



**EDMONTON AND AREA LAND TRUST**  
**REGIONAL CONSERVATION PLAN**





## TABLE OF CONTENTS

About us	3
Planning context: Global to local planning for conservation	5
Ecological context: Conservation in a fragmented landscape	15
Priority areas: Focusing our conservation efforts	24
Land Securement: How we conserve land	29
Land Stewardship: How we monitor and steward land	34
Contact us	37
Map data sources, photo credit, and references	38



## ABOUT US

The Edmonton and Area Land Trust (EALT) is a registered charity that conserves land in the city of Edmonton and within a 150 km radius. We steward the lands in our care and monitor those with a conservation easement, ensuring their ecological and other values are maintained in perpetuity. We are eligible to receive ecological gifts of land. We have a small team of staff and interns and are governed by a Board of Directors represented by our founding Members and the public at large.

We acknowledge that we are located on Treaty 6 territory, a traditional gathering place, travelling route and home for many Indigenous Peoples. The work that EALT does to conserve the land within the Edmonton region continues the legacy of stewardship that has fostered this land since time immemorial.

## VISION

A network of forests, river valleys, wetlands, lakes and farmlands in Edmonton and area is conserved as a legacy for future generations.

## MISSION

We conserve nature in Edmonton and area, engaging people and communities in land conservation and stewardship.

## STRATEGIC PLAN, 2020-2025

Securing new lands that benefit nature and people is a top priority. Our focus is ecologically-important lands, and land that, in addition to ecological value, have social, cultural, agricultural, or recreational value.

## REGIONAL CONSERVATION PLAN

This plan outlines how we will meet our land securement goals and how our efforts help meet ecological targets and strategies set by local, provincial, national, and international agencies.



**1. WE SECURE ECOLOGICALLY-IMPORTANT LANDS THAT SUPPORT BIODIVERSITY, HABITAT CONNECTIVITY, AND ECOSYSTEMS.**

Ecologically-important lands provide habitat and landscape connections for wildlife, and are important for our health and well-being. These areas provide ecosystems services of cleaning our air and water, offering drought and flood protection, and are a cost-effective nature-based solution to mitigate climate change.

**2. WE CONSERVE LANDS THAT, IN ADDITION TO ECOLOGICAL VALUE, HAVE HIGH SOCIAL, CULTURAL, AGRICULTURAL, OR RECREATION VALUE, SUPPORTING SMART GROWTH, HEALTH, AND WELLBEING.**

Farmland and other lands may be important for landscape-scale conservation, climate change adaptation and mitigation, cultural heritage, low impact recreation, and local food security. Conserving these lands will ensure that, as the city and region grow, future generations will also have open spaces where they can connect with nature, be active outdoors, and grow or enjoy local food.



# PLANNING CONTEXT

## GLOBAL TO LOCAL PLANNING FOR CONSERVATION



## GLOBAL TARGETS

The United Nations Convention on Biological Diversity (CBD) is an international treaty with the aim to conserve biodiversity, promote sustainable use, and ensure fair and equitable sharing of benefits.

The *CBD Strategic Plan for Biodiversity 2011-2020* sets a framework for action by all countries to save biodiversity and enhance its benefits for people. Its goals and targets, known as the Aichi Targets, set the course for countries to align national and regional efforts.

Land trusts such as EALT contribute to achieving the CBD goal to: Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity.

In addition, land conservation helps meet Aichi Target 11:

By 2020, at least 17 per cent of terrestrial and inland water areas, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes (CBD 2020).





## CANADA'S TARGETS

Canada is one of nearly 200 countries that commits to the Convention on Biological Diversity (CBD). Prepared by federal, provincial, and territorial governments, *Canada's Biodiversity Outcomes Framework and 2020 Goals & Targets* articulates our nation-wide efforts to achieve the Aichi Targets. Significantly, Target 1 calls for more land and freshwater conservation:

By 2020, at least 17 percent of terrestrial areas and inland water, and 10 percent of coastal and marine areas, are conserved through networks of protected areas and other effective area-based conservation measures (ECCC 2016).

To support progress towards these targets, federal, provincial, and territorial governments, in partnership with the Indigenous Circle of Experts, launched *Pathway to Canada Target 1*. This initiative calls for the creation of new protected areas, Indigenous Protected and Conserved Areas (IPCAs), and other effective area-based conservation measures (OECMs). It specifically encourages collaboration with land trusts as part of a conservation toolbox.

The federal government has since renewed Canada's commitment to conservation, mandating the Minister of Environment and Climate Change Canada to:

Introduce a new ambitious plan to conserve 25 per cent of Canada's land and 25 per cent of Canada's oceans by 2025, working toward 30 percent by 2030. This plan should be grounded in science, Indigenous knowledge and local perspectives (Minister of ECCC Mandate Letter 2019).

Canada joins other countries in a "high ambition coalition" to advocate for conserving 30 percent of the world's lands and oceans by 2030 and to adopt these targets as part of the CBD Post-2020 Global Biodiversity Framework.

Making progress toward increased land and freshwater conservation in Canada relies on collaboration and collective action, particularly with provincial governments that set policy and supports for the conservation and stewardship of public and private land at a provincial level.



## PROTECTED AREAS

The International Union for the Conservation of Nature (IUCN) defines a protected area as:

A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values (Dudley 2008; Mitchell et al 2018).

Like many of the private lands conserved by land trusts, EALT's lands qualify as IUCN-defined protected areas. In our regional conservation context, EALT's lands contribute to the networks of protected areas and other effective area-based conservation measures that Aichi Target 11 and Canada Target 1 aim to achieve.

## OTHER EFFECTIVE AREA-BASED CONSERVATION MEASURES

The IUCN defines an other effective area-based conservation measure (OECM) as:

A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in-situ conservation of biodiversity with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values (IUCN-WCPA 2019).

In-situ conservation is “the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties.” (IUCN-WCPA 2019).

Unlike a protected area, where conservation is a primary objective, an OECM may or may not have this as a primary goal. For example, an area with the primary purpose of public recreation could be considered to have a secondary role in conservation if it also allows for the in-situ conservation of biodiversity (IUCN-WCPA 2019). Given the highly fragmented region in which EALT operates, recognizing the value of OECMs and other areas that have some ecological value is important for achieving overall biodiversity outcomes.





## INDIGENOUS CONSERVATION

In developing strategies to meet Canada’s conservation targets, the Indigenous Circle of Experts (ICE) recommends meaningful partnerships and opportunities to create Indigenous Protected and Conserved Areas (IPCAs). “IPCAs are lands and waters where Indigenous governments have the primary role in protecting and conserving ecosystems through Indigenous laws, governance, and knowledge systems” (ICE 2018).

ICE recognizes that there may be instances where a partnership between Indigenous governments and non-governmental organizations such as a land trust may be beneficial and the preferred option for an Indigenous community.

ICE encourages “philanthropic organizations and other NGOs to support and partner with Indigenous governments (and Indigenous NGOs, where applicable), and federal, provincial and territorial governments to develop, implement and manage IPCAs” (Recommendation 16, ICE 2018).

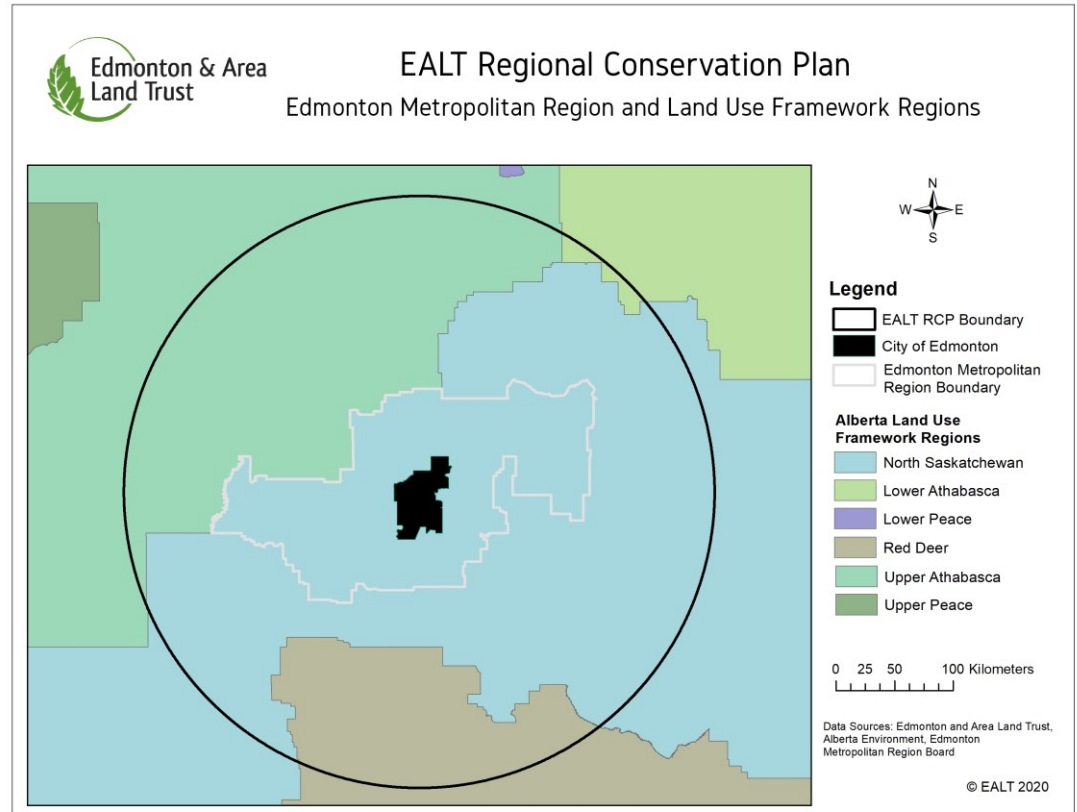
## PROVINCIAL PLANNING

Land and resource management in Alberta is guided by the Land-use Framework (LUF), a regional approach to managing public and private lands and natural resources to achieve the province's long-term economic, social, and environmental goals.

The LUF calls for seven regional land-use plans and the development of management outcomes for air, land, water, and biodiversity. Two regional plans have been completed to date. Planning is in progress for the North Saskatchewan Region where EALT primarily operates.

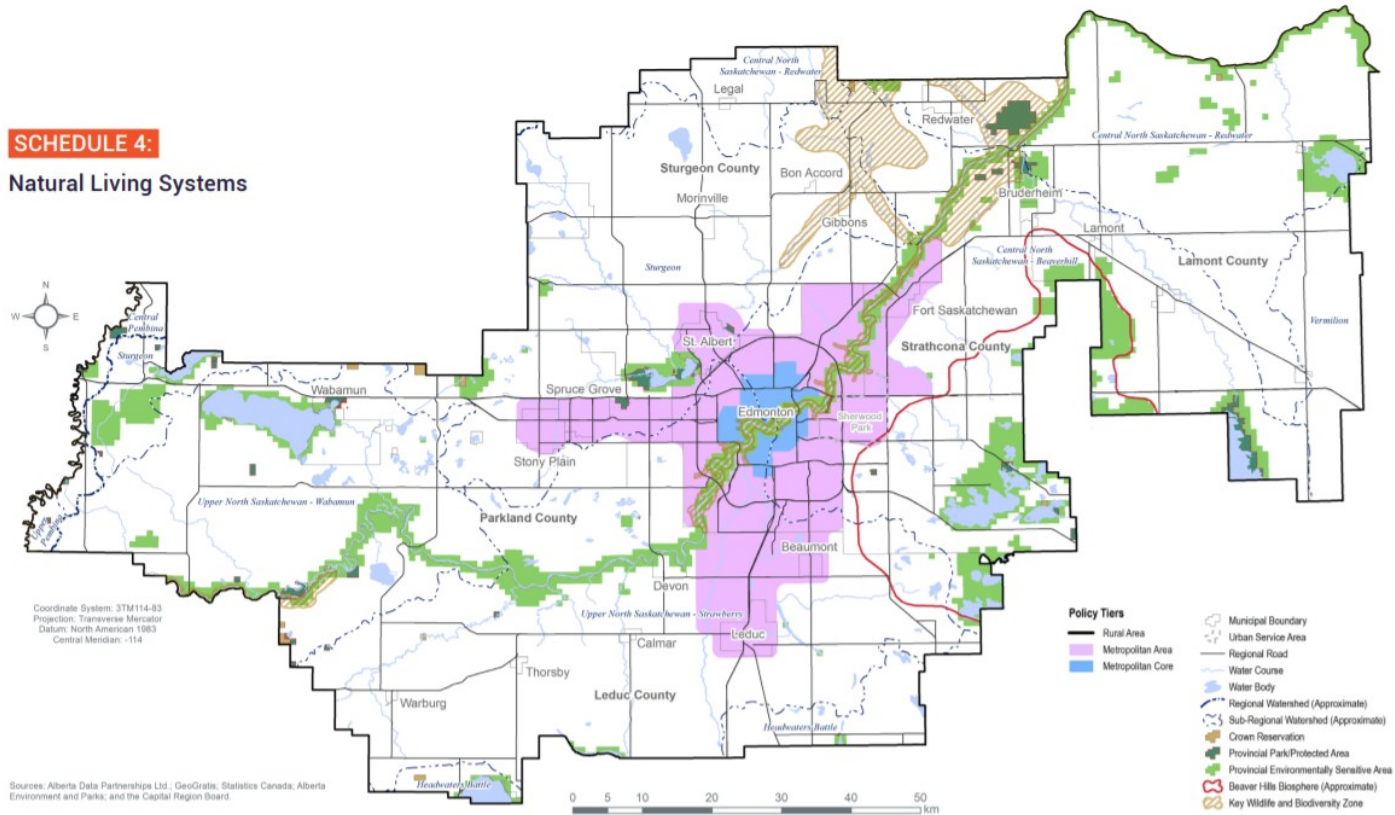
The LUF commits the provincial government to develop a strategy for conservation and stewardship for public and private lands. It calls on the strategy to build on private land conservation tools set out in the *Alberta Land Stewardship Act*, such as conservation easements, directives, offsets, and transfer of development credits.

Provincial incentives and programs, such as the Land Trust Grants Program, provide important supports for private land conservation. Also important are the land-use plans and strategies at a local level, as planning for private land also falls within municipal jurisdiction.



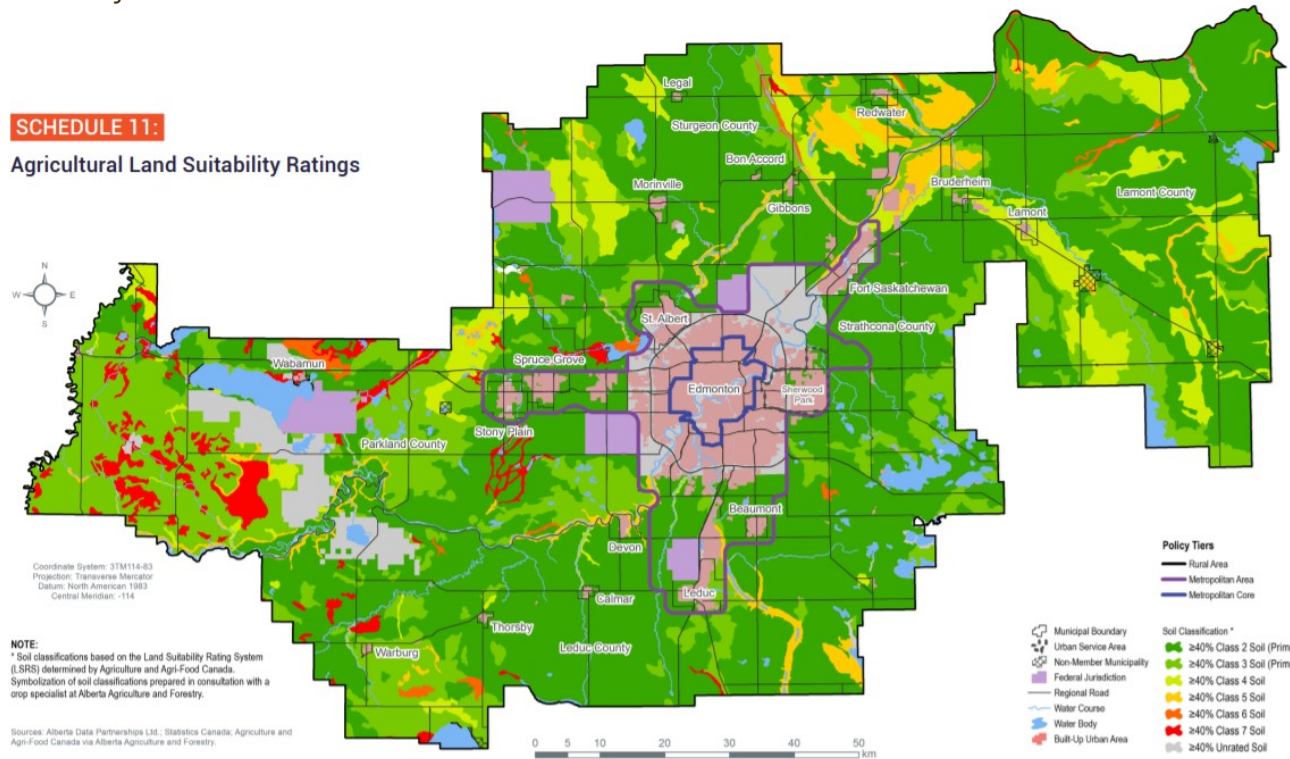
# REGIONAL PLANNING

EALT's operating area includes the Edmonton Metropolitan Region, which is expected to double in population to 2.2 million by 2044. The *Edmonton Metropolitan Region Board Growth Plan—Re-imagine. Plan. Build.* provides a policy framework to plan for responsible growth. This includes using land and resources efficiently, conserving the region's agricultural land base, and conserving natural assets for future generations. The plan sets policy objectives to conserve living natural systems of regional, provincial, and federal significance, such as environmentally sensitive areas, key wildlife and biodiversity zones, watersheds, and the Beaver Hills Biosphere.



Agriculture is the largest land use in the region and a major contributor to the Edmonton region's working and natural landscapes. A *Regional Agricultural Master Plan* is being developed to build on the region's *Growth Plan* policy objectives, which include conserving a supply of prime agricultural lands and minimizing the fragmentation and conversion of prime agricultural land for non-agricultural uses.

Conserving important agricultural land in Edmonton and area contributes to food security and has social benefit such as market gardens, community-supported agriculture, and local food. Agricultural lands that also have natural pasture, woodlands, and wetlands can help maintain habitat and ecological connectivity for wildlife and biodiversity. While not a replacement for larger tracts of intact habitat, small patches of native vegetation can be stepping stones for wildlife as they move throughout the landscape, or may be of sufficient size for species that do not require large areas. Likewise, protecting ecological corridors on agricultural lands can allow wildlife to move unimpeded for their life cycle needs.



# CITY OF EDMONTON PLANNING

The City of Edmonton is the major urban centre in the region and has a number of plans related to the conservation, enjoyment, and use of natural and working landscapes, including:

## The City Plan

This plan sets the strategic direction for the way Edmonton grows towards a city of two million people. It includes objectives to protect and expand natural systems to support biodiversity, ecological connectivity, and reduce habitat fragmentation. The plan also includes objectives to support the conservation of agricultural land and prevent fragmentation and conversion for residential and non-residential uses.

## Breathe: Edmonton's Green Network Strategy

This strategy aims for Edmonton to be a healthy city through connection and integration of open space at the site, neighbourhood, city, and regional levels. The goal is to make sure that as the city grows, it is supported by a green network that includes natural areas, corridors and linkages, parks, and green infrastructure.

## Ribbon of Green

This initiative guides the conservation, preservation, and use of the North Saskatchewan River Valley and ravine system. The initiative also includes a planned trail systems to promote healthy living, and agricultural and horticultural use. (COE 2020). The recent *Ribbon of Green SW+NE Plan* provides direction for the acquisition, development, programming, and management of publicly owned lands with in the system.



## SURROUNDING MUNICIPALITIES

The conservation of natural areas and systems within municipalities surrounding Edmonton is impacted by various plans and strategies at a municipal level.

A large portion of Strathcona County is within the Beaver Hills Biosphere Reserve. The county's Beaver Hills Policy Area aims to conserve the Beaver Hills Moraine, including connectivity between the moraine and the North Saskatchewan River valley.

A number of municipalities border the North Saskatchewan River valley in the Edmonton area, including the Town of Devon, Parkland County, Leduc County, Strathcona County, Sturgeon County, and City of Fort Saskatchewan. Each has policies and tools, such as municipal development plans, area structure plans, and land use bylaws, that impact planning and development in the river valley, its tributaries, and tablelands.

These and other surrounding municipalities also identify important natural features within their boundaries, such as wetlands, lakes, and creeks, and remaining stands of boreal forest and aspen parkland. Municipal studies on wildlife corridors and environmentally significant areas, and natural area and conservation management plans inform protection of these natural features at a municipal level. Surrounding municipalities also recognize the need to protect agricultural lands.

For examples of municipal plans, strategies, and studies, see the References.





# **ECOLOGICAL CONTEXT**

## **CONSERVATION IN A FRAGMENTED LANDSCAPE**



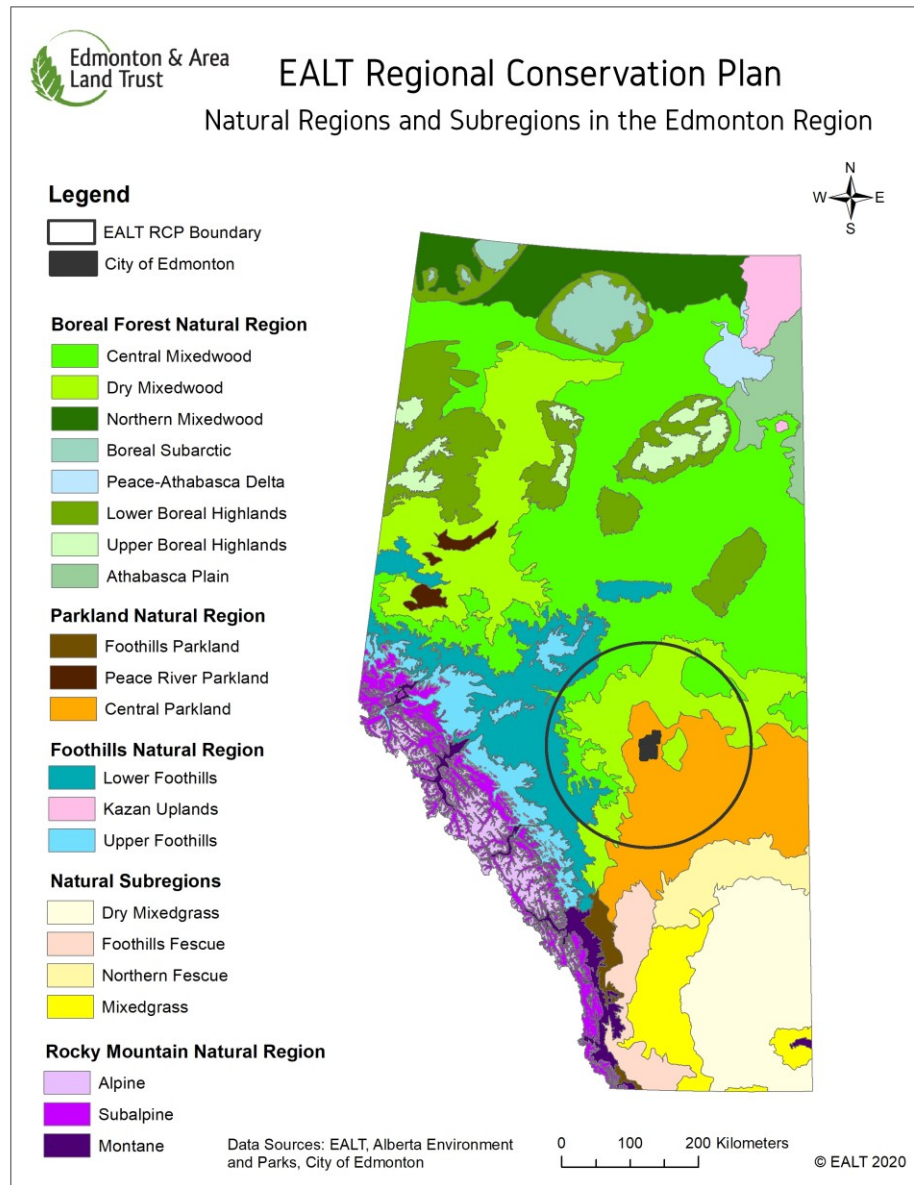
# NATURAL REGIONS IN ALBERTA

Natural Regions are the largest ecological mapping unit used in Alberta. They are distinguished by broad features, including landforms, soils, vegetation, and the wildlife that inhabit them. Alberta has six Natural Regions: Rocky Mountains, Foothills, Boreal Forest, Grassland, Parkland and Canadian Shield.

Natural Regions are further divided into 21 Subregions. Subregions are classified by a variety of factors, including vegetation, geology, landforms and elevation.

The Edmonton and area is primarily in the Parkland Natural Region and the southern edge of the Boreal Forest Natural Region.

Natural Region	Natural Subregion	Location	% EALT area
Parkland	Central Parkland	Edmonton and immediate surrounds	39%
Boreal Forest	Dry Mixedwood	Begins within 50 km radius around Edmonton, and a pocket to the southeast, covering the Cooking Lake Moraine Natural Area	35%
Boreal Forest	Central Mixedwood	Begins within 75-100 km radius of Edmonton	17%
Foothills	Lower Foothills	Begins 125 km west of Edmonton	9%





# NATURAL SUBREGIONS IN EDMONTON AND AREA

## CENTRAL PARKLAND

- 5% or less of the subregion remains in native vegetation—primarily Trembling Aspen, with Balsam Poplar and White Spruce.
- Waterbodies cover about 2%; several large lakes and rivers, including the North Saskatchewan.
- Wetlands cover about 10% and are very productive for waterfowl
- Undulating plain and hummocky upland. About 80% of the plains and 65% of the hummocky uplands have been converted to cropland.
- Heavily populated and cultivated subregion.

## CENTRAL MIXEDWOOD

- Largest subregion in Alberta (25%).
- Tree types are similar to the Dry Mixedwood Subregion, with a greater percentage of coniferous species.
- Vast open expanses, gentle undulating plains, and poorly drained wet fens and bogs that cover almost half of the subregion.
- Small lakes and other watercourses cover about 3% of the subregion.
- Significant aspen and conifer harvesting occurs in the region, as well as intensive oil and gas exploration and extraction.

## DRY MIXEDWOOD

- Second largest subregion in Alberta.
- Dominated by Trembling Aspen stands, with Balsam Poplar and White Spruce. Black Spruce, Jack Pine and Tamarack are common.
- Undulating plains and hummocky knob and kettle uplands.
- Bog and fen vegetation communities cover approximately 15% of the subregion.
- Over 50% of the subregion is cultivated. Significant aspen harvesting and oil and gas exploration occurs as well.

## LOWER FOOTHILLS

- Most diverse forests in Alberta, which include Trembling Aspen, with Balsam Poplar, White Birch, Lodgepole Pine, Black Spruce, White Spruce, Balsam Fir and Tamarack.
- Several major rivers run east and north from the subregion.
- Bog and fen wetlands have thick peat accumulations.
- One of the most productive timber harvesting subregions, with intensive oil and gas exploration and development.

## HUMAN FOOTPRINT

People have a large footprint on the landscape in which EALT operates.

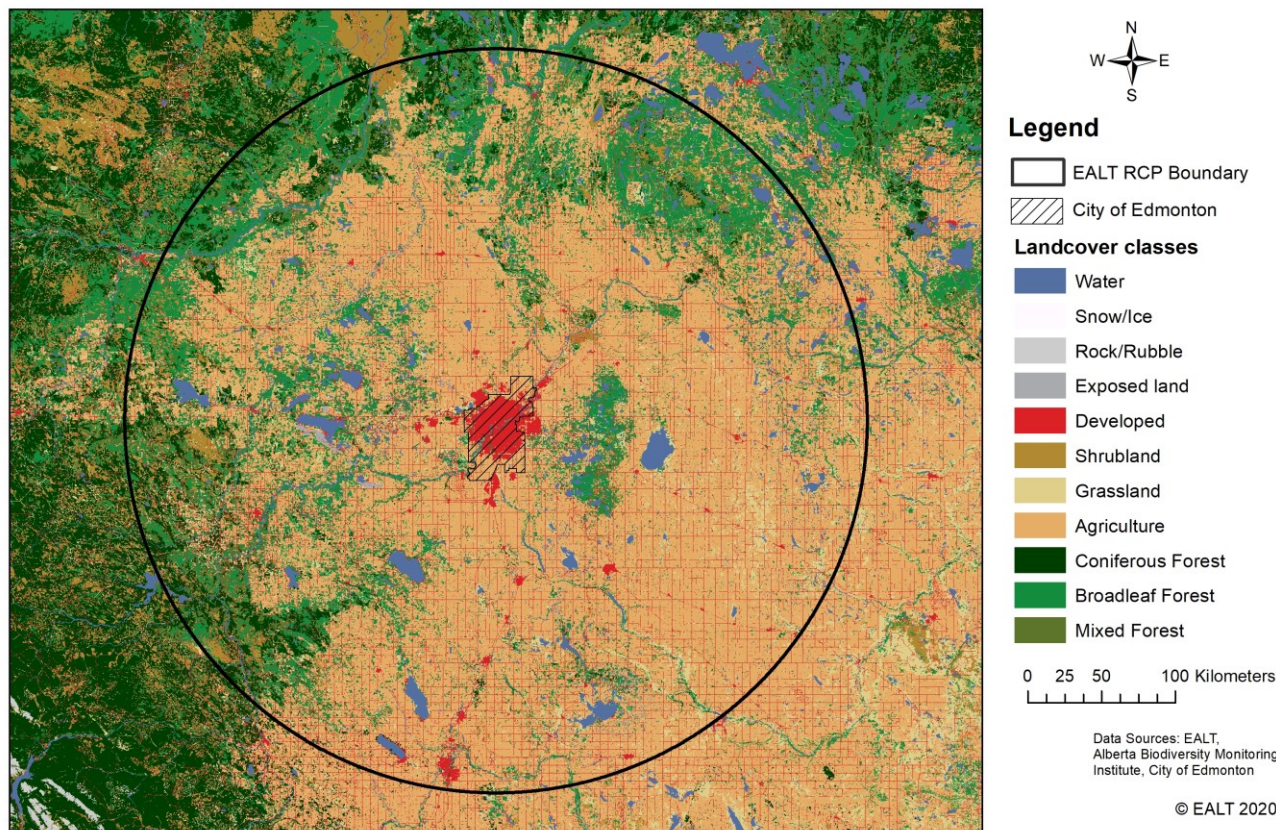
Mapping data from the Alberta Biodiversity Monitoring Institute helps us see the scale of our human footprint and where there are clusters of forest, grassland, shrubland, and water on the landscape.

The map illustrates how remaining natural areas are highly fragmented, making it all the more vital to protect land, particularly in areas that have ecological significance and social benefit for the city and region.



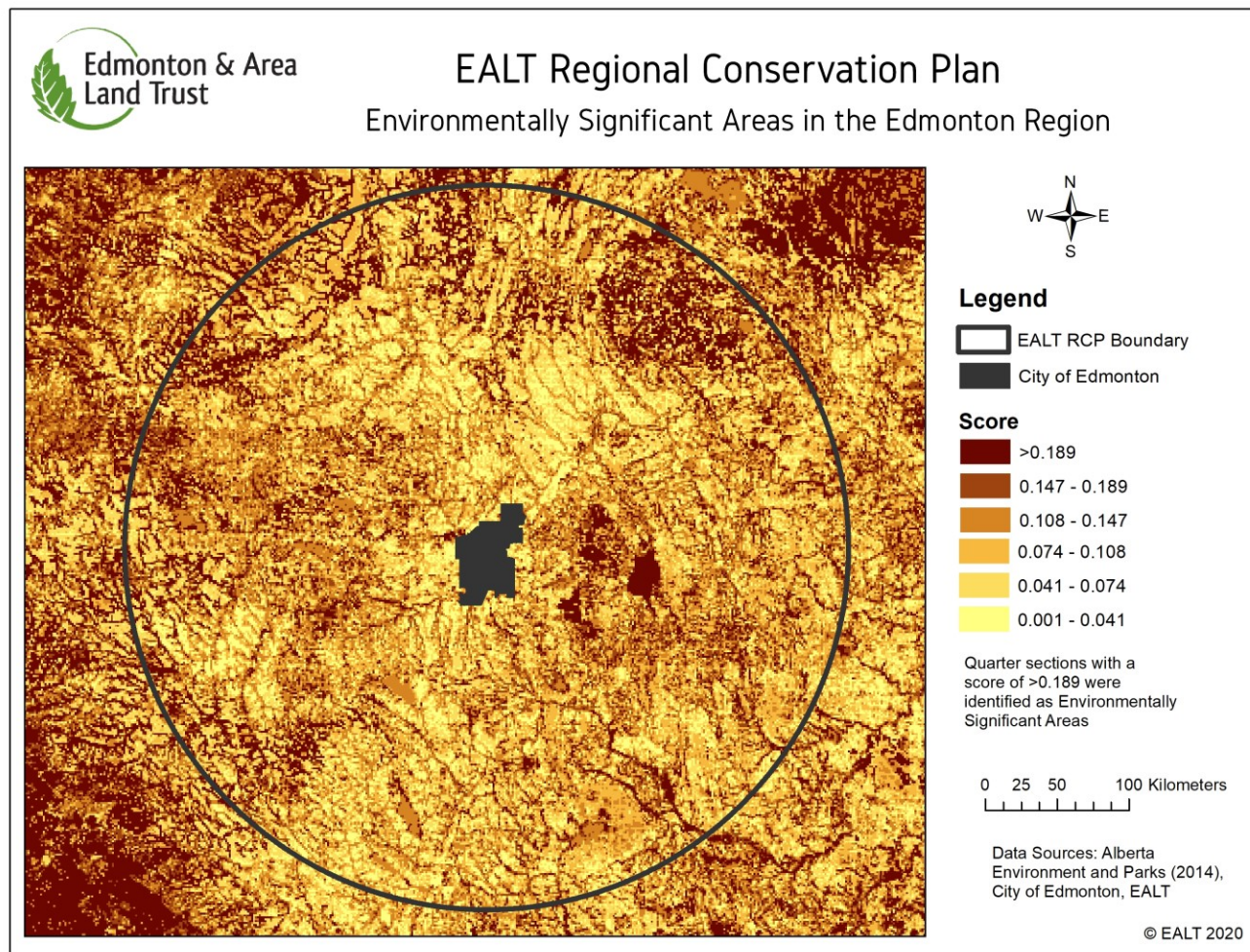
## EALT Regional Conservation Plan

### Landcover and Human Footprint in the Edmonton Region



## ENVIRONMENTALLY SIGNIFICANT AREAS

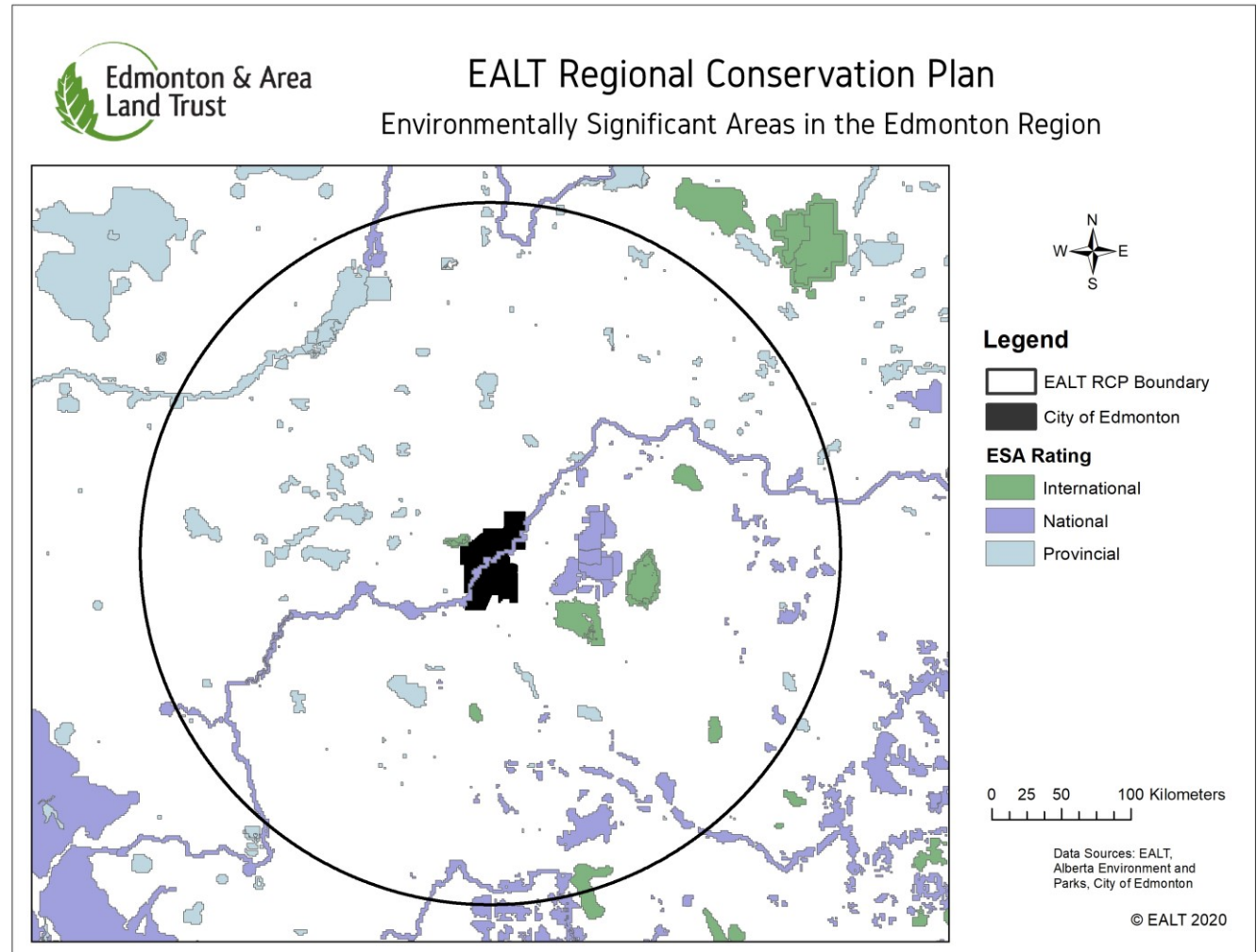
Alberta Environment and Parks scores the environmental significance of land by quarter sections to identify areas of ecological significance in the province. A variety of criteria are used such as: large habitat patches and corridors, presence of species at risk, rare habitats, or areas that are important for water quality and quantity. Areas with a score of 0.189 or higher are considered environmentally significant. Environmentally Significant Areas (ESAs) are important to the long-term maintenance of biological diversity, physical landscape features and natural processes, at multiple scales.



The Edmonton region has a number of Environmentally Significant Areas, including those of provincial, national, and international rating.

However, the ESA designation doesn't necessarily mean that the area will be conserved, only that it is of high ecological value and is an ideal place for permanent conservation.

EALT compares these maps and lists of ESAs to lands that we secure, to check if our candidate lands are environmentally significant. By focusing on ESAs and other areas of similar designations (e.g. nesting habitat or wildlife zones) from governments, EALT ensures that our land conservation efforts have the biggest impact for wildlife habitat retention and continuance of ecosystem services.

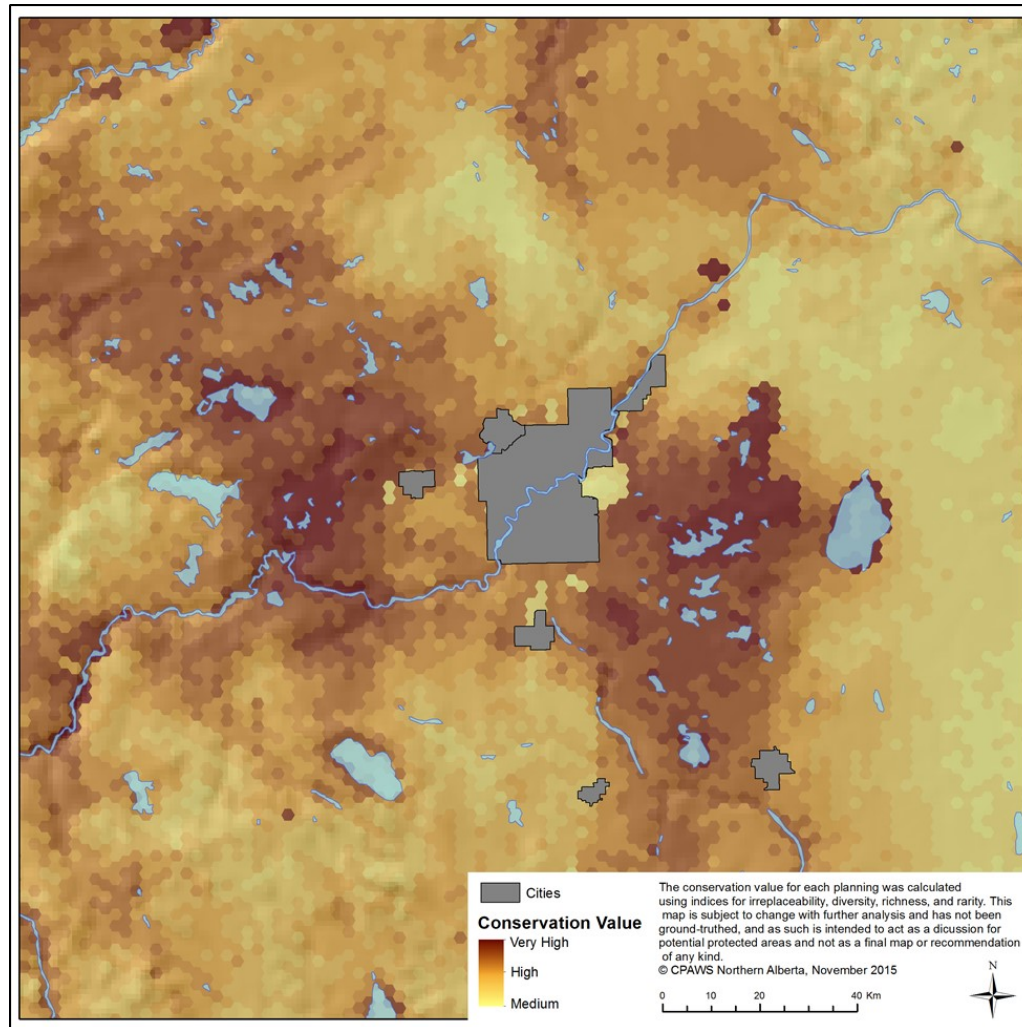


## CONSERVATION VALUE

Mapping by the Canadian Parks and Wilderness Society (CPAWS) also helps us focus our securement efforts.

Dividing the landscape into 500 hectare planning units, CPAWS used numerous coarse filters (climate, geology, land cover) and fine filters (species at risk, species ranges) to identify areas of high conservation value, in terms of indices such as irreplaceability, diversity, richness, and rarity.

The filters used in this analysis identify areas that are the most important for wildlife and their habitat. Yellow areas have a medium conservation value, ranging up to the darkest maroon that has very high conservation value.



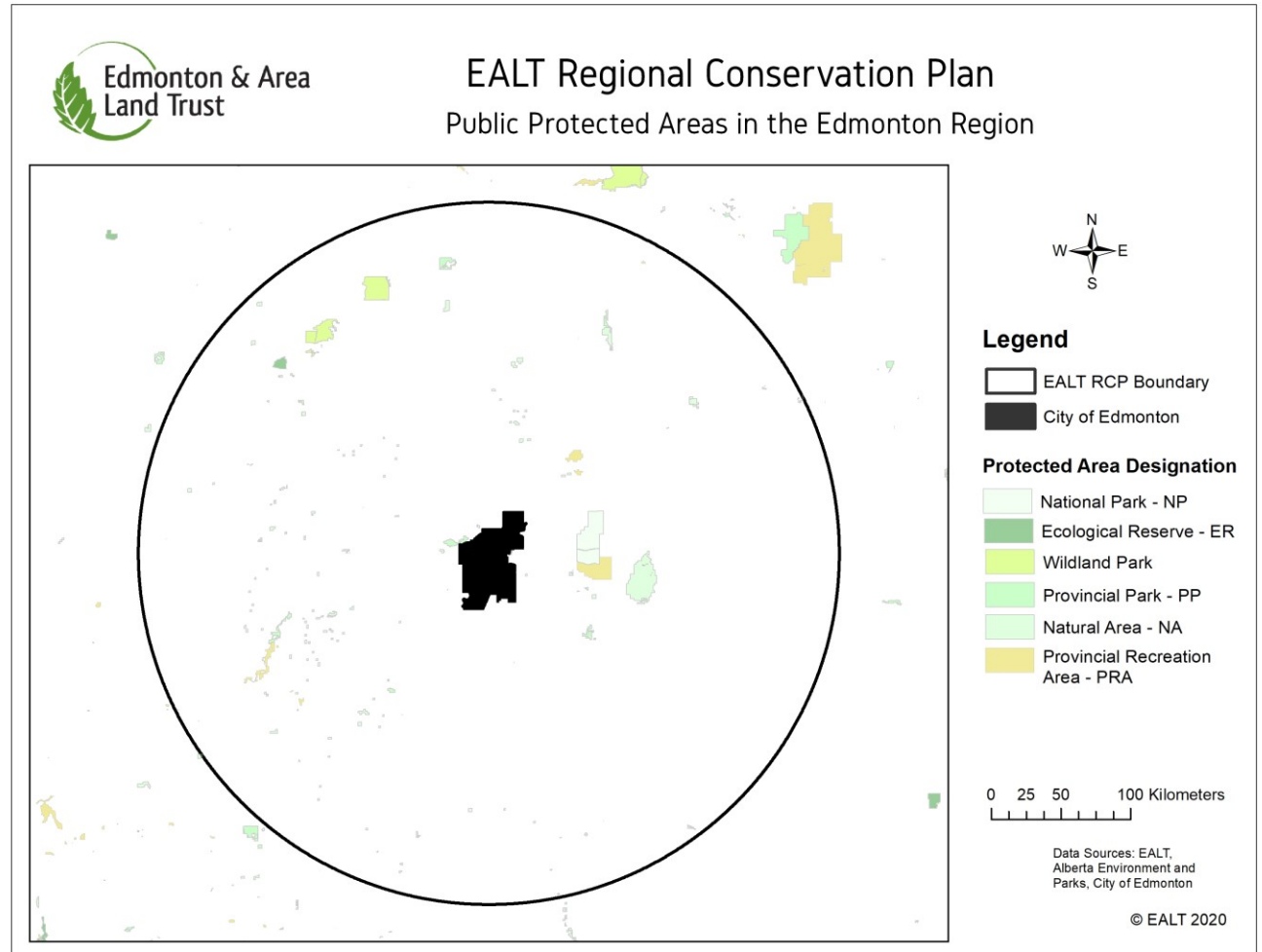
Conservation Blueprint of Northern Alberta: Prioritizing areas for protected areas planning

# PUBLIC PROTECTED AREAS

It takes a network of conserved areas to ensure enough space is available for wildlife habitat and the provision of ecosystem services and climate change resilience.

Some areas of ecological significance and high conservation value in the Edmonton region are protected at a provincial or federal level (see map). The Beaver Hills area east of Edmonton, for example, contains Elk Island National Park, Cooking Lake-Blackfoot Provincial Recreation Area, Ministik Lake Game Bird Sanctuary, Miquelon Lake Provincial Park and the Beaverhill Lake Heritage Rangeland Natural Area.

However, despite having many areas of environmental significance, much of the Edmonton region has limited levels of protection. Since the majority of land in the region is privately owned, private land conservation by EALT and other conservation organizations is key to increasing the network of protected lands in the Edmonton and area.

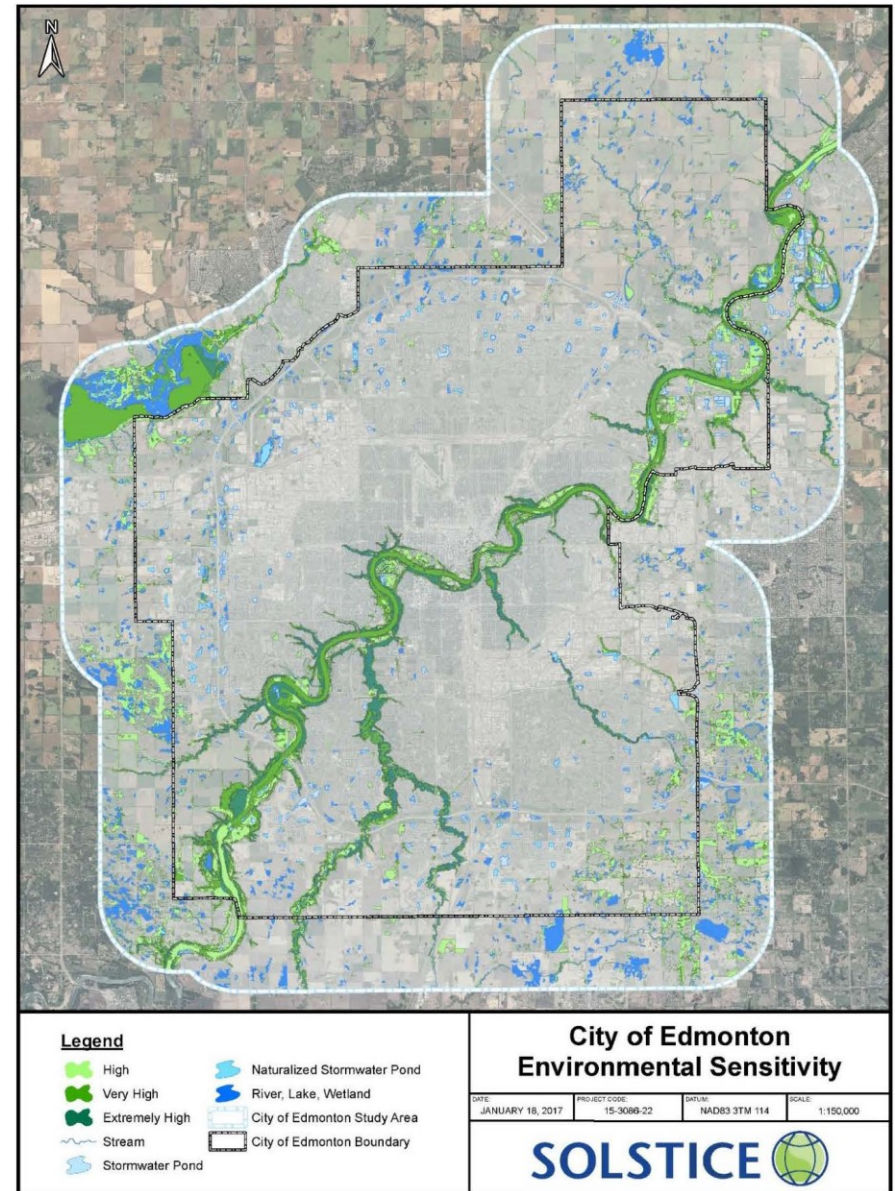


## EDMONTON ECOLOGICAL CONTEXT

Similar to broad ranging studies that identify environmentally significant areas in Alberta, the City of Edmonton compiled a comprehensive assessment of environmentally sensitive areas in 2017, within and just outside of city boundaries at the time. After this study was completed, the city boundary has expanded south to include what was formerly Leduc County.

The *Environmental Sensitivities Report* identifies areas within a 3 km buffer around the city that contain assets important for biodiversity conservation and ecosystem services, as well as threats and constraints to development.

The map identifies these areas of high to extremely high sensitivity. This very detailed inventory provides additional ecological context for EALT when pursuing land securements.





# **PRIORITY AREAS**

## **FOCUSING OUR CONSERVATION EFFORTS**





## PRIORITY AREAS

We focus our securement efforts in areas that have high ecological value, and therefore the greatest positive impact for conservation. We identify priority areas using the EALT Ecologically Valuable Lands map (next page).

We created this map using ArcGIS by combining shapefiles of Environmentally Significant Areas, protected areas, key wildlife and biodiversity zones, colonial nesting bird sites, trumpeter swan waterbodies and buffers, sensitive amphibian ranges, and other points of ecological interest with the CPAWS Conservation Value data and the Alberta Environment and Parks' 2014 ESA update. By combining several data sets that identify areas of ecological importance, we have a comprehensive view of priority areas for conservation, particularly:

- North Saskatchewan and Sturgeon river valleys and their tributaries and tablelands
- Beaver Hills Biosphere Reserve (also known as the Cooking Lake Moraine)
- Central Parkland and Dry Mixedwood Natural Subregions

These are general areas for EALT to concentrate on to achieve our goals. We also recognize that lands outside of these areas are important for landscape-scale conservation and ecological connectivity. We consider each land for the value it brings to overall conservation in Edmonton and area.

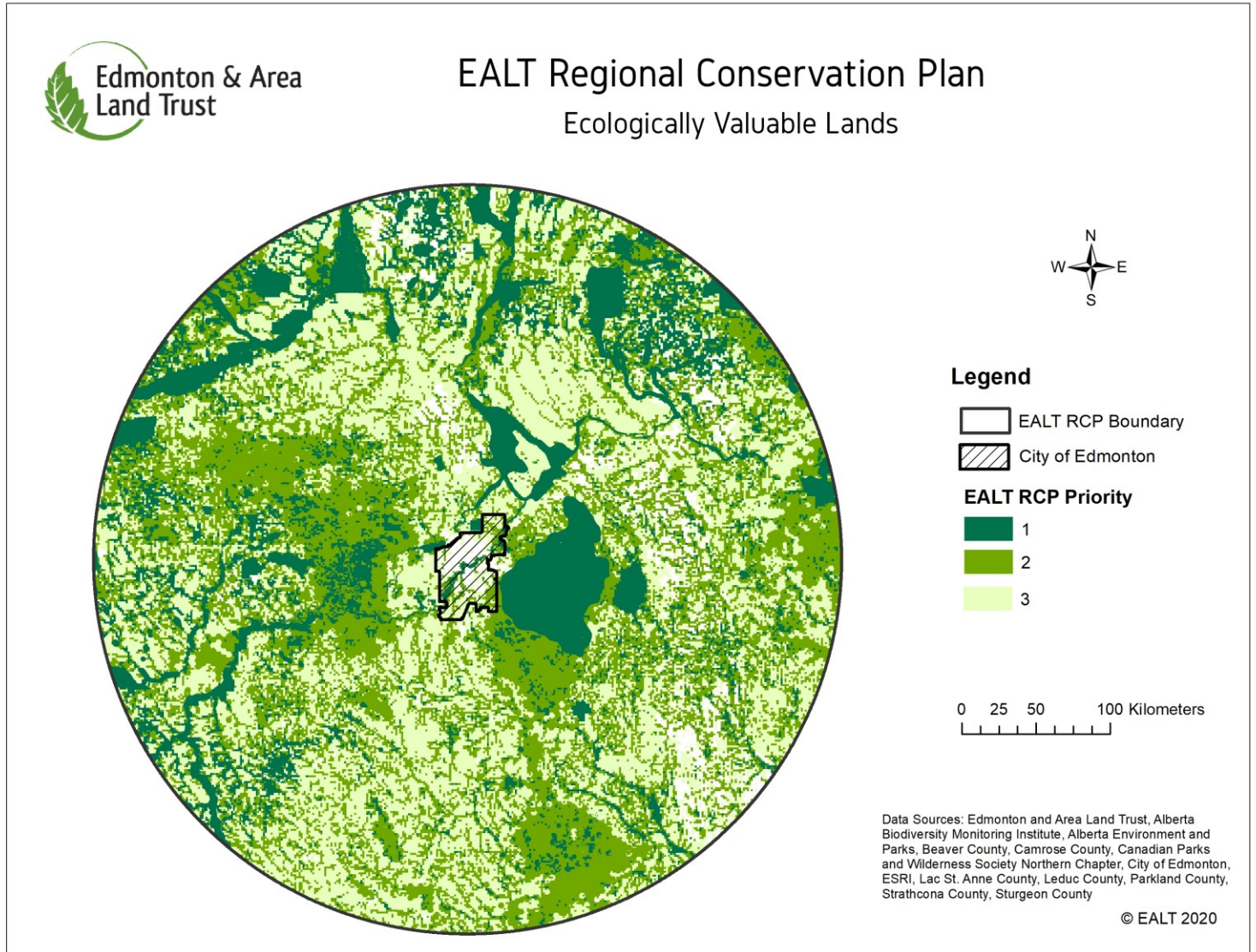


# ECOLOGICALLY VALUABLE LANDS MAP

**Priority 1** (dark green) are high priority areas, including Beaver Hills Biosphere, riparian areas of the North Saskatchewan River and its tributaries, and lands that help connect habitat patches.

**Priority 2** (medium green) are medium priority areas that can provide a buffer or corridor to the areas of highest ecological value.

**Priority 3** (light green) may have remnant or small patches of native habitat. Lands that have been converted to agricultural use may still provide value for conservation at the landscape scale.



## ECOLOGICAL PRIORITIES

We prioritize our conservation efforts on lands that have high ecological value in the context of their location and broader ecological network. Factors that help us prioritize lands include:

### Proximity to other ecologically important lands

Land that is adjacent to or near provincially or nationally protected areas, privately protected areas (such lands owned by other land trusts), or within an Environmentally Significant Area or an area of high conservation value, such as key wildlife and biodiversity zones, trumpeter swan waterbodies and watercourses or colonial nesting birds sites, or other areas known to be important for wildlife nesting or foraging.

### Habitat Connectivity

Land that contributes important ecological networks, corridors, or stepping stones for wildlife as they move and disperse throughout the landscape. Habitat connectivity will become increasingly important as the climate changes and wildlife move in response to shifting habitats.

### Presence of wetlands, lakes, rivers or streams

Land that contains or is adjacent to waterbodies such as rivers, streams, wetlands, and lakes. These sites provide water for wildlife and may be important for drinking water quality and quantity or for flood and drought protection.

### Presence of Species at Risk

Land that has species listed on the *Species at Risk Act* (federal), *Alberta Wildlife Act* (provincial), or are listed as sensitive, may be at risk, or at risk by the Committee on the Status of Endangered Wildlife in Canada (federal) or the General Status of Alberta's Species (provincial).

### Presence of Keystone species

Land that provides valuable habitat for keystone species—species on which others in an ecosystem largely depend. These species play an important role in how an ecosystem functions and influences the abundance of other species. For example, Pileated Woodpeckers create tree cavities for other species that nest in cavities, or foxes or fishers that control populations of small mammals and rodents

### Size

We do not place a specific restriction on the size of a potential land securement. Potential urban conservation lands in particular may be small in size, but large in ecological value.



## SOCIAL PRIORITIES

We also prioritize lands that, in addition to ecological value, have agriculture, recreation, or other community values. Some lands that aim to conserve social values may be considered Other Effective Area-based Conservation Measures, depending on the reasons for conservation, and if conserving the land results in the in-situ conservation of biodiversity (IUCN-WCPA 2019). Factors that help us prioritize these securement opportunities include:

### Agricultural values

- Land that has important soil for agriculture, as identified by the Edmonton Metropolitan Regional Board Growth Plan or other similar plans.
- Lands with a combination of agricultural and ecological values.

### Recreational values

- Land that provides opportunity for low-impact recreation, such as hiking, wildlife watching, cross country skiing, and snowshoeing.
- Lands with a combination of recreational and ecological values.

### Other social values

- Land that has historical, archaeological, or cultural value.
- Lands with a combination of social and ecological values.



# LAND SECUREMENT

## HOW WE CONSERVE LAND





## SECUREMENT METHODS

### **DONATION**

EALT primarily conserves land through the donation of land or conservation easement. Landowners can donate their land or a conservation easement, and receive tax benefits for their donation.

Depending on the characteristics of the land, the landowner may receive a typical donation receipt as with other financial donations to a charity, or an ecological donation receipt, which has additional tax benefits through the federal Ecological Gifts Program.

### **PURCHASE**

With sufficient support from a donor or in partnership with other conservation organizations, EALT may be able to purchase or contribute to the purchase of land. Golden Ranches, Bunchberry Meadows, and Hicks are examples of lands we have secured in partnership with other land trusts and with the generous support of significant donors.



## SECUREMENT TYPES

### **FEE SIMPLE**

When a landowner donates their land to EALT, we become the landowner and are responsible for the maintenance and monitoring of the land. This is also known as Fee Simple, which describes complete ownership of the land.

Another option is a Life Estate, in which a landowner can donate their property to EALT but continue to live on, enjoy, or work the land for a specific period of time. In addition, a landowner can arrange a future donation of their land to EALT as a bequest in their will.

In many cases, we make these lands available to the public to enjoy for low impact recreation, such as hiking, bird watching, and snowshoeing.

### **CONSERVATION EASEMENT**

Conservation easements are an option for landowners to protect their land, yet continue to own and use it, and have the ability to sell in the future. A conservation easement is a protective notation that assures the future stewardship of land by granting agreed rights to a land trust such as EALT, to safeguard the ecological or other values of all or part of the land. The easement is registered on title and stays with the land, regardless of who owns it in the future.

The conservation easement agreement includes restrictions that describe what is and isn't allowed on the land. Some restrictions are very common, such as not allowing further subdivision, draining wetlands, or removing trees. Other restrictions can be included based on what the landowner desires and what EALT can feasibly monitor.



## FUNDING LAND SECUREMENT

While we wish we could secure all lands with ecological and other values, we can only move forward once we have funds for securement and annual stewardship in place. Funding may come from a combination of the landowner, bequestor, donor, fundraising campaigns, or the Alberta Land Trust Grant Program. This program is a vital source of funds for land trusts to secure ecologically significant lands through a competitive grant application process. There is not a similar program in place for lands primarily with agricultural, recreational, or other values, and funds for these types of securements must come from other sources, primarily the landowner and private donors.

### Securement costs

- Includes legal fees, appraisal fees, and staff time to complete the securement, Baseline Data Report, and Conservation Management Plan.
- Costs vary on the circumstances, but can be \$25,000 or more.

### Stewardship costs

- Includes staff time for annual maintenance, monitoring, and stewardship, in perpetuity.
- Also includes equipment, capital requirements (e.g. gates), and contractor services.
- Costs are often highest in the first 5-10 years due to major projects (e.g. fences, gates, and invasive plant management).





3.

## MANAGEMENT CONSIDERATIONS

Along with financial consideration, we must also consider the management needs for every potential land securement. This may include:

- Short and long term stewardship needs, such as managing invasive plant species, building or repairing fences and gates, trail maintenance, and addressing trespassing issues.
- Road access for staff to easily manage and monitor the land.
- Access for low-impact recreation, if the land will be owned by EALT and open for public use.



# LAND STEWARDSHIP

## HOW WE MONITOR AND STEWARD LAND





## LAND STEWARDSHIP

We manage and steward the conservation lands that we own and monitor those with a conservation easement. We follow the Canadian Land Trust Alliance Standards and Practices in all areas of our work. With respect to land stewardship, this includes:

- Preparing a Baseline Documentation Report for each conservation site within 12 months of securing the land. This report identifies the land's ecological, cultural, historical, and Indigenous features, as well as any threats. It involves field site visits to document these features, creating maps of the area, and other background research.
- Developing a Conservation Management Plan for lands that are owned by EALT within 12 months of securing the land. This Plan identifies goals for the conservation of the land, as well as the strategies, activities, and timelines to achieve these.
- Restrictions and Property Management Principles in our Conservation Easement agreements to ensure that owners of lands who have a CE on title are aware of the conservation goals for the land and best management practices for its continued conservation and restoration.
- Monitoring our conservation lands and easements for potential problems and addressing these in a timely manner.



## ADAPTIVE MANAGEMENT

EALT uses science-based methods to guide stewardship of lands that we own. We consult with scientific literature, conservation experts, and hire consultants if the scope of a project extends beyond EALT's internal capacity.

We use an adaptive management model for land stewardship to ensure that we not only aim for best management practices, but that we monitor and evaluate these on an ongoing basis to ensure they are achieving the intended outcomes.



Adaptive management project model (adapted from Conservation Measures Partnership 2020)



## CONTACT US

Edmonton and Area Land Trust  
#101, 10471—178 Street  
Edmonton AB, T5S 1R5



780-483-7578  
info@ealt.ca  
www.ealt.ca  
@EdAreaLandTrust

## PHOTOS & MAPS

Cover page. EALT, Larch Sanctuary

2. Monteith, long-eared owl
3. EALT, volunteers at Pipestone Creek Conservation Lands
4. Romanchuk, lynx
5. EALT, Coates Conservation Lands
6. Carbyn, trumpeter swan
7. EALT, Pipestone Creek Conservation Lands
8. Hastings, Boisvert's GreenWoods Conservation Lands
9. Kevin Crosby, moose
10. EALT, EMRB and LUF map
11. EMRB, Natural Living Systems map
12. EMRB, Agricultural Suitability map
13. EALT, Larch Sanctuary
14. EALT, Lu Carbyn Nature Sanctuary
15. Legault, Glory Hills Conservation Lands
16. EALT, Natural Regions map
17. -
18. EALT, Human Footprint map
19. EALT, ESA map

## ECOLOGICALLY VALUABLE LANDS MAP DATA SOURCES

Alberta Biodiversity Monitoring Institute  
Alberta Environment and Parks  
Beaver County  
Camrose County  
Canadian Parks and Wilderness Society Northern Chapter  
City of Edmonton  
Edmonton and Area Land Trust  
ESRI  
Lac St. Anne County  
Leduc County  
Parkland County  
Strathcona County  
Sturgeon County

20. EALT, ESA map
21. CPAWS, conservation value map
22. EALT, Protected Areas map
23. EALT, Smith Blackburn Homestead
24. EALT, volunteer installing nest box
25. Romanchuk, ruby-crowned kinglet
26. EALT, Ecologically Valuable Lands map
27. -
28. EALT, New Jubilee Conservation Lands
29. Norm Legault, Lu Carbyn Nature Sanctuary
30. EALT, swallowtail caterpillar
31. EALT, volunteers at Boisvert's GreenWoods Conservation Lands
32. EALT, Ministik Conservation Lands
33. EALT, volunteer pulling yellow toadflax
34. EALT, volunteers at Coates Conservation Lands
35. EALT, Smith Blackburn Homestead
36. EALT, volunteers planting native plants
37. Hil Reine, fleabane; EALT, police car moth

## REFERENCES

- Alberta Environment and Parks. 2020. Land Use. Available at <https://www.landuse.alberta.ca/Pages/default.aspx>. Accessed April 8, 2020.
- Alberta Land Stewardship Act. 2009.
- Alberta Parks 2014. Natural Regions and Subregions of Alberta: A Framework for Alberta's Parks.
- Baikie, D. Chan, M. Macdonald, D., Osorio, N. 2019. Nisku Wildlife Corridor Report. Prepared for Leduc County.
- Convention on Biological Diversity (CBD). 2018. *Protected areas and other effective area-based conservation measures* (Decision 14/8). <https://www.cbd.int/doc/decisions/cop-14/cop-14-dec-08-en.pdf>.
- City of Edmonton (COE). 2016. Live Active. A Collaborative Strategy for Active Living, Active Recreations, and Sport in Edmonton. Available at [https://www.edmonton.ca/city\\_government/initiatives\\_innovation/active-recreation-and-sport-policy.aspx](https://www.edmonton.ca/city_government/initiatives_innovation/active-recreation-and-sport-policy.aspx).
- City of Edmonton (COE). Ecological Network Map. Available at [https://www.edmonton.ca/city\\_government/documents/PDF/Ecological\\_Network\\_Map.pdf](https://www.edmonton.ca/city_government/documents/PDF/Ecological_Network_Map.pdf).
- City of Edmonton (COE). 2020. Ribbon of Green. SW + NE. Available at [https://www.edmonton.ca/city\\_government/initiatives\\_innovation/ribbon-of-green.aspx](https://www.edmonton.ca/city_government/initiatives_innovation/ribbon-of-green.aspx).
- Conservation Measures Partnership. Open Standards for the Practice of Conservation. Version 4.0. 2020. Available at <https://cmp-openstandards.org/>.
- Convention on Biological Diversity. 2010. Strategic Plan 2011-2020: Aichi Biodiversity Targets. Available at <https://www.cbd.int/sp/targets/>.
- CPAWS Conservation Blueprint Maps (2016 Version 1.1) Available at: <http://www.cpawsnab.org>.
- Dragon, B., Farooqui, H., Patel, S., Stelfox, N. 2018. Leduc Wildlife Corridor Study. Prepared for the City of Leduc, Leduc County, and Stantec Consulting Ltd.
- Dudley, N. (Ed) (2008). *Guidelines for Applying Protected Area Management Categories*. IUCN: Gland, Switzerland. 86pp. <https://doi.org/10.2305/IUCN.CH.2008.PAPS.2.en>.
- Edmonton and Area Land Trust Strategic Plan. 2020-2025.
- Edmonton Metropolitan Region Board. Regional Agriculture Plan. 2020. Available at <http://emrb.ca/ramp/>. Accessed April 8, 2020.
- Edmonton Metropolitan Region Board (EMRB 2017). Re-imagine. Plan. Build. Edmonton Metropolitan Region Growth Plan. Available at <http://emrb.ca/growth-plan/>.
- Environment and Climate Change Canada (ECCC). 2016. Canada's Biodiversity Outcomes Framework and 2020 Goals & Targets. Available at <https://biodivcanada.chm-cbd.net/sites/biodivcanada/files/2018-01/CW66-525-2016-eng.pdf>.
- Environment and Climate Change Canada, Ecological Gifts Program. <https://www.canada.ca/en/environment-climate-change/services/environmental-funding/ecological-gifts-program.html>.
- Fiera Biological Consulting 2014. Environmentally Significant Areas in Alberta: 2014 Update. Report prepared for the Government of Alberta, Edmonton, Alberta. Fiera Biological Consulting Report Number 1305. Pp. 51.
- Fiera (Fiera Biological Consulting Ltd.). 2015. Leduc County Environmentally Significant Areas Study. Report prepared for Leduc County. Fiera Biological Consulting Report #1358.
- Government of Canada. 2015. 2020 Biodiversity Goals and Targets for Canada. Available at <http://biodivcanada.ca/>.

## REFERENCES

- Hilty, J., Worboys, G.L., Keeley, A., Woodley, S., Lausche, B., Locke, H., Carr, M., Pulsford I., Pittock, J., White, J.W., Theobald, D.M., Levine, J., Reuling, M., Watson, J.E.M., Ament, R., and Tabor, G.M.\* (2020). *Guidelines for conserving connectivity through ecological networks and corridors*. Best Practice Protected Area Guidelines Series No. 30. Gland, Switzerland: IUCN.
- Humphrey JW, Watts K, Fuentes-Montemayor E, Macgregor NA, Peace AJ, Park KJ. 2015. "What can studies of woodland fragmentation and creation tell us about ecological networks? A literature review and synthesis", *Landscape Ecology*, vol. 30, pp. 21-50.
- Indigenous Circle of Experts (ICE). 2018. We Rise Together: Achieving Pathway to Canada Target 1 through the creation of Indigenous Protected and Conserved Areas in the spirit and practice of reconciliation. Parks Canada Agency on behalf of the Indigenous Circle of Experts. Gatineau, QC. Available at [http://publications.gc.ca/collections/collection\\_2018/pc/R62-548-2018-eng.pdf](http://publications.gc.ca/collections/collection_2018/pc/R62-548-2018-eng.pdf)
- IUCN-WCPA Task Force on OECMs. 2019. Recognising and reporting other effective area-based conservation measures. Gland, Switzerland: IUCN.
- Kamal S, Grodinska-Jurczak M, Brown G. 2015. "Conservation on private land: a review of global strategies with a proposed classification system". *Journal of Environmental Planning and Management*, vol 58, no 4, pp 576-597.
- Leduc County Environmentally Significant Areas Study. 2015.
- Mitchell, B.A., Stolton, S., Bezaury-Creel, J., Bingham, H.C., Cumming, T.L., Dudley, N., Fitzsimons, J.A., Malleret-King, D., Redford, K.H. and Solano, P. (2018). *Guidelines for privately protected areas*. Best Practice Protected Area Guidelines Series No. 29. Gland, Switzerland: IUCN. xii + 100pp.
- National Advisory Panel. 2018. Canada's Conservation Vision: A Report of the National Advisory Panel. Parks Canada Agency on behalf of the National Advisory Panel. Gatineau, QC. Available at [http://publications.gc.ca/collections/collection\\_2018/pc/R62-549-2018-eng.pdf](http://publications.gc.ca/collections/collection_2018/pc/R62-549-2018-eng.pdf)
- Natural Regions Committee 2006. Natural Regions and Subregions of Alberta. Compiled by D.J. Downing and W.W. Pettapiece. Government of Alberta. Pub. No. T/852.
- O2 Planning + Design Inc. 2014. Parkland County Environmental Conservation Master Plan. Prepared for Parkland County.
- Pathway to Target 1. 2018. One With Nature. A Renewed Approach to Land and Freshwater Conservation in Canada: A Report of Canada's Federal, Provincial and Territorial Departments Responsible for Parks, Protected Areas, Conservation, Wildlife and Biodiversity. Available at <https://www.conservation2020canada.ca>
- Ronson A, Pendelbury D, 2015, "Conservation Blueprint of Northern Alberta: Prioritizing areas for protected areas planning", Canadian Parks and Wilderness Society Northern Alberta.
- Salafsky N, Margoluis R, Redford K. 2008. Adaptive Management: A Tool for Conservation Practitioners.
- Saura S, Bodin O, Fortin MJ, 2014, "Stepping stones are crucial for species' long-distance dispersal and range expansion through habitat networks", *Journal of Applied Ecology*, vol. 51, pp. 171-182.
- Serecon, Toma & Bouma, Stantec. Leduc County Agricultural Strategy. Prepared for Leduc County.
- Solstice. 2017. Environmental Sensitivities Project. Prepared for City of Edmonton Parks & Biodiversity.
- Spencer Environmental. 2015. St Albert Natural Area Conservation and Management Plan.
- Toma & Bouma, Stantec. 2015. Strathcona County Agriculture Master Plan. Prepared for Strathcona County.
- Toma & Bouma, Stantec. 2016. Parkland County Future of Agricultural Study. Prepared for Parkland County.