the Sturgeon River. This parcel of land experiences significant erosion and bank instability and there is interest in providing trail development in this area;
- **Figure 15 - Demonstration Site 2: Hamlet Residential** – a parcel of land in Carbondale that has no programmed use and the maintenance of the open space seems excessive given the limited use of the site. A better understanding of the potential recreational use such as a trail connection and small gathering space would serve the numerous adjacent lots and the community well. Programming portions of the lot and then naturalizing remnant areas would serve the community well with a passive open space and would reduce ongoing maintenance obligations of mowing a large parcel with no current use; and
- **Figure 16 - Demonstration Site 3: Agricultural Fringe** – many roadway corridors act as ecological linkages between larger patches of habitat areas. With cropland on both sides of the road roadways lack visual character, do not provide quality ecological corridors and oftentimes encounter encroachment of cultivated fields with landowners placing crops as far into road rights of way as possible. This segment is a demonstration of an appropriate location to provide wind breaks through enhanced tree planting within the roadway corridor that will provide aesthetic improvements along with enhanced ecological movement and habitat for small animals and birds.

Refer to the three figures following, which identify each project location, a summary of existing conditions at each site, and an estimation of how this project will affect:

- **Level of Service** – how the project offers a new experience, type of recreation or proposed development that is currently absent or deficient within the County;
- **Maintenance Obligation** – the intensity of maintenance required that will result from implementing the proposed project;
- **Ecological Value** – how the project will contribute to ecological systems of the site and the surrounding area; and
- **Initial Capital Cost** - an estimation of the proposed costs to complete the project as outlined in each figure, in estimated 2022 dollars.

Demonstration Site 1: Riparian

Site Information:

Roll: 2808061

Legal: 0227111; 2; 61ER
SE-25-54-25-4

Address: SW Riverstone Pointe

Area of Site: 25.85 acres

Zoning: EP / CR-2 (Environmental
Protection & Country Estate)



Existing Conditions:

- Sturgeon Reserve Land;
- Consists of forested areas, open naturalized areas, and a natural seasonal pond;
- Located within Homeowner Association maintained multi-lot subdivision;
- Significant erosion along banks of Sturgeon River during high precipitation years; and
- Existing trail system (Bellrose River Walk) is primary reason for public access, however bank erosion has caused challenges.

Level of Service ↑

Expand the existing trail system, adding segments to create continuous loops.

Maintenance Obligation ↓

By naturalizing the existing mowed area there will be a reduced obligation for the County to mow.

Ecological Value ↑

By naturalizing the manicured portions of the site there is increased habitat value. Riverbank erosion mitigation techniques will also be employed.

Initial Capital Cost \$

Phase 1: trail loop connection (500m @ \$150/m = \$75,000) and erosion mitigation planting and life staking along river (\$25,000) = \$100,000



Figure 14 - Demonstration Site 1: Riparian Area

Demonstration Site 2: Hamlet Residential

Site Information:

Roll: 1898000

Legal: 4192MC; ; R NE-8-55-24-4

Address: Carbondale

Area of Site: 1.64 acres

Zoning: POS (Public Open Space)



Existing Conditions:

- Sturgeon Reserve Land;
- Consists of open naturalized areas, mowed lawns and newly planted trees;
- Located within the unserviced Hamlet of Carbondale;
- Adjacent to several back of lots and train tracks;
- Existing amenities include 2 benches, 2 picnic tables and in-ground garbage; and
- Several encroachments by adjacent landowners that need to be addressed.

Level of Service	Maintenance Obligation	Ecological Value	Initial Capital Cost
<p>↑</p> <p>What is now a vacant piece of land will become an educational experience for the community to enjoy.</p>	<p>↓</p> <p>What is currently manicured lawn will be transformed into a zero-maintenance pollinator garden with interpretive trail.</p>	<p>↑</p> <p>Converting lawn into a pollinator garden greatly increases the ecological value of this parcel, and will benefit the surrounding cropland.</p>	<p>\$</p> <p>Phase 1: Naturalize the parcel using a combination of pollinator-loving plants and seed mixes. = +/- \$75,000</p>



Figure 15: Demonstration Site 2: Hamlet Residential

Demonstration Site 3: Agricultural Fringe

Site Information:

Roll: 3196000 (NW limit)
3179000 (SE limit)

Legal: 4; 2; 56; 20; SE / SE-20-56-25-4 (NW limit)
1122685; 1; 2 SW-16-56-25-4 (SE limit)

Address: Range Road 254

Area of Site: +/- 15 acres

Zoning: AG (Agriculture General)



Existing Conditions:

- Range Road 254 right-of-way (east and west sides of road);
- Consists of open fields / cropland on either side of road; and
- Little to no vegetation along this stretch of road with the exception of the areas immediately surrounding homes.

Level of Service ↑	Maintenance Obligation ↓	Ecological Value ↑	Initial Capital Cost \$
Planting along the road ROW will act as a wind break and snow fence, creating overall better driving conditions.	The planted hedgerows come with reduced maintenance with a lower demand for winter snow clearing operations.	These hedgerows will act as stepping stones within the landscape that create opportunities for wildlife movement across the landscape.	Phase 1: Northwest Poplar (<i>Populus x jackii</i> 'Northwest') planted at 50% density (14m O/C) = 270 trees = +/- \$135,000



Figure 16: Demonstration Site 3: Agricultural Fringe

8.0 Open Space Planning: Policy and Legislative Framework

The provision of open space planning, parks and recreation in Alberta municipalities is predominantly led at a local level. At the same time there are influencing factors such as grant opportunities, environmental regulation and both government and non-government initiatives at higher levels of government that impact parks and recreation. The following is a general summary of the different levels of governance and the types of considerations that apply to open space, parks and recreation.

8.1 Existing Federal Policy and Legislation

i) Federal Acts and Legislation

While federal acts and legislation do not govern or regulate recreation in a municipality, it has a significant influence on the development within some natural areas such as waterways that contain fish or have the potential of hosting fish, and some upland natural areas that contain migratory birds or have the potential of hosting migratory birds. The Canadian Environmental Protection Act, Migratory Birds Act, Species at Risk Act, Environment Act, Impact Assessment Act, Canada Transport Act, amongst others are all pertinent to the planning, maintaining and operations of many recreational activities in municipalities alike Sturgeon County.

8.2 National Guidelines for Recreation

i) Parks for All (2017)

Developed in 2017 by the Canadian Parks and Recreation Association (CPRA) and the Canadian Parks Council (CPC), Parks for All presents a vision for parks as well as four strategic directions.

Vision: Connected Canadian parklands and waters that support healthy Nature and healthy people in harmony for generations to come, backed by an active, diverse parks community that cultivates shared goals, mutual respect, and collective action.



Strategic Directions:

Collaborate

Nurturing partnerships between Indigenous organizations and the broader parks community;
Collaborating with new and diverse sectors; and
Strategizing beyond park boundaries.

Connect

Raising public awareness of our parks;
Facilitating experiences which connect visitors with nature; and
Sharing stories and successes to inspire more engagement.

Conserve

Expanding Canada's park system;
Enhancing parks planning and management; and
Enhancing ecosystem service benefits from parks.

Lead

Setting ambitious examples that can pave the way for others, in Canada and internationally;
Building the capability of current and future leaders; and
Developing and maintaining systems, tools, and resources to support leaders.

This initiative provides a unified strategic direction for all parks across Canada. The vision is well suited to open space planning and development in Sturgeon County.

ii) Truth and Reconciliation

Reconciliation Canada is an Indigenous-led organization that envisions a vibrant Canada where all peoples achieve their full potential and shared prosperity through meaningful relationships, values-based dialogue, leadership and action. Several "calls to action" were outlined in the Truth and Reconciliation report commissioned by Reconciliation Canada in 2016. Some of the calls to action are pertinent to the public delivery of recreation services.

- Call to Action 66: We call upon the federal government to establish multiyear funding for community-based youth organizations to deliver programs on reconciliation.
- Call to Action 67: We call upon the federal government to provide funding to the Canadian Museums Association to undertake, in collaboration with Aboriginal peoples, a national review of museum policies and best practices.
- Call to Action 87: We call upon all levels of government, in collaboration with Aboriginal peoples, sports halls of fame, and other relevant organizations, to provide public education that tells the national story of Aboriginal athletes in history.
- Call to Action 88: We call upon all levels of government to take action to ensure long-term Aboriginal athlete development and growth, and continued support for the North American Indigenous Games, including funding to host the games and for provincial and territorial team preparation and travel.

iii) A Framework for Recreation in Canada: Pathways to Wellbeing (2015)

The Framework provides a new vision for recreation and identifies common ways of thinking about the role of recreation in Canadian life, based on clear goals and underlying values and

principles. It has been endorsed by the Government of Canada, Provincial and Territorial Ministers, the Canadian Parks and Recreation Association, Provincial and Territorial Parks and Recreation Associations and the Federation of Canadian Municipalities. The Framework provides a renewed definition of recreation: Recreation is the experience that results from freely chosen participation in physical, social, intellectual, creative and spiritual pursuits that enhance individual and community wellbeing.

8.3 Existing Provincial Policy and Legislation

i) Provincial Bills, Acts and Regulations

While provincial bills, acts and regulations do not govern or regulate recreation in a municipality, it has a significant influence on the development within some natural areas such as permanent or ephemeral wetlands, bed and shore of certain waterbodies such as the Sturgeon River and its tributaries, urban forests that contain or have the potential to contain wildlife, open grasslands that contain or have the potential to contain rare plants, amongst others. Some of the pertinent Acts relevant to the planning, maintenance and active use of the environment include Public Lands Act, Historical Resources Act, Natural Resources Act, Wildlife Act, amongst others.

8.4 Provincial Guidelines for Recreation

i) Active Alberta 2011-2021

Recreation, active living and sport are vitally important to Albertans. Research clearly points to the importance of active lifestyles to the physical, social and emotional health and well-being of individuals and their communities. This resource outlines a 10-year policy to refocus government initiatives, challenge partners, and encourage Albertans to become more active. Active Alberta sets out a vision for recreation, active living and sport: Albertans enjoy a high quality of life, improved health and wellness, strong communities, economic benefits and personal fulfillment, through recreation, active living and sport.

ii) Spirit of Alberta: Alberta's Cultural Policy (2008)

Launched in January 2008, this policy provides a framework for decision-making related to the support, growth and development of culture. Based on extensive research and public consultation, the Spirit of Alberta policy reflects the broad view of Albertan culture, encompassing the arts, our heritage, natural landscapes and recreation. The policy is focused around four keystones, including access, capacity, excellence and growth of cultural industries.

Recreation, active living and sport are integral to the culture of Alberta. As the Spirit of Alberta: Alberta's Cultural Policy states, recreation and sport are included in our definition of Alberta's culture and: "...culture is the glue that connects us as individuals to our communities, fostering unity, civility and a sense of belonging, pride and caring for our fellow citizens."

9.0 Open Space Project Decision-Making

9.1 Outstanding Capital Projects

i) Current Capital Plans

Tables found in Appendix B - Capital Project Summary Chart identifies a list of capital projects. The status of these projects have been noted, along with estimated capital costs, priority level in short, medium or long-term horizons, a description of the project and the source report or initiative that inspired the project. In summary, there are approximately 35 projects included on this list as outstanding projects, many of which are related to trail development.

ii) Trails Planning

Past engagement of the 2016 Open Space Plan identified that trails were by far the most prominent recreational amenity in demand by residents. In October 2021 the County pursued a gap analysis for its trail system in the developed area of the Sturgeon Valley, with the goal of highlighting the deficiencies in the existing trail system, guiding connectivity planning and determining necessary funding for future enhancements and improvement of service delivery standards for non-vehicular mobility. The study resulted in an assessment that:

- confirmed the vision for the trails system;
- confirmed the feasibility of neighbourhood trail connections through undeveloped utility corridors; and
- developed options for active transportation routes along the main roads through the valley (Bellerose Drive, Sturgeon Road, Starkey Road, Old Coal Mine Road, and Estates Way West and East).

An engagement program identified desired routes for trails, barriers to trail use in the County, key destinations and a draft trails and active transportation network system for the Sturgeon Valley area. Overall, this process influenced the prioritization of trail development projects within the project limits.



9.2 Prioritizing Future Capital Projects

Figure 17 - Capital Project Scoring Matrix for Parks and Open Space identifies a number of criteria indifferent categories by which future capital projects can be assessed. Each criteria holds a different weighting. Through the selection of scoring for each of the criteria, a total value can be determined that allows comparison between projects. The following provides a general statement for potential values resulting from using this matrix:

Table 2 - General Description of Scoring Matrix Results

Score	Description	Proceed?
100	Perfect score (and highly unlikely). The project meets the highest of standards in all aspects of the scoring matrix.	Yes
90-100	Exceptional. The proposed project has exemplary attributes that should be given high priority for immediate planning and implementation.	Yes
70-90	High. The project received the highest ranks in most categories and should be considered for implementation.	Yes
50-70	Moderate. The project has very good merits in many categories while not meeting targets in many areas. Explore improving the project in some areas if possible.	Consider adjustments
30-50	Good. The project has strengths in limited criteria while scoring poorly in several others.	Consider adjustments
0-30	Poor. The project has criteria with significant weaknesses and should be re-calibrated prior to consideration.	No

An assessment of each capital project was not conducted as part of this master plan update. The following figure identifies the proposed scoring matrix. To demonstrate the scoring of a project, the values identified in red are based on the example candidate project shown on Figure 16 - Candidate Site #3: Agricultural Fringe. This example evaluation using the scoring tool results in a total aggregate score of 84, which falls into the “high” description as shown on Table 2 - General Description of Scoring Matrix Results.

It is important to recognize that this scoring matrix can be adjusted moving forward. Strategic priorities may change, and the weighting of the various scoring criterial may be tweaked to better reflect the values of residents, Council and Administration. The scoring matrix serves as a good starting point to evaluate capital projects and it is important that it remains a living document that is re-evaluated as it is used.

Project Type: <input checked="" type="checkbox"/> New Park <input type="checkbox"/> Park Redevelopment <input type="checkbox"/> Pathway <input type="checkbox"/> Conservation							
Item	Description	Description	Value	Weight	Score	Total	
1	Strategic Importance	Project aligned to corporate priorities and outcomes.	Essential Project - there are legal, safety, regulatory or mandated reasons to pursue this project and without doing so will create legal concerns, fines or high risk of liability against the Municipality's planned growth. High degree of alignment with the Strategic Plan	100	12%	80	10
			Priority Project - projects deemed a priority to Council and will maintain critical infrastructure to residents, however are not mandatory. Very well aligned with the pillars of the Strategic Plan	80			
			Efficiency or Cost Savings Project - has a positive break-even over the life of the capital investment due to operational cost savings and will provide financial benefits in the future. Some alignment with the Strategic Plan. To do this, assess current operating and maintenance costs then evaluate potential changes	60			
			Lifecycle Maintenance - projects that maintain existing capital infrastructure in its current state. Projects are not mandatory however if not pursued, the condition of existing infrastructure will decline. Low alignment with the Strategic Plan	40			
			Improvement - projects will increase service levels such as new facilities, expanding existing infrastructure or new initiatives. Low to no alignment with the Strategic Plan	20			
2	Budget Impact	Overall Impact of Project Costs	Significant decrease in operating costs over a 10-year period, >\$100,000	100	5%	25	1
			Moderate decrease in operating costs over a 10-year period, \$50,000 to \$100,000	50			
			Marginal decrease in operating costs over a 10-year period, \$0 to \$50,000	25			
			Little or no impact to operating costs, or not applicable	0			
			Marginal increase in operating costs over a 10-year period, \$0 to \$50,000	-25			
			Moderate increase in operating costs over a 10-year period, \$50,000 to \$100,000	-50			
Significant increase in operating costs over a 10-year period, >\$100,000	-100						
3	Strategic Alignment	Compatibility with Strategic Plan, Municipal Development Plan, other statutory plans	Direct alignment will all plans	100	12%	100	12
			Indirectly aligned with some plans, but not all	50			
			No alignment with any strategic plans	0			
4	Environmental Ethic	Demonstrates environmental values	Greatly improves natural systems by adding new or enhanced ecological features, and a clear increase in biodiversity, wise use of materials, etc.	100	20%	100	20
			Project provides improvements to natural systems such as increasing biodiversity and climate resiliency	50			
			There are minor improvements to natural systems however much of the site's ecological function will remain the same	25			
			Has no negative ecological impacts to natural systems including water, air, earth and provides an improvement to habitat for flora and fauna	0			
			Degrades the natural quality of ecological functions of a site	-25			
			Impairs or eliminates more than 50% of the ecological functions of a site	-50			
Eradicates natural conditions of a site and eliminates natural habitat for flora and fauna	-100						
5	Public Risk	The extent to which the project will address / mitigate risk to public health and / or occupational health and safety	Risks to the public once posed by the site are now eliminated and passes a CPTED evaluation	100	12%	100	12
			There are no risks to the public, and personal safety on site remains the same as prior to implementing this project, generally meets CPTED guidelines	0			
			Risks to the public are unavoidable and mitigation measures must be put into place, does not meet CPTED guidelines	-50			
6	Trends & Leading Practices	Now this project aligns with current trends and leading practices in recreation	Demonstrates innovation (is new to the region) and brings a high degree of conformance with local, provincial and national trends and leading practices for recreation	100	9%	100	9
			Aligns with local, provincial and national trends and leading practices for recreation	50			
			Has minor alignment with trends and leading practices	25			
			Does not align with the trends and leading practices	0			
7	Sense of Place and Community	How the project reflects local values, promotes the County's sense of place	The project has significant contributions to promoting local identity and sense of place for the County	50	10%	50	5
			The project acknowledges local identity and is suited to the County	0			
			The project does not have attributes that reflect local identity and does not promote sense of place	-50			
8	Staff Capacity and Support	The County has existing staff to deliver on the project	The County maintains staff with the necessary skills and availability to the project to self-deliver	100	10%	50	5
			The County would need to hire outside consulting / contractor assistance to deliver the project, which is readily available in the region	50			
			The expertise and capacity does not currently exist internal to the County nor is it readily available in the region	0			
9	Funding Sources	Where the capital and operating costs are coming from	Both capital and operating costs are from external sources, from other levels of government, partnerships, other grants	200	10%	50	10
			75% to 99% of project financing is from external sources	100			
			25% to 74% of project financing is from external sources	50			
			Less than 25% of the project is financed from an external source	25			
			Project is financed entirely through municipal budgets	0			
100%						84	

Figure 17 - Capital Project Scoring Matrix for Parks and Open Space (used to determine project readiness)

Recommended Action #11: implement the practice of completing the Capital Project Scoring Matrix for Parks and Open Space for all future projects to help prioritize projects against one another, and to identify areas where improvements can be made to the project charter prior and terms of reference prior to proceeding.

9.3 Competencies for Project Delivery

Planning for parks and open space development requires a diverse set of competencies. Alike many comparable municipalities, Sturgeon County has a vast range of competencies amongst its staff that includes planning, legal services, public engagement, parks planning, engineering, agrology and a variety of technical services such as GIS and CAD support. The process of identifying ideal park sites through to implementation and long-term management necessitates this range of expertise. Further, the consulting market in the greater Edmonton area has all the necessary talents to deliver any project seen in Sturgeon County. The development of open space and the process needed to realize projects require a variety of expertise, therefore having a full range of perspectives is essential. While projects may be led by staff from the Community Services team, having a collaborative environment that allows for staff from other departments is essential.

Recommended Action #12: internal policy should mandate a collaborative environment amongst administrative staff to help with the planning, delivery, implementation and long-term management of open space projects. Administrative structure should foster support from different departments to help deliver capital projects related to open space and to maintain open spaces in the long-term.



9.4 Land Acquisition Tools

There are various means of securing land for the purpose of parks and open space development and protecting ecological systems from pressures of development and human use. In Alberta, many of these tools are available to municipalities as defined in the Municipal Government Act (MGA) as well as the Alberta Land Stewardship Act. The following describe some tools that can be used to formally and legally designate parcels of land for the purpose of dedicating land for recreation, preservation, conservation and protection from future alteration that may degrade or eliminate natural qualities of the land.

Division 8 of the MGA provides a municipality the authority to require a landowner to dedicate land for a certain municipal use, such as Environmental Reserve (ER) and Municipal Reserve (MR). Through this process, there are limitations to the amount and characteristics of the land that can be taken. Oftentimes taking of lands do not allow for sufficient areas to have an impact to the type of ecosystem intended to preserve or protect. For example, land take as ER serves the protection of riparian ecosystems well, however, does not provide for the ability to take adequate buffers beyond the limits of lands that qualify as ER. The County is encouraged to develop policy to work with private landowners adjacent to ER or MR areas to explore other tools such as conservation easements, giving land through land trusts or other private initiatives in key locations of critical ecological significance, which leaves the land title in the name of the original landowner but is managed in a different way that may achieve conservation and preservation efforts.

Recommended Action #13: work with private landowners adjacent to ER or MR areas to explore other tools such as conservation easements, giving land through land trusts or other private initiatives in key locations of critical ecological significance to create added buffers to ER or MR or establish stepping stones to and amongst regional ecological systems.

i) Environmental Reserve

The Municipal Government Act includes the ability for a municipality to determine land as Environmental Reserve (ER). This land is typically unsuitable for significant development and is comprised of land classified as a swamp, gully, ravine, coulee, floodplain or land nearby a body of water. Any development with ER is usually limited to access trails. ER is usually dedicated during the process of subdividing privately owned land, whereby the reserve land is taken by the municipality for the purpose of ensuring development is restricted from the area of land unsuited to development and for environmental preservation reasons. Taking ER also helps to protect the public by identifying problematic lands that may be unstable for development or create unsafe conditions for people during day-to-day use.

ii) Municipal Reserve

Municipal reserve is a second means for a municipality to take land under the MGA. Typically done at the time of area structure planning, municipalities can take up to 10% of a total land area, minus any area to be taken or already taken as ER, as municipal reserve, school reserve or

municipal and school reserve. The land transaction typically takes place at the time of subdivision. MR areas are intended to have a recreational focus, providing access for all people into these spaces for a variety of recreational opportunities. In some contexts, MR land is left intact and can be patches of forested land, grasslands or otherwise natural habitat. In most cases, the land is converted into some form that allows for more planned recreation such as sports fields, playground developments, amongst other uses.

iii) Land Trusts

A land trust is “a not-for-profit, non-government organization established to promote the conservation of biodiversity on private land” (Alberta, 2021). Land trusts typically focus on land conservation initiatives and held by societies that are non-profit and charitable organizations. They more often than not are focused on protecting sensitive or otherwise significant natural habitat and usually encourage sustainable human use for education, recreation and social functions. Land trusts are similar to other legal trusts, whereby a grantor sets unique terms and conditions that fit their needs.

Any land in Alberta that is established into a land trust must demonstrate that the intended use of the land aligns with the government’s overall conservation objectives. Funding is available for projects that land trusts and conservation efforts under the Alberta Land Trust Grant Program. Alberta Environment and Parks is the provincial department that administers this program, and their conservation priorities are focused on maintaining large areas of native landscape, conserving connecting corridors, sustaining disconnected pockets of native habitat within fragmented landscapes and supporting watershed functions for healthy aquatic ecosystems and water quality (Province of Alberta, 2021).



iv) Conservation Easements

The Alberta Land Stewardship Act includes the Conservation Easement Registration Regulation, last updated in early 2021. This Regulation allows the formal designation of lands for the protection, conservation and enhancement of the environment, of natural scenic or aesthetic values and of agricultural land or land for agricultural purposes. These protection efforts must be focused on land with the intended purpose of recreational use, open space use, environmental education use, or for use for research and scientific studies of natural ecosystems. The regulation provides clear rules concerning the registration of a conservation easement and will then add the parcel to a provincial-wide registry of all registered lands.

Recommended Action #14: conduct a County-wide review of ecological systems and update the 1989 Environmentally Sensitive Areas Technical Report to review all public land as well as privately held lands that may qualify as ER, CR or be candidates for conservation easements.

v) Green Acreages Program

Throughout Alberta, many small acreage, hobby farm and recreational property owners are looking to manage their land in a more sustainable manner. The program seeks to provide landowners the ability to implement stewardship programs to conserve and protect natural assets such as air, land, water and wildlife. Funding comes from Alberta's Watershed Resiliency and Restoration Program, providing access to landowners for cost-sharing of landowner-identified projects. Examples of projects include:

- projects that enhance natural watershed function;
- wetland enhancements, such as enhancing riparian and upland vegetation associated with wetlands
- stormwater management, such as erosion controls, planting vegetation, wetland enhancements or construction, hydrologic function enhancement for the watershed (may include planting, contouring, wetland construction), floodplain restoration, low-impact developments (such as rain gardens and bioswales);
- riparian zone enhancements through planting and buffers;
- shoreline remediation and/or re-naturalization, such as planting native species, reinforcing shoreline through soil bioengineering and other natural methods;
- erosion reduction measures (e.g., shoreline or riparian naturalization with native plants, establishing a buffer of native plants between landscaped areas and bodies of water, and re-establishment of shorelines through soil bioengineering and other natural methods);
- exclusion fencing, off-site watering systems and stream crossings (e.g., to keep livestock out of water bodies and away from riparian areas); and
- use of native species in planting initiatives.

Information seminars are made available through various municipalities, and workbooks with background information is available to people with interest in the program. The Green Acreages program is geared solely toward individual landowner initiatives, and not directed toward public open space. On the other hand, systems-based planning initiatives are

important to help conserve, protect and enhance natural systems that span both private and public property.

Recommended Action #15: put an emphasis on promoting the Green Acreages Program to help build a stronger environmental ethic amongst residents, and to help establish more ecological stepping stones.

9.5 Recommendation for Additional Local Policy

Throughout this document various policy statements or policy direction were identified in text boxes. The following summarizes the various policy recommendations made in this plan:

- **Section 3.3 – Recommended Action:** formulate policies so that they consider ecological impacts at a County-wide or watershed scale opposed to limiting impacts at a site scale;
- **Section 4.0 – Trends and Leading Practices in Recreation:** apply national, provincial and regional trends and leading practices into newly proposed capital project plans to determine alignment and support project selection;
- **Section 5.2 – Level of Service and Distribution Analysis:** ensure that there is a strong representation of open space typologies right across the transect provided, adding inventory to the open space network in areas that the system is deficient in;
- **Section 9.3 – Competencies for Project Delivery:** internal policy should encourage a collaborative environment amongst administrative staff to help with the planning, delivery, implementation and long-term management of open space projects;
- **Section 9.4 – Land Acquisition Tools:** develop policy to work with private landowners adjacent to ER or MR areas to explore other tools such as conservation easements, giving land through land trusts or other private initiatives in key locations of critical ecological significance; and
- **Section 9.4 – Land Acquisition Tools:** conduct a County-wide review of ecological systems and update the 1989 Environmentally Sensitive Areas Technical Report to review all public land as well as privately held lands that may qualify as ER, CR or be candidates for conservation easements.

It is recommended that the above policy direction be written into statutory plans such as the next iteration of the Municipal Development Plan, or that specific policies be drafted to address these statements. Some of these statements can be rolled into the same policy.

10.0 Summary: Consolidated List of Recommendations

This update to the 2016 Open Space plan provides two main changes. First, the update rationalizes how open space is classified by including a new transect with four categories and 16 classifications of open space. This process identified that the County does not have an excess of any one category, and that there is a need to develop new types of open space as the County grows and population increases. Secondly, an evaluation tool was developed that will help to prioritize various projects against one another, ensure alignment with County-supported goals and objectives and to improve upon projects prior to implementing them.

Throughout the document, 15 recommended actions were included and are summarized as follows:

Recommended Action #1: open space policies and the way in which sites are planned and developed needs to strike a fine balance between maximizing human recreation potential and ensuring ecosystems can thrive.

Recommended Action #2: open space planning and design should be coordinated with the desired community outcomes that have been identified in the 2021 Sturgeon County Strategic Plan for 2022-2025 as each of the guiding principles, community outcomes and the overall vision are directly relevant to open space planning.

Recommended Action #3: formulate policies so that they consider ecological impacts at a County-wide or watershed scale opposed to limiting impacts at a site scale. Partnerships with entities such as Alberta Biodiversity Monitoring Institute (ABMI), is recommended.



Recommended Action #4: apply national, provincial and regional trends and leading practices into newly proposed capital project plans to determine alignment and support project selection.

Recommended Action #5: promote education of Sturgeon County residents and landowners on the value of protecting natural systems and forge a stronger environmental ethic: value in a balanced sense that considers a balance of ecological, human health and monetary benefits.

Recommended Action #6: the County's asset management system needs to include the inventory of public open space, recreational amenities and all parks assets. The asset management plan must address the needs for infrastructure renewal while having equal importance on preserving natural systems.

Recommended Action #7: Sturgeon County is encouraged to create development guidelines and policy that includes principles of biodiversity and low impact development to help prioritize the protection of the natural environment.

Recommended Action #8: ensure that there is a strong representation of open space typologies right across the transect provided, adding inventory to the open space network in areas that the system is deficient in as development continues and Municipal Reserve dedications and land swapping opportunities become available.

Recommended Action #9: prohibit the disposition of open space given the low supply of open space across the transect of different typologies. Develop a focus on enhancement of existing typologies and conduct a more detailed enhancement plan for key open spaces to more precisely delineate appropriate uses, setback requirements and environmental enhancement initiatives.

Recommended Action #10: encourage public education and develop stronger partnerships with private landowners to help preserve in-tact natural areas and to promote biodiversity, such as the Alternative Land Use Services (ALUS) program that is common here in Alberta.

Recommended Action #11: implement the practice of completing the Capital Project Scoring Matrix for Parks and Open Space for all future projects to help prioritize projects against one another, and to identify areas where improvements can be made to the project charter prior and terms of reference prior to proceeding.

Recommended Action #12: internal policy should mandate a collaborative environment amongst administrative staff to help with the planning, delivery, implementation and long-term management of open space projects. Administrative structure should foster support from different departments to help deliver capital projects related to open space and to maintain open spaces in the long-term.

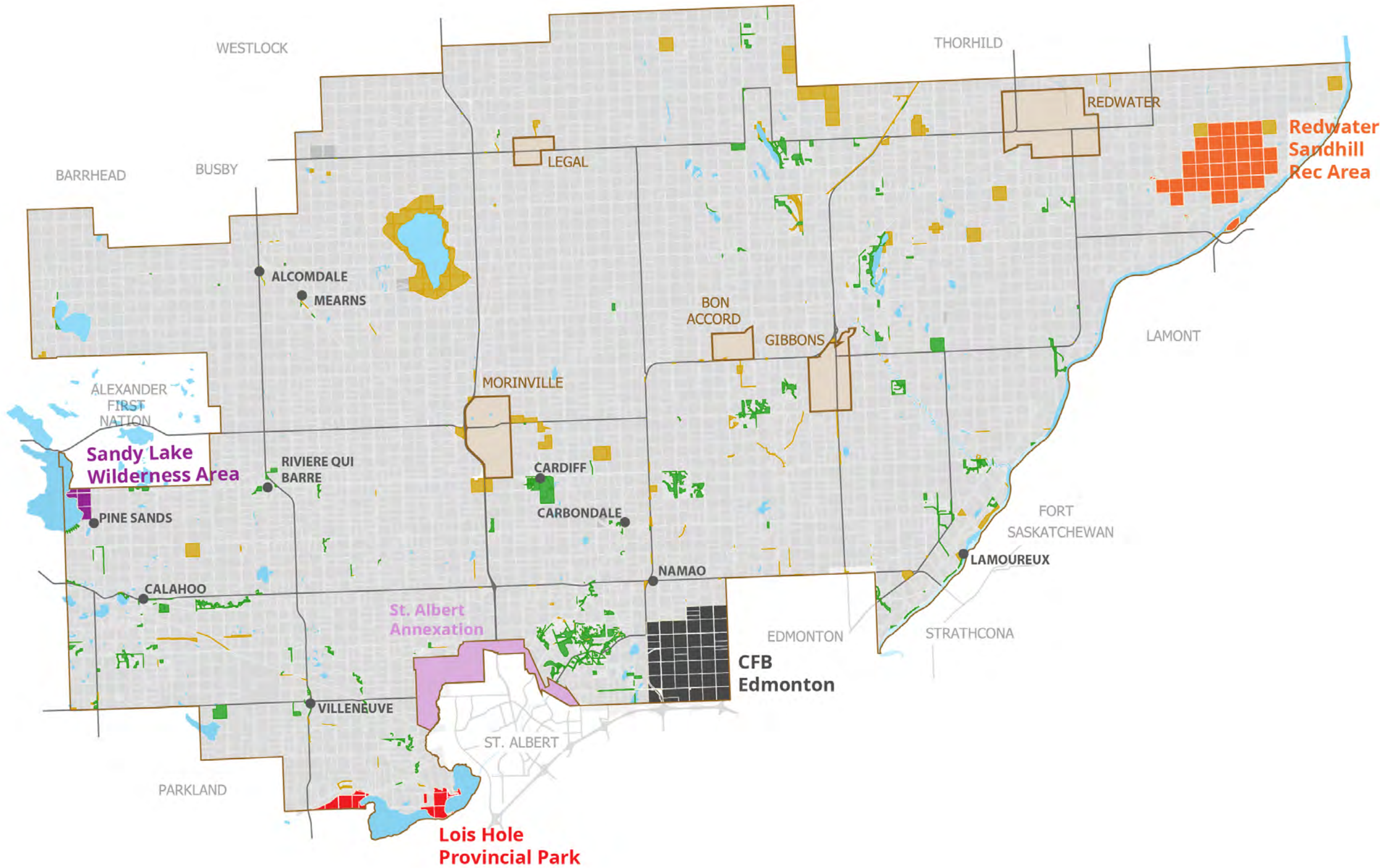
Recommended Action #13: work with private landowners adjacent to ER or MR areas to explore other tools such as conservation easements, giving land through land trusts or other private initiatives in key locations of critical ecological significance to create added buffers to ER or MR or establish stepping stones to and amongst regional ecological systems.

Recommended Action #14: conduct a County-wide review of ecological systems and update the 1989 Environmentally Sensitive Areas Technical Report to review all public land as well as privately held lands that may qualify as ER, CR or be candidates for conservation easements.

Recommended Action #15: put an emphasis on promoting the Green Acreages Program to help build a stronger environmental ethic amongst residents, and to help establish more ecological stepping stones.

Appendix A: Maps

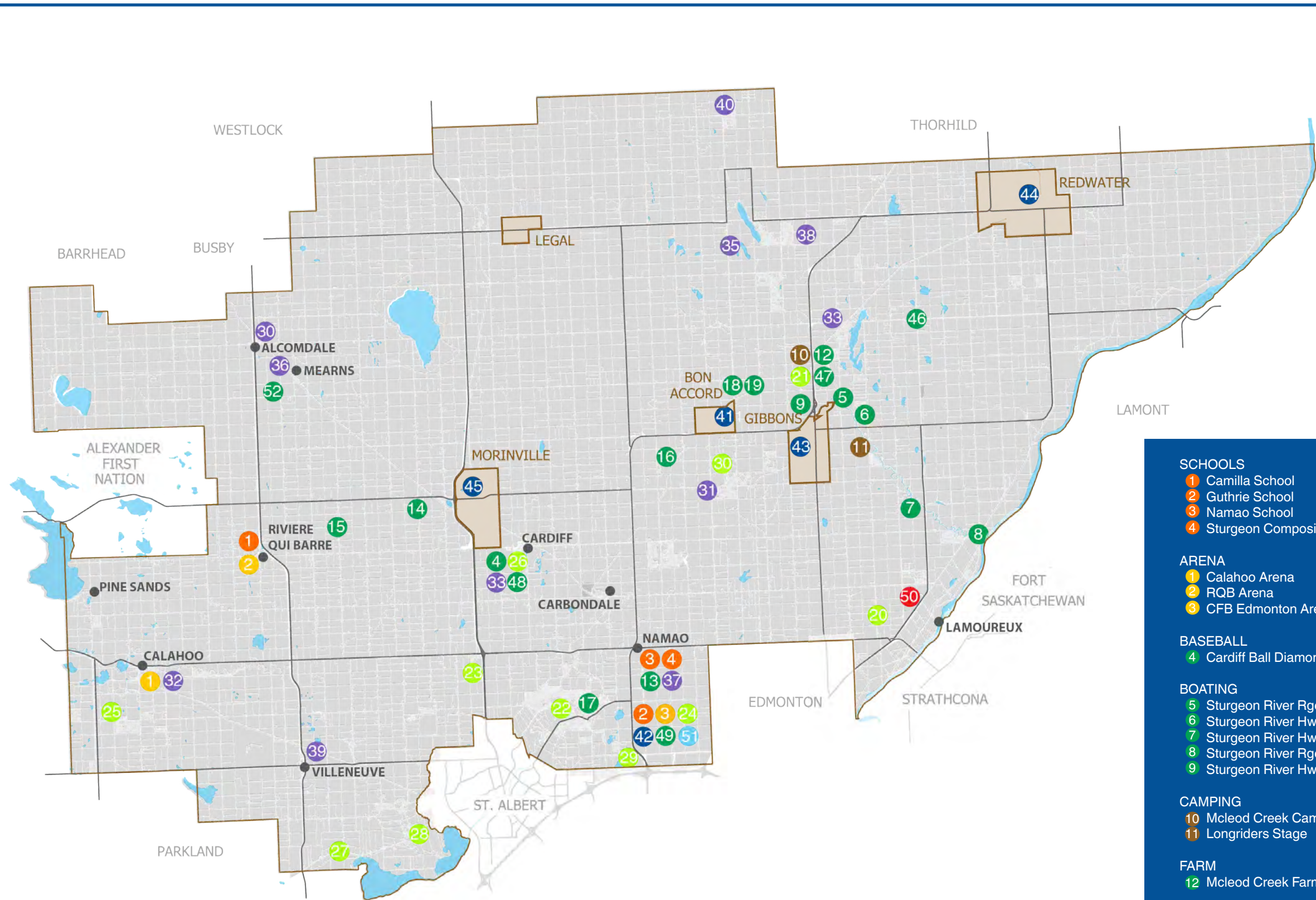




- ### LEGEND
- Sturgeon County lands
 - Crown/provincial lands
 - Local Municipalities
 - St. Albert Annexation
 - CFB Edmonton
 - Lois Hole Provincial Park
 - Redwater Sandhill Rec Area
 - Sandy Lake Wilderness Area

Public Land Ownership





- GOLF**
- 23 Fort In View Golf Course
 - 24 Goose Hummock Golf Resort
 - 25 Sturgeon Valley Golf and Country Club
 - 26 Terrae Pines Golf and Country Club
 - 27 Lancaster Golf
 - 28 Calahoo Hills
 - 29 Cardiff Park Golf
 - 30 JR's Golf Course
 - 20 Sandpiper
 - 21 Cattail Crossing Golf & County
 - 22 Spring Creek

- HALL**
- 31 Alcomdale Hall
 - 32 Calahoo Hall
 - 33 Cardiff Hall
 - 34 Coronado Community Hall
 - 35 Fedorah Community Hall
 - 36 Mearns Community Hall
 - 37 Namao Community Hall
 - 38 Pinewood Hall
 - 39 Villeneuve Community Hall
 - 40 Waugh Community Hall

- SCHOOLS**
- 1 Camilla School
 - 2 Guthrie School
 - 3 Namao School
 - 4 Sturgeon Composite High School

- LIBRARY**
- 41 Bon Accord Library
 - 42 Edmonton Garrison Community Library
 - 43 Gibbons Public Library
 - 44 Redwater Public Library
 - 45 Morinville Public Library

- ARENA**
- 1 Calahoo Arena
 - 2 RQB Arena
 - 3 CFB Edmonton Arena

- PAINTBALL**
- 46 Quest of Adventure

- BASEBALL**
- 4 Cardiff Ball Diamonds

- PARK**
- 47 Jurassic Forrest
 - 48 Cardiff Park
 - 49 Lancaster Park

- BOATING**
- 5 Sturgeon River Rge Rd 231
 - 6 Sturgeon River Hwy 643
 - 7 Sturgeon River Hwy 825
 - 8 Sturgeon River Rge Rd 222
 - 9 Sturgeon River Hwy 28A

- RACE TRACK**
- 50 Stratotech Raceway

- CAMPING**
- 10 Mcleod Creek Campground
 - 11 Longriders Stage

- RECREATION COMPLEX**
- 51 Edmonton Garrison Rec Complex

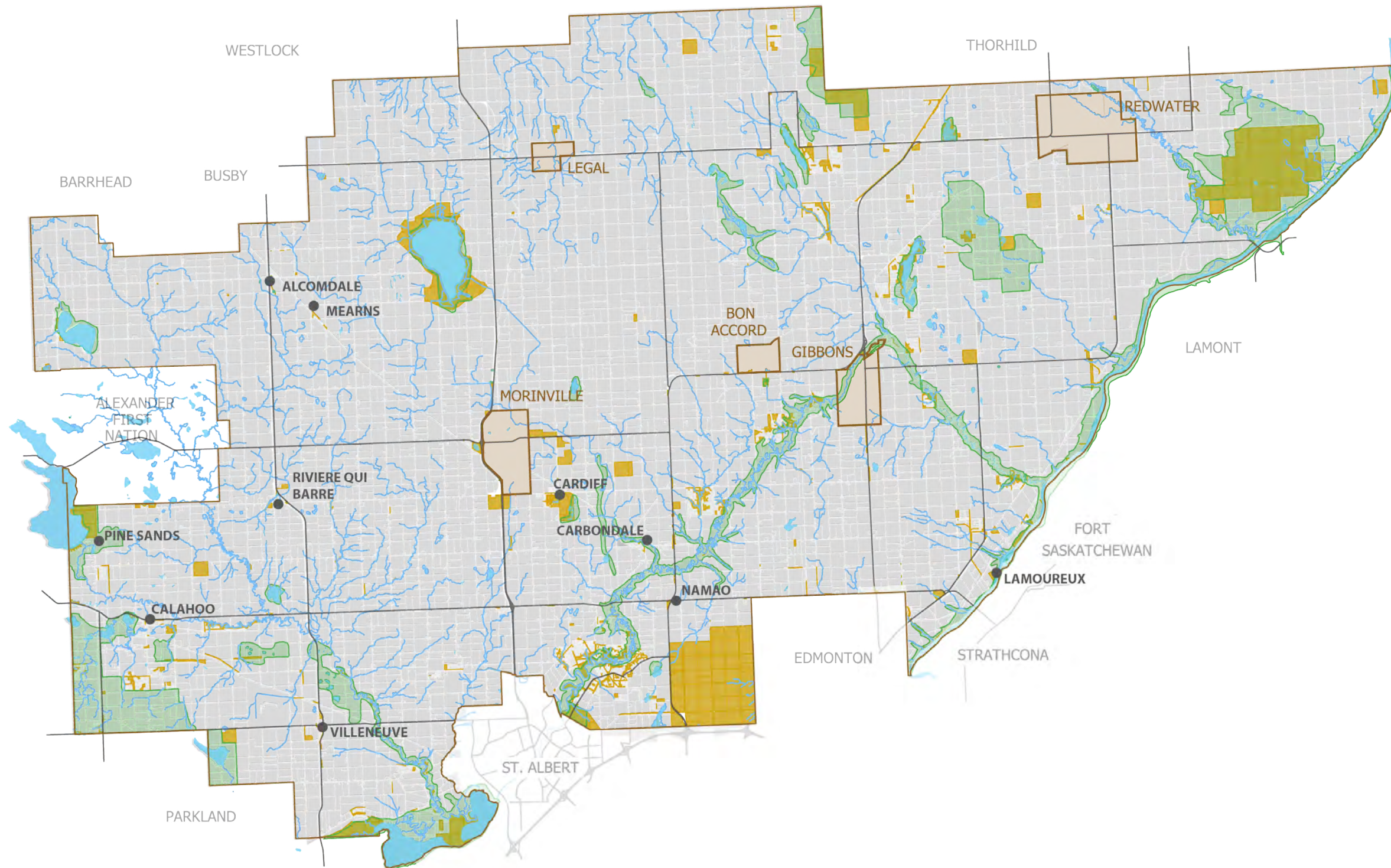
- FARM**
- 12 Mcleod Creek Farm

- WELLNESS**
- 52 Infiniti Trails 4 Healing

- GREENHOUSE**
- 13 2BK Vegetable Farm
 - 14 Deb's Greenhouse
 - 15 High Q Greenhouse
 - 16 LCJ Greenhouse
 - 17 Peas on Earth
 - 18 Prairie Gardens
 - 19 Sprout U-Pick Apple Farm

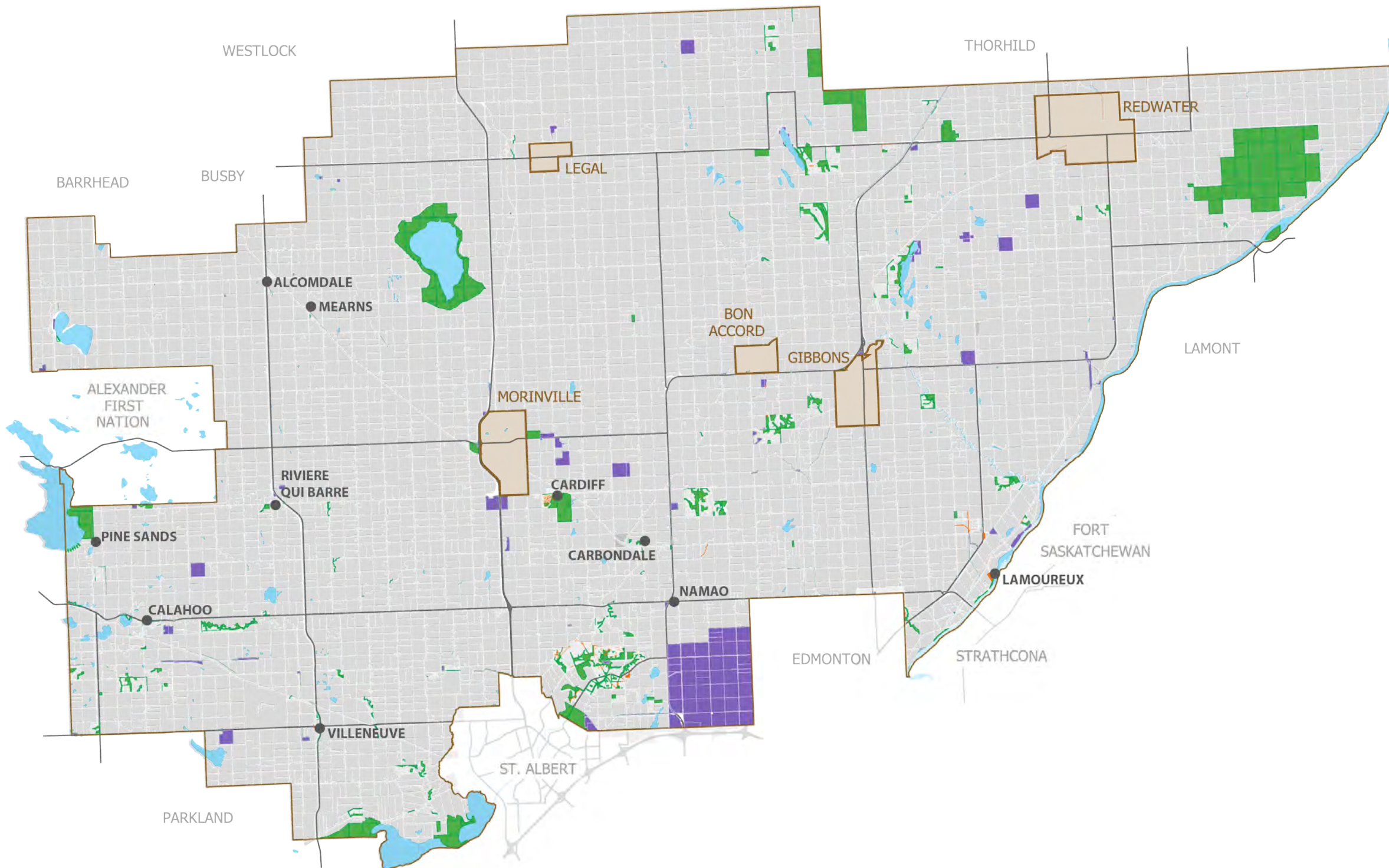
LEGEND

- Environmentally Sensitive Area
- All Public Lands



Environmentally Sensitive Area





LEGEND

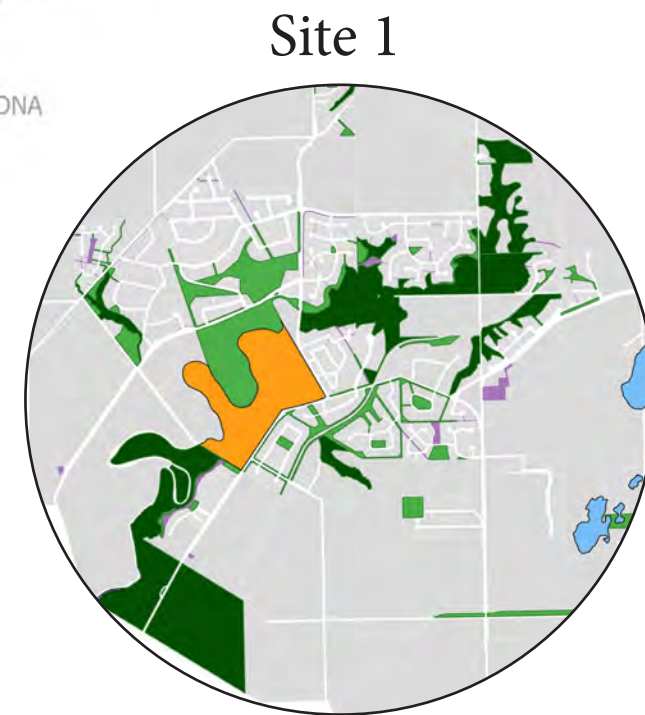
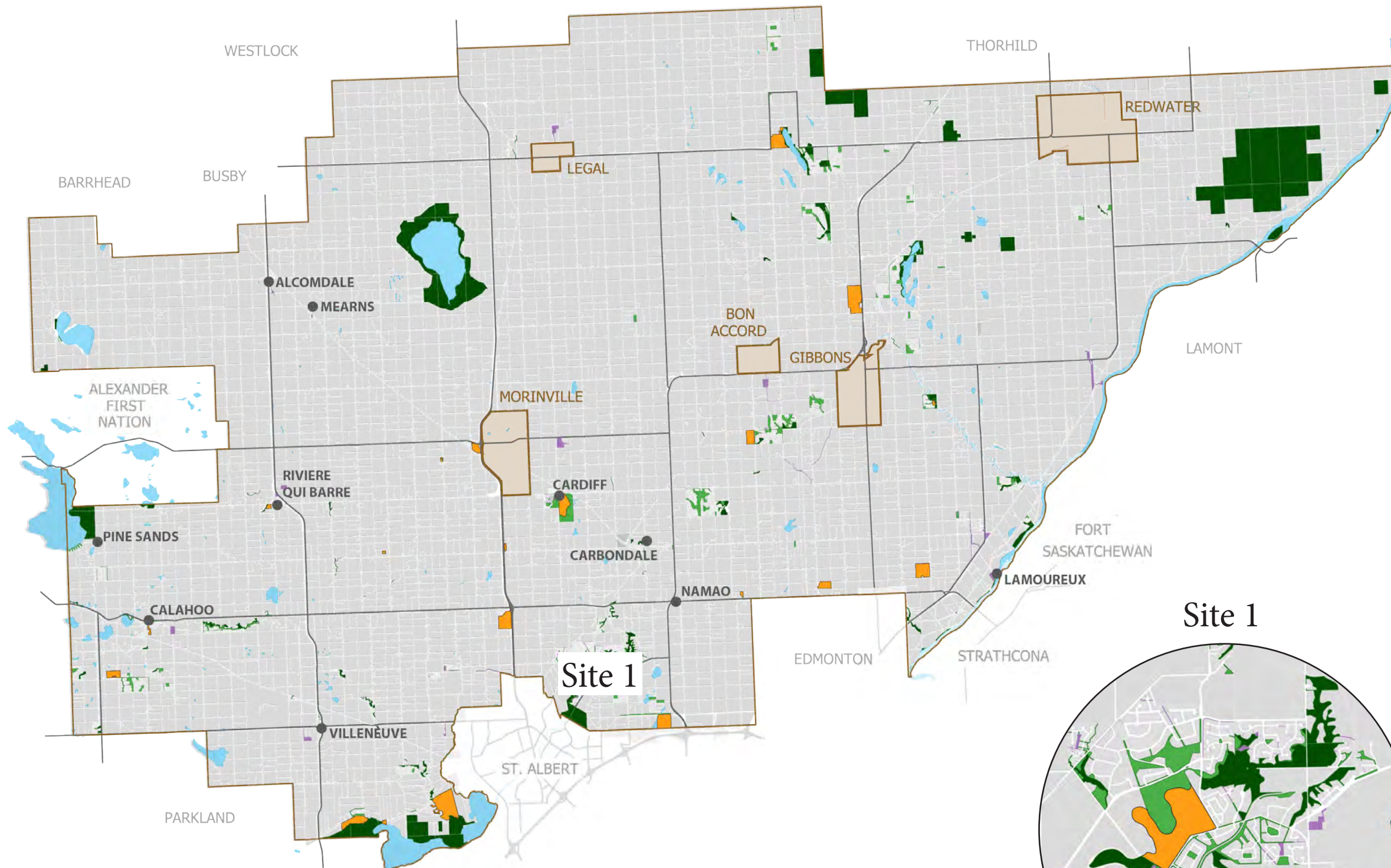
- Public Lands - Recreational
- Public Lands - Infrastructure Services
- Public Lands - Non - Recreational

Public Land Recreational Uses



LEGEND

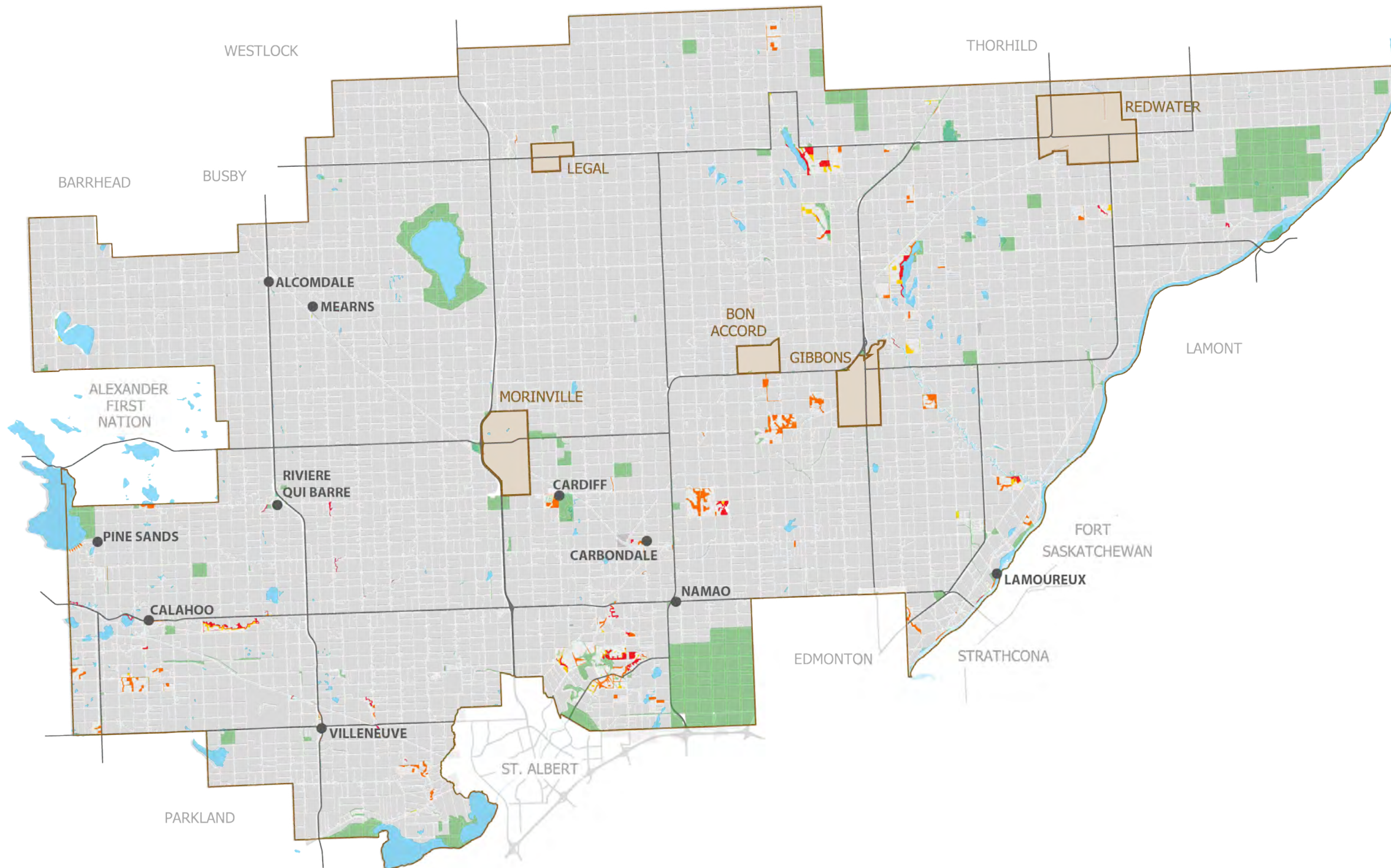
- EP - Environmental Protection
- POS - Public Open Space
- PU - Public Utility
- REC - Recreational



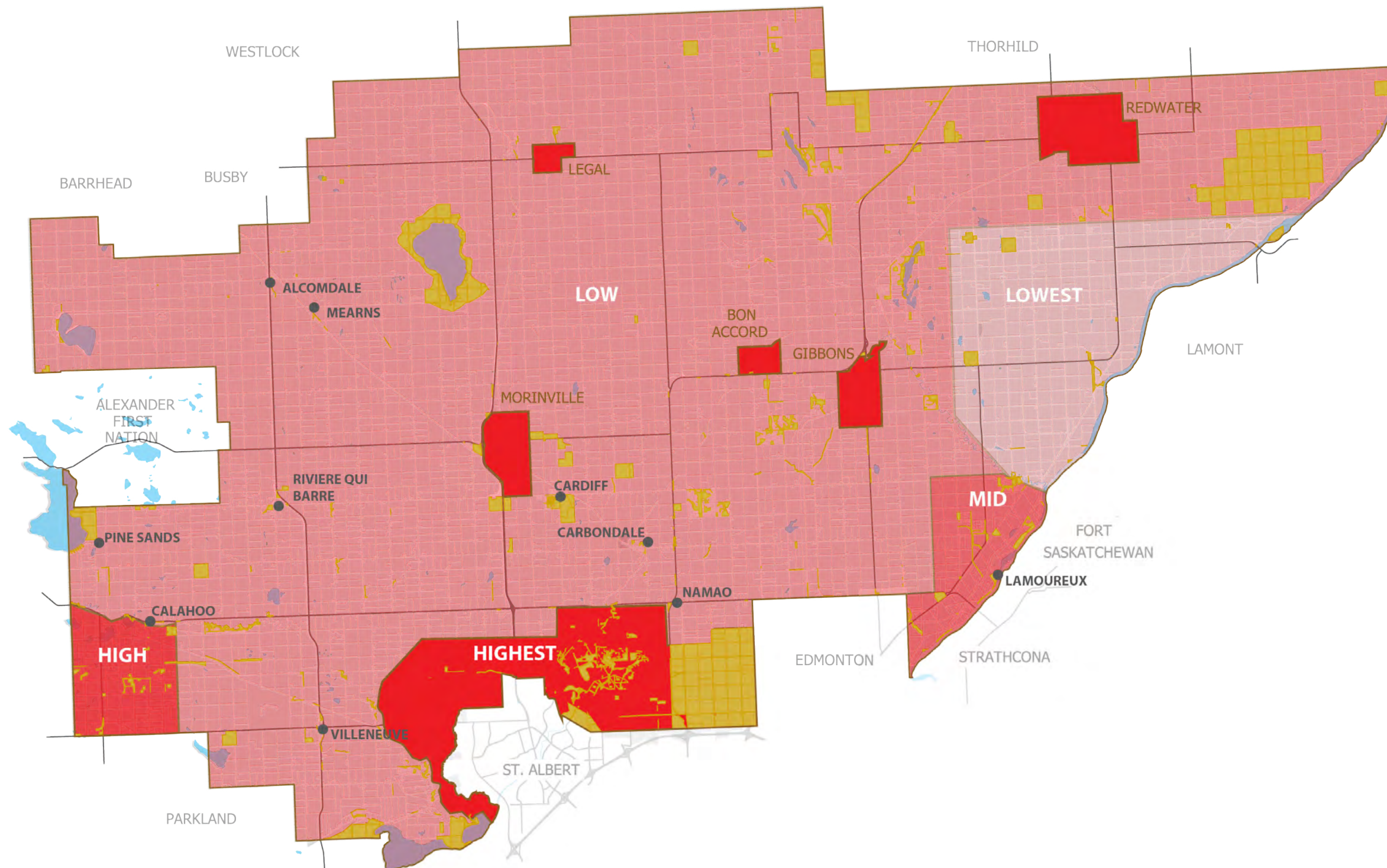
Existing Zoning

LEGEND

- ER - Environmental Reserve
- MR - Munciple Reserve
- R - Reserve
- All Public Lands



Existing Land Designations

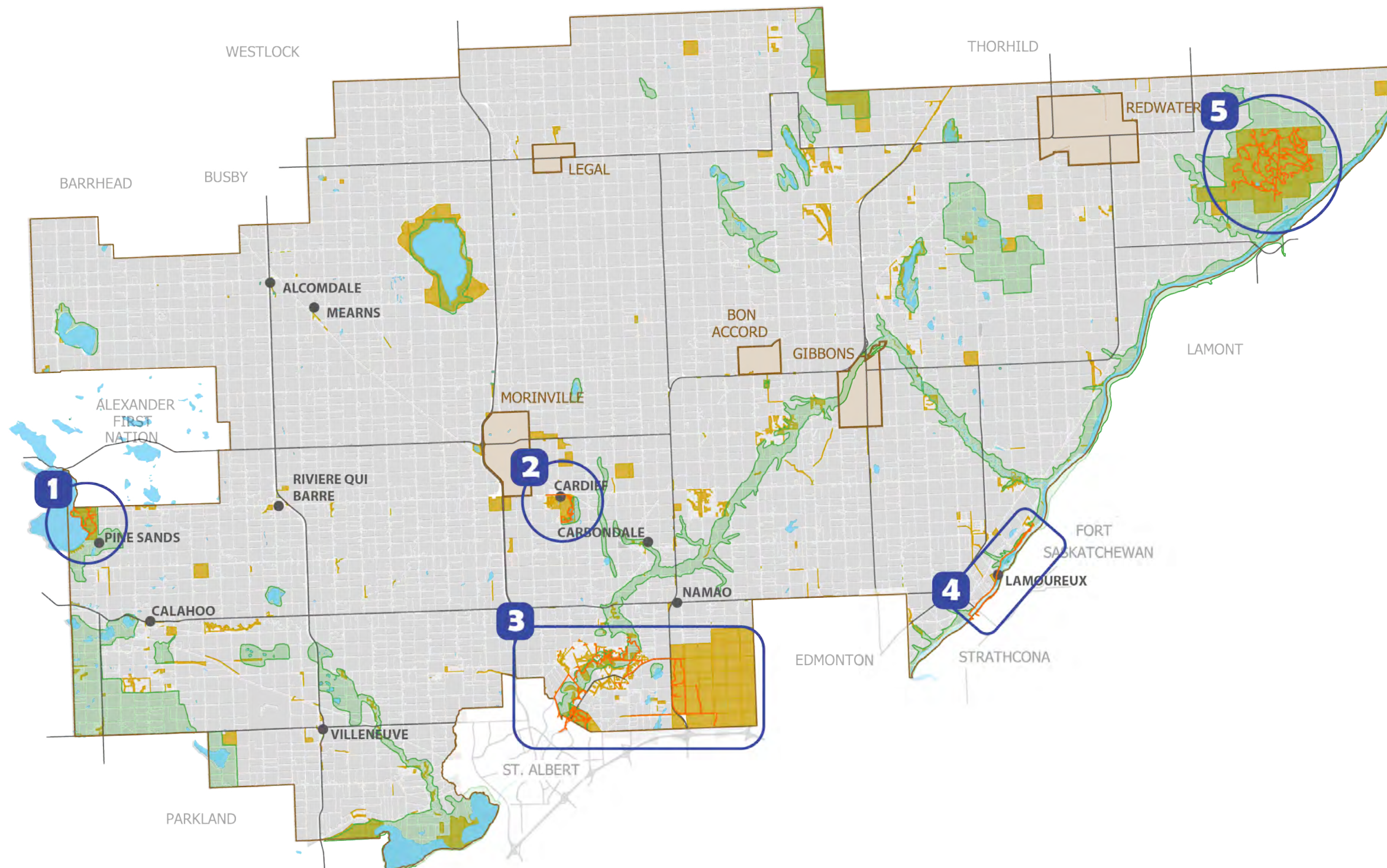


LEGEND

- Public Lands
- POPULATION DENSITY
(# OF PEOPLE PER 1000 HA OF LAND)
- Lowest Density (18)
- Low Density (60-82)
- Mid Density (114)
- High Density (218)
- Highest Density (445 and over)

Population Density - Public Lands





LEGEND

- Existing/Proposed Trails
- Environmentally Sensitive Area
- All Public Lands

NAMED TRAILS

- SITE 2
 - Cardiff Red Ribbon Trail
 - Cardiff Road Trail
- SITE 3
 - Bellerose Trail
 - Edmonton Garrison Trails
 - Old Bellerose Trail
 - Pinnacle Ridge Trail
 - River's Gate Trail
 - Riverlot 56
 - Riverstone Connector Trail
 - Riverstone Trail
 - Starkey Trail
 - Sturgeon Rd East Trail
 - Valley Trail
 - Valor Avenue Trail
- SITE 4
 - Lamoureux Trail
 - Fort Augustus Heritage Trail

Overall Existing and Proposed Trails





LEGEND

- Existing Trails
- Public Lands

SANDYLAKE WILDERNESS AREA

Existing trails surface: Dirt
Total length of trails approx. 6900m

Site 1 Existing Trails



LEGEND

Existing Trails

Public Lands

Total length of trails approx. 6400m

CARDIFF PARK

CARDIFF RED RIBBON TRAIL

Surface: Shale

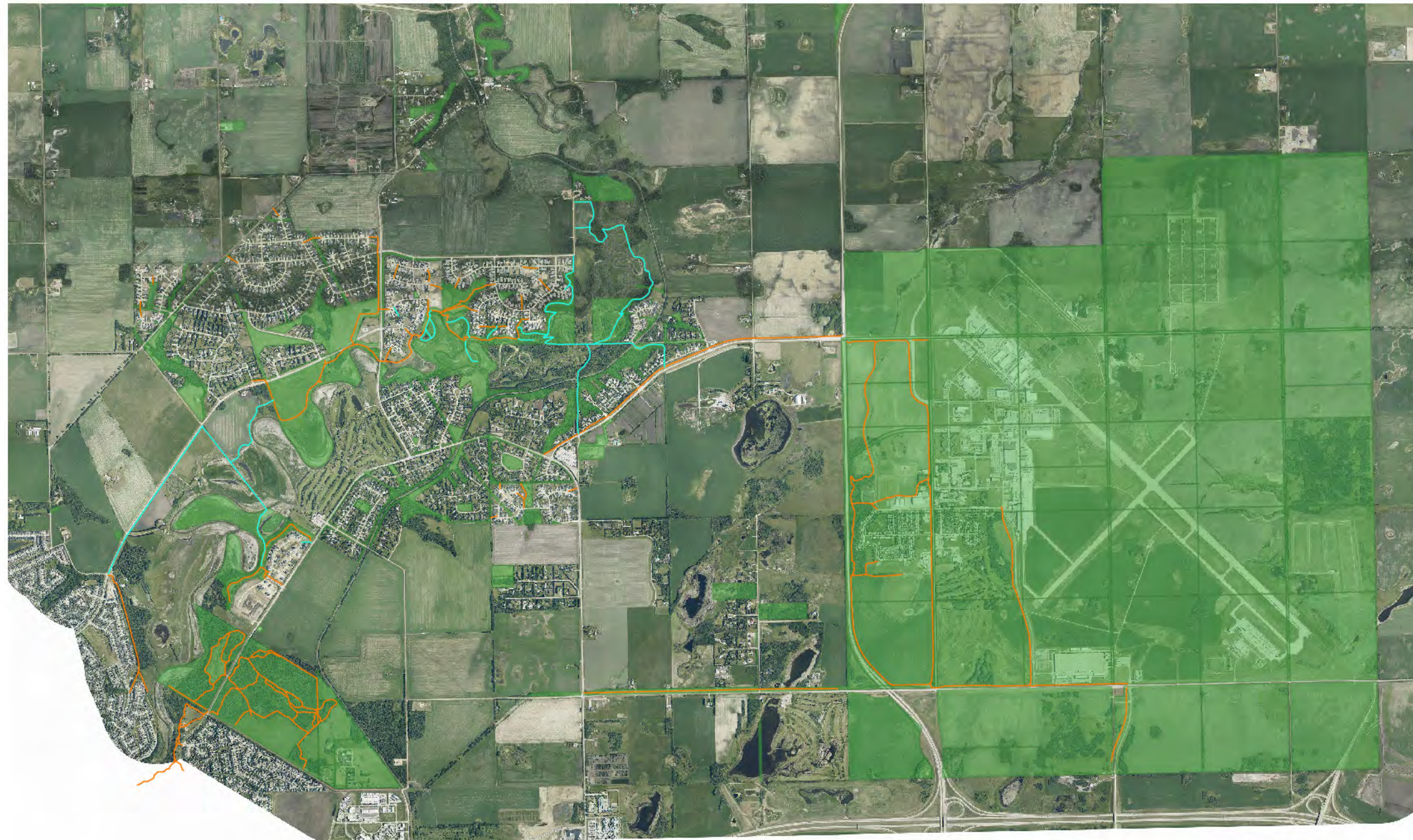
Length: 5200m

CARDIFF ROAD TRAIL

Surface: Asphalt

Length: 1200m

0 250 500m



LEGEND

- Existing Trails
Total length of trails approx. 42.1km
- Proposed Trails
Total length of trails approx. 12.3km
- Public Lands

STURGEON VALLEY

BELLEROSE TRAIL Surface: Asphalt Length: 2000m	STARKEY TRAIL Surface: Asphalt Length: 1249m
EDMONTON GARRISON TRAILS Surface: Asphalt Length: 12.2km	STURGEON RD EAST TRAIL Surface: Asphalt Length: 3061m
OLD BELLEROSE TRAIL Surface: Asphalt Length: 932m	TWP RD 542 TRAIL Surface: Asphalt Length: 2329m
PINNACLE RIDGE TRAIL Surface: Asphalt Length: 928m	VALLEY TRAIL Surface: Asphalt Length: 1194m
RIVER'S GATE TRAIL Surface: Asphalt Length: 1280m	
RIVERLOT 56 Surface: Dirt Length: 9.2km	
RIVERSTONE CONNECTOR TRAIL Surface: Asphalt Length: 300m	

0 1 2km



0 1 2km

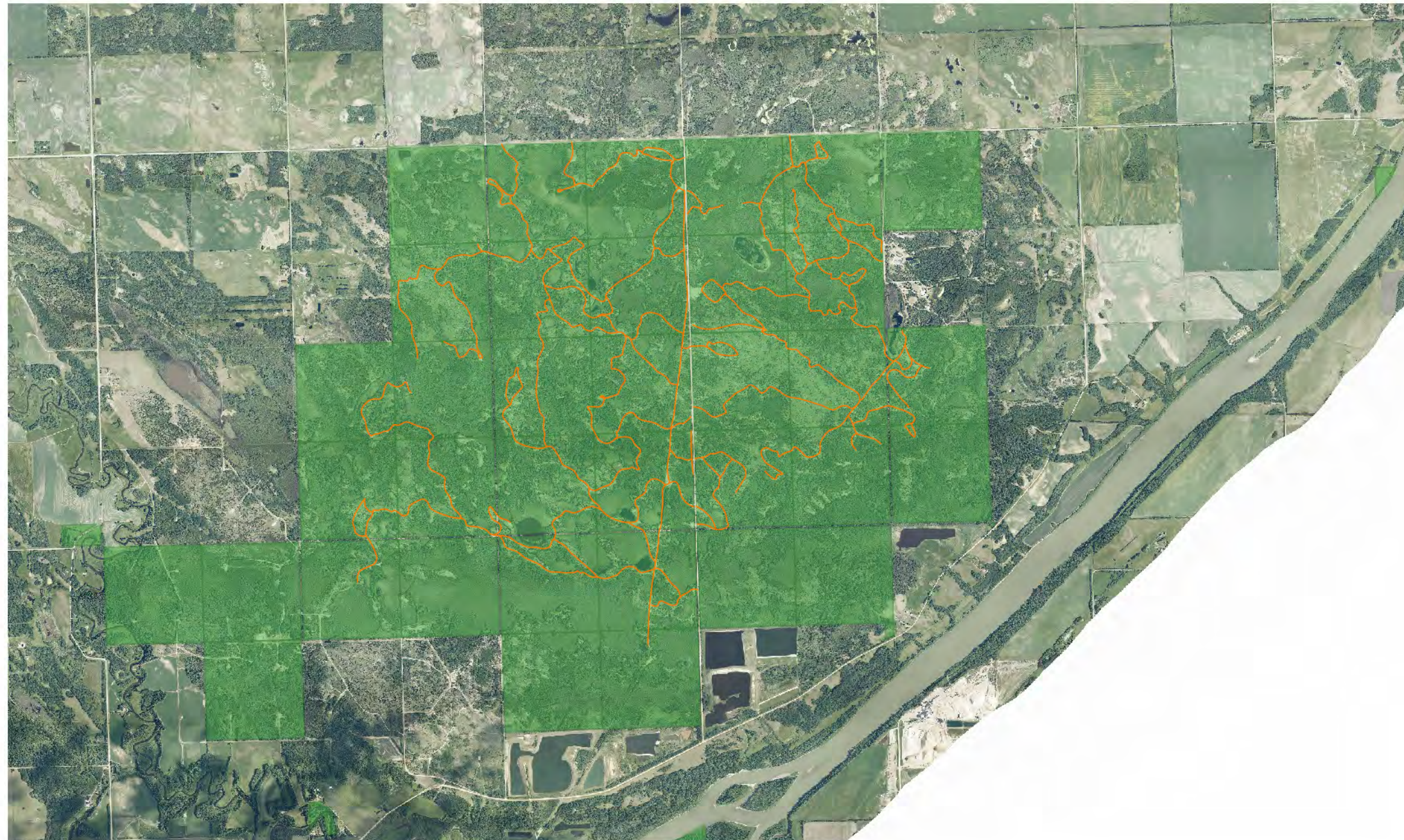
LEGEND

- Existing Trails
Total length of trails approx. 6.7m
- Proposed Trails
Total length of trails approx. 4.8km
- Public Lands

RIVERSIDE TRAILS

LAMOUREAUX TRAIL
Surface: Asphalt
Length: 1885m

FORT AUGUSTUS HERITAGE TRAIL
Surface: Asphalt
Length: 2189m



LEGEND

Existing Trails

Public Lands

REDWATER TRAILS

Existing trails surface: Dirt

Total length of trails approx. 57.7km

0 1 2km

Site 5 Existing Trails

Appendix B: Capital Projects Summary Chart



Project Type:

New Park

Park Redevelopment

Pathway

Conservation

Item		Description	Description	Value	Weight	Score	Total
1	Strategic Importance	Project aligned to corporate priorities and outcomes.	Essential Project - there are legal, safety, regulatory or mandated reasons to pursue this project and without doing so will create legal concerns, fines or high risk of liability against the Municipality's planned growth. High degree of alignment with the Strategic Plan	100	12%		
			Priority Project - projects deemed a priority to Council and will maintain critical infrastructure to residents, however are not mandatory. Very well aligned with the pillars of the Strategic Plan	80			
			Efficiency or Cost Savings Project - has a positive break-even over the life of the capital investment due to operational cost savings and will provide financial benefits in the future. Some alignment with the Strategic Plan. To do this, assess current operating and maintenance costs then evaluate potential changes	60			
			Lifecycle Maintenance - projects that maintain existing capital infrastructure in its current state. Projects are not mandatory however if not pursued, the condition of existing infrastructure will decline. Low alignment with the Strategic Plan	40			
			Improvement - projects will increase service levels such as new facilities, expanding existing infrastructure or new initiatives. Low to no alignment with the Strategic Plan	20			
2	Budget Impact	Overall Impact of Project Costs	Significant decrease in operating costs over a 10-year period, >\$100,000	100	5%		
			Moderate decrease in operating costs over a 10-year period, \$50,000 to \$100,000	50			
			Marginal decrease in operating costs over a 10-year period, \$0 to \$50,000	25			
			Little or no impact to operating costs, or not applicable	0			
			Marginal increase in operating costs over a 10-year period, \$0 to \$50,000	-25			
			Moderate increase in operating costs over a 10-year period, \$50,000 to \$100,000	-50			
			Significant increase in operating costs over a 10-year period, >\$100,000	-100			
3	Strategic Alignment	Compatibility with Strategic Plan, Municipal Development Plan, other statutory plans	Direct alignment with all plans	100	12%		
			Indirectly aligned with some plans, but not all	50			
			No alignment with any strategic plans	0			
4	Environmental Ethic	Demonstrates environmental values	Greatly improves natural systems by adding new or enhanced ecological features, and a clear increase in biodiversity, wise use of materials, etc.	100	20%		
			Project provides improvements to natural systems such as increasing biodiversity and climate resiliency	50			
			There are minor improvements to natural systems however much of the site's ecological function will remain the same	25			
			Has no negative ecological impacts to natural systems including water, air, earth and provides an improvement to habitat for flora and fauna	0			
			Degrades the natural quality of ecological functions of a site	-25			
			Impairs or eliminates more than 50% of the ecological functions of a site	-50			
			Eradicates natural conditions of a site and eliminates natural habitat for flora and fauna	-100			
5	Public Risk	The extent to which the project will address / mitigate risk to public health and / or occupational health and safety	Risks to the public once posed by the site are now eliminated and passes a CPTED evaluation	100	12%		
			There are no risks to the public, and personal safety on site remains the same as prior to implementing this project, generally meets CPTED guidelines	0			
			Risks to the public are unavoidable and mitigation measures must be put into place, does not meet CPTED guidelines	-50			
6	Trends & Leading Practices	Now this project aligns with current trends and leading practices in recreation	Demonstrates innovation (is new to the region) and brings a high degree of conformance with local, provincial and national trends and leading practices for recreation	100	9%		
			Aligns with local, provincial and national trends and leading practices for recreation	50			
			Has minor alignment with trends and leading practices	25			
			Does not align with the trends and leading practices	0			
7	Sense of Place and Community	How the project reflects local values, promotes the County's sense of place	The project has significant contributions to promoting local identity and sense of place for the County	50	10%		
			The project acknowledges local identity and is suited to the County	0			
			The project does not have attributes that reflect local identity and does not promote sense of place	-50			
8	Staff Capacity and Support	The County has existing staff to deliver on the project	The County maintains staff with the necessary skills and availability to the project to self-deliver	100	10%		
			The County would need to hire outside consulting / contractor assistance to deliver the project, which is readily available in the region	50			
			The expertise and capacity does not currently exist internal to the County nor is it readily available in the region	0			
9	Funding Sources	Where the capital and operating costs are coming from	Both capital and operating costs are from external sources, from other levels of government, partnerships, other grants	200	10%		
			75% to 99% of project financing is from external sources	100			
			25% to 74% of project financing is from external sources	50			
			Less than 25% of the project is financed from an external source	25			
			Project is financed entirely through municipal budgets	0			
					100%		

**Appendix C: 2021 Sturgeon County Strategic Plan (2022-2025)
Plan on a Page**



Sturgeon County

STRATEGIC PLAN (2022 – 2025) – “PLAN ON A PAGE”

Vision – Offering a rich tapestry of historical, cultural, and natural experiences, Sturgeon County is a municipality that honours its rural roots and cultivates desirable communities. Uniquely situated to provide world-class agricultural, energy, and business investment opportunities, the County prioritizes responsible stewardship and dreaming big.

Our Guiding Principles

- Collaboration
- Accountability
- Flexibility
- Excellence
- Safety
- Future Readiness
- Affordability
- Innovation

Community Outcomes

Sturgeon County has identified five community outcomes to serve as goal statements for the organization, with corresponding strategic priorities. These outcomes will guide strategic decision making by the municipality to ensure Sturgeon County is continuously evolving in an intentional way.

Planned Growth

- Internationally competitive to attract, grow, and sustain diverse business
- Modern broadband and digital capabilities
- Reliable and effective infrastructure
- Low cost, minimal red tape regulations
- Comprehensive land use and infrastructure planning
- Agricultural preservation and supports
- Tenacious focus on new growth and innovation

Thriving Communities

- Beautiful, surprising places with high standards
- Engaging cultural, historic, and civic amenities
- Integrated natural spaces and trail systems
- Safe, welcoming, and diverse communities
- Small community feel and personal connections
- Commitment to high quality of life
- Strong community identity and pride
- Healthy and resilient

Environmental Stewardship

- Clean air, land, and water
- Carbon neutral municipal practices
- Adaptive to climate and weather patterns
- Conservation of natural areas and agricultural lands
- Safekeeping ecosystems
- Circular economy opportunities
- Enhanced greening and biodiversity
- Sustainable development
- Partnerships with industry and others to drive emission reductions

Collaborative Governance

- Predictable and stable external relationships
- Meaningful connections with indigenous communities
- Transparent and action-oriented decision making based on sound rationale
- Ongoing community consultation and engagement
- Respectful and informed debate
- Volunteer partnerships
- Clear and supportive governance processes

Operational Excellence

- Engaged and effective people - Council, Admin, volunteers
- Quality, cost-effective service delivery
- Robust procurement and operational practices and policies
- Positive culture within the municipal organization
- Continuous learning and improvement mindset

- Nimble and bold, with strong leadership
- Future focused thinking to proactively respond to emerging opportunities and challenges
- Asset management and performance measurement
- Alternative revenue generation and service delivery models
- Long term financial planning and sustainability
- Careful debt and reserve stewardship
- Integrated strategic and business planning

Strategic priorities for the next four years (and beyond)

- Reinforce Sturgeon County as an internationally competitive and supportive municipality to locate and conduct business
- Cultivate safe, beautiful, and complete communities
- Achieve carbon neutral municipal operations by considering benchmarks that reflect environmental, social, and governance (ESG) measures
- Prioritize municipal workforce and process and policy modernization that supports a productive and future-ready organization
- Realize opportunities for alternative revenue generation and shared efficiencies through innovative new models and partnerships
- Acknowledge and celebrate Sturgeon County's history and relationships with Indigenous and other communities
- Support long-term transition to a low carbon economy, prioritizing hydrogen and other clean energy production
- Embed thoughtful long-range financial and operational planning into decision-making processes
- Enhance local broadband, emergency, transportation, and recreation infrastructure
- Ensure residents will be offered cost-effective and highly valued services

Key Strategies and Plans

Annual and Long-Term Plans

- Council's Strategic Plan
- Municipal Development Plan, Land Use Bylaw, and community/ neighbourhood plans
- Service Oriented Master Plans (Recreation, Financial, Economic Development, etc.)
- Operating and Capital Plans and Budget
- Alberta Industrial Heartland Association Strategic Plan

- Edmonton Metropolitan Region Growth Plan
- Metropolitan Region Servicing Plan
- Edmonton Global Strategic Plan
- Edmonton Regional Hydrogen HUB Plan
- *Municipal Government Act* and associated regulations

Monitoring and Reporting on Progress

- Corporate Business Plan Semi-Annual Reporting to Council
- Resident Engagement and Surveys
- Service Level Monitoring and Reporting

9613 - 100 Street
Morinville, Alberta
T8R 1L9

www.sturgeoncounty.ca



Sturgeon County

Appendix D: Capital Plan Spreadsheet



	Report/Source	Description	Short Term (1-5)	Med Term (5-10)	Long Term (10+)	Complete?
A. County Wide Parks						
1	Sturgeon Valley Park Open Space Master Plan	Update the Sturgeon Valley Park Master Plan based on community consultation of the long-term master plan and develop a phased approach to the implementation of the park to create a county wide park				N
2		Implement phase 1 of the revised Sturgeon Valley Master Plan				N
3	Cardiff Park Open Space Master Plan	As recommended in the MDP, review and develop a long term management for Cardiff Park that incorporates cultural and recreational assets. Work with the Rotary Club to determine the feasibility of a group camping site in a portion of the countywide park				Y
B. Neighbourhood Parks						
4	Riviere Qui Barre Open Space Master Plan	Evaluate the need for additional recreation opportunities in Riviere Qui Barre and develop a plan for a new neighbourhood park utilizing the County land in the community. Given the parcel's proximity to Camilla School facilities, any new neighbourhood park utilizing the County's parcel should be primarily passive use, but may include active recreation components				N
5	Alcomdale Park Site Open Space Master Plan	Work with the community association to develop a playground at the park and discuss any other facilities that could be added to better service residents in the northwest of the county				N
C. Various Sites						
6	Open Space Master Plan	Assess remnant open space parcels and consider disposition if warranted				N
7	Open Space Master Plan	Allocate funding to provide support (financial, maintenance, and operation) of community organizations providing public recreation opportunities				N
8	Open Space Master Plan	Evaluate the condition of existing open space infrastructure and develop a plan for life cycle improvements to existing infrastructure				N

	Report/Source	Description	Short Term (1-5)	Med Term (5-10)	Long Term (10+)	Complete?
D. Greenways (Trails)						
9	Sturgeon Valley Park to St Albert	Open Space Master Plan	Develop a trail from Sturgeon Valley Park to St. Albert on both the north and south side of the river. Ensure that any subdivisions that occur along the proposed route include the development of necessary trail linkages (approx. 4.9 km)			N
10	Riverstone Point to Sturgeon Road East	Open Space Master Plan	Develop a trail from Riverstone Pointe to Sturgeon Road east along the road of way including a bridge crossing of the Sturgeon River (approx. 1.8 km)			N
11	Sturgeon Road to Townshi Road 542	Open Space Master Plan	Develop a trail from Sturgeon Road to Township Road 542 via Range Road 250 (approx. 2.3km)			N
12	97 Street Overpass	Open Space Master Plan	Develop a trail to connect with the 97th Street overpass along Township Road 542 (approx. 1.5km).			N
13	Lamoureux Parking Lot to Sturgeon River	Open Space Master Plan	Develop a trail from the Lamoureux Parking lot to Sturgeon River via North Saskatchewan River (proposed River Valley Alliance route)			N
14	North Saskatchewan River	Open Space Master Plan	Bridge across North Saskatchewan River near Lamoureux to Fort Saskatchewan			N
15	Morinville to Cardiff Park	Open Space Master Plan	Develop a trail from Morinville to Cardiff Park along the rail corridor or via secondary roads (approx 2.4km)			N
16	Cardiff Park to Cardiff Echoes	Open Space Master Plan	Develop a trail from Cardiff Park to Cardiff Echoes from both the northern and southern portions of the park via road reserves and public reserves (approx. 2.1 km)			N
17	Redwater Sandy Hills to North SK River	Open Space Master Plan	Develop a trail from Redwater Sand Hills to North SK River via Redwater River (approx 4.3km)			N
18	Top of North Saskatchewan River Bank - Sturgeon River to Redwater River	Open Space Master Plan	Develop a trail along the banks of the North Saskatchewan River from Sturgeon River to Redwater River (21.5km)			N
19	River from Big Lake to Calahoo	Open Space Master Plan	Develop at trail along the banks of the Sturgeon River from Big Lake to Calahoo (25.5km).			N
20	Cardiff Park to Carbondale	Open Space Master Plan	Develop a trail from Cardiff Park to Carbondale trail access along the rail corridor or via secondary roads (approx 4.9 km)			N
21	Bon Accord to Township Road 582	Open Space Master Plan	Develop a trail from Bon Accord to Township Road 582 connection past Lily Lake (approx. 17.9km)			N
22	Bon Accord to Sturgeon River and Gibbons	Open Space Master Plan	Develop a trail from Bon Accord to Sturgeon River and Gibbons trail connection (approx. 4.1km)			N

		Report/Source	Description	Short Term (1-5)	Med Term (5-10)	Long Term (10+)	Complete?
E. Natural Areas							
23	Sandy Lake Wilderness Area	Open Space Master Plan	Fence Sandy Lake Wilderness Area to prevent further degradation of the site caused by unauthorized off highway motor vehicles				N
24		Open Space Master Plan	Prepare a Management Plan, which supersedes the 1989 report to address items such as fencing, signage, trails, preservation, conservation and remediations, group camping and campgrounds, and as a strategy for long term use of the site				N
25		Open Space Master Plan	Implement long-term plan for Sandy Lake Wilderness Area				N
26	Redwater Sandhills Recreation Area	Open Space Master Plan	Partner with the Province to create a day use area and acquire land in close proximity to the Redwater Sandhills Recreation Area for a day use natural area				N
27		Open Space Master Plan	Partnerships / Joint Use Agreements – with other municipalities, school boards, the development industry, non-profit organizations and community / recreation associations				N
28		Open Space Master Plan	Open Space Facility Evaluation – build on the current maintenance plan to determine future facility upgrading and/or replacement recommendations.				N
29		Open Space Master Plan	Existing Facility Database – undertake a comprehensive inventory of all county and non- County open space facilities including; sport fields, day use facilities, servicing, site furniture, trails, etc.				N
30		Open Space Master Plan	Open Space Plan Review – undertake yearly reviews and updates of the Open Space Plan (see 6.2.1)				N
31		Open Space Master Plan	Open Space Guidelines/Standards and Specifications – undertake the development of County specific guidelines/standards for use by all those wishing to develop open space facilities.				N
32		Open Space Master Plan	Open Space Planning Framework – develop a set of guidelines used in determining best management practices for the planning of open spaces				N
33		Open Space Master Plan	Parks and Open Spaces Bylaw – The County is currently developing and Public Lands Bylaw. Suggested policies that would relate to parks and open space which could be included in the Parks Bylaw to address parks and open space include but are not necessarily limited to: - roles and responsibilities of authorities, hours, signage requirements, donations and recognition memorials, use of vehicles, acceptable patron conduct, restriction on animals, restrictions on fires, restrictions on camping, use of water bodies, litter,				N

Report/Source	Description	Short Term (1-5)	Med Term (5-10)	Long Term (10+)	Complete?
F. Cardiff Park					
					Y
34	Large overhead structure, including power		X	X	N
35	Trail signage - wayfinding program	X	X		N
36	Pave Red Ribbon Trail		X	X	N
37	New gravel trail segment	X			Y
38	Interpretive signange program		X		N
39	Winter Skating Ribbon	X			Y
40	Replace playground with nature play		X		N
41	New nature-based play area			X	N
42	Enhance volleyball court	X			N
43	Re-orient diamond #1, dugouts for #1 & #2		X		N
44	Add benches and posts to existing soccer fields	X			Y
45	Replace fishing dock	X			Y
46	Accessible kayak launch structure		X		Y
47	Enhanced naturalization plantings	X	X	X	Y
48	9-hole disc golf course	X			N
49	Swimming area - markers, signage	X			N
50	Day use picnic sites	X	X	X	N
51	New accessible washroom, year-round		X		N
52	Off-leash dog park (un-fenced)	X			N
53	Enlarged gravel parking lots, roadside pull-offs	X	X	X	N
54	Better organized parking lot			X	N
55	Decommission un-used parking lot	X			N
56	Remove stage structure	X			Y
57	Student and group bus drop-off			X	N
58	Boat and equipment drop-off with stabilization	X			N
59	Remove un-used building and trailer		X		N
60	Regulatory approvals for boat launch	X			N
61	Regulatory approvals for dock	X			N
G. Sturgeon Valley					
62	Landscape Development				
63					
64					
65					
66					
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69					
71	Access and parking				
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73	Pedestrian Circulation				
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75					
76					
77	Structures and Site Furniture				
78					
79					
80	Wayfinding and Intrepretive Signage				
81					

Appendix E: Literature Cited



ⁱ Kellert, S. R., & Wilson, E. O. (Eds.). (1993). *The biophilia hypothesis*. Washington, DC: Island Press.

ⁱⁱ Pliska, S. (2006). Biophilia: Understanding your building's primordial attraction to all things green. *Environmental Design + Construction*, March 2006, 75.

ⁱⁱⁱ Orsega-Smith, E., Mowen, A., Payne, L., Godbey, G. (2004) The interaction of stress and park use on psycho-physiological health in older adults. *Journal of Leisure Research*, 36(2), 232-256.

^{iv} Buchko, J. (2013). *Paradoxical Nature In Cities*. Doctoral Dissertation, Spokane, WA: Washington State University.

^v Lundmark, C. (2009). Ecosystem Function and . . . *Bioscience*, 59(1), 96. doi: 10.1525/bio.2009.59.1.18

^{vi} Smith, R. G., & Gross, K. L. (2006). Weed biology and ecology: Weed community and corn yield variability in diverse management systems. *Weed Science*, 54(1), 106-113.

^{vii} Wardle, D.A., Hooper, D.U., Chapin, F.S., Ewel, J.J., Hector, A., Inchausti, S., . . . Lavorel, J.H. (2005). Effects of biodiversity on ecosystem functioning: A consensus of current knowledge. *Ecological Monographs*, 75(1), 3-35.