

NORTH SASKATCHEWAN RIVER VALLEY *Area Redevelopment Plan*

NOVEMBER 2024



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LAND ACKNOWLEDGEMENT

The lands on which Edmonton sits and the North Saskatchewan River that runs through it have been sites of natural abundance, ceremony and culture, travel and rest, relationship building, making and trading for Indigenous Peoples since time immemorial.

Edmonton is located within Treaty 6 Territory and within the Métis homeland. We acknowledge this land as the traditional territories of many First Nations such as the Nehiyaw (Cree), Denesuliné (Dene), Nakota Sioux (Stoney), Anishinaabe (Saulteaux), and Niitsitapi (Blackfoot). We also acknowledge this place as the home of one of the largest communities of Inuit south of the 60th parallel.

The City of Edmonton owes its strength and vibrancy to these lands and the diverse Indigenous Peoples whose ancestors' footsteps have marked this territory as well as settlers from around the world who continue to be welcomed here and call Edmonton home. Together, we call upon all our collective honoured traditions and spirits to work in building a great city for today and future generations.



1.0 INTRODUCTION TO THE PLAN

1.1 General Introduction

The North Saskatchewan River Valley and Ravine System Area Redevelopment Plan (the Plan) serves to guide the City of Edmonton (the City) in protecting and enhancing natural and built assets within Edmonton's North Saskatchewan River Valley and Ravine System. This Plan builds upon and refines the planning policies, objectives, and requirements of The City Plan.

1.2 Authority and Relationship to Other Plans

The North Saskatchewan River Valley and Ravine System Area Redevelopment Plan is an area redevelopment plan as described under Section 634 of the Municipal Government Act.

The Plan is subject to The City Plan, the City of Edmonton's combined Municipal Development Plan and Transportation Master Plan. In the event of a discrepancy, The City Plan shall prevail over the Plan.

In accordance with the District Policy and relevant District Plan, rezoning, subdivision, and development permit decisions in this geographical area will be guided by the Plan.

In the event of a discrepancy between the Plan and the Rossdale Area Redevelopment Plan, the Plan shall prevail over the Rossdale Area Redevelopment Plan.

The Plan shall be read in conjunction with The City Plan and other policies, strategies, and guidelines established by the City of Edmonton. References to applicable strategies and guidelines are included but are not comprehensive.

1.3 Administrative and Interpretive Clauses

- 1.3.1 Where a term is not defined in the Plan, Administration may interpret such undefined terms in accordance with applicable legislation, statutory plans, bylaws, and policies.
- 1.3.2 Each policy statement uses either "should" or "shall." A policy statement containing "shall" is mandatory and must be implemented. Where a policy proves impractical or impossible, an applicant may apply to amend the Plan. A policy statement containing "should" is an advisory statement and indicates the preferred objective, policy, or implementation strategy. If the "should" statement is not followed, because it is impractical or impossible, the intent of the policy may be met through other means.
- 1.3.3 Where a policy involves two or more conditions, provisions, or events connected by the word "and," this means that all the connected items shall apply in combination.

- 1.3.4 Where a policy involves two or more conditions, provisions, or events connected by the word “or,” this means that connected items apply individually.
- 1.3.5 The Plan boundary shall be as illustrated on Map 1. Where necessary, detailed Plan boundaries shall coincide with land dedicated as environmental reserve, owned by the City of Edmonton, or the closest carriageway of any road right-of-way.
- 1.3.6 In the event of a conflict between the text of the Plan and a map, map symbol, boundary, or image, the text of the Plan shall prevail to the extent of the conflict.

1.4 Plan Amendments

Policies, text, and mapping information contained in the Plan may be amended from time to time to remain current and up-to-date in response to broader or more specific issues affecting the Plan area. Any changes to policy, text, or mapping information contained within the Plan shall be in accordance with the Municipal Government Act. Where changes are required to accommodate a land development application, the applicant shall prepare the Plan amendment in support of the application. Such amendments should align with the general intent of policies outlined in the Plan and other applicable statutory plans. All amendments to the Plan shall be presented as a proposed bylaw to City Council for consideration after a public hearing.





2.0 PLAN CONTEXT

2.1 Physical Context

The North Saskatchewan River Valley and Ravine System comprises an extensive natural landscape that profoundly shapes Edmonton's physical environment and cultural identity. Stretching over 48 kilometres from southwest to northeast, this geographical feature is characterized by a diverse array of topographical elements, including steep riverbanks, meandering waterways, and vegetated corridors. The valley's formation is primarily attributed to the erosive forces of the North Saskatchewan River, which has sculpted deep ravines and gorges over millennia, creating a picturesque and dynamic terrain.

The physical context of the North Saskatchewan River Valley and Ravine System is intimately tied to its hydrology, with the river and its tributaries serving as the principal conduits for water flow within the valley. These watercourses not only sustain a rich diversity of aquatic and riparian habitats, but also influence the distribution of vegetation and wildlife throughout the area. Riparian zones, characterized by their proximity to water sources, support unique ecosystems adapted to fluctuating water levels and provide critical habitat for numerous plant and animal species.

In close proximity to the river valley, Edmonton's urban landscape integrates with the natural environment, resulting in a blend of built and natural spaces. Access points throughout the system offer residents and visitors direct access to its recreational amenities and scenic vistas. The valley's interface with regional neighbours, including Parkland County, Sturgeon County, and Strathcona County, enhances its recreational and ecological significance as it serves as a shared green space and natural corridor for residents across the Edmonton Metropolitan Region.

Despite its natural beauty and ecological significance, the North Saskatchewan River Valley and Ravine System faces various challenges, including changing weather patterns, biodiversity loss, flood and wildfire risk, urban encroachment, and increasing usership as Edmonton grows to an anticipated population of two million people. Addressing these challenges requires a multifaceted approach that requires sustainable land use planning to ensure the long-term resilience and vitality of this invaluable natural asset.

2.2 Historical Context

The North Saskatchewan River Valley and Ravine System has long served as a place of connection and a path across the prairies for Indigenous Peoples that continues to connect the east and west today. The historical importance of the North Saskatchewan River Valley and Ravine System as a place for gathering, celebration, and connection lays an imprint on

the land. Located within Treaty Six Territory, which stretches from central, western Alberta to Manitoba, the River Valley and Ravine System represents traditional territory for numerous First Nations and Métis Peoples. Indigenous People have been stewards of the River Valley and Ravine System since time immemorial.

Millennia after the First Peoples first inhabited this region, the fur trade drove settlers to journey west into the prairies to establish trading posts from 1670-1870. This colonization resulted in permanent settlements including homesteads only 160 years ago. Since Edmonton was incorporated as a city in 1904, growth has continued to branch off from the North Saskatchewan River. Despite the continuous development of this city over the past 120 years, the River Valley and Ravine System has been established as a largely undeveloped, green connection. This protection has been supported by public ownership of most of the lands on both sides of the river, starting from 1907, and a directive in the 1933 Municipal Zoning Bylaw to preserve the area as parkland.

The historical recognition of the importance of the North Saskatchewan River Valley and Ravine System as an important natural feature has not always been enough to protect it. Throughout Edmonton's history, there have been times when the integrity of the system has been compromised or at risk due to industrial and utility uses, proposals for expansive transportation networks, and proposals for expansive landscape modification for recreational use.

Approval of the North Saskatchewan River Valley Area Redevelopment Plan of 1985 served as a critical step in efforts to protect the River Valley and Ravine System through responsible planning and environmental management.

Since the approval of the North Saskatchewan River Valley Area Redevelopment Plan of 1985, the City of Edmonton has continued to provide strategic direction for the protection of the River Valley and Ravine System with the Ribbon of Green Concept Plan in 1990, the Ribbon of Green Master Plan in 1992, and Ribbon of Green SW + NE Strategic Plan in 2020.

2.3 Policy and Planning Context

The North Saskatchewan River Valley and Ravine System is foundational to the story and identity of Edmonton and Edmontonians. Indigenous Peoples have long been stewards of this river and this place, traditionally called amiskwaciwâskahikan, and are still stewards today. The North Saskatchewan River Valley and Ravine System supports critical natural processes and provides places to recreate, celebrate, and recharge. In 2024, the North Saskatchewan River was designated a Canadian Heritage River in recognition of its cultural, natural, and recreational value.

As a regional biodiversity core area and Edmonton's most important natural asset, the North Saskatchewan River Valley and Ravine System provides essential ecosystem services, including, but not limited to, supporting biodiversity, providing clean soil, air, and water,

supporting flood protection and mitigation, providing food and medicines, providing carbon sequestration and storage, and supporting urban climate regulation. The River Valley and Ravine System also serves as a key ecological and movement corridor that provides critical habitat for a wide range of plant and animal species that live in and move through the city. In addition to its role in providing a variety of ecosystem services, the River Valley and Ravine System also supports the provision of critical urban services, including utility services such as water and wastewater treatment.

As Edmonton has grown, the River Valley has faced increasing pressure from urban development and use. Historical industrial, transportation, utility, and recreation infrastructure have placed pressure on the natural environment of the River Valley and Ravine System. Today, climate change, invasive species, and the cumulative impacts of ongoing uses are added threats to ecological integrity.

The Ribbon of Green Strategic Plan identifies the following vision for Edmonton's River Valley and Ravine System: a protected, connected, ecologically resilient landscape that honours our collective history and promotes healthy living through diverse opportunities for recreation, active transportation, learning, and gathering in the tranquility of nature. The Plan has a critical role to play in achieving this vision.

The Plan will help guide our response to growing and changing demand for access to, and use of, the River Valley and Ravine System, and to emerging opportunities. Strategic and environmental assessment will enable us to give thoughtful consideration to the potential environmental and community impacts of proposed development. In considering development proposals, the City of Edmonton should seek to minimize built infrastructure across the River Valley and Ravine System to that which is essential for providing urban services and which requires a River Valley location. Where negative impacts are unavoidable, mitigation will be applied. Ecological restoration, including the potential closing and decommissioning of existing facilities and infrastructure in constrained and degraded areas, is critical in improving ecosystem health and increasing resiliency. Wherever possible, nature-based solutions should be applied to any future development. Such solutions will also help us to mitigate and adapt to the impacts of climate change. Limiting development in the River Valley and Ravine System provides opportunity to support numerous ecosystem services and contributes to meeting our climate change commitments.

Maintaining and restoring ecological health is essential to our enjoyment of the River Valley - for sport, recreation, active transportation, gathering, learning, and resting in the midst of a busy urban environment. If we allow this system, which is both highly valued and also sensitive to our use, to degrade, we risk losing the many benefits it provides.

Delivering the objectives of the Plan will be a process of continuous learning, monitoring our progress, and adapting our approach where needed. It will also be a collaborative process - working together with Indigenous Nations and Communities in the spirit of reconciliation to incorporate their knowledge and wisdom into decision-making and stewardship of these

lands; working with community groups to advance stewardship and monitoring; and, working with city-building partners to advance innovative, transformative, and restorative River Valley projects.

We are stewarding a natural asset that has been protected and stewarded by many generations before us. Our gift to future generations is continued care of the natural habitats, wildlife, sacred places, and stories contained in the River Valley and Ravine System.



PHOTO BY GERALD ROMANCHUK

3.0 OBJECTIVES

The objectives of this Plan are to:

- ensure the environmental protection of the North Saskatchewan River Valley and Ravine System; and,
- provide public access to the North Saskatchewan River Valley and Ravine System for celebration and wellness.

This Plan supports our collective vision for the North Saskatchewan River Valley and Ravine System, as captured in the Ribbon of Green.

The North Saskatchewan River Valley and Ravine System is a protected, connected, ecologically resilient landscape that honours our collective history and promotes healthy living through diverse opportunities for recreation, active transportation, learning, and gathering in the tranquility of nature.



4.0 LAND USE POLICIES

4.1 General and Open Space Land Use Policies

- 4.1.1 The primary land use throughout the Plan area shall be **open space**.
- 4.1.2 River Valley Open Space, as shown on Map 1, should be planned in accordance with the spatial and policy guidance provided by the Ribbon of Green Strategic Plan.
- 4.1.3 **Development** on lands designated for River Valley Open Space or Public Utilities, as shown on Map 1, shall be limited to those that are compatible with environmental protection, recreation, and cultural heritage, or provide transportation or utility services that require a River Valley location.
- 4.1.4 Outside of the existing residential communities of Rossdale and Cloverdale, as shown on Map 1, development of new or **significantly expanded intensive open space facilities** shall be discouraged.
- 4.1.5 Subdivisions that would prohibit future dedication of reserves in the Plan area shall not be approved.
- 4.1.6 The City shall pursue City ownership of lands in the Plan area through a combination of purchase, reserve dedication, donations, or bequeathments. Easements shall only be contemplated where no other methods are possible.
- 4.1.7 The City shall pursue ownership of lands outside of the Plan area with significant environmental features functionally contributing to the River Valley and Ravine System through a combination of purchase, reserve dedication, donations, or bequeathments. Easements shall only be contemplated where no other methods are possible.
- 4.1.8 Lands acquired by the City in accordance with Policy 4.1.7 shall be incorporated into the Plan area.
- 4.1.9 The City shall designate eligible lands within the Plan area as environmental reserve in accordance with the provisions of The City Plan, the Municipal Government Act, and City policies C542A and C531.
- 4.1.10 The primary land use of all lands acquired by the City in accordance with Policy 4.1.6 or 4.1.7 shall be **open space**. Such lands shall be classified as River Valley Open Space as shown on Map 2 and should be planned in accordance with the spatial and policy guidance provided by the Ribbon of Green Strategic Plan.

- 4.1.11 Public engagement for proposed **development** on lands identified for River Valley Open Space or Public Utilities, as shown on Map 1, shall be undertaken in accordance with the City's public engagement policy and The City Plan.
- 4.1.12 Indigenous engagement for proposed **development** on lands identified for River Valley Open Space or Public Utilities, as shown on Map 1, shall be undertaken in accordance with The City Plan.
- 4.1.13 An amendment to the Plan shall be required:
- a) for any rezoning that is in conflict with any objective or policy of the Plan;
 - b) for any **development** that proposes to change the boundaries of the Plan, where that change is not based on updated technical information reflecting current site conditions; or
 - c) where directed by City Council.
- 4.1.14 Any application to amend the Plan as outlined in Policy 4.1.13 shall require completion of a strategic assessment and an environmental assessment as outlined in Appendix 1.
- 4.1.15 An **ecological network approach** shall be considered by City administration as part of land use and **development** proposals in the Plan area.
- 4.1.16 **Nature-based solutions** shall be considered by City administration as part of land use and **development** proposals in the Plan area.
- 4.1.17 Climate change adaptation efforts and resilience opportunities shall be considered by City administration as part of land use and **development** proposals in the Plan area.
- 4.1.18 The **mitigation hierarchy** shall be considered by City administration as part of land use and **development proposals** in the Plan area.
- 4.1.19 Outside of the existing residential communities of Rossdale and Cloverdale, as shown on Map 1, **development** in the floodplain, as outlined in the District Policy, relevant District Plans, or the Zoning Bylaw, shall be discouraged.
- 4.1.20 Within the existing residential communities of Rossdale and Cloverdale, as shown on Map 1, **development** in the floodplain, as outlined in the District Policy, relevant District Plans, or the Zoning Bylaw, shall be in accordance with the District Policy and relevant District Plan.
- 4.1.21 Outside of the existing residential communities of Rossdale and Cloverdale, as shown on Map 1, rezoning or plan amendments to allow for uses other than **open space**, shall be discouraged.

- 4.1.22 Despite Policy 4.1.21, outside of the existing residential communities of Rossdale and Cloverdale, as shown on Map 1, rezoning to allow for new or **significantly expanded intensive open space facilities** shall be discouraged.
- 4.1.23 Modification of waterbody boundaries within the Plan area for any purpose other than ecological restoration, flood risk mitigation, or geotechnical risk mitigation shall not be supported.

4.2 Utility Infrastructure and Uses

- 4.2.1 Existing utility infrastructure and uses may continue.
- 4.2.2 Opportunities to mitigate the impacts of existing utilities, and restore lands used for utility infrastructure to **open space** use, shall be evaluated as part of infrastructure lifecycle management and renewal.
- 4.2.3 Outside of the existing residential communities of Rossdale and Cloverdale, as shown on Map 1, development of new or **significantly expanded intensive utility facilities** shall be discouraged.

4.3 Transportation Infrastructure and Uses

- 4.3.1 Existing transportation infrastructure and uses may continue.
- 4.3.2 Opportunities to mitigate the impacts of existing transportation infrastructure, and restore lands used for transportation infrastructure to **open space** use, shall be evaluated as part of infrastructure lifecycle management and renewal.
- 4.3.3 Outside of the existing residential communities of Rossdale and Cloverdale, as shown on Map 1, development of **new or significantly expanded intensive transportation facilities** shall be discouraged.

4.4 Additional Uses

- 4.4.1 Existing agricultural uses may continue.
- 4.4.2 Existing industrial uses may continue.
- 4.4.3 Existing **resource extraction** uses may continue but should not be expanded.
- 4.4.4 Rezoning to allow for new or **significantly expanded resource extraction** shall be in accordance with policy 5.3.2.3 of The City Plan.
- 4.4.5 Development of new or **significantly expanded** industrial uses shall not be supported.

- 4.4.6 Existing residential uses and associated **development**, including in the existing residential communities of Cloverdale and Rosssdale, as shown on Map 1, may continue.
- 4.4.7 No new residential lots shall be created outside of the existing residential communities of Rosssdale and Cloverdale, as shown on Map 1.
- 4.4.8 Existing commercial or **urban service** uses may continue.
- 4.4.9 Outside of the existing residential communities of Rosssdale and Cloverdale, as shown on Map 1, development of new or **significantly expanded** commercial or **urban service** uses shall not be supported, unless they are:
- a) accessory to **open space** use;
 - b) accessory to agricultural use; or,
 - c) entirely occurring within the footprint of an existing structure.



5.0 DEVELOPMENT PROPOSALS

5.1 Proposal Requirements

- 5.1.1 Applications for development permits in the Plan area may be subject to additional technical reporting requirements addressing **environmental** impacts and risks at the discretion of the development planner in consultation with the department responsible for river valley strategic planning. The development planner, in consultation with the department responsible for river valley strategic planning, may impose conditions on the development permit to ensure that **environmental** impacts and risks have been mitigated in accordance with the application of the **mitigation hierarchy**.
- 5.1.2 All **development** proposed on lands designated for River Valley Open Space or Public Utilities, as shown on Map 1, shall be subject to a strategic assessment and an environmental assessment in accordance with Appendix 1.

5.2 Governance and Authority

- 5.2.1 The strategic assessment and environmental assessment as outlined in Appendix 1 shall be subject to review and acceptance by the department responsible for river valley strategic planning.
- 5.2.2 City Council approval of a strategic assessment as outlined in Appendix 1 shall be required for new or **significantly expanded intensive utility facilities, intensive transportation facilities, and intensive open space facilities**, if those facilities are proposed on lands designated for River Valley Open Space or Public Utilities, as shown on Map 1.
- 5.2.3 City Council approval of a strategic assessment as outlined in Appendix 1 shall be required for new or **significantly expanded development** proposed on lands designated for River Valley Open Space or Public Utilities, as shown on Map 1, likely to result in permanent, adverse **environmental** or community impacts that cannot be mitigated, as determined by the department responsible for river valley strategic planning.
- 5.2.4 City Council approval of a strategic assessment as outlined in Appendix 1 shall be required for any application to amend the Plan as in 4.1.13.
- 5.2.5 In approving the strategic assessment as outlined in Appendix 1 for **development** subject to section 5.2.2, 5.2.3, or 5.2.4, City Council shall consider whether the proposed **development**:
 - a) meets the goals, objectives, and policies of this Plan;
 - b) requires a River Valley and Ravine System location; and,
 - c) is in the public interest.

6.0 GLOSSARY

Development

Constructed buildings, structures, or facilities, or changes to the land, undertaken to serve social, economic, or environmental needs.

This does not include work or a change in use occurring entirely within existing constructed buildings, structures, or facilities, and with no potential for impact to the surrounding environment.

Environmental

Includes, but is not limited to: soil, air, and water quality; geology and geomorphology; ecology and biodiversity; geotechnical risks; flood risk; climate change adaptation and mitigation; historical and archaeological resources; and other similar considerations.

Ecological Network Approach

An ecological network approach to conservation aims to protect biodiversity and ecological functions by recognizing the natural connections between natural areas and their surroundings. This approach means protecting a network of core natural areas that are ecologically connected by natural and semi-natural linkages and – to the extent possible – surrounded by compatible land uses.

Intensive Open Space Facilities

Temporary or permanent indoor or outdoor facilities, including buildings, structures, or modified lands, used for entertainment, recreation, conferences, park functions, or other similar purposes and which are approximately 20,000 m² or more in size.

Examples include: sports or recreation centres or clubs; golf courses and sports fields; zoos; museums; interpretive centres; or other similar facilities.

This does not include:

- repair, maintenance, or change in use of existing temporary or permanent indoor or outdoor facilities, including buildings, structures, or modified lands, used for entertainment, recreation, conferences, park functions or other similar purposes, of any size.

Intensive Transportation Facilities

Temporary or permanent transportation facilities or infrastructure greater than approximately 500 m² or more in size, including:

parking lots, railway corridors, railway bridges, roadway corridors, roadway bridges, surface or below ground parkades, transit centres, or other similar facilities or infrastructure.

This does not include:

- temporary or permanent transportation facilities or infrastructure less than approximately 500 m² in size, such as emergency turnarounds, local service roads, local parking lots, medians, or other similar facilities;
- facilities intended for active transportation such as pathways, pedestrian bridges, or other similar facilities, of any size; or,
- repair, maintenance, or change in use of existing temporary or permanent transportation facilities or infrastructure of any size.

Intensive Utility Facilities

Temporary or permanent utility facilities or infrastructure greater than approximately 500 m² or more in size, including:

transmission pipelines, power generation facilities, water and wastewater treatment facilities, waste management facilities and landfills, stormwater management facilities, or other similar facilities or infrastructure.

This does not include:

- temporary or permanent utility facilities or infrastructure less than approximately 500 m² in size, such as power poles, outfalls, utility access points, or other similar facilities;
- transmission infrastructure or pipelines for water, wastewater, power, or telecommunications, of any size; or,
- repair, maintenance, or change in use of existing temporary or permanent utility facilities or infrastructure of any size.

Mitigation Hierarchy

A conservation tool that guides users towards limiting the negative impacts on biodiversity from development projects. The components of the mitigation hierarchy are defined in the following order of importance:

1. Avoid: Prevent impacts through project relocation, changing the project scope, and/or project timing.
2. Minimize: Minimize impacts through project design modifications that reduce the extent, duration, and/or intensity of unavoidable impacts.
3. Restore: Restore or rehabilitate areas that have been exposed to impacts that could not be avoided or minimized.
4. Offset: Offset permanent losses to native ecosystems through restoration, creation or protection of native ecosystems where residual impacts cannot be addressed by avoidance, minimization or mitigation.

Nature-Based Solutions

Actions to protect, sustainably manage, and restore natural and modified ecosystems, benefiting people and nature at the same time. Nature-based solutions target major challenges including, but not limited to, climate change, disaster risk reduction, food and water security, biodiversity loss, and human health.

Open Space

An area of outdoor land or water that contributes to celebration, wellness, and ecology, that is publicly owned or publicly accessible. Open space uses in the North Saskatchewan River Valley and Ravine System include publicly accessible parks, natural areas, recreation amenities and facilities, and heritage, culture, festival, or event spaces, or other similar areas.

Resource Extraction

Development used primarily for the removal, extraction, and primary processing of natural resources. Typical examples include clay pits, coal mining, gravel pits, oil and gas wells, sandpits, stripping of topsoil, or other similar **development**.

Significant Expansion

An expansion of existing **development**, including primary or accessory structures, utilities, parking lots, and other supporting infrastructure, beyond its existing physical footprint in a manner that necessitates ground or vegetation disturbance and carries risk of permanent adverse **environmental** or community impacts that cannot be adequately mitigated.

Urban Service

Development used to provide urban services such as child care service, community service, library, school, cemetery, detention facility, health care facility, or recycling drop-off centre.

Appendix 1: Strategic Assessment and Environmental Assessment Framework

Overview

This framework provides a process for evaluating whether a potential **development** in the River Valley and Ravine System should proceed and identifying the conditions under which it may proceed.

Detailed technical requirements associated with the strategic assessment and environmental assessment shall be developed and updated by the department responsible for river valley strategic planning. Amendment to this framework may be required where changes to technical requirements impact key elements of the assessment, provided below, or with the overall purpose of the assessment.

Strategic Assessment

The purpose of the strategic assessment is to support decision-making about proposed **development** or potential **development** resulting from programming activities in the River Valley by evaluating the **development's** rationale, alignment with City policy and strategy, including the Plan and Ribbon of Green Strategic Plan, and potential adverse impacts, at an early stage. This helps mitigate the risk of expending significant time and financial resources on the development of design and technical reporting for **development** that ultimately may not align with the goals and objectives of the Plan.

Strategic Assessment Requirements

The following considerations shall be addressed in the strategic assessment:

1. Project rationale and anticipated benefits;
2. Alignment with Plan policy direction and land use concept;
3. Alignment with Ribbon of Green policy and spatial guidance;
4. Site rationale, necessity of a River Valley location, and alternatives considered (if any);
5. For renewal projects or redevelopment on existing footprint, evaluation of opportunities to reduce the developed footprint and expand open space;
6. Overview of potential **environmental** impacts and mitigation measures, based on desktop analysis; and
7. Completed or planned public, stakeholder, and Indigenous engagement.

Environmental Assessment

The purpose of the environmental assessment is to support the identification, prediction, and evaluation of the potential **environmental** impacts of a proposed project in order to support mitigation of adverse impacts and application of the **mitigation hierarchy**. The environmental assessment is generally completed at later project stages, once information regarding the location and design is available, and site-specific analysis and technical studies can be completed.

Environmental Assessment Requirements

The following considerations shall be addressed in the environmental assessment:

1. Project context, including project purpose, design, and construction approach;
2. Site context, including existing land uses and **environmental** conditions;
3. Assessment of potential direct, indirect, and cumulative **environmental** impacts of construction and operation;
4. Demonstrated application of the **mitigation hierarchy**;
5. Anticipated mitigation measures in alignment with the **mitigation hierarchy**;
6. Permanent **environmental** changes and residual **environmental** impacts;
7. Severity and significance of residual **environmental** impacts;
8. **Environmental** monitoring requirements; and
9. Summary of feedback pertaining to the project or its **environmental** impacts from any public, stakeholder, and Indigenous engagement undertaken.

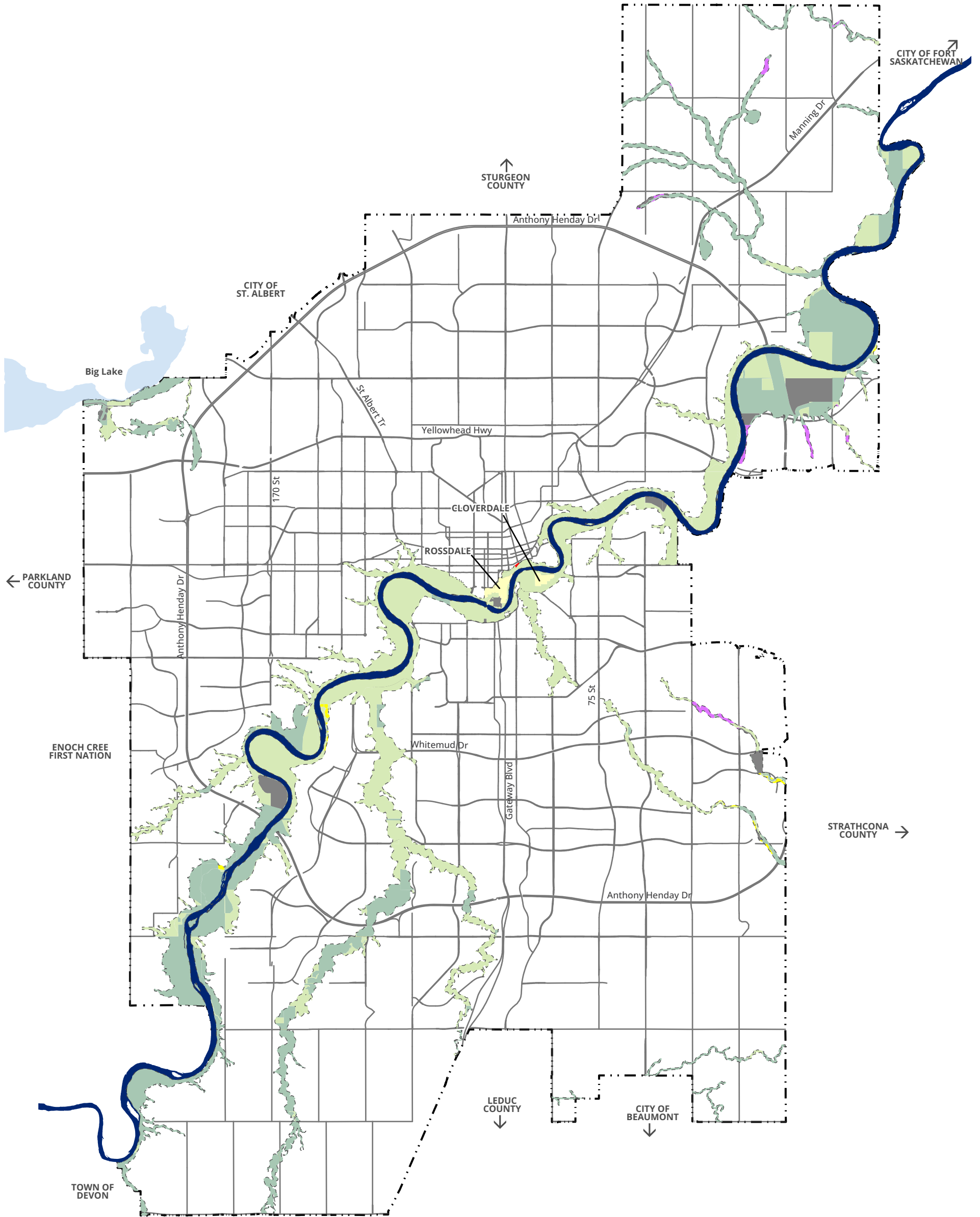
Assessment of **environmental** conditions and **environmental** impacts shall include, but not be limited to, the following components:

1. Hydrology;
2. Geology, Geomorphology, and Soils;
3. Vegetation and Habitat;
4. Wildlife and Wildlife Movement;
5. Historical and Archaeological Resources;
6. Noise, Odour, and Visual Impacts; and
7. Climate Adaptation and Mitigation.













Map 1: Existing Land Use

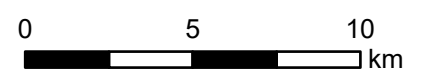
EXISTING LAND USE

Overview



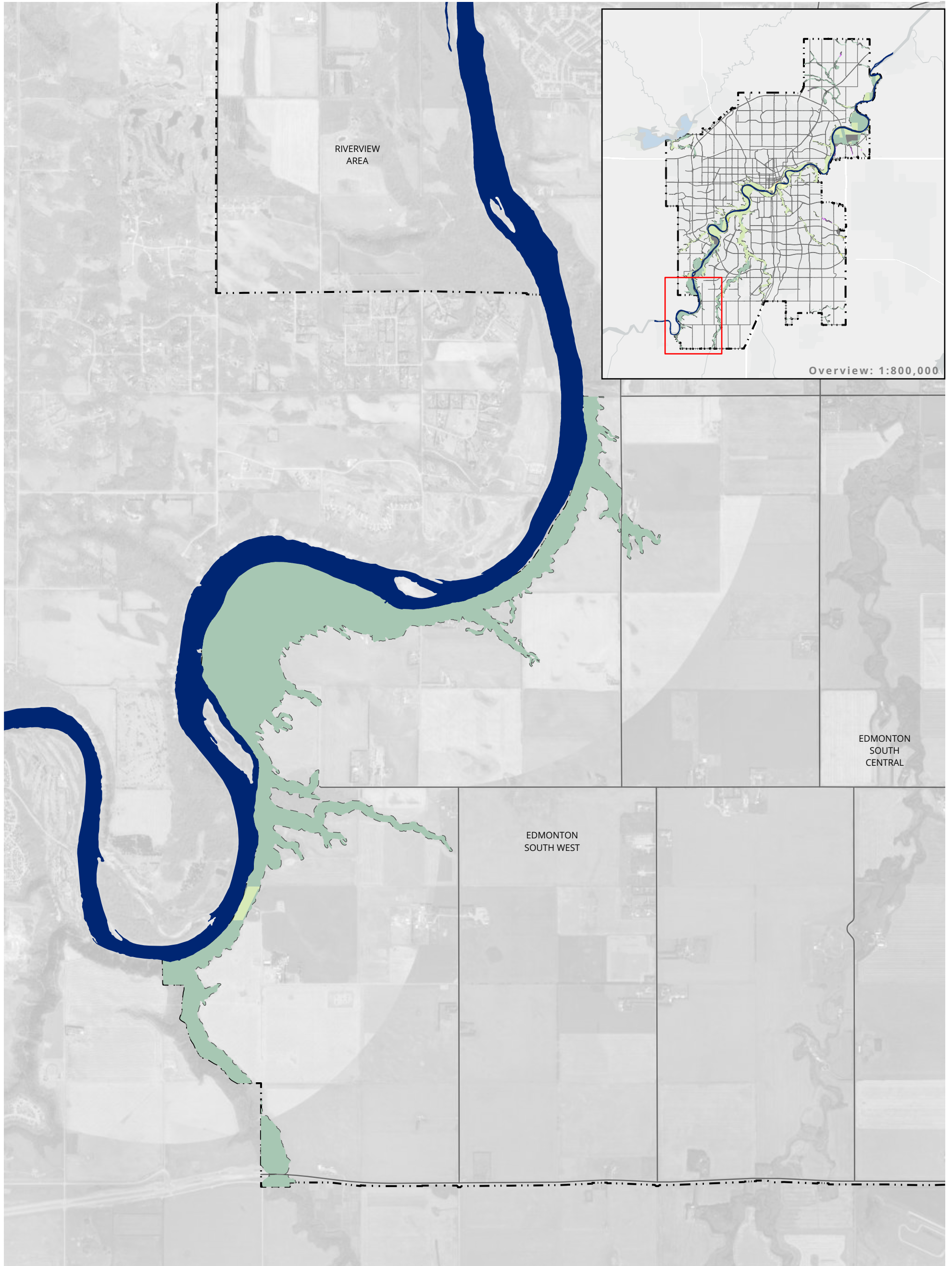
LEGEND

- | | | |
|---|---|---|
|  River Valley Open Space |  Residential Community |  Big Lake |
|  Other Open Space/Agricultural |  Industrial |  North Saskatchewan River |
|  Public Utility |  Commercial |  Plan Boundary |
|  Residential |  City Boundary |  Major Road |















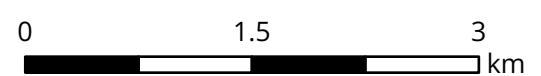
EXISTING LAND USE

Rabbit Hill Reach



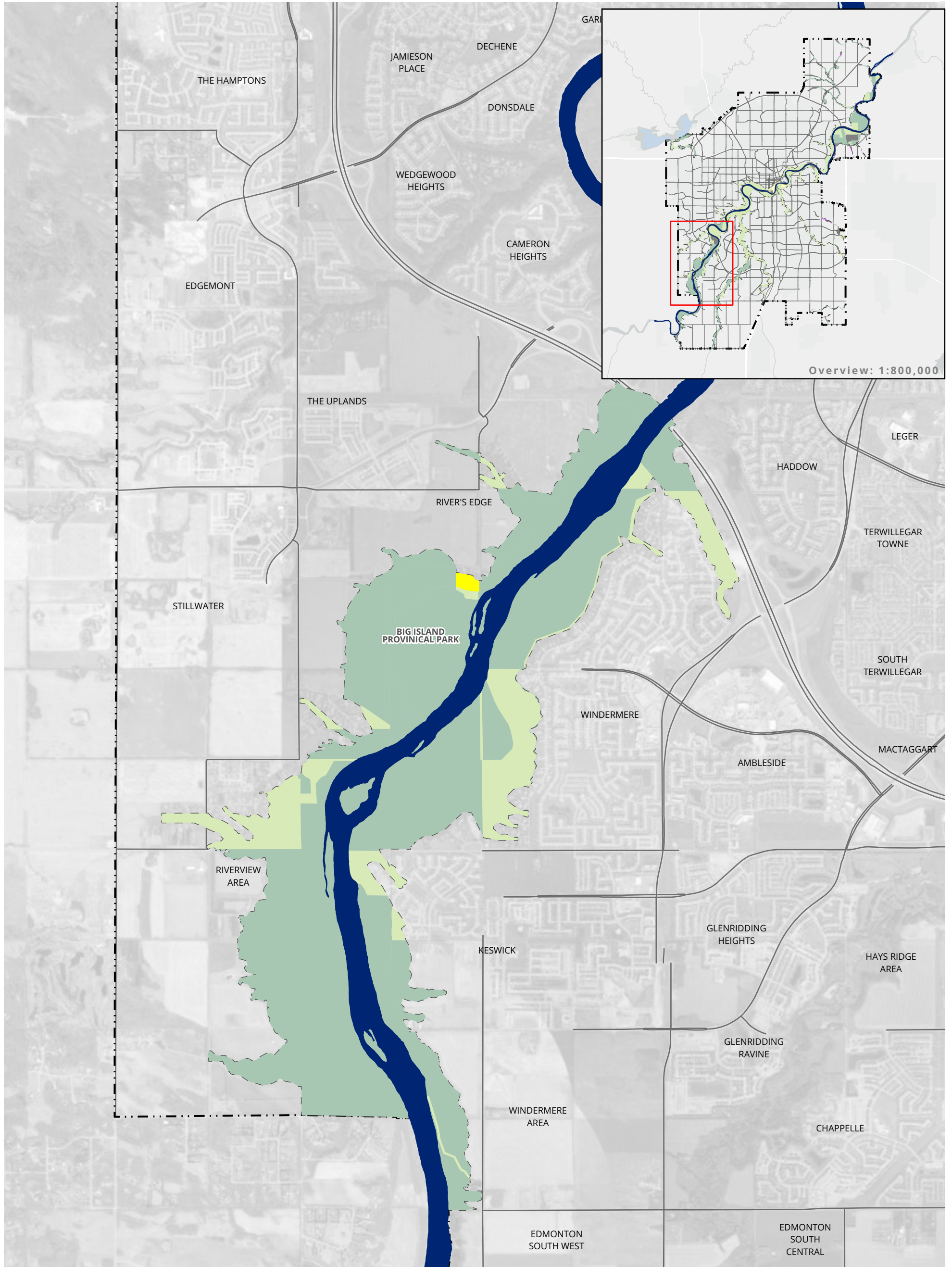
LEGEND

- | | | |
|--|---|--|
|  River Valley Open Space |  Residential Community |  Big Lake |
|  Other Open Space/Agricultural |  Industrial |  North Saskatchewan River |
|  Public Utility |  Commercial |  Plan Boundary |
|  Residential |  City Boundary |  Major Road |



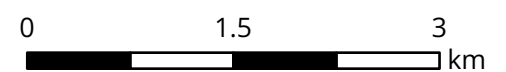
EXISTING LAND USE

Big Island + Woodbend Reach



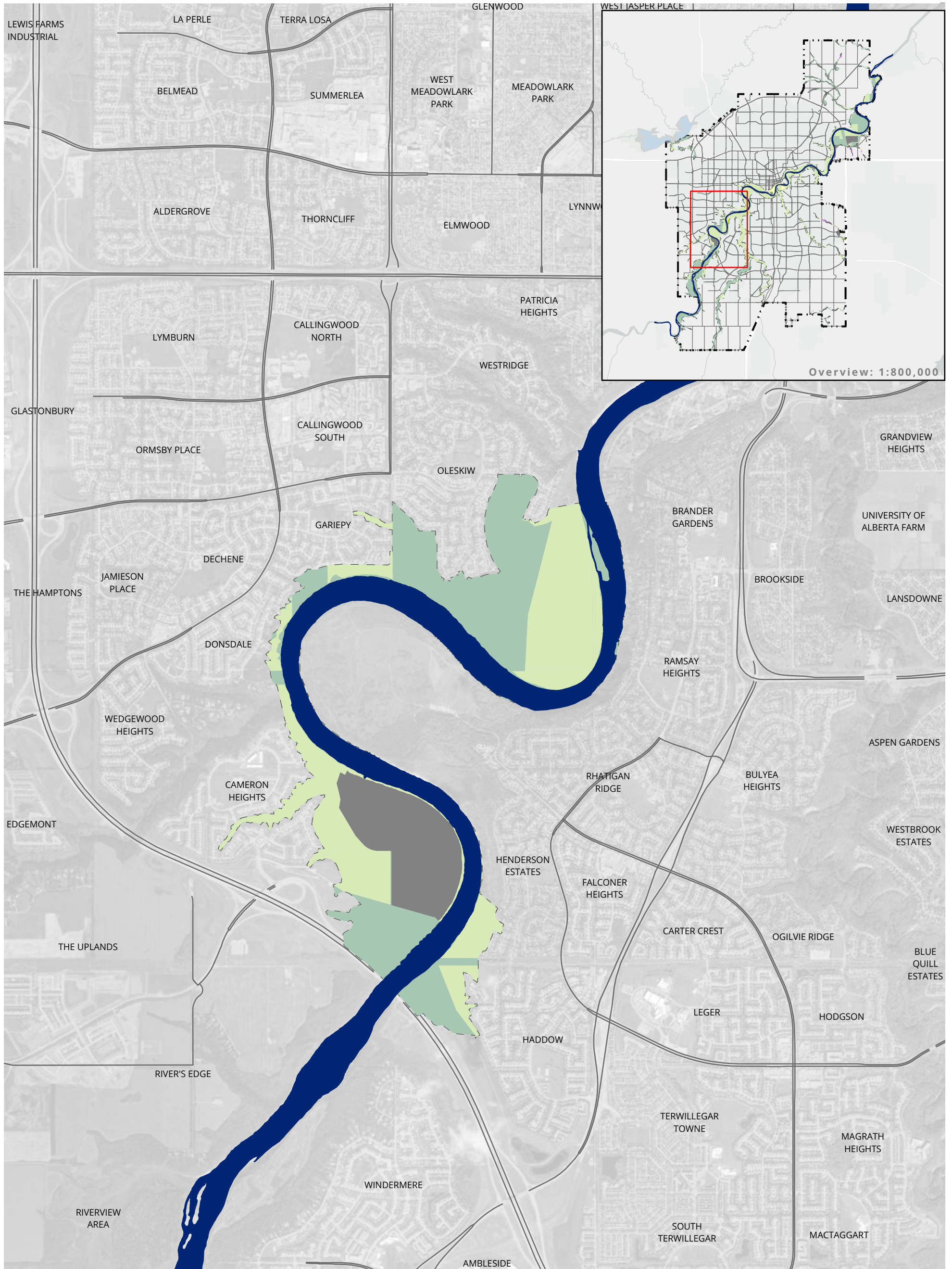
LEGEND

- | | | |
|-------------------------------|-----------------------|--------------------------|
| River Valley Open Space | Residential Community | Big Lake |
| Other Open Space/Agricultural | Industrial | North Saskatchewan River |
| Public Utility | Commercial | Plan Boundary |
| Residential | City Boundary | Major Road |



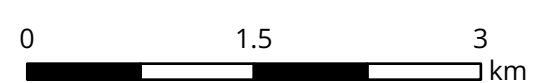
EXISTING LAND USE

Cameron-Oleskiw River Valley Reach



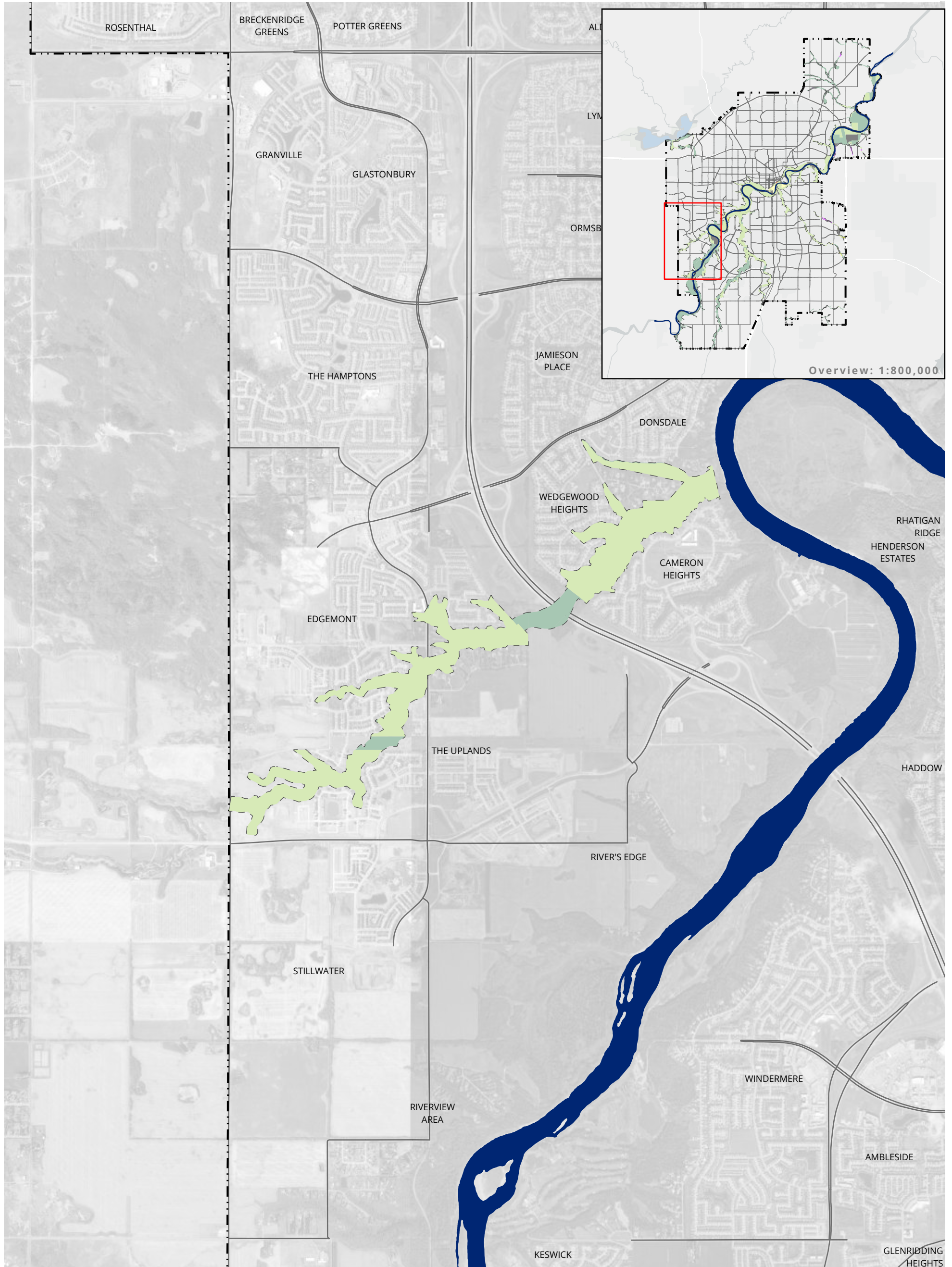
LEGEND

- | | | |
|--|--|---|
| River Valley Open Space | Residential Community | Big Lake |
| Other Open Space/Agricultural | Industrial | North Saskatchewan River |
| Public Utility | Commercial | Plan Boundary |
| Residential | City Boundary | Major Road |















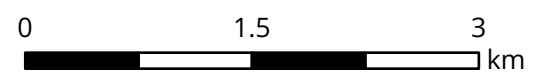
EXISTING LAND USE

Wedgewood Ravine Reach



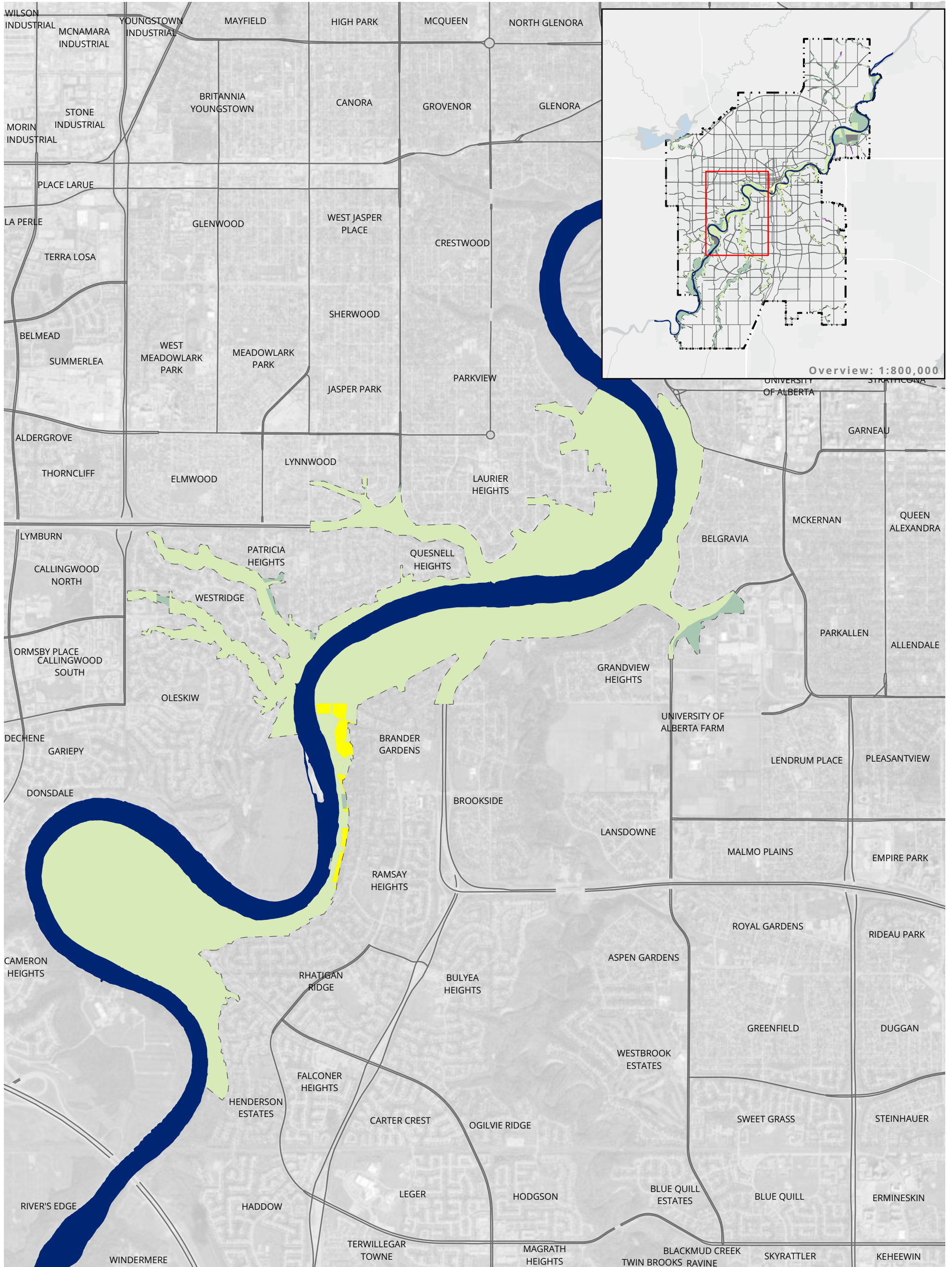
LEGEND

- | | | |
|--|---|--|
|  River Valley Open Space |  Residential Community |  Big Lake |
|  Other Open Space/Agricultural |  Industrial |  North Saskatchewan River |
|  Public Utility |  Commercial |  Plan Boundary |
|  Residential |  City Boundary |  Major Road |



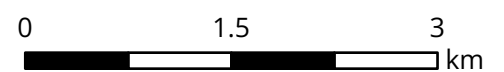
EXISTING LAND USE

North Saskatchewan West Reach



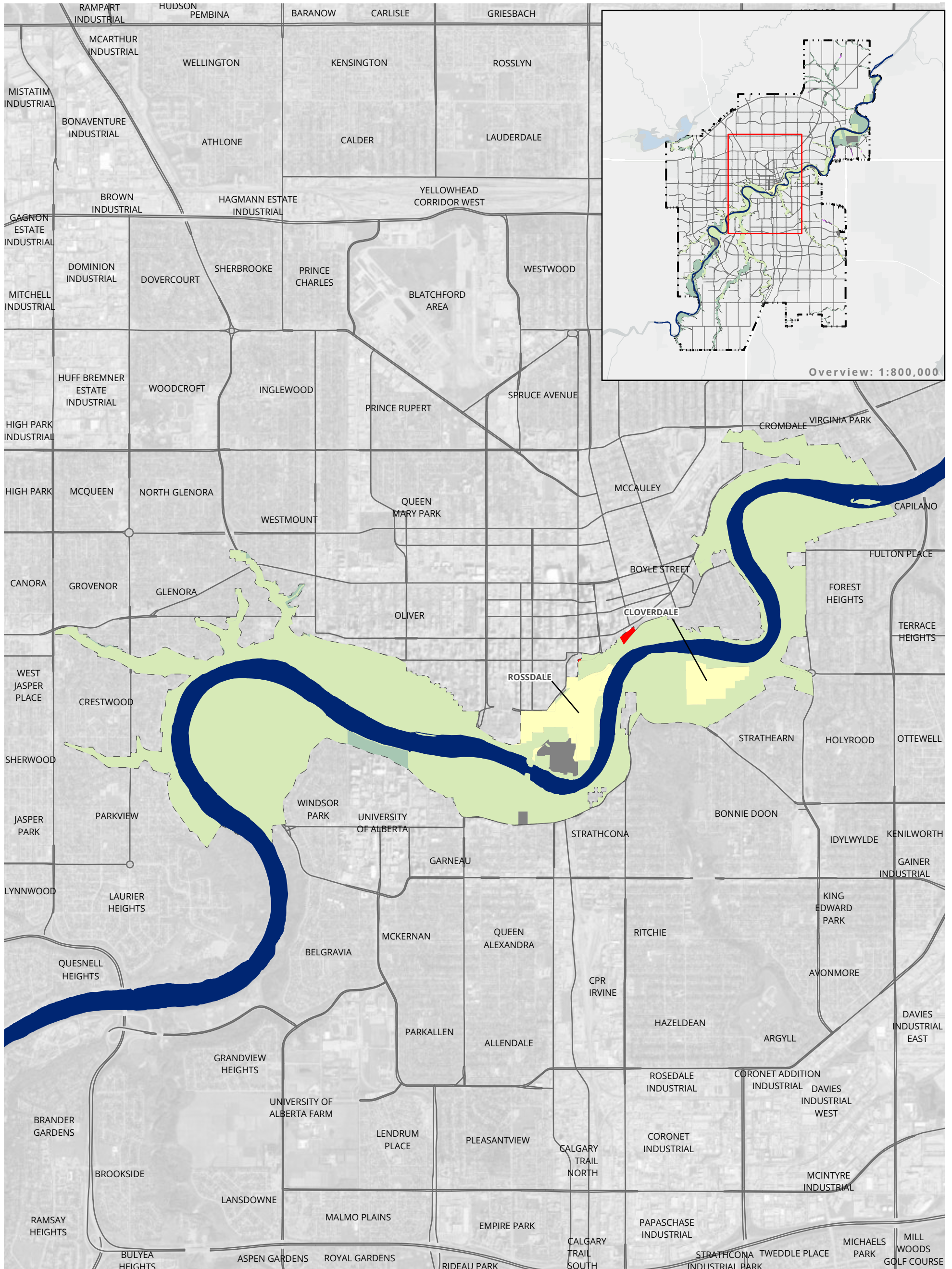
LEGEND

- | | | |
|-------------------------------|-----------------------|--------------------------|
| River Valley Open Space | Residential Community | Big Lake |
| Other Open Space/Agricultural | Industrial | North Saskatchewan River |
| Public Utility | Commercial | Plan Boundary |
| Residential | City Boundary | Major Road |



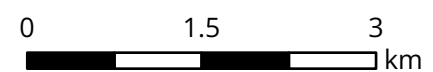
EXISTING LAND USE

North Saskatchewan Central Reach



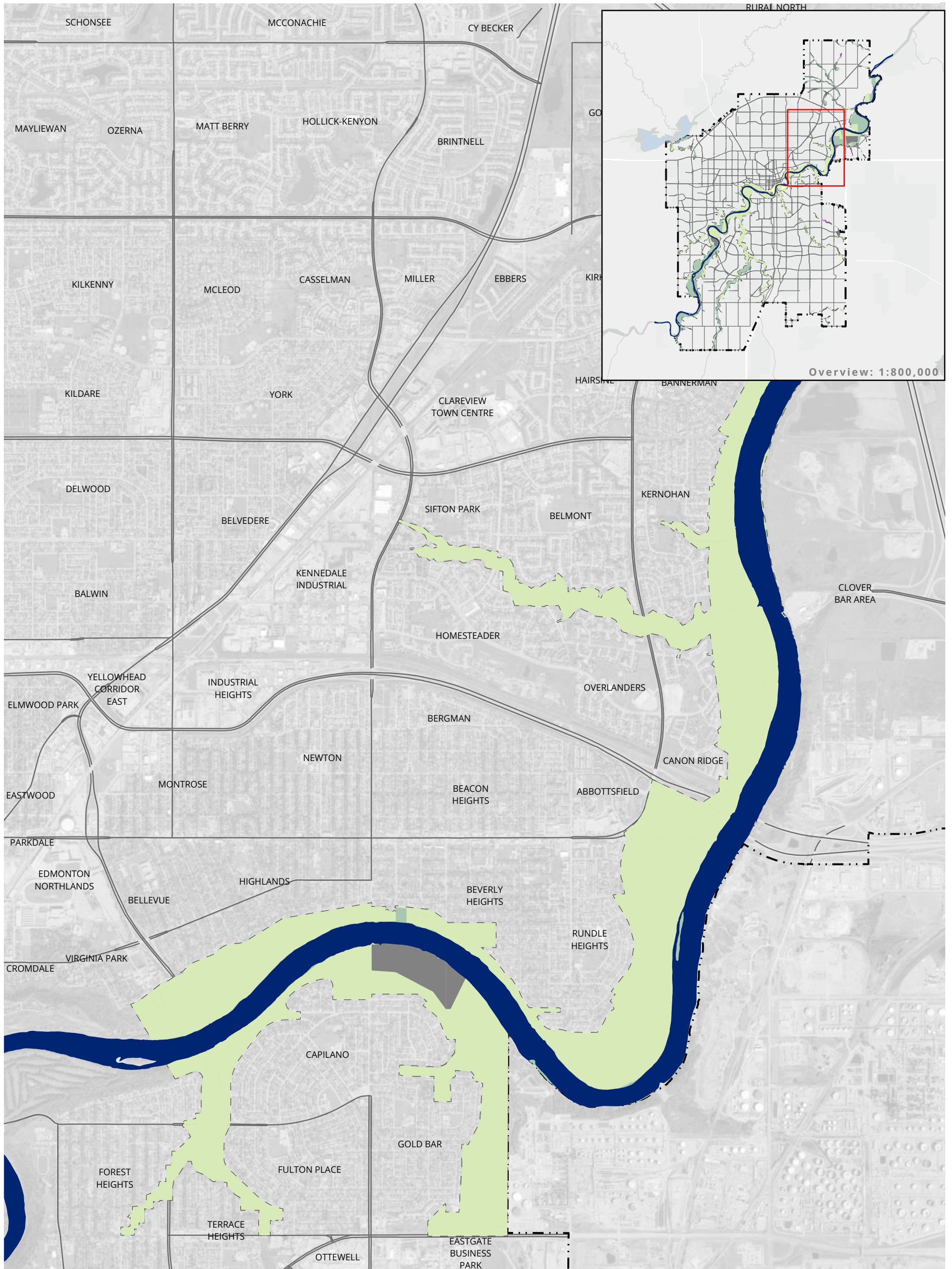
LEGEND

- River Valley Open Space
- Other Open Space/Agricultural
- Public Utility
- Residential
- Residential Community
- Industrial
- Commercial
- City Boundary
- Big Lake
- North Saskatchewan River
- Plan Boundary
- Major Road















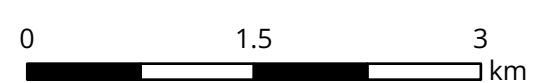
EXISTING LAND USE

North Saskatchewan East Reach



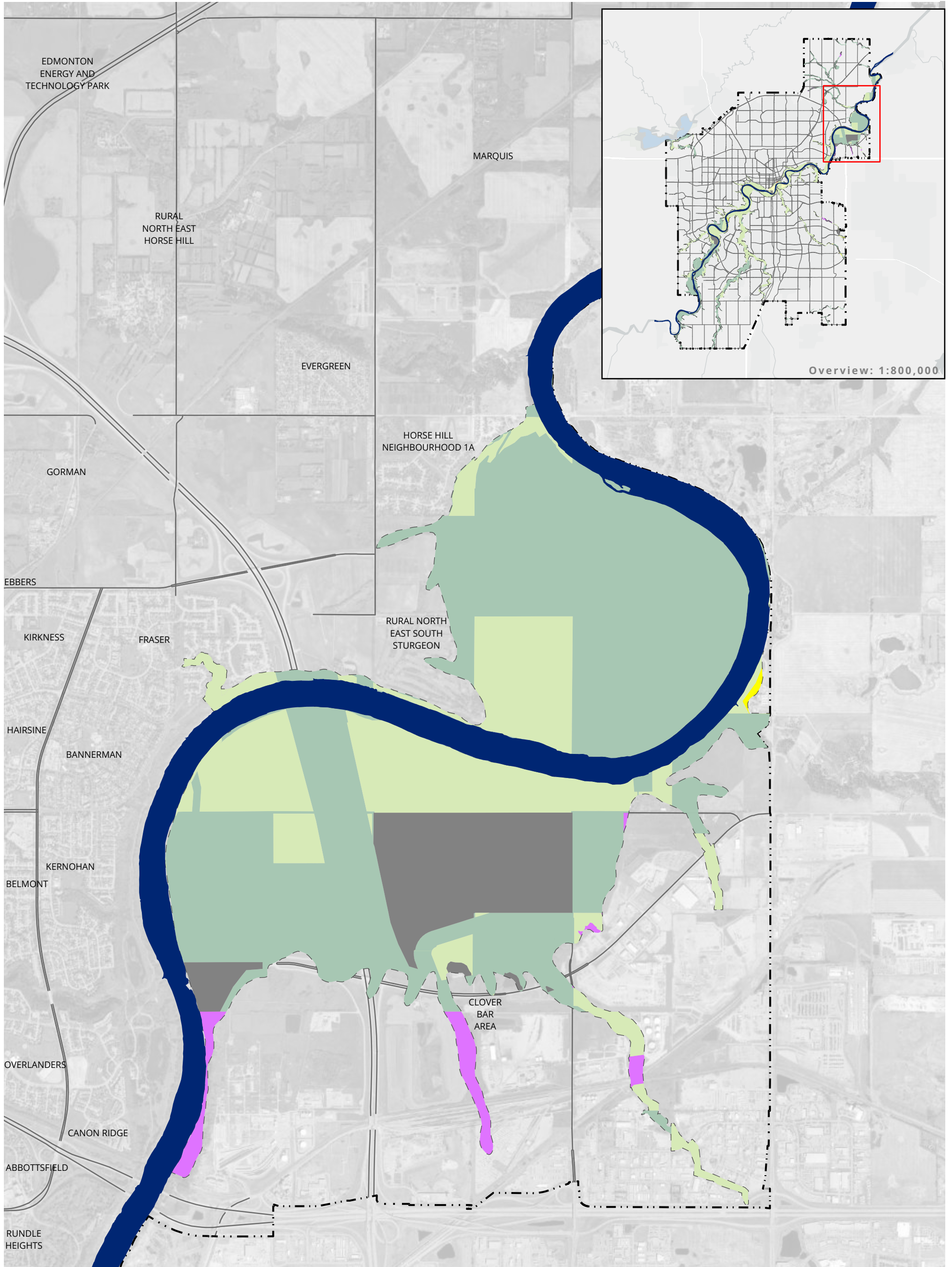
LEGEND

- | | | |
|--|---|--|
|  River Valley Open Space |  Residential Community |  Big Lake |
|  Other Open Space/Agricultural |  Industrial |  North Saskatchewan River |
|  Public Utility |  Commercial |  Plan Boundary |
|  Residential |  City Boundary |  Major Road |



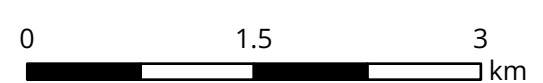
EXISTING LAND USE

Edmonton East Reach



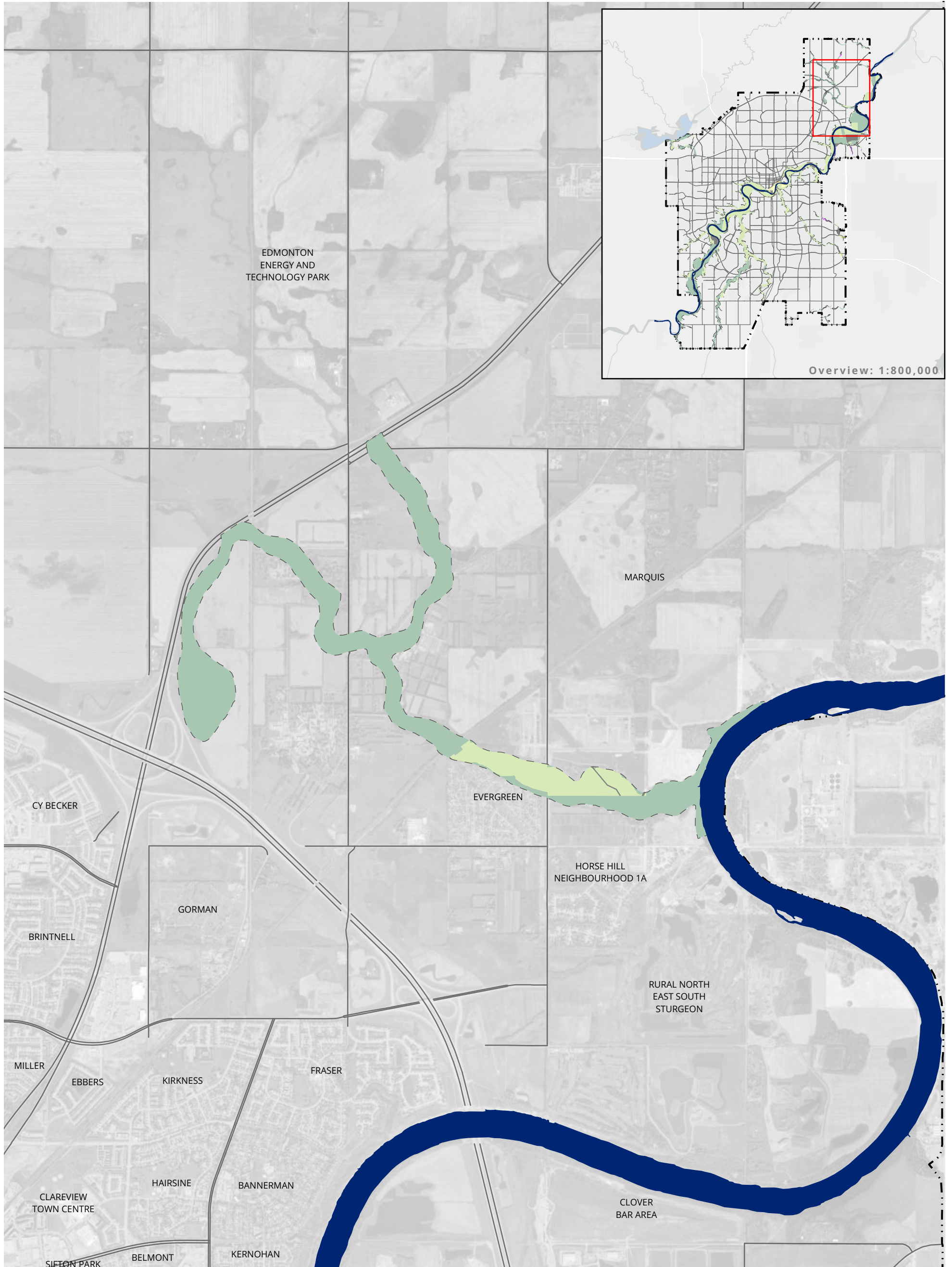
LEGEND

- | | | |
|-------------------------------|-----------------------|--------------------------|
| River Valley Open Space | Residential Community | Big Lake |
| Other Open Space/Agricultural | Industrial | North Saskatchewan River |
| Public Utility | Commercial | Plan Boundary |
| Residential | City Boundary | Major Road |



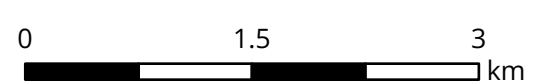
EXISTING LAND USE

Horsehills Creek Ravine Reach



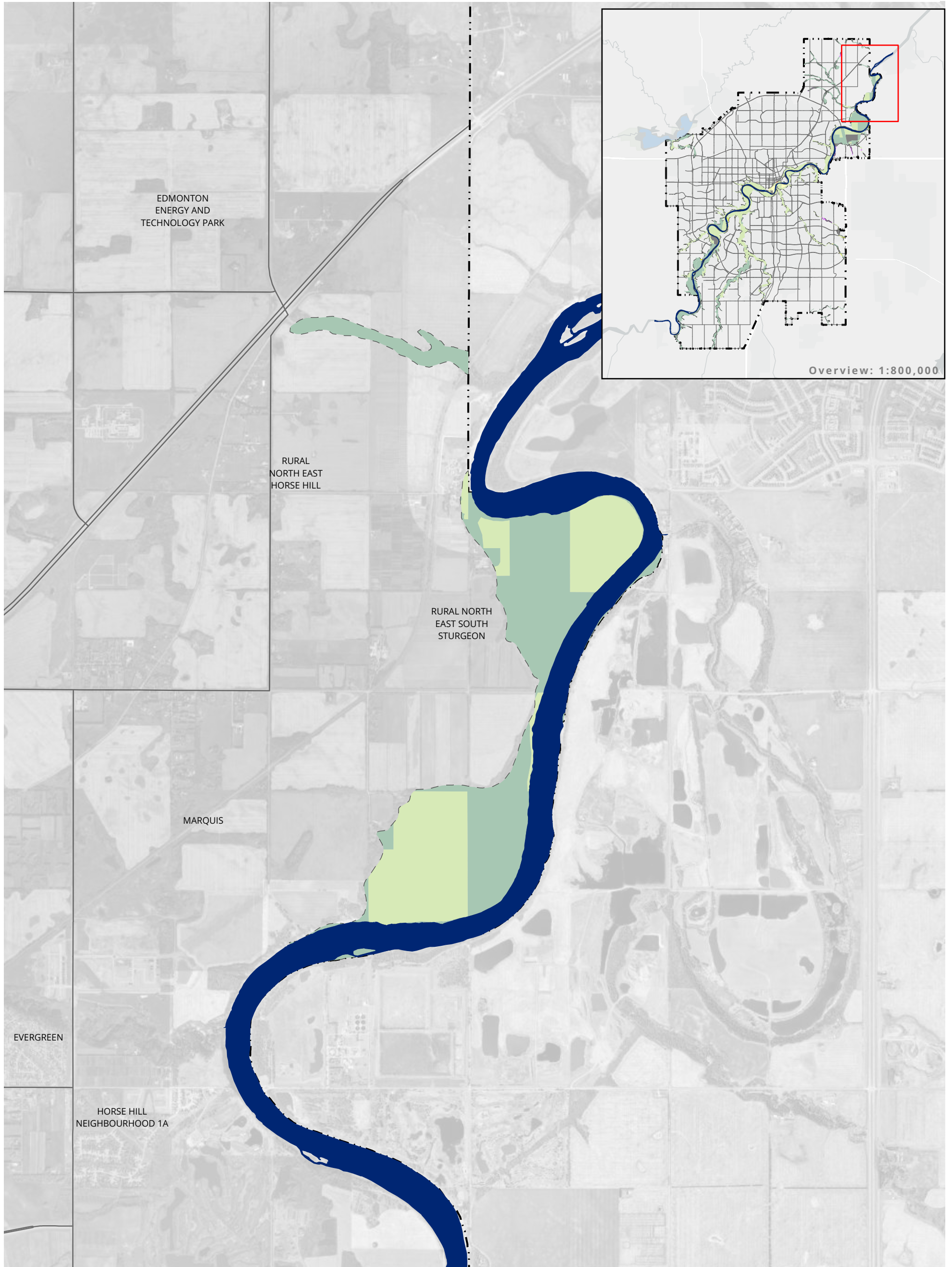
LEGEND

- | | | |
|-------------------------------|-----------------------|--------------------------|
| River Valley Open Space | Residential Community | Big Lake |
| Other Open Space/Agricultural | Industrial | North Saskatchewan River |
| Public Utility | Commercial | Plan Boundary |
| Residential | City Boundary | Major Road |















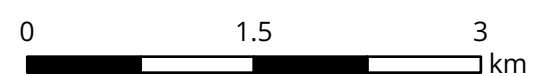
EXISTING LAND USE

Marquis River Valley Reach



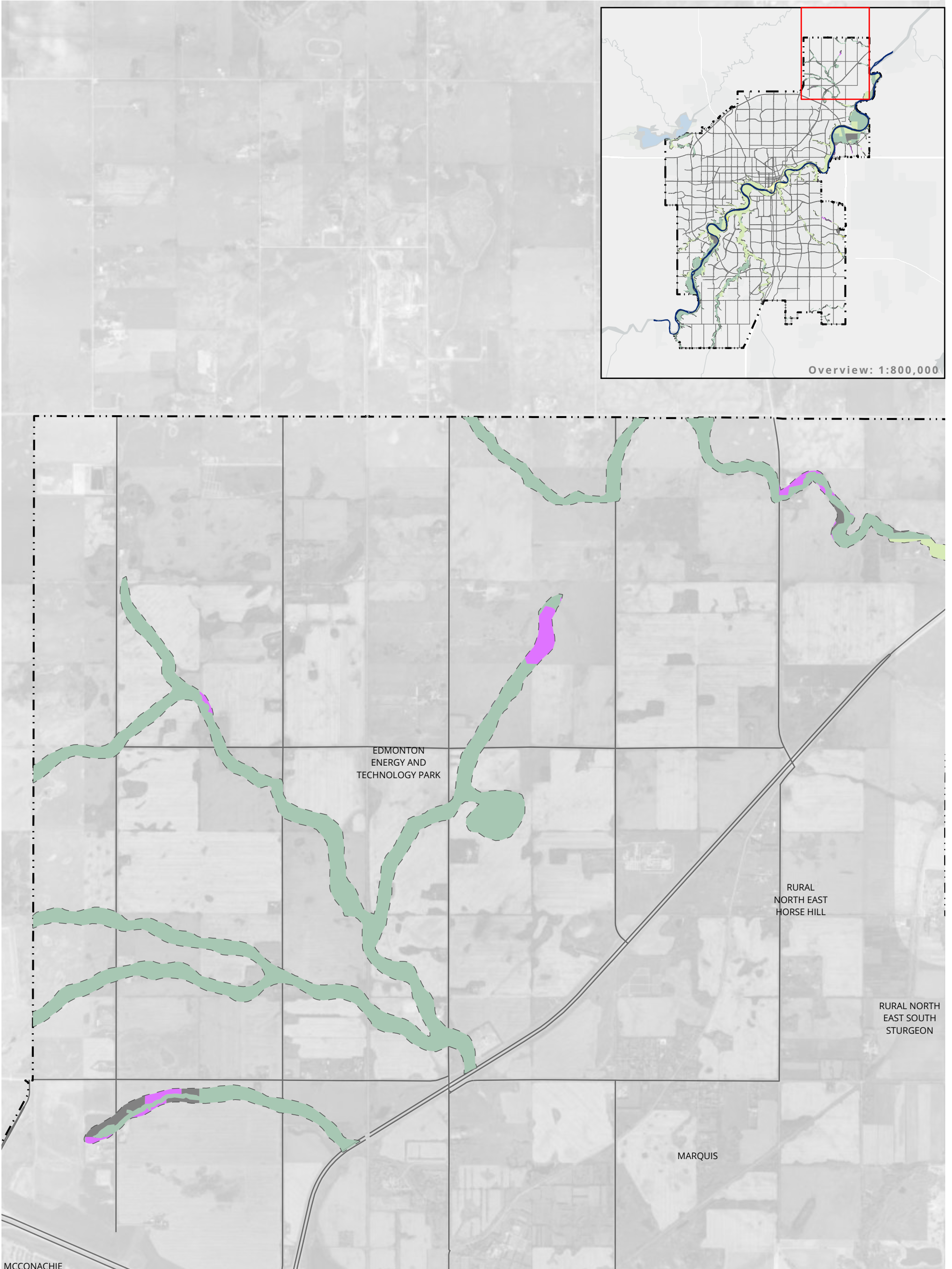
LEGEND

- | | | |
|--|---|--|
|  River Valley Open Space |  Residential Community |  Big Lake |
|  Other Open Space/Agricultural |  Industrial |  North Saskatchewan River |
|  Public Utility |  Commercial |  Plan Boundary |
|  Residential |  City Boundary |  Major Road |















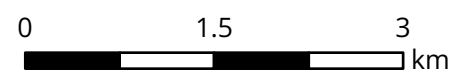
EXISTING LAND USE

Horsehills North Reach



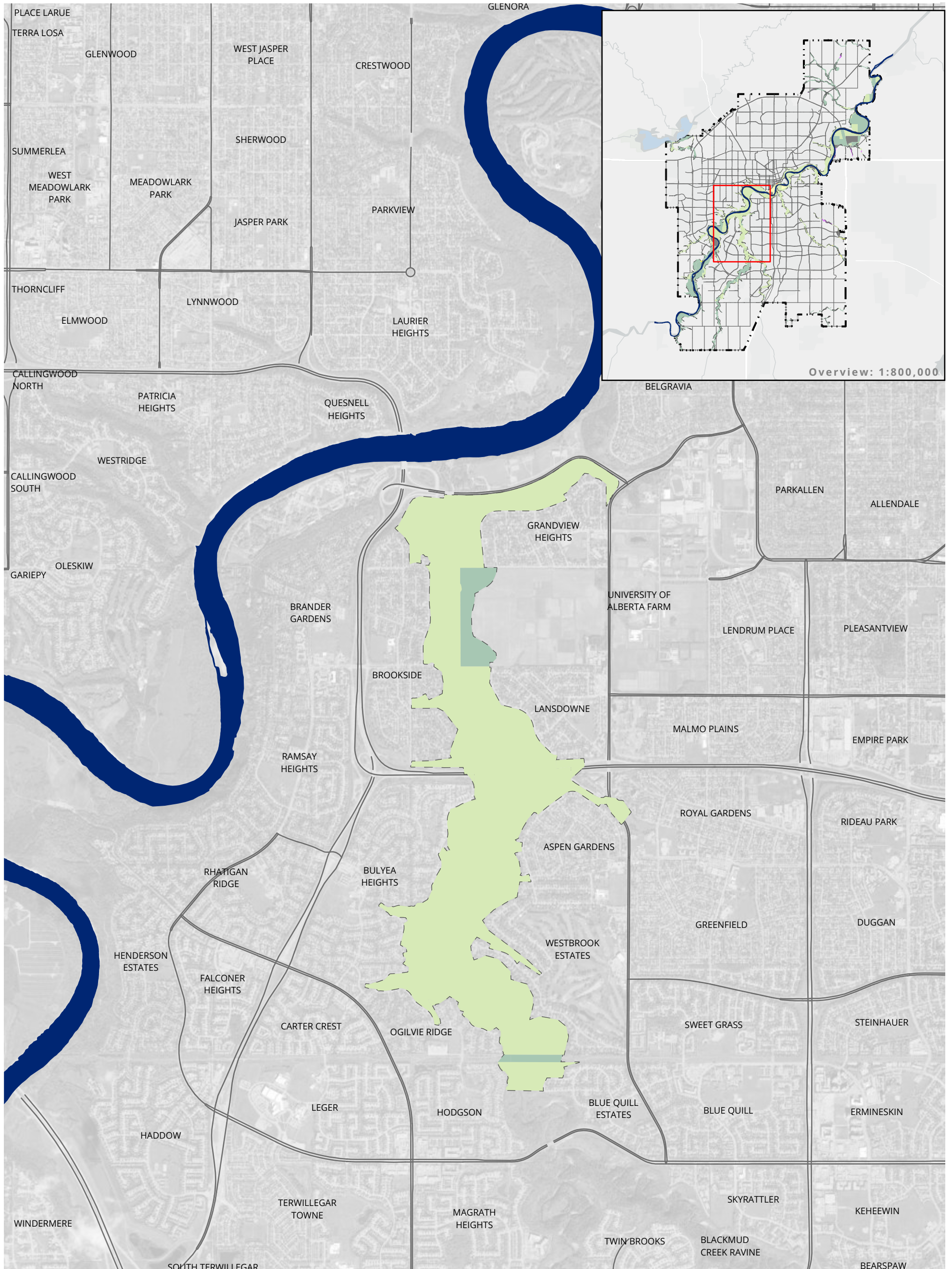
LEGEND

- | | | |
|--|---|--|
|  River Valley Open Space |  Residential Community |  Big Lake |
|  Other Open Space/Agricultural |  Industrial |  North Saskatchewan River |
|  Public Utility |  Commercial |  Plan Boundary |
|  Residential |  City Boundary |  Major Road |















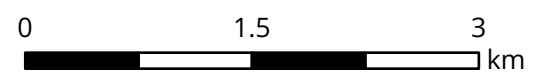
EXISTING LAND USE

Whitemud North Reach



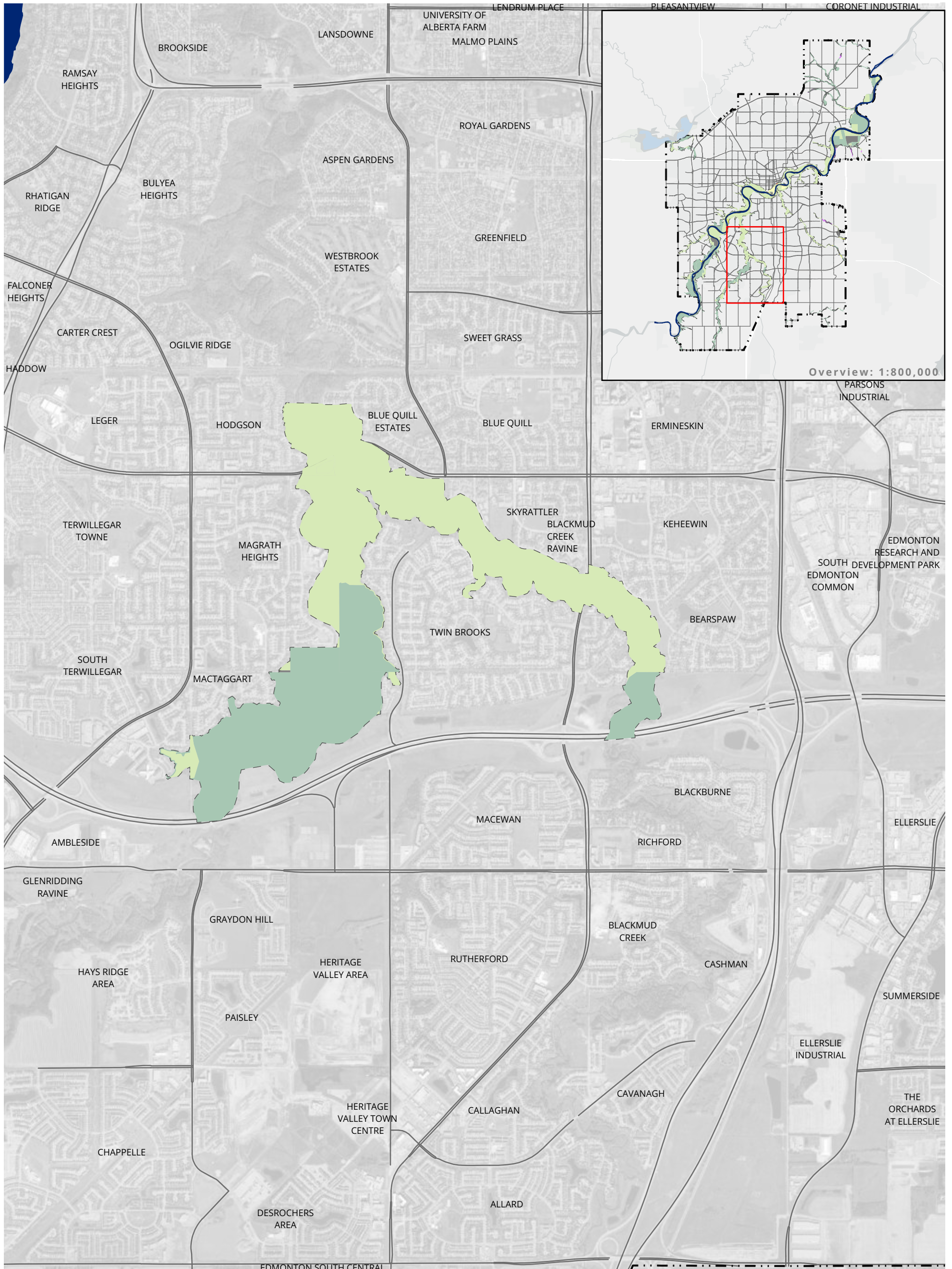
LEGEND

- | | | |
|--|---|--|
|  River Valley Open Space |  Residential Community |  Big Lake |
|  Other Open Space/Agricultural |  Industrial |  North Saskatchewan River |
|  Public Utility |  Commercial |  Plan Boundary |
|  Residential |  City Boundary |  Major Road |















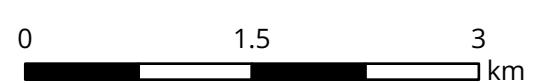
EXISTING LAND USE

The Confluence Reach



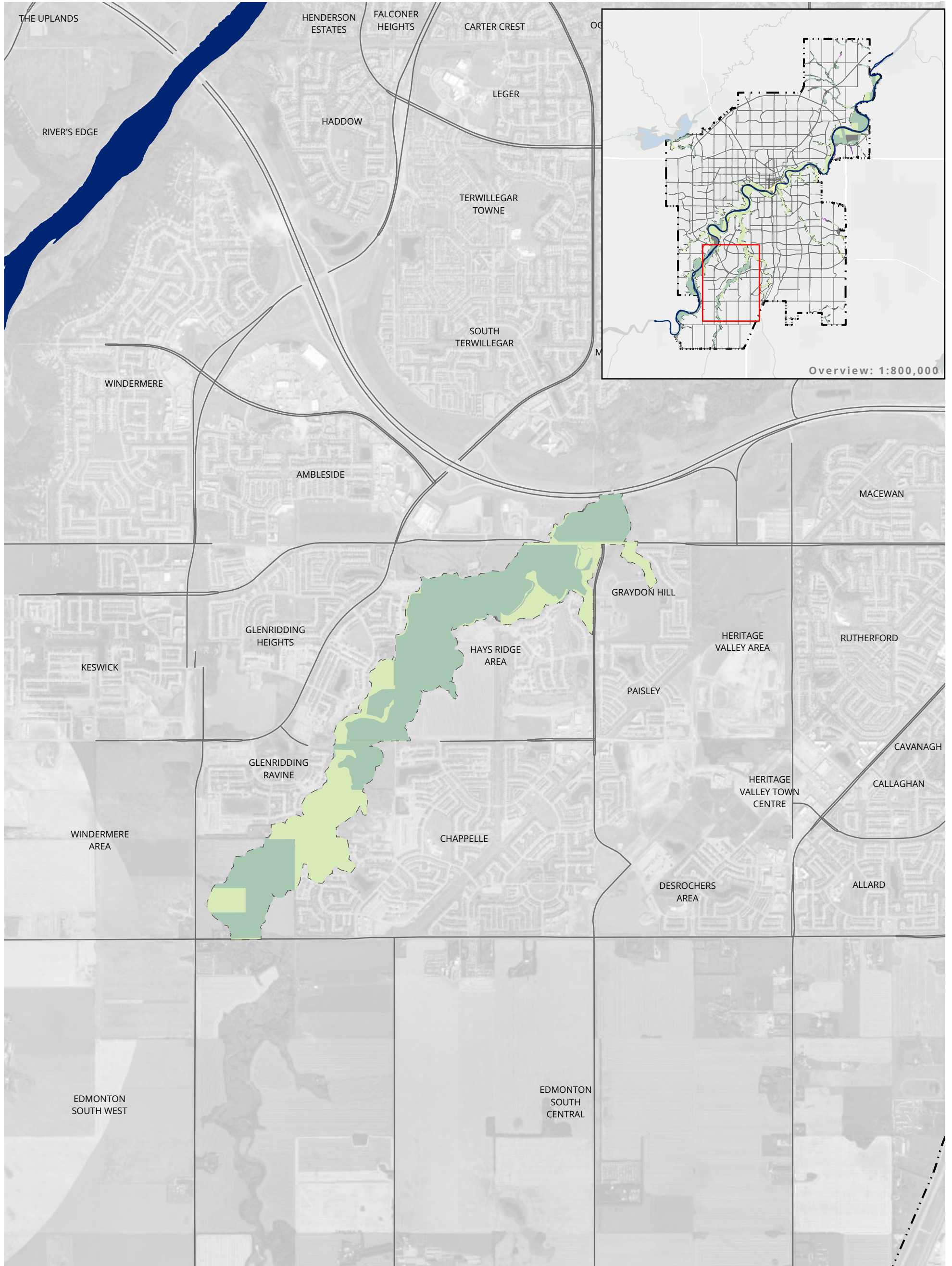
LEGEND

- | | | |
|--|---|--|
|  River Valley Open Space |  Residential Community |  Big Lake |
|  Other Open Space/Agricultural |  Industrial |  North Saskatchewan River |
|  Public Utility |  Commercial |  Plan Boundary |
|  Residential |  City Boundary |  Major Road |















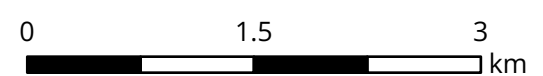
EXISTING LAND USE

Whitemud Ravine Reach



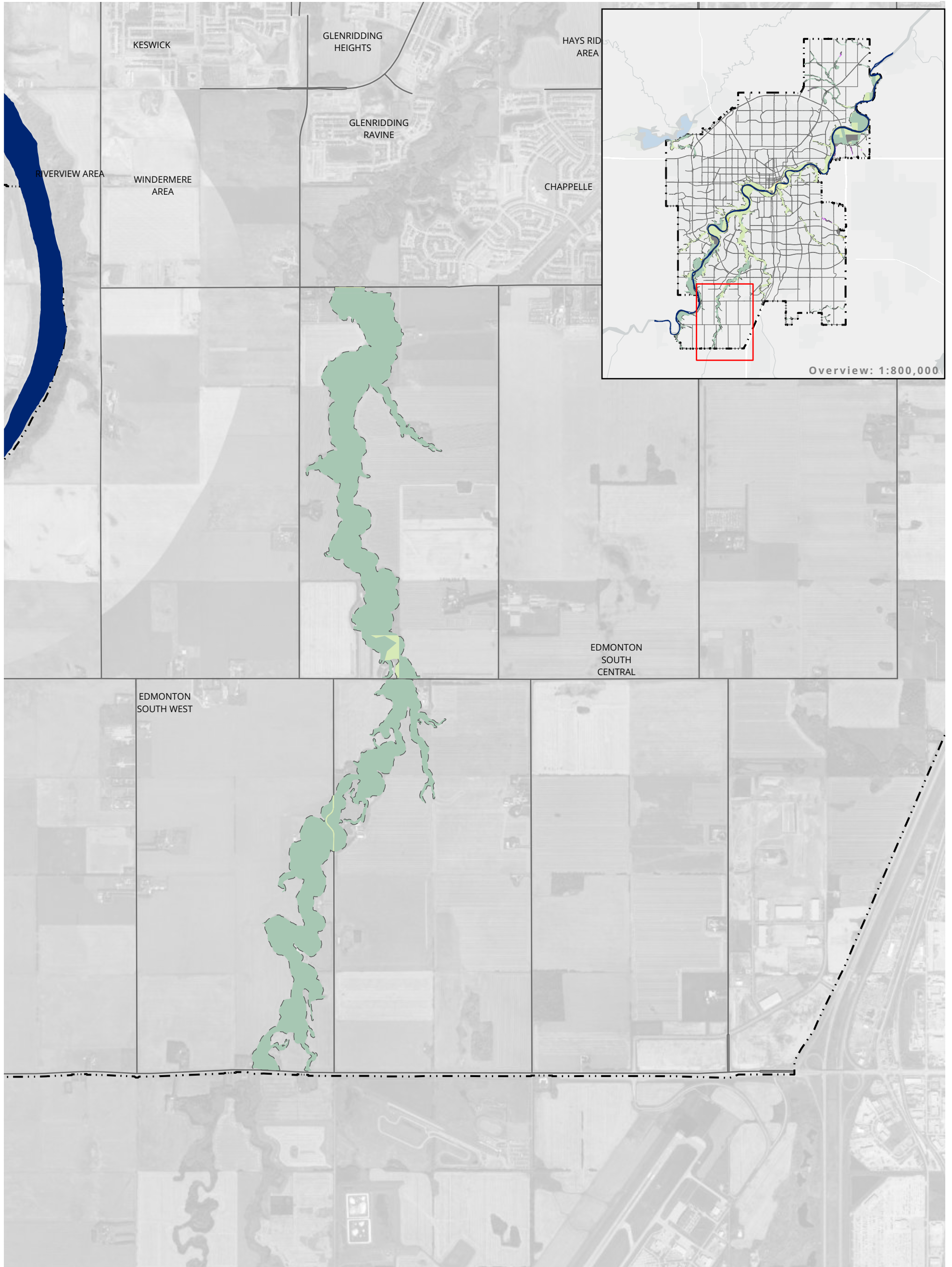
LEGEND

- | | | |
|--|---|--|
|  River Valley Open Space |  Residential Community |  Big Lake |
|  Other Open Space/Agricultural |  Industrial |  North Saskatchewan River |
|  Public Utility |  Commercial |  Plan Boundary |
|  Residential |  City Boundary |  Major Road |



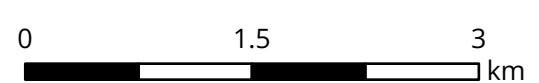
EXISTING LAND USE

Whitemud Headwaters Reach



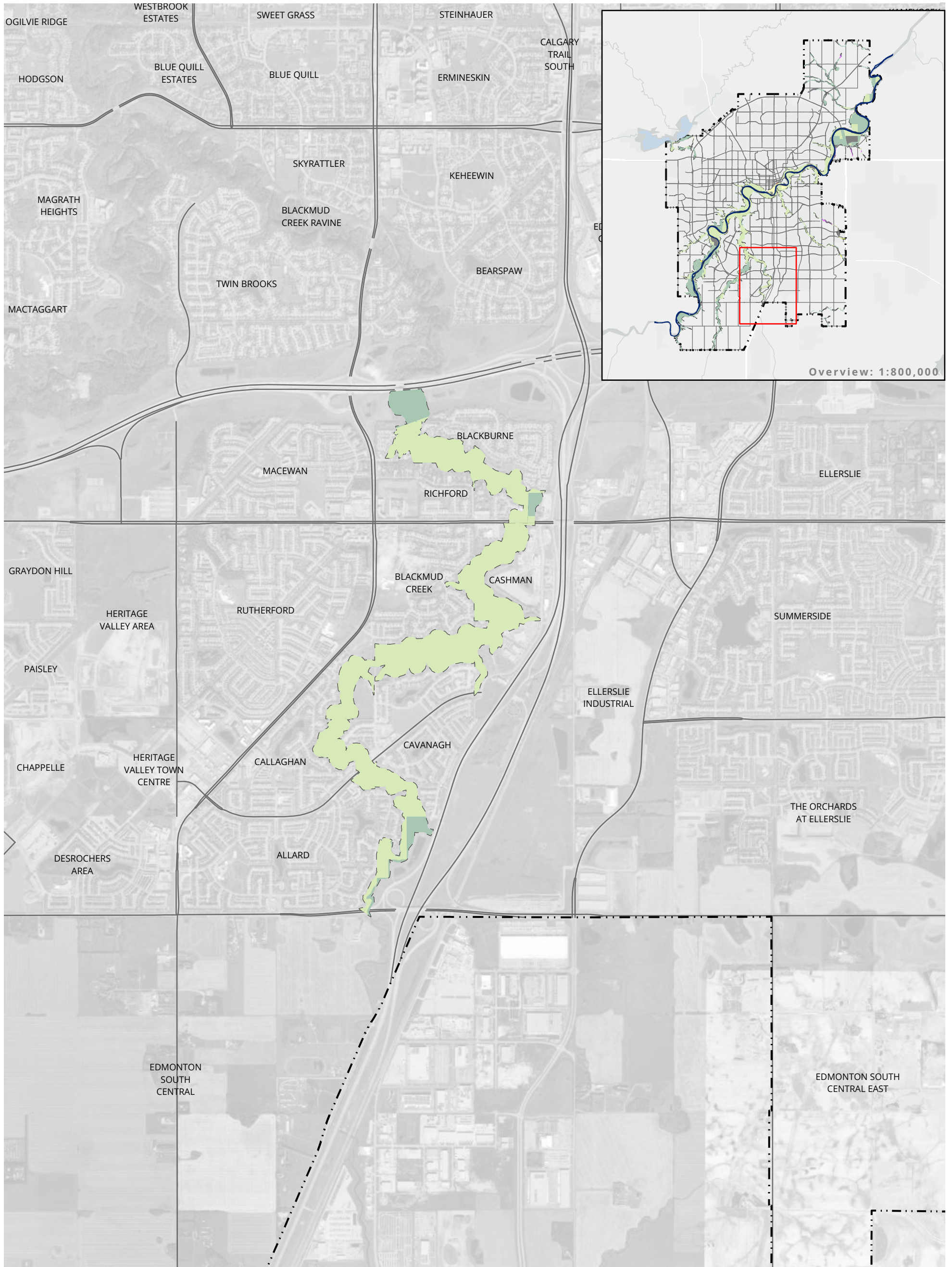
LEGEND

- | | | |
|-------------------------------|-----------------------|--------------------------|
| River Valley Open Space | Residential Community | Big Lake |
| Other Open Space/Agricultural | Industrial | North Saskatchewan River |
| Public Utility | Commercial | Plan Boundary |
| Residential | City Boundary | Major Road |















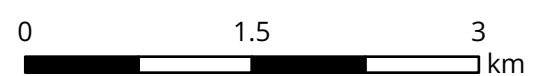
EXISTING LAND USE

Blackmud Ravine Reach



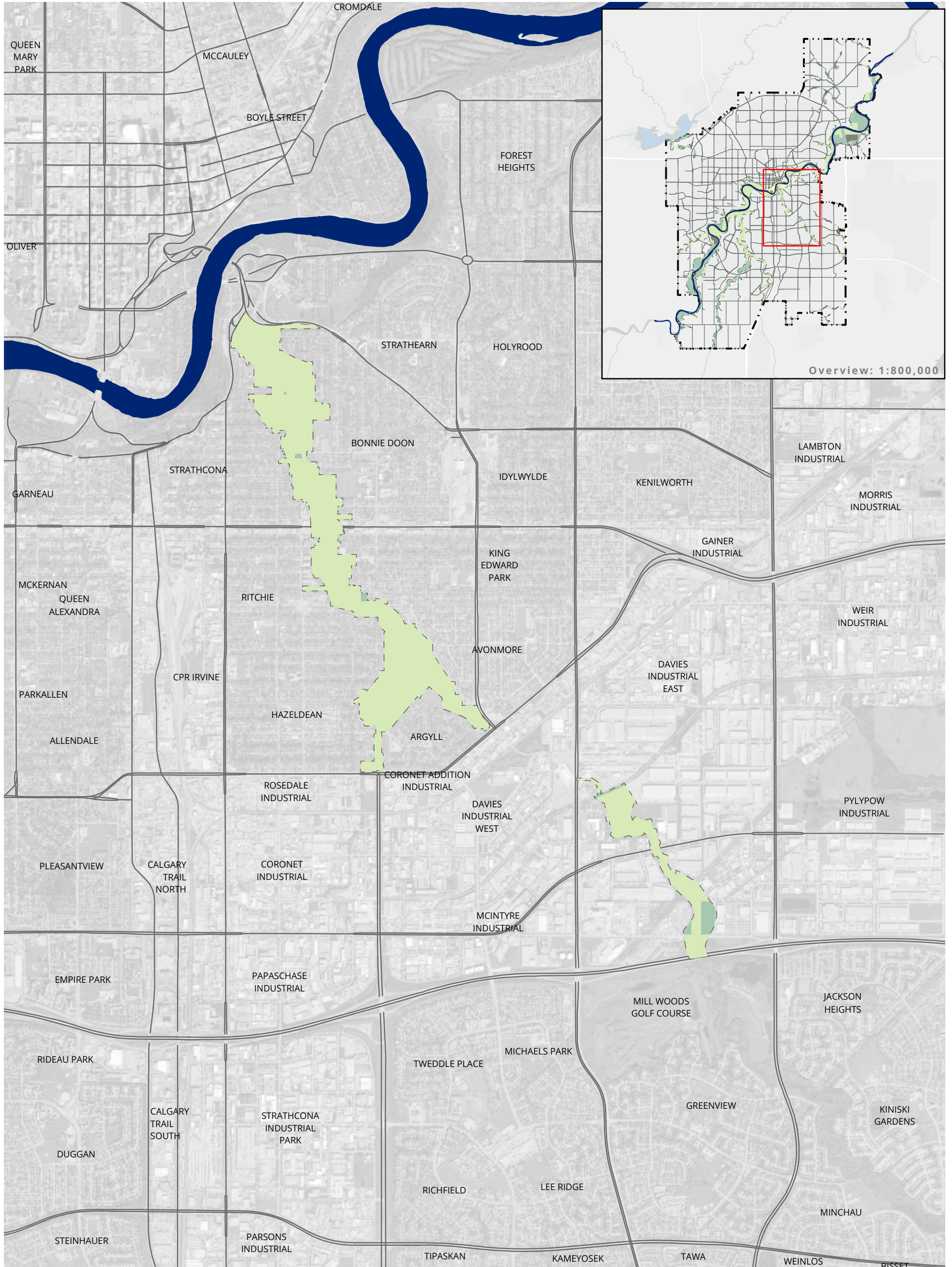
LEGEND

- | | | |
|--|---|--|
|  River Valley Open Space |  Residential Community |  Big Lake |
|  Other Open Space/Agricultural |  Industrial |  North Saskatchewan River |
|  Public Utility |  Commercial |  Plan Boundary |
|  Residential |  City Boundary |  Major Road |















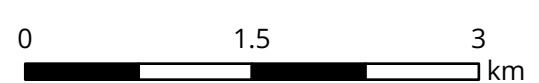
EXISTING LAND USE

Mill Creek North Reach



LEGEND

- | | | |
|--|---|--|
|  River Valley Open Space |  Residential Community |  Big Lake |
|  Other Open Space/Agricultural |  Industrial |  North Saskatchewan River |
|  Public Utility |  Commercial |  Plan Boundary |
|  Residential |  City Boundary |  Major Road |















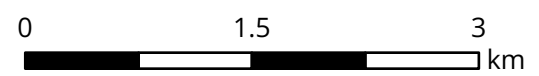
EXISTING LAND USE

Mill Creek South Reach



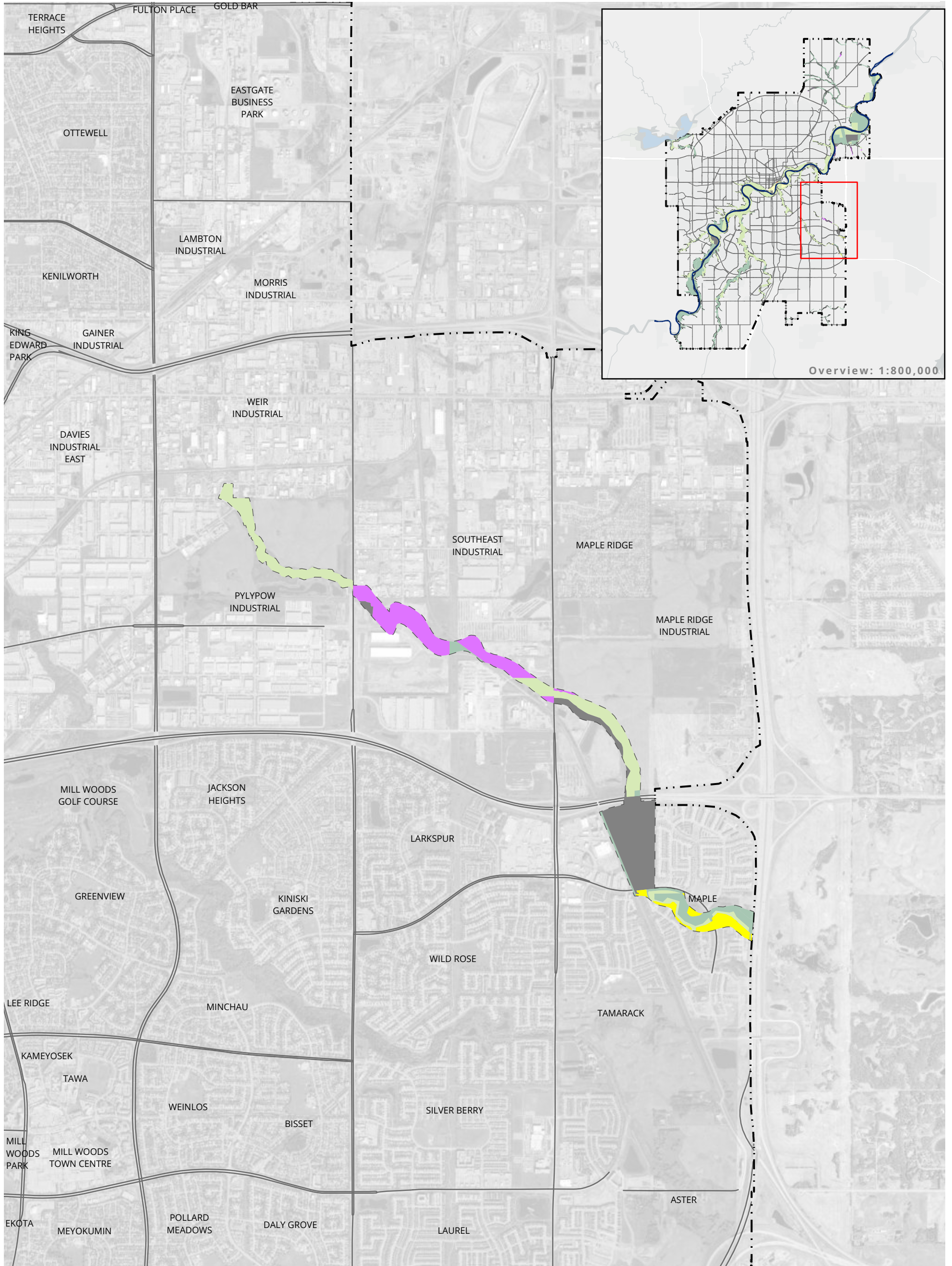
LEGEND

- | | | |
|--|---|--|
|  River Valley Open Space |  Residential Community |  Big Lake |
|  Other Open Space/Agricultural |  Industrial |  North Saskatchewan River |
|  Public Utility |  Commercial |  Plan Boundary |
|  Residential |  City Boundary |  Major Road |



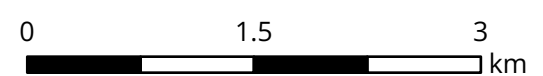
EXISTING LAND USE

East Ravines Reach



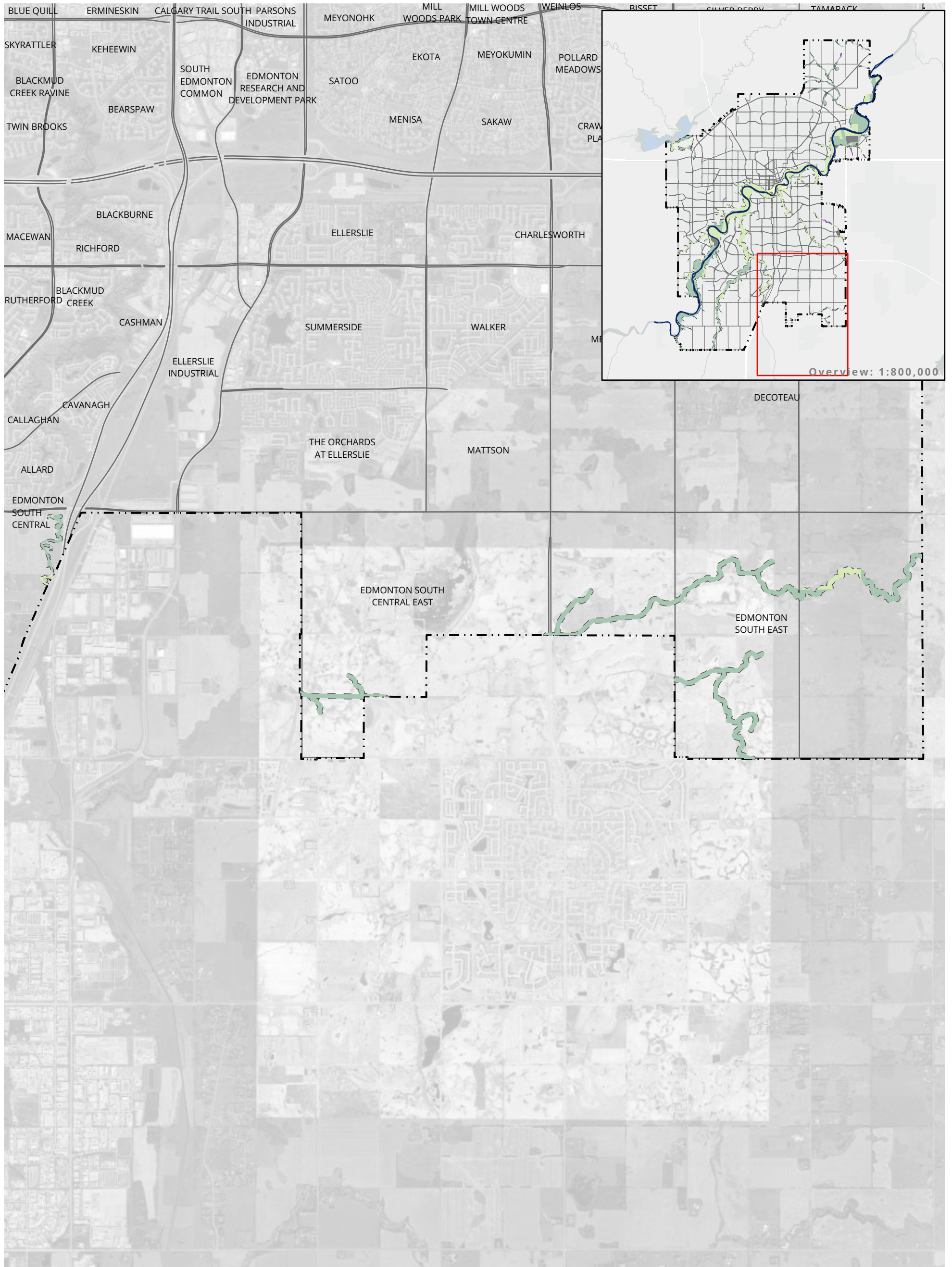
LEGEND

- | | | |
|-------------------------------|-----------------------|--------------------------|
| River Valley Open Space | Residential Community | Big Lake |
| Other Open Space/Agricultural | Industrial | North Saskatchewan River |
| Public Utility | Commercial | Plan Boundary |
| Residential | City Boundary | Major Road |



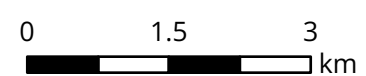
EXISTING LAND USE

Irvine Creek to Blackmud South Reach



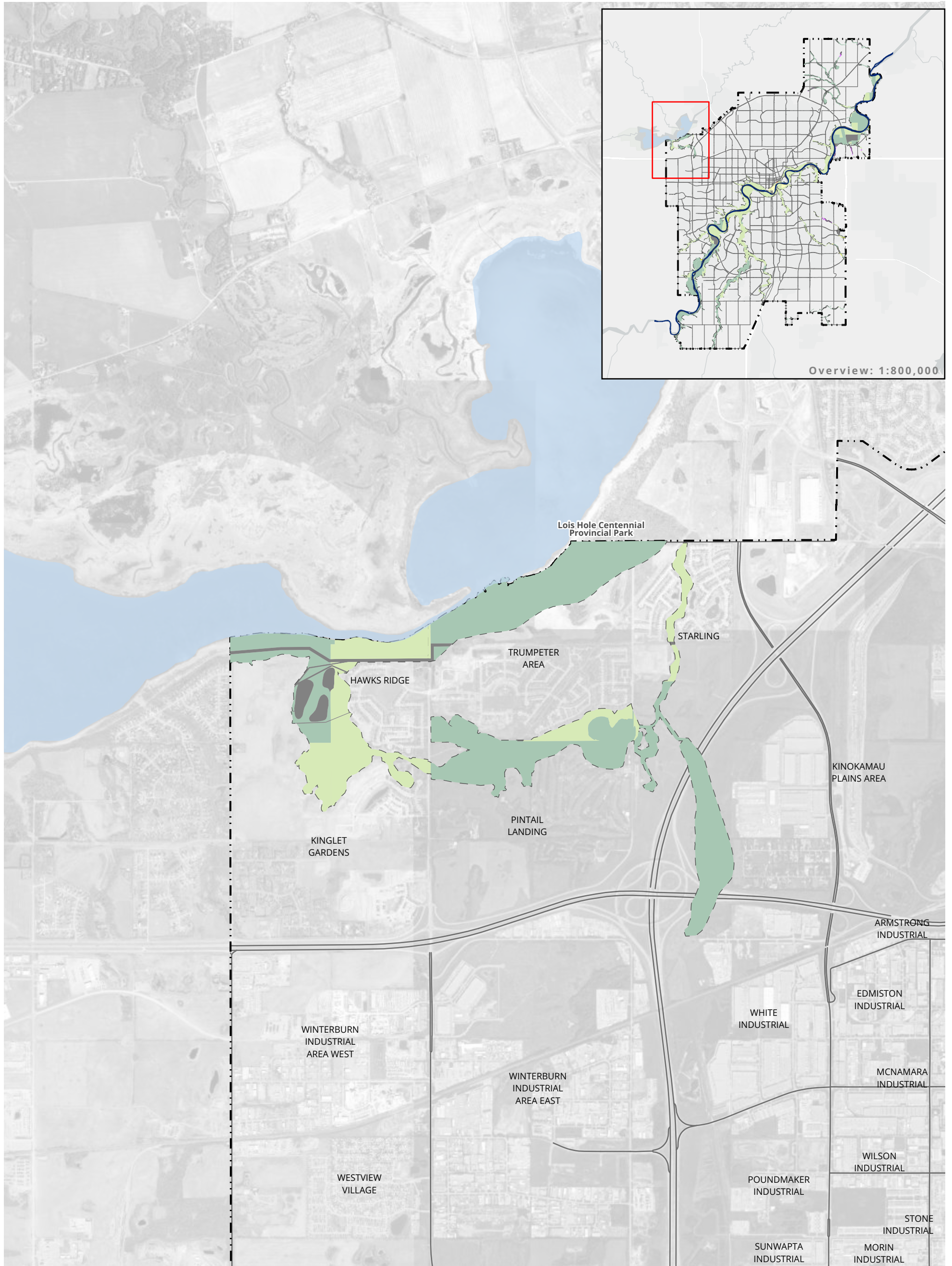
LEGEND

- | | | |
|--|--|---|
| River Valley Open Space | Residential Community | Big Lake |
| Other Open Space/Agricultural | Industrial | North Saskatchewan River |
| Public Utility | Commercial | Plan Boundary |
| Residential | City Boundary | Major Road |















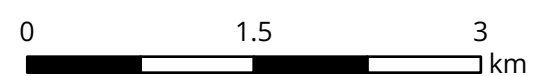
EXISTING LAND USE

Big Lake Reach



LEGEND

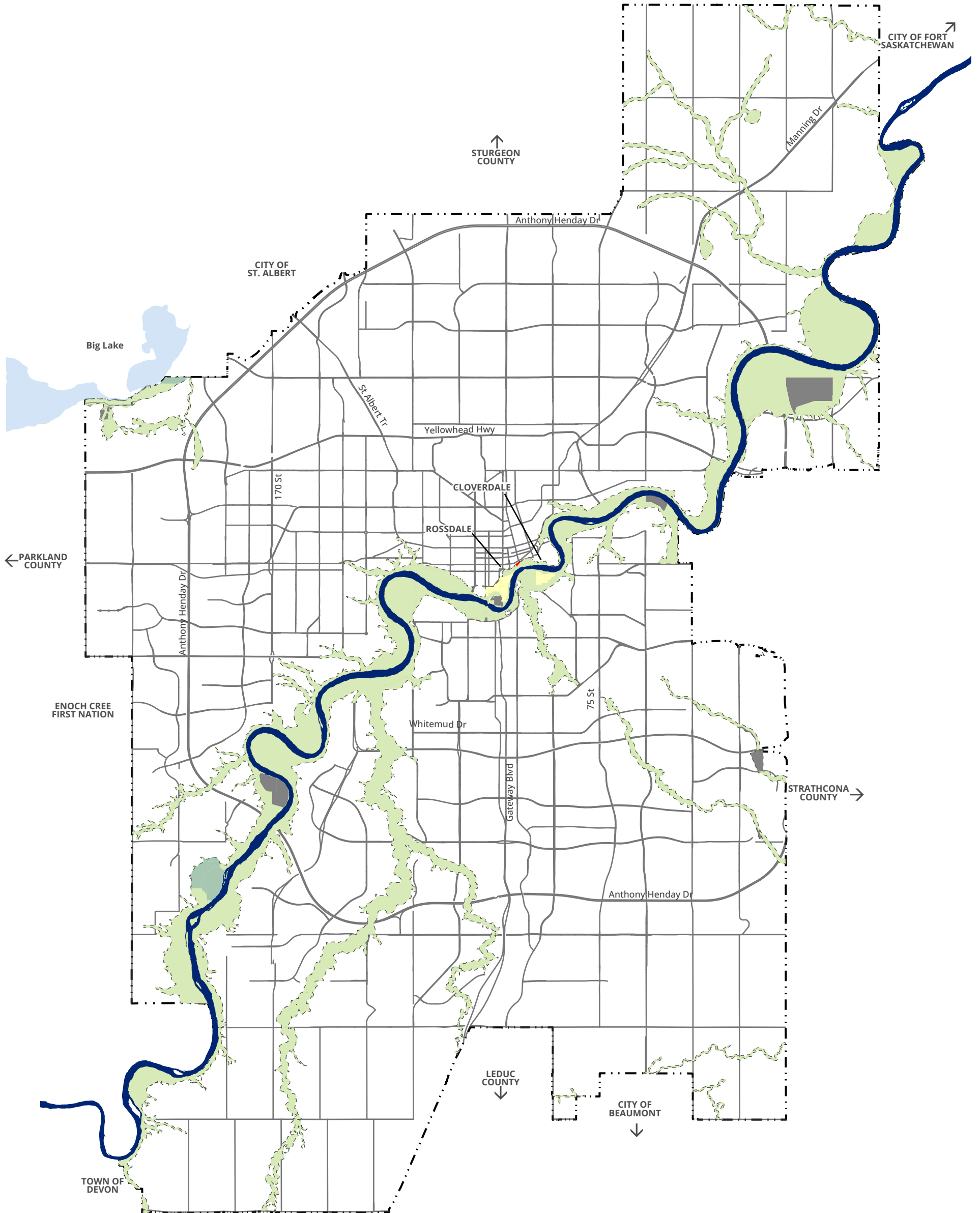
- | | | |
|--|---|--|
|  River Valley Open Space |  Residential Community |  Big Lake |
|  Other Open Space/Agricultural |  Industrial |  North Saskatchewan River |
|  Public Utility |  Commercial |  Plan Boundary |
|  Residential |  City Boundary |  Major Road |



Map 2: Potential Land Use Pattern

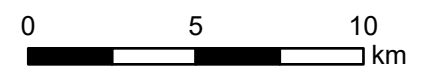
POTENTIAL LAND USE PATTERN

Overview



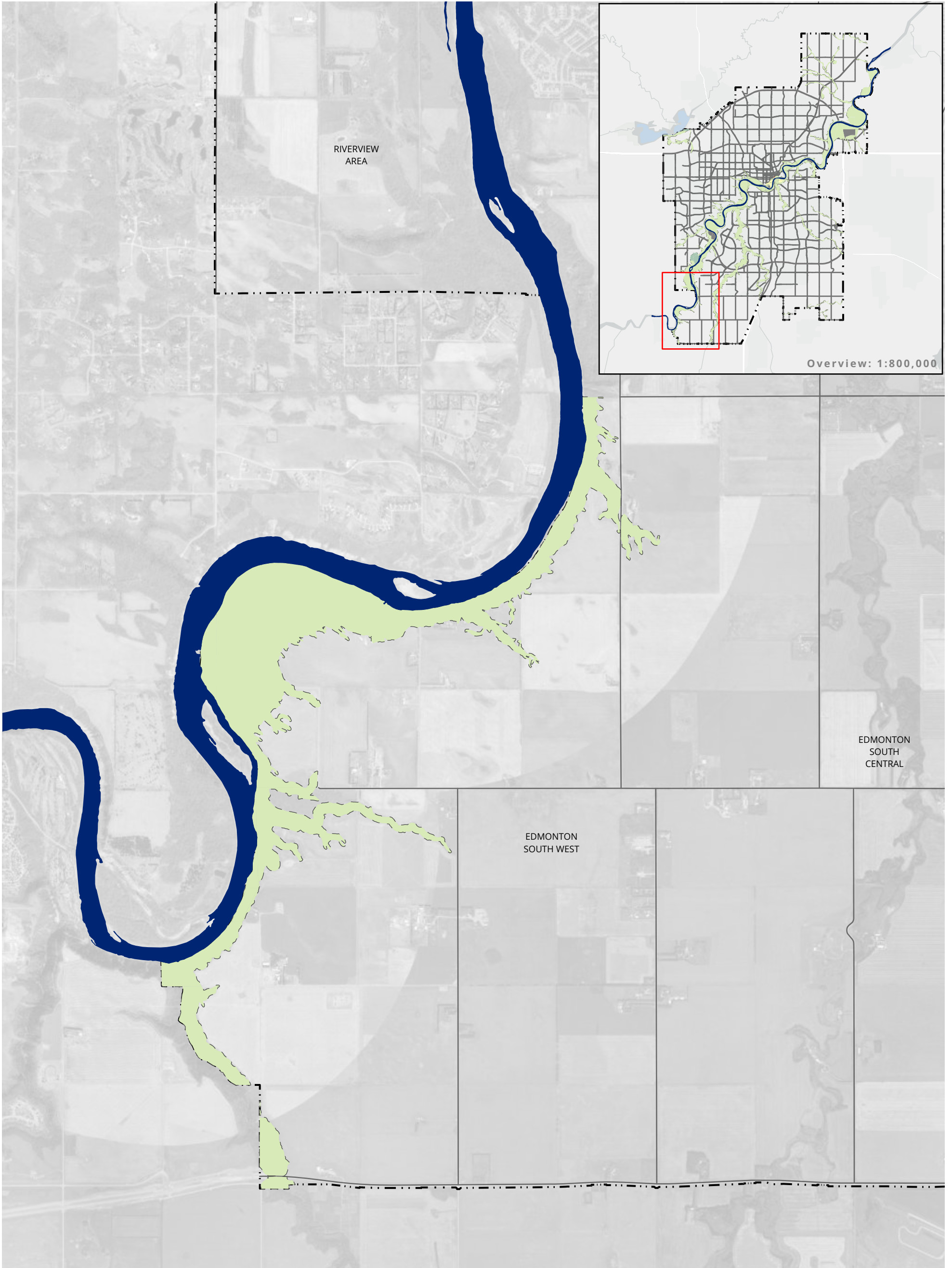
LEGEND

- | | | |
|-------------------------|-------------------------------|--------------------------|
| River Valley Open Space | Commercial | North Saskatchewan River |
| Public Utility | Other Open Space/Agricultural | Big Lake |
| Residential Community | City Boundary | Major Road |
| Plan Boundary | | |



POTENTIAL LAND USE PATTERN

Rabbit Hill Reach



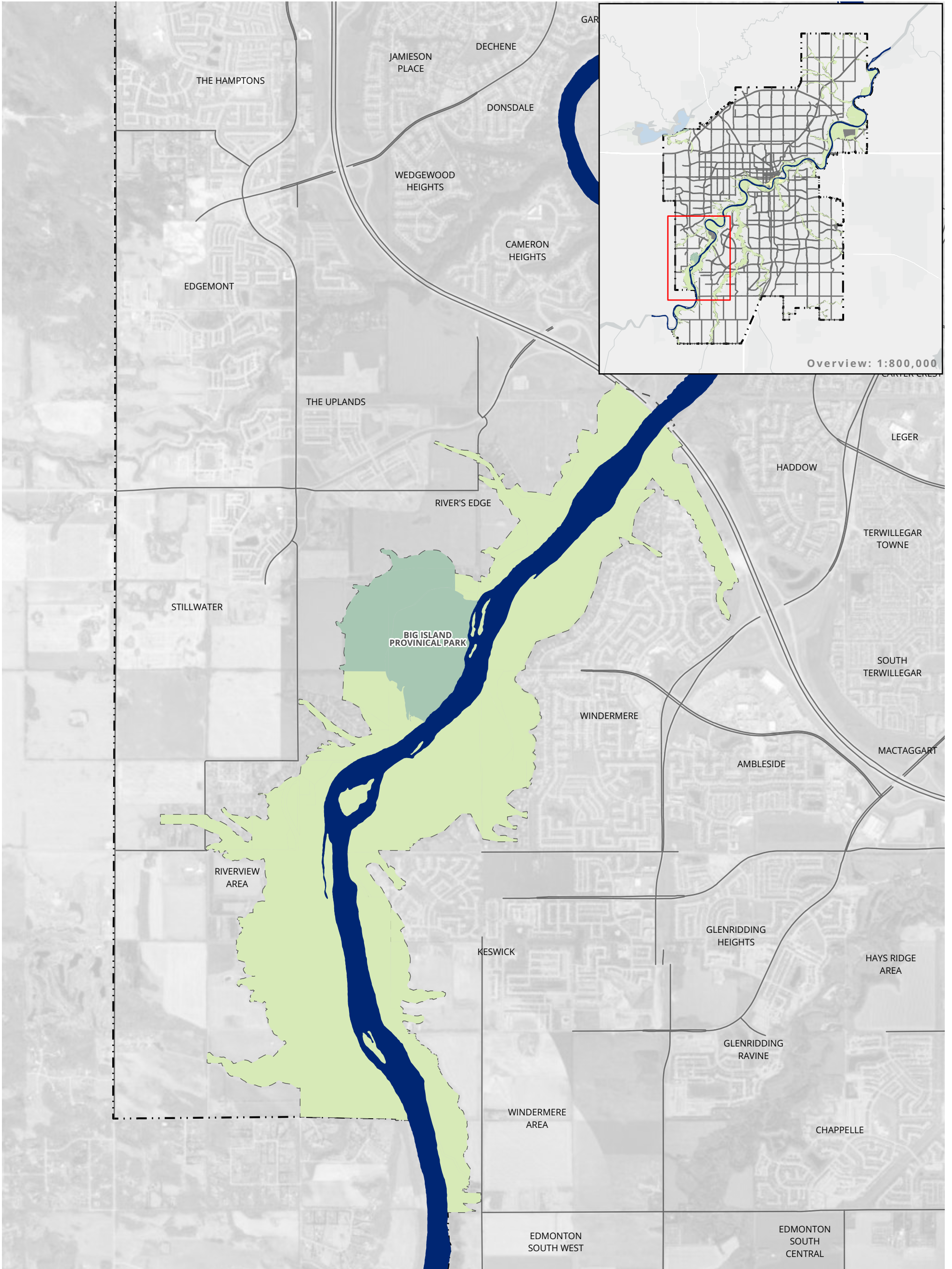
LEGEND

- | | | |
|-------------------------|-----------------------------------|--------------------------|
| River Valley Open Space | Commercial | North Saskatchewan River |
| Public Utility | Other Open Space/
Agricultural | Big Lake |
| Residential Community | City Boundary | Major Road |
| Plan Boundary | | |













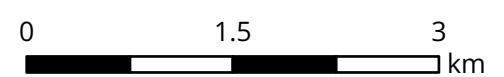
POTENTIAL LAND USE PATTERN

Big Island + Woodbend Reach



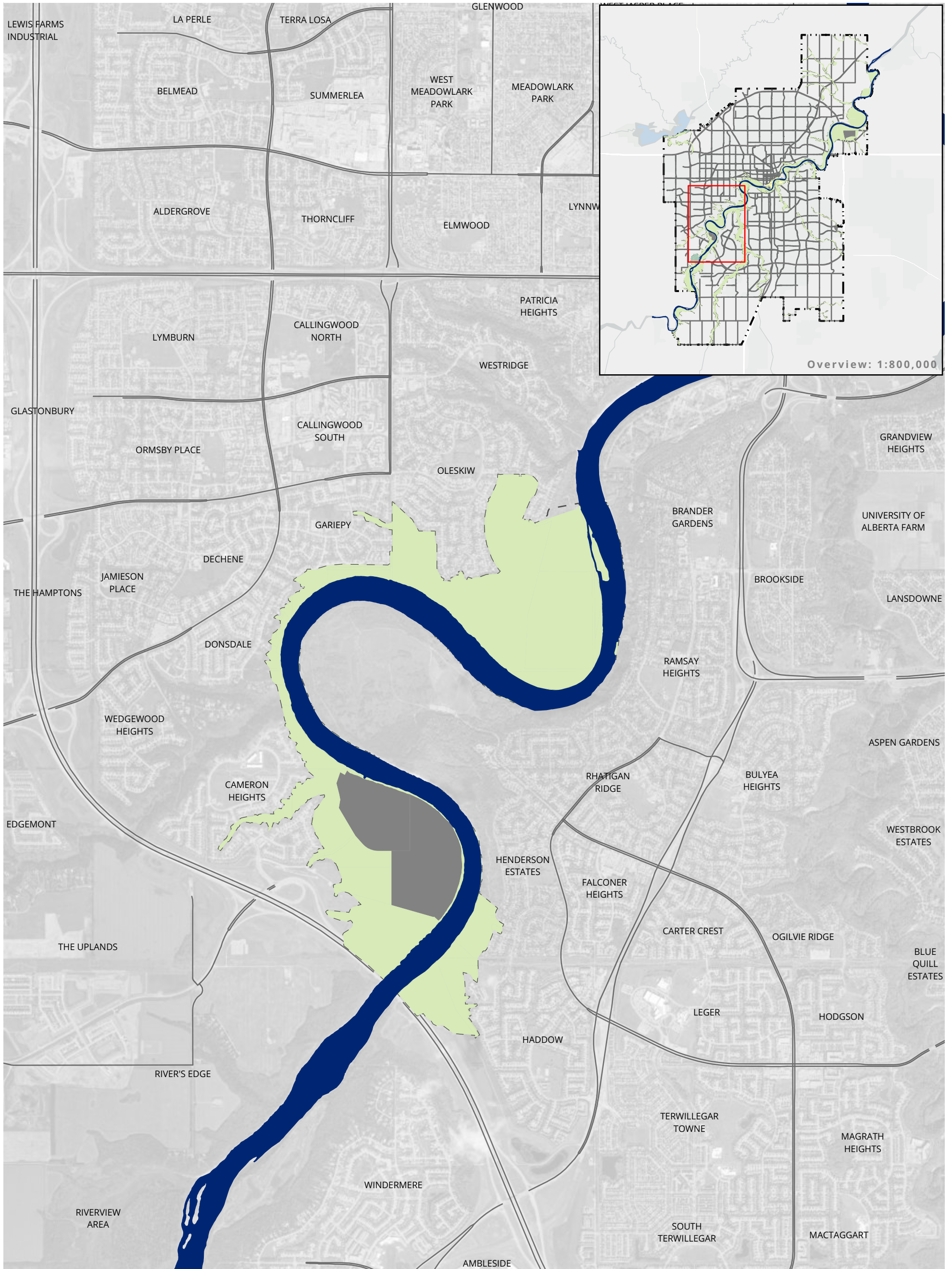
LEGEND

- | | | |
|---|---|--|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake |
|  Residential Community |  City Boundary |  Major Road |
|  Plan Boundary | | |













POTENTIAL LAND USE PATTERN

Cameron-Oleskiw River Valley Reach



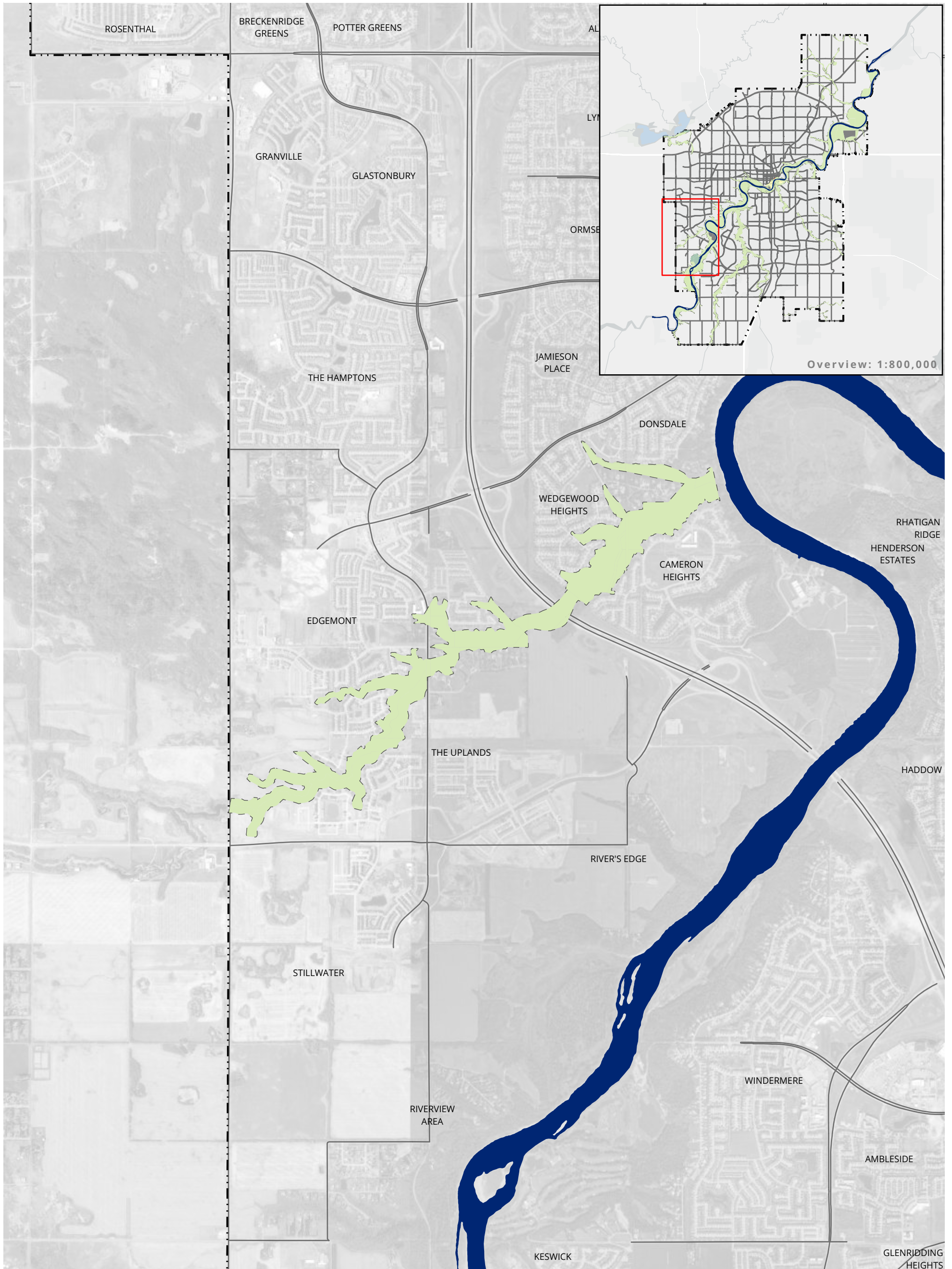
LEGEND

- | | | |
|---|---|--|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake |
|  Residential Community |  City Boundary |  Major Road |
|  Plan Boundary | | |













POTENTIAL LAND USE PATTERN

Wedgewood Ravine Reach



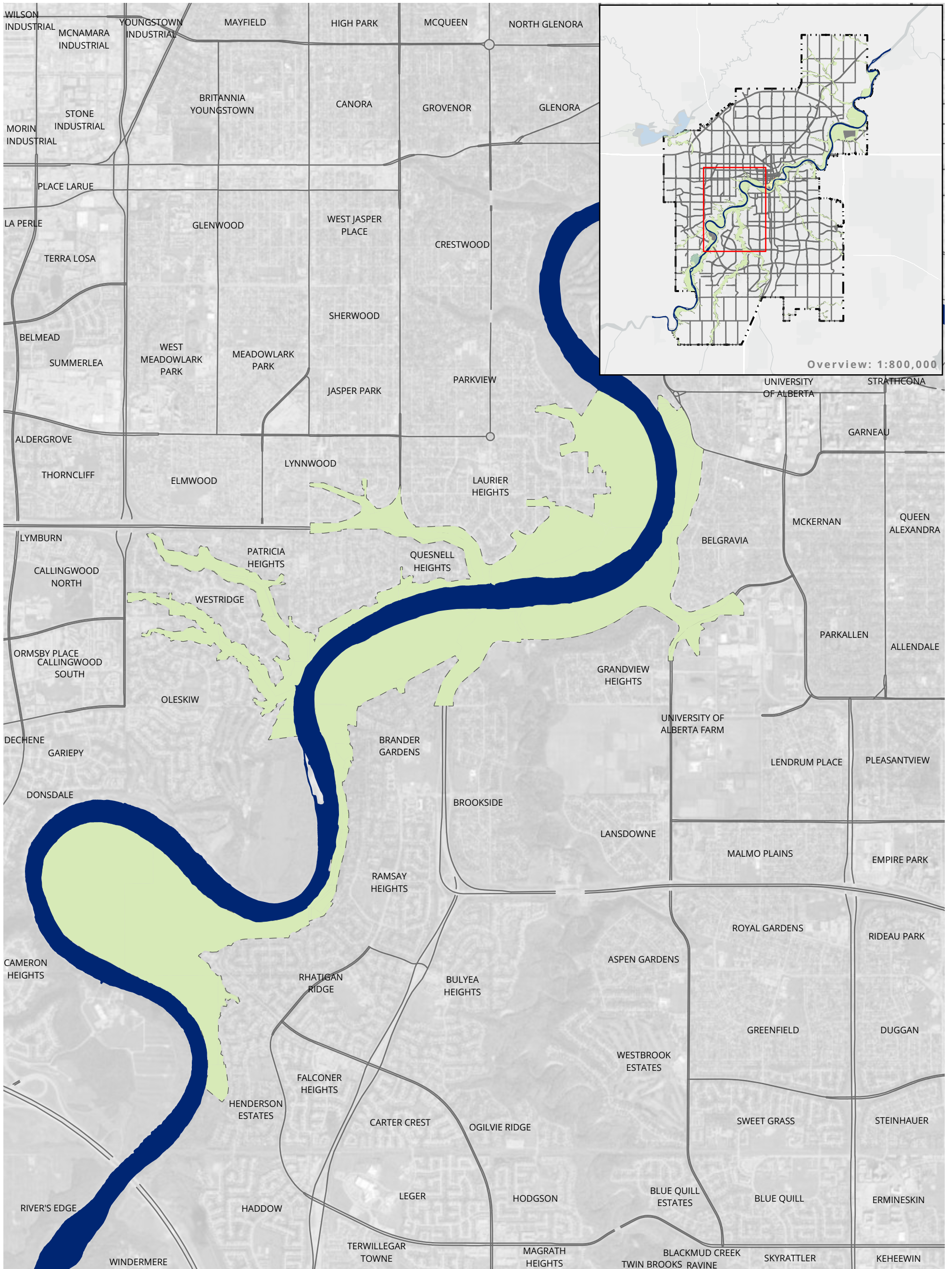
LEGEND

- | | | |
|---|---|--|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake |
|  Residential Community |  City Boundary |  Major Road |
|  Plan Boundary | | |













POTENTIAL LAND USE PATTERN

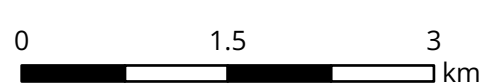
North Saskatchewan West Reach



Overview: 1:800,000

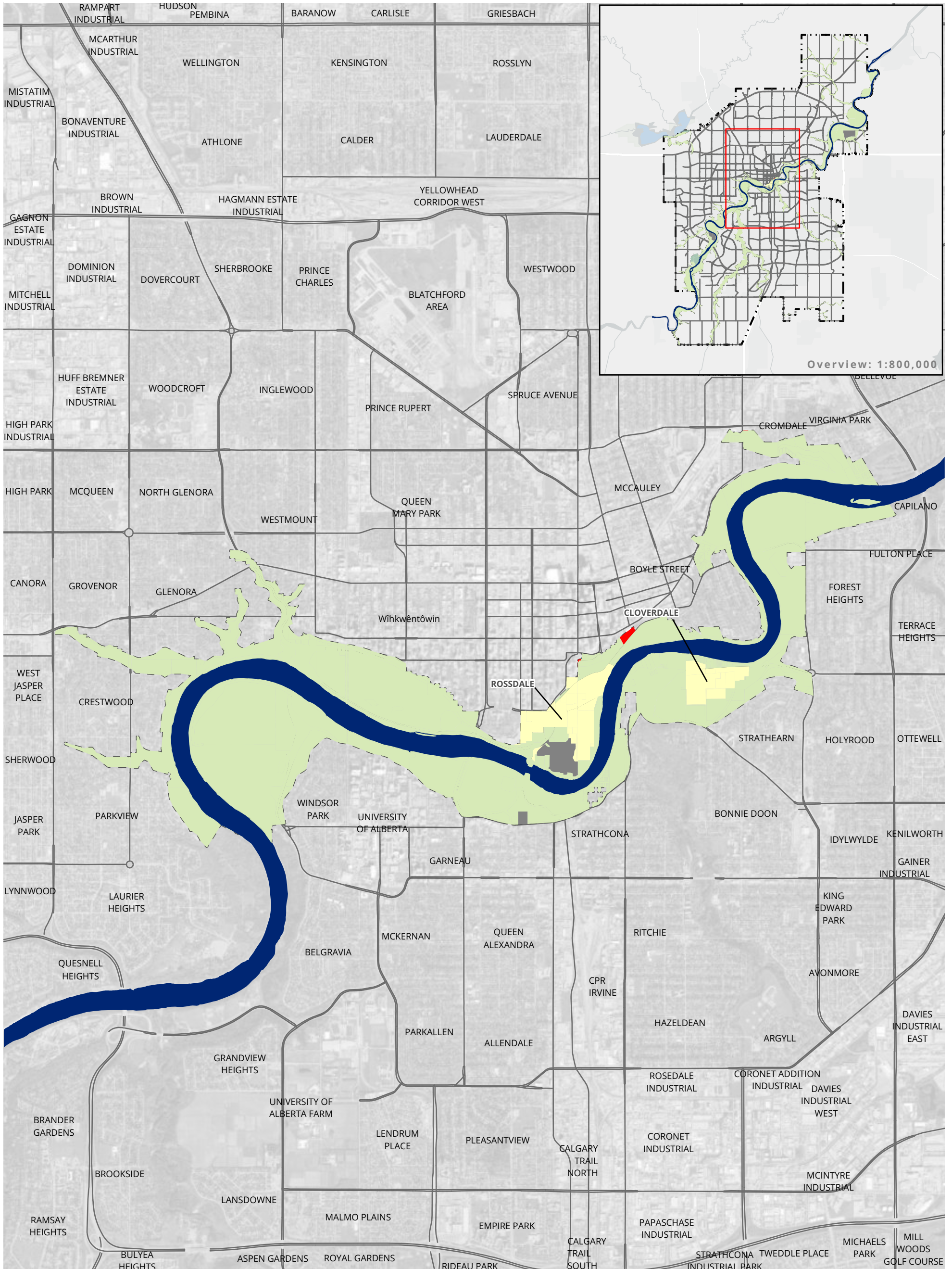
LEGEND

- | | | |
|---|---|--|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake |
|  Residential Community |  City Boundary |  Major Road |
|  Plan Boundary | | |













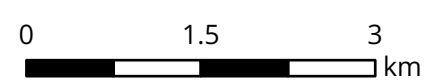
POTENTIAL LAND USE PATTERN

North Saskatchewan Central Reach



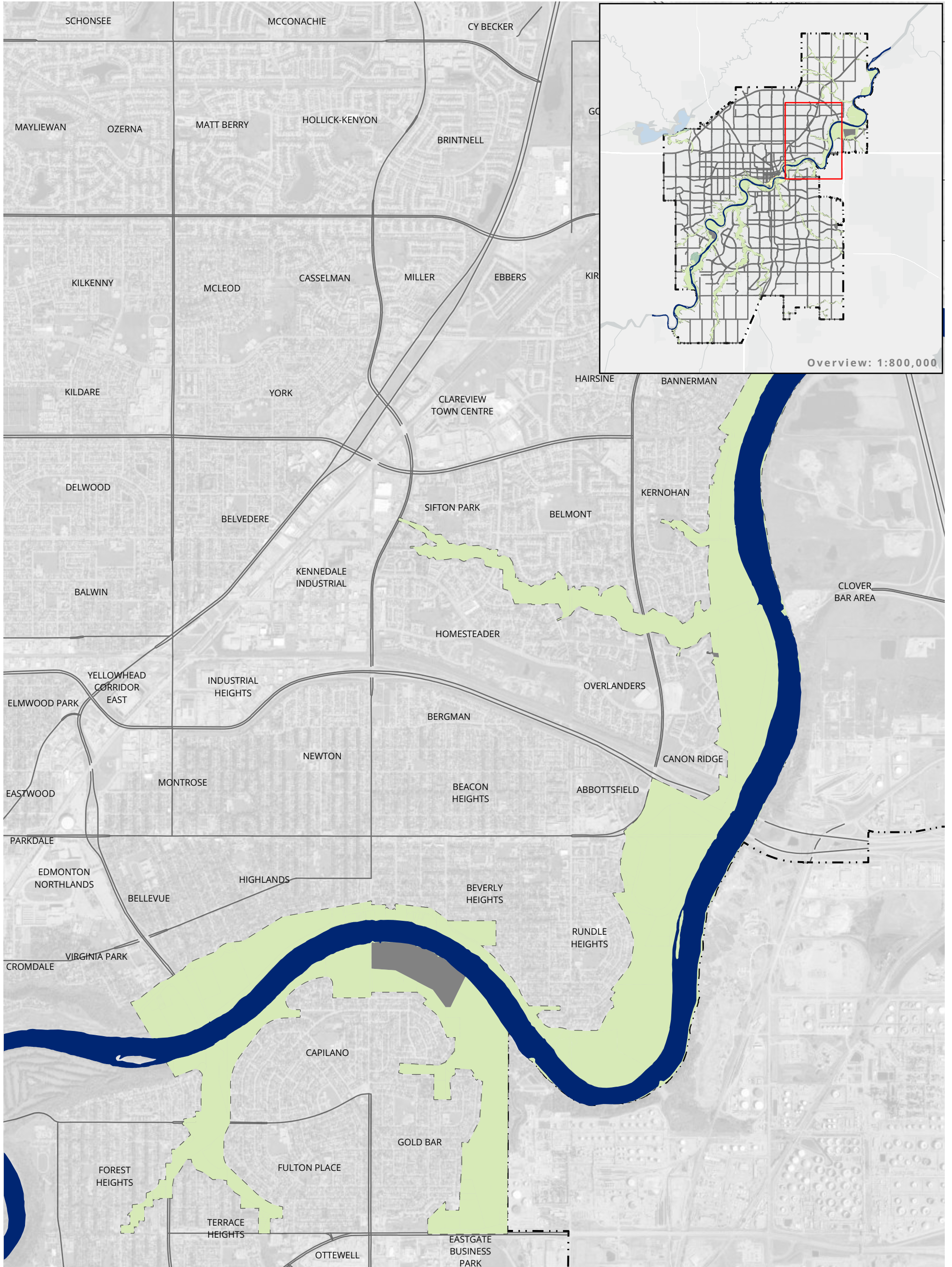
LEGEND

- | | | |
|---|---|--|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake |
|  Residential Community |  City Boundary |  Major Road |
|  Plan Boundary | | |













POTENTIAL LAND USE PATTERN

North Saskatchewan East Reach



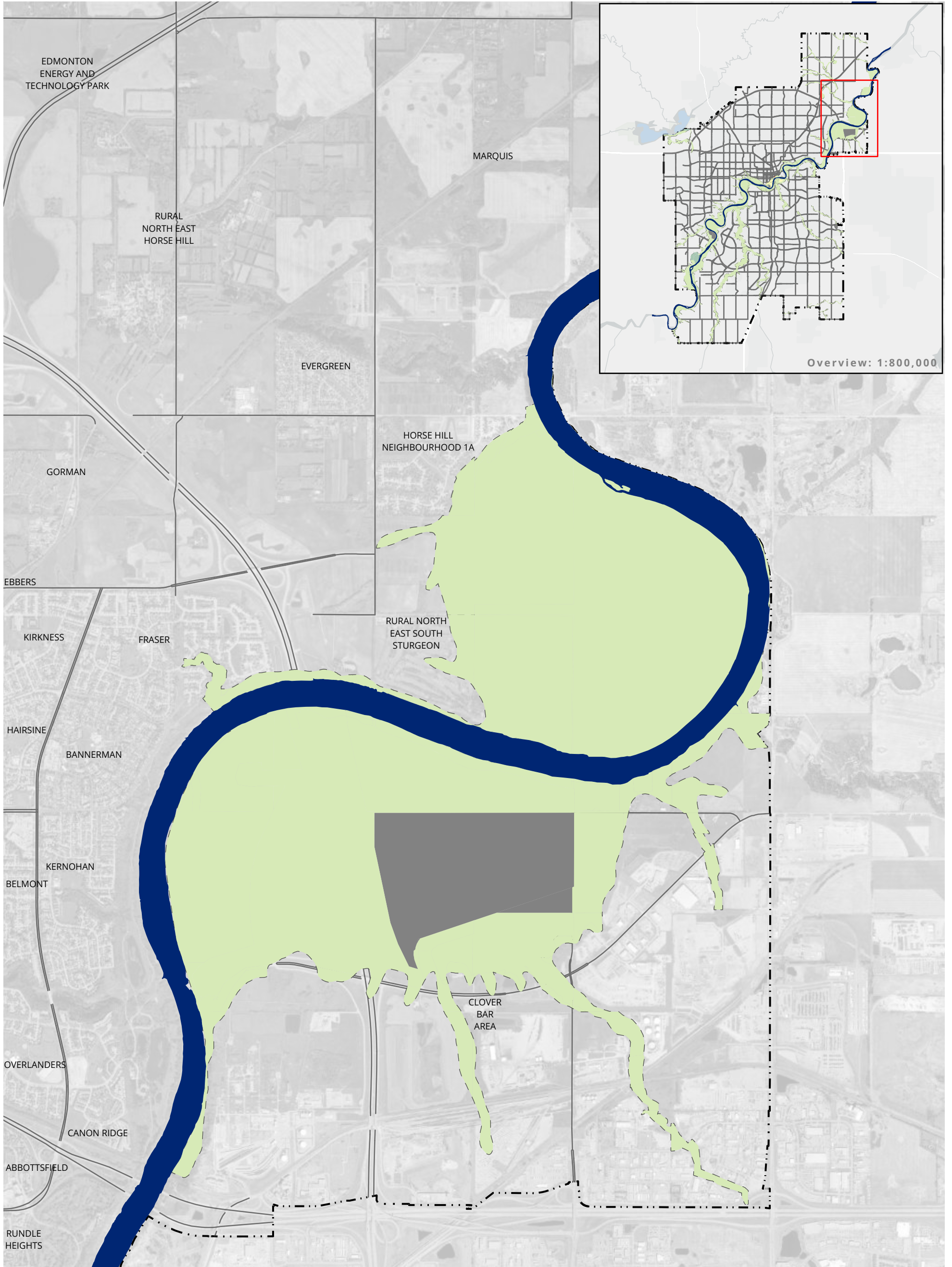
LEGEND

- | | | |
|---|---|--|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake |
|  Residential Community |  City Boundary |  Major Road |
|  Plan Boundary | | |













POTENTIAL LAND USE PATTERN

Edmonton East Reach



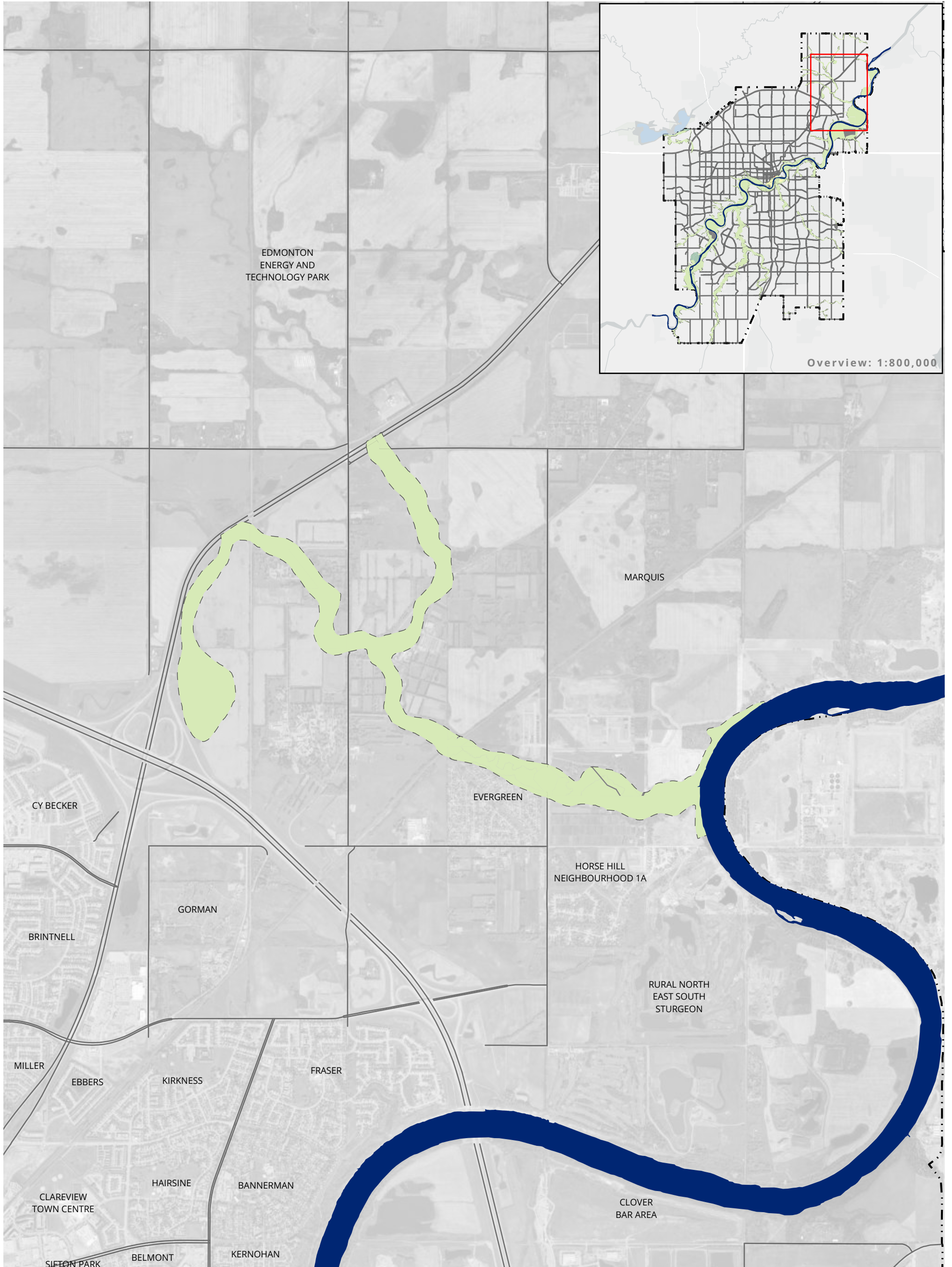
LEGEND

- | | | |
|---|---|--|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake |
|  Residential Community |  City Boundary |  Major Road |
|  Plan Boundary | | |













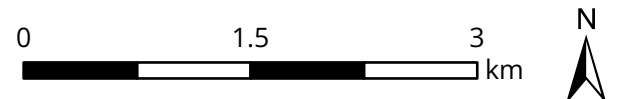
POTENTIAL LAND USE PATTERN

Horsehills Creek Ravine Reach



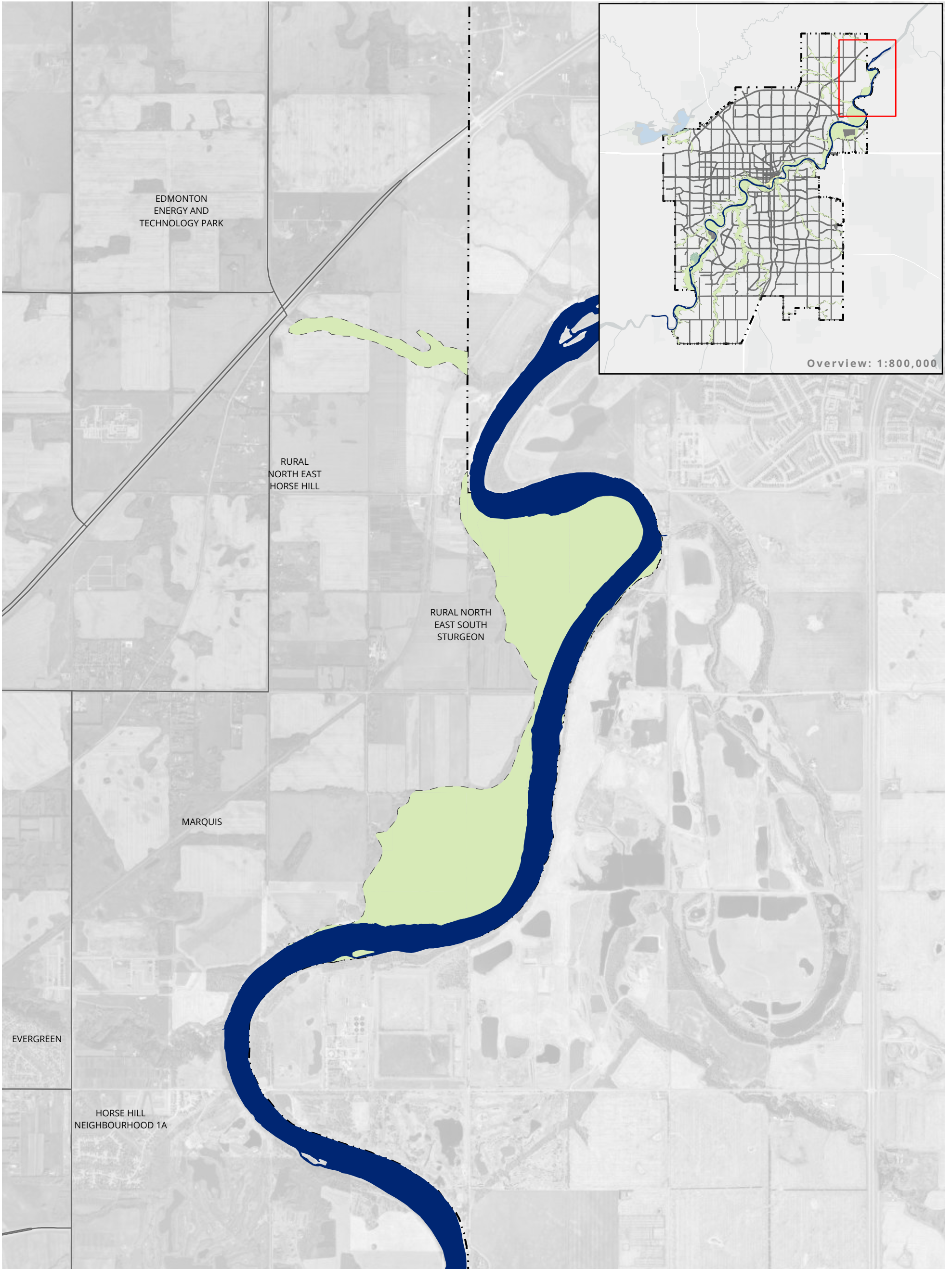
LEGEND

- | | | |
|---|---|--|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake |
|  Residential Community |  City Boundary |  Major Road |
|  Plan Boundary | | |



POTENTIAL LAND USE PATTERN

Marquis River Valley Reach



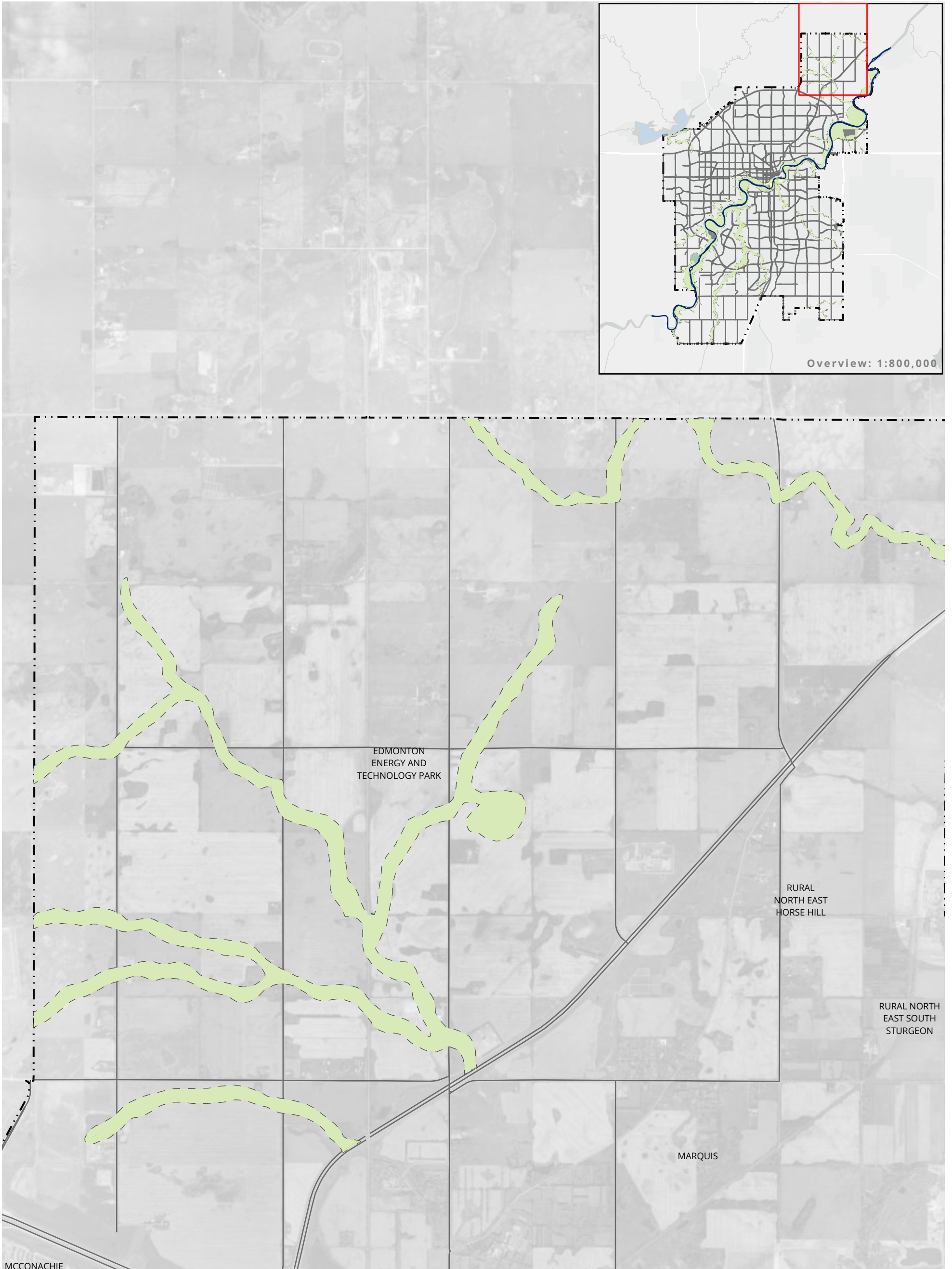
LEGEND

- | | | |
|-------------------------|-----------------------------------|--------------------------|
| River Valley Open Space | Commercial | North Saskatchewan River |
| Public Utility | Other Open Space/
Agricultural | Big Lake |
| Residential Community | City Boundary | Major Road |
| Plan Boundary | | |













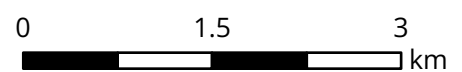
POTENTIAL LAND USE PATTERN

Horsehills North Reach



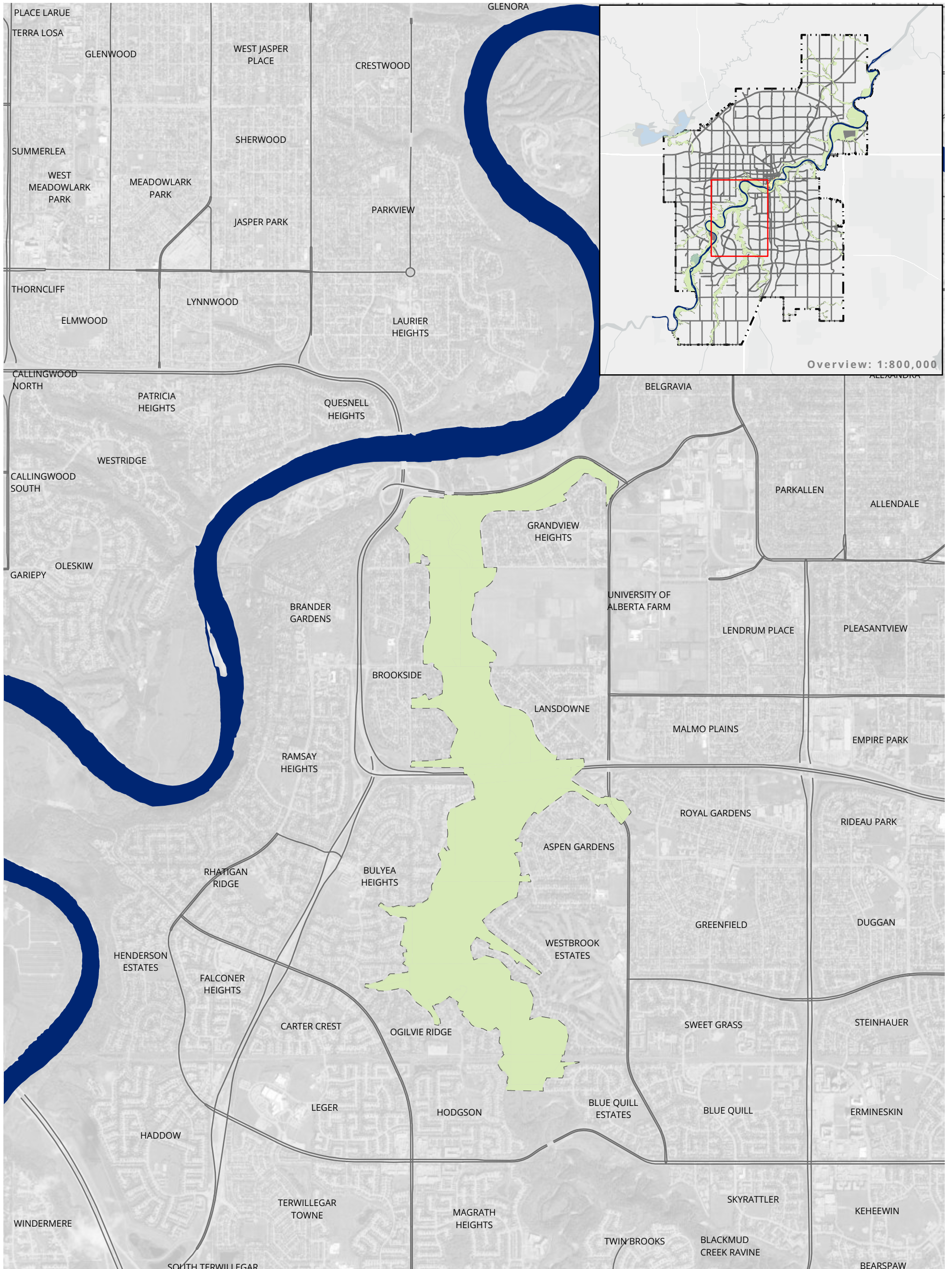
LEGEND

- | | | |
|---|---|--|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake |
|  Residential Community |  City Boundary |  Major Road |
|  Plan Boundary | | |













POTENTIAL LAND USE PATTERN

Whitemud North Reach



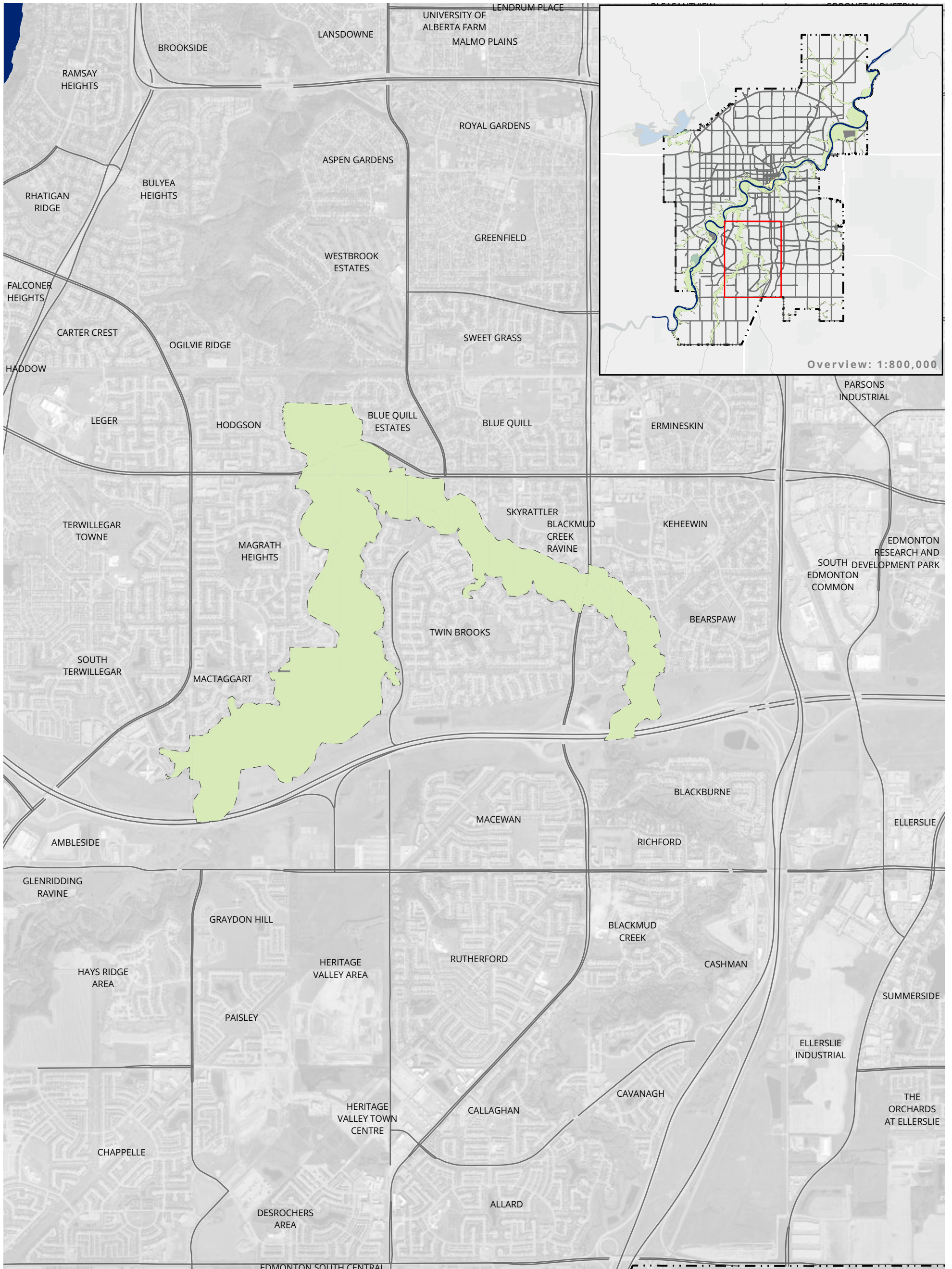
LEGEND

- | | | |
|---|---|--|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake |
|  Residential Community |  City Boundary |  Major Road |
|  Plan Boundary | | |




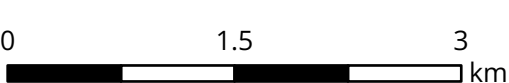










POTENTIAL LAND USE PATTERN

The Confluence Reach

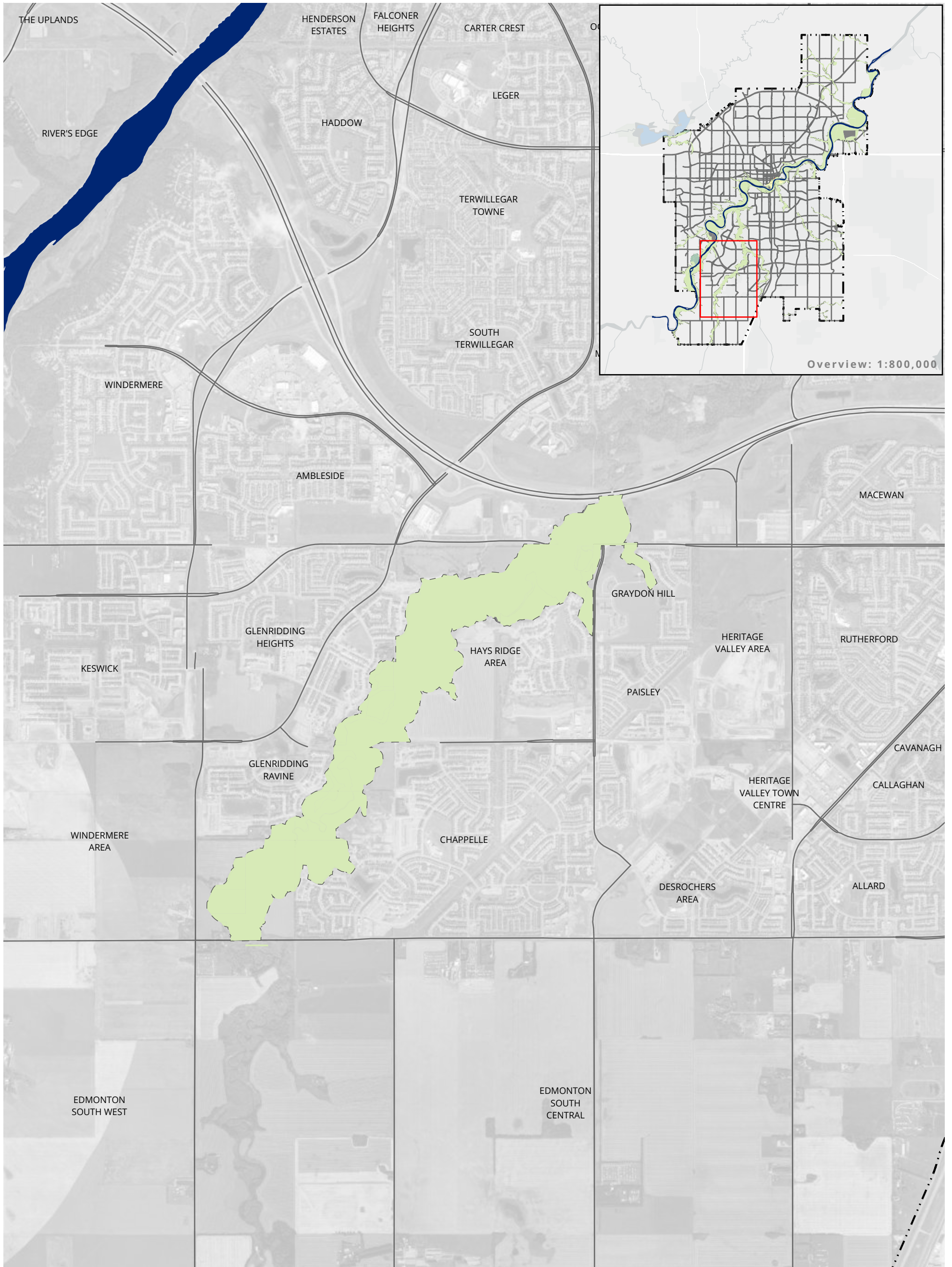


LEGEND











- | | | | | |
|---|---|--|---|---|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |  |  |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake | | |
|  Residential Community |  City Boundary |  Major Road | | |
|  Plan Boundary | | | | |

POTENTIAL LAND USE PATTERN

Whitemud Ravine Reach



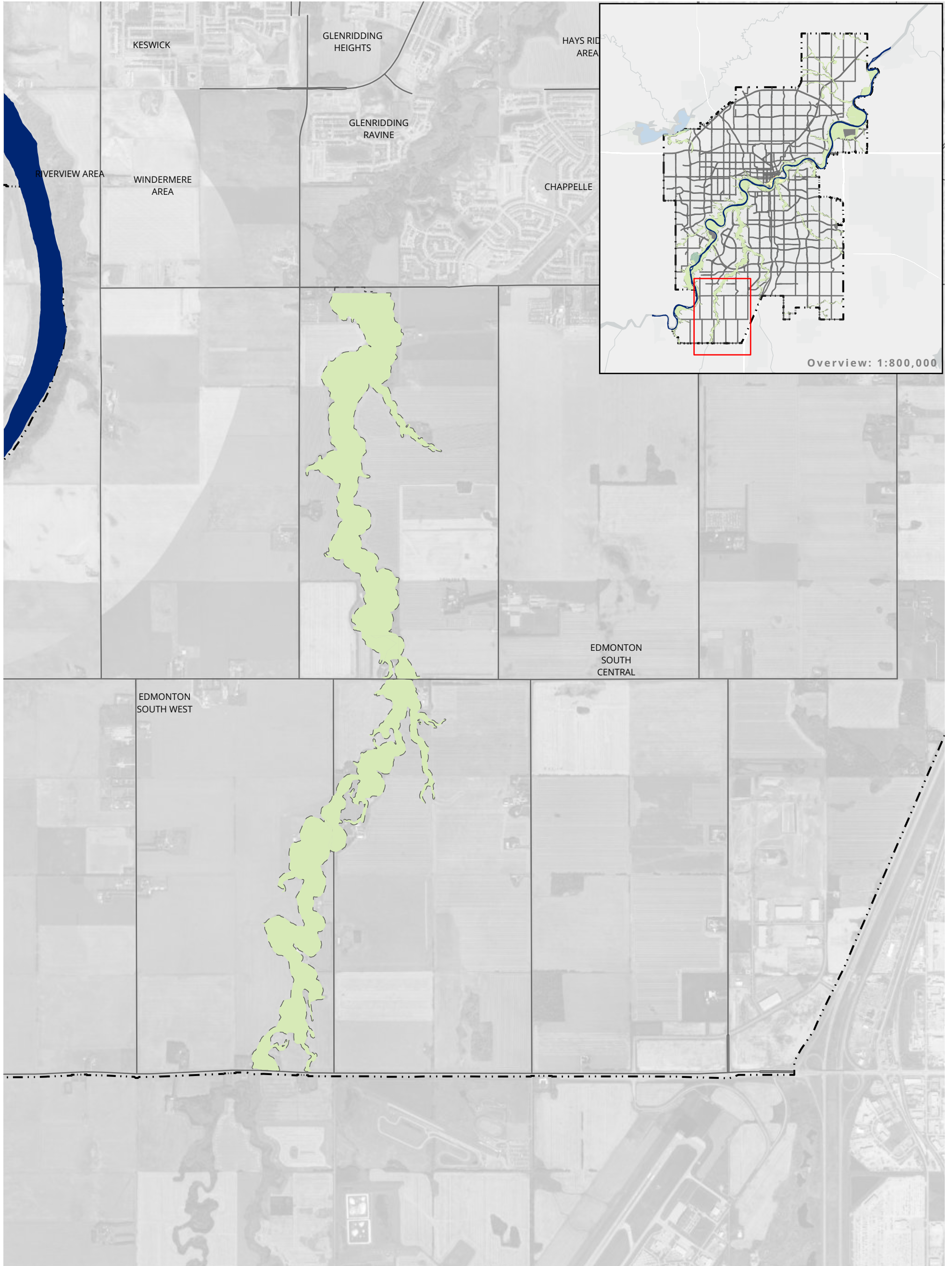
LEGEND

- | | | |
|---|---|--|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake |
|  Residential Community |  City Boundary |  Major Road |
|  Plan Boundary | | |













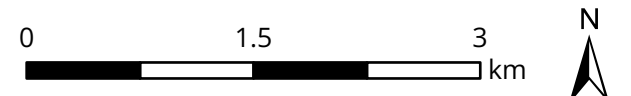
POTENTIAL LAND USE PATTERN

Whitemud Headwaters Reach



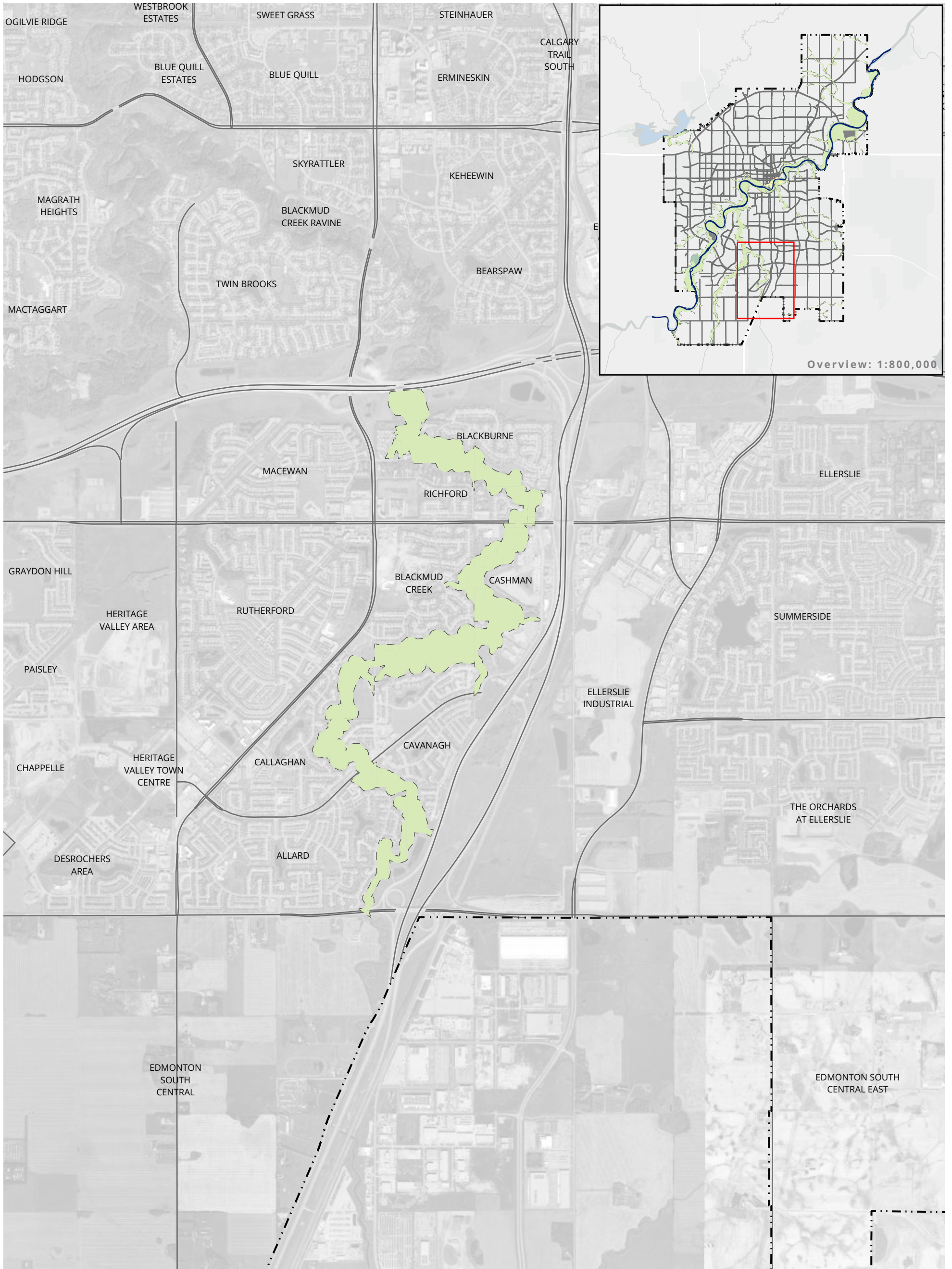
LEGEND

- | | | |
|---|---|--|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake |
|  Residential Community |  City Boundary |  Major Road |
|  Plan Boundary | | |













POTENTIAL LAND USE PATTERN

Blackmud Ravine Reach



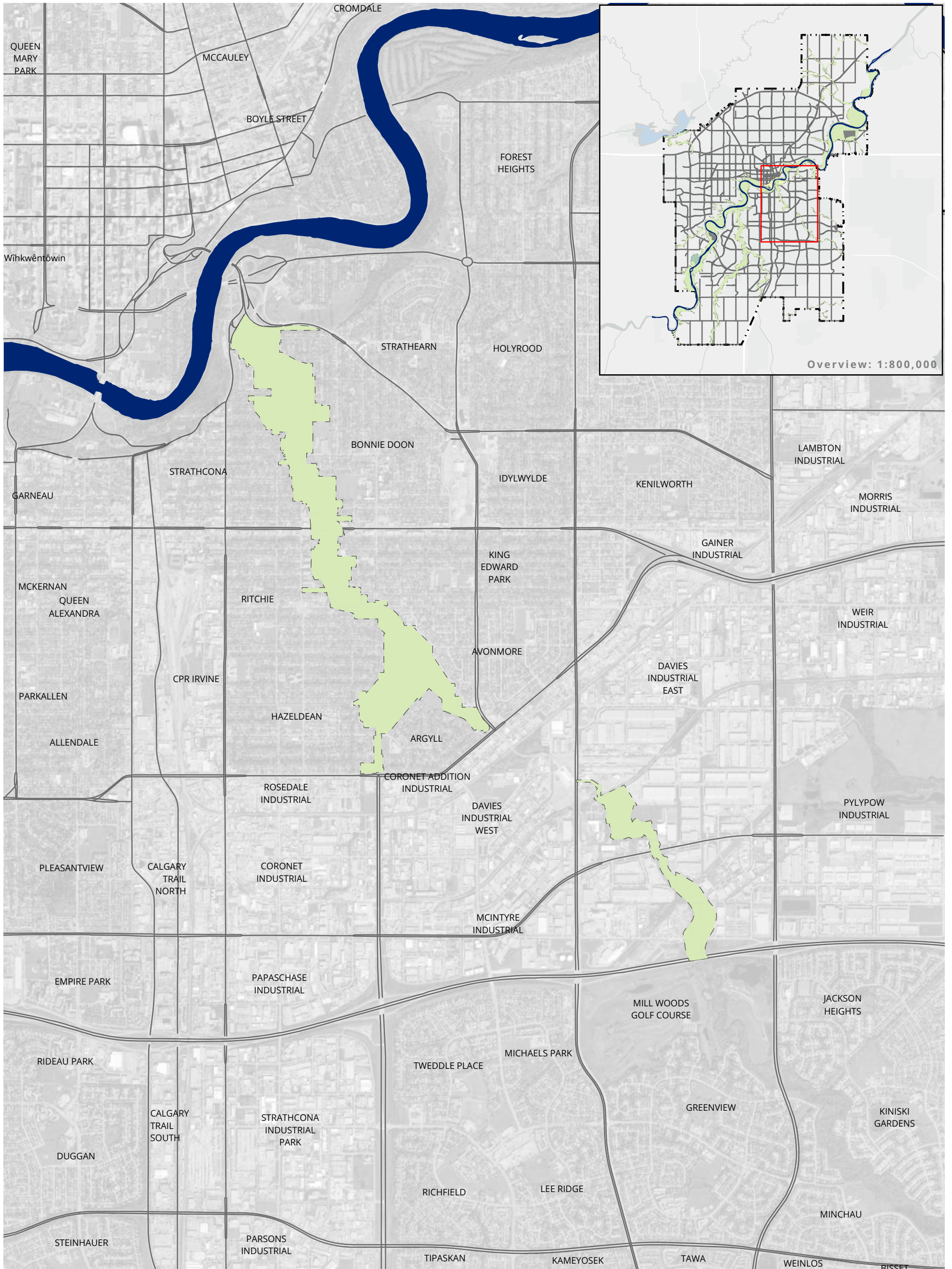
LEGEND

- | | | |
|---|---|--|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake |
|  Residential Community |  City Boundary |  Major Road |
|  Plan Boundary | | |




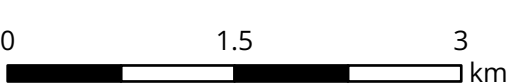










POTENTIAL LAND USE PATTERN

Mill Creek North Reach



LEGEND

- | | | | | |
|---|---|--|---|---|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |  |  |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake | | |
|  Residential Community |  City Boundary |  Major Road | | |
|  Plan Boundary | | | | |

POTENTIAL LAND USE PATTERN

Mill Creek South Reach



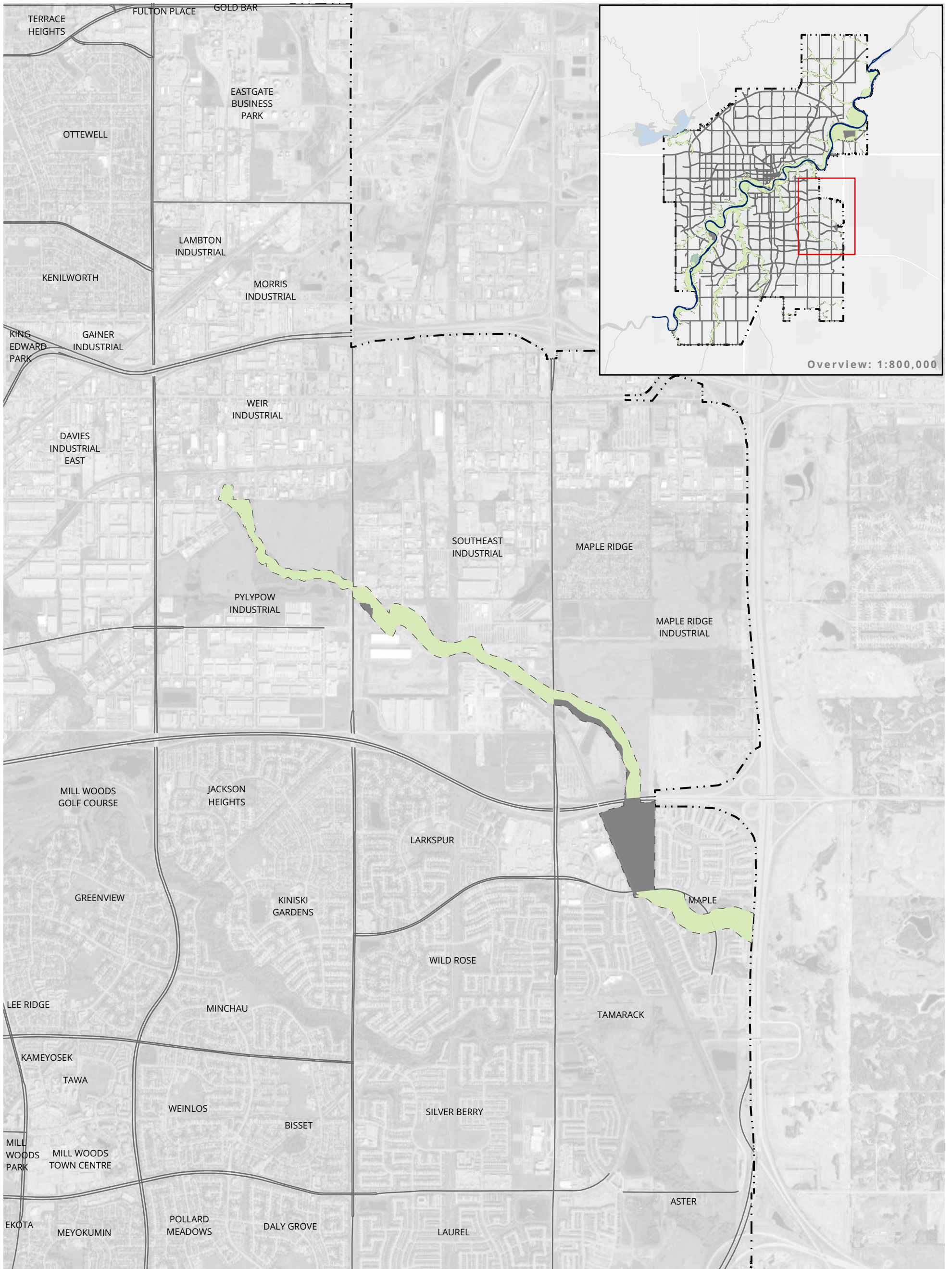
LEGEND

- | | | |
|-------------------------|-----------------------------------|--------------------------|
| River Valley Open Space | Commercial | North Saskatchewan River |
| Public Utility | Other Open Space/
Agricultural | Big Lake |
| Residential Community | City Boundary | Major Road |
| Plan Boundary | | |













POTENTIAL LAND USE PATTERN

East Ravines Reach



Overview: 1:800,000

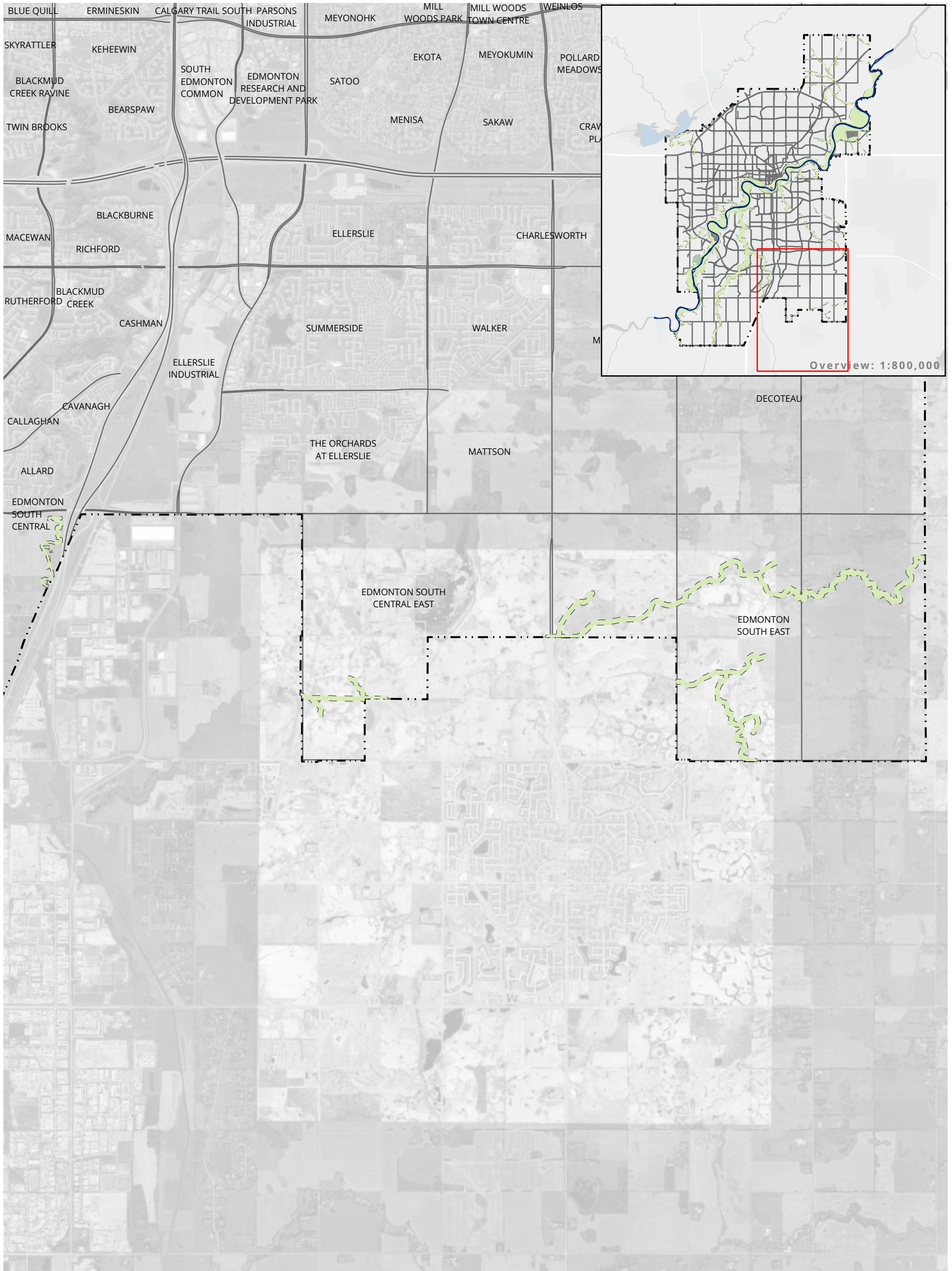
LEGEND

- | | | |
|---|---|--|
|  River Valley Open Space |  Commercial |  North Saskatchewan River |
|  Public Utility |  Other Open Space/
Agricultural |  Big Lake |
|  Residential Community |  City Boundary |  Major Road |
|  Plan Boundary | | |



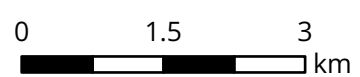
POTENTIAL LAND USE PATTERN

Irvine Creek to Blackmud South Reach



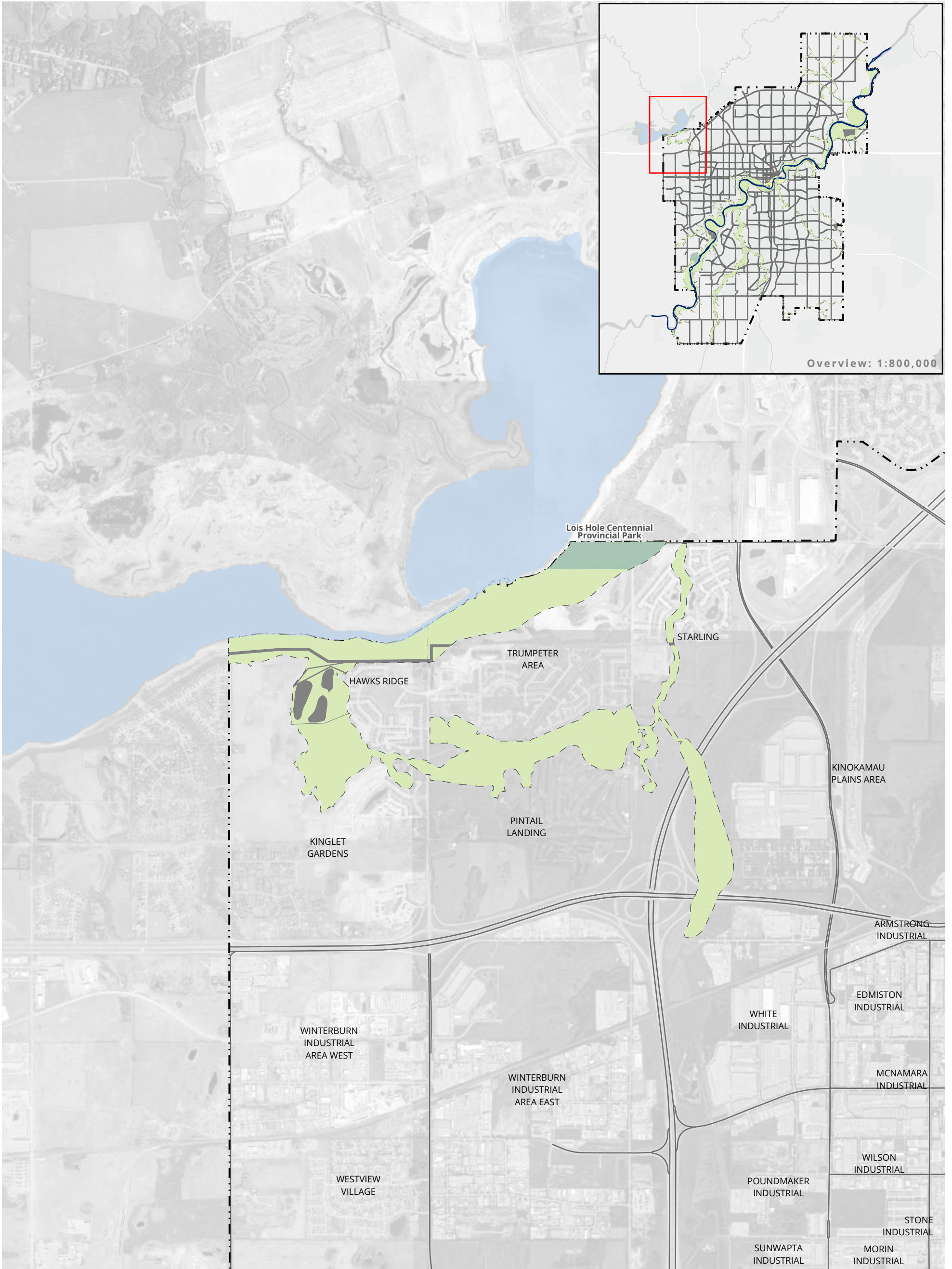
LEGEND

- River Valley Open Space
- Commercial
- North Saskatchewan River
- Public Utility
- Other Open Space/ Agricultural
- Big Lake
- Residential Community
- City Boundary
- Major Road
- Plan Boundary



POTENTIAL LAND USE PATTERN

Big Lake Reach



LEGEND

- | | | |
|-------------------------|-----------------------------------|--------------------------|
| River Valley Open Space | Commercial | North Saskatchewan River |
| Public Utility | Other Open Space/
Agricultural | Big Lake |
| Residential Community | City Boundary | Major Road |
| Plan Boundary | | |

