Current State Summary

This section includes a high-level inventory of greenspaces and natural corridors within the City of Winnipeg, identifying types, approximate acreage, known high-value sites, and gaps in information.

Existing Spatial Data Related to Greenspace and Natural Corridors

Winnipeg Natural Areas Inventory

The City of Winnipeg's Naturalist Services Branch (part of the Public Works Department) has conducted a habitat assessment and grading of **8,729.5 acres of natural areas** in Winnipeg (2021 data). The department conducted inventories on City owned land and on lands where landowner permission was acquired. Of this total area, approximately **3,600 acres are on city owned land** (~41%). See *Map 1: Winnipeg Natural Areas Inventory - Grading*.

Grading

Assessed sites are rated for their habitat characteristics and classified into one of four grades:

- **"A" Quality Habitat** (Maximum sensitivity to disturbance): Virtually undisturbed by man or recovered to an extent where community structure and composition is intact and reflects historical natural vegetation and wildlife habitat. Other factors include soil disturbance, a high degree of native vegetation present and conversely, a lack of weedy or non-native plant species.
- **"B" Quality Habitat** (High sensitivity to disturbance): Light to moderate disturbance, for example, encroachment of non-native species, may have a minimal amount of weeds but maintains a more natural condition where native species are still the major vegetation community.
- **"C" Quality Habitat** (Low sensitivity to disturbance): Moderate disturbance, a significant number of weed species which have replaced native species, few native species present. For example, an old agricultural clearing that has not been used in recent times and native plant species are slowly returning, or an area that is occasionally mowed.
- **"D" Quality Habitat** (Minimum sensitivity to disturbance): Heavily disturbed site, the vegetation is dominated by weed species or absent all together. None or very few native species present. (City of Winnipeg Habitat Assessment and Grading).

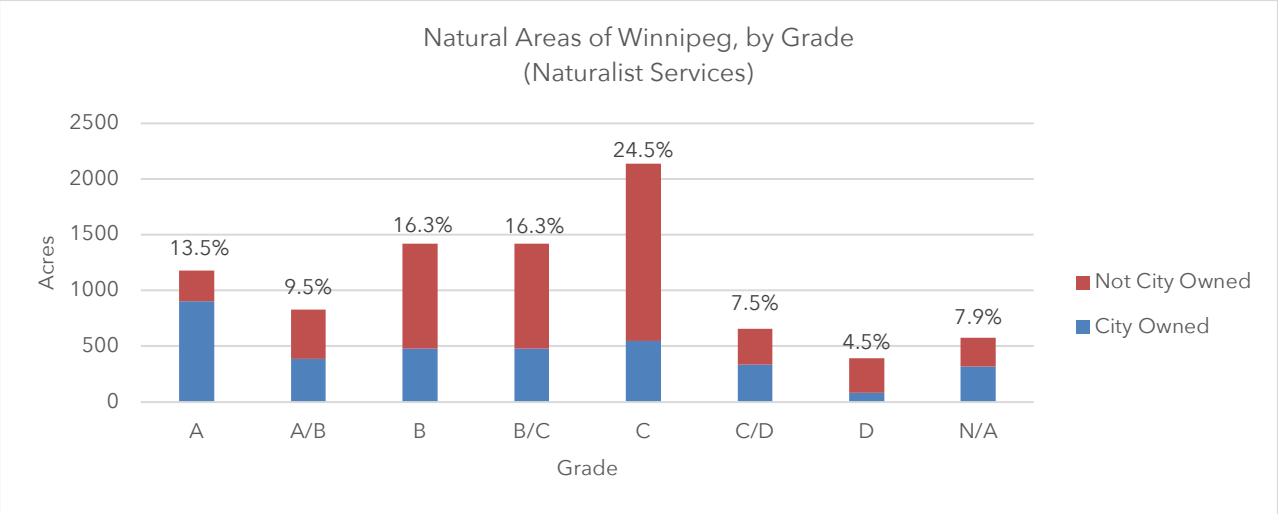


Figure 1: Natural Areas of Winnipeg, by Grade (Naturalist Services, 2023)

As the chart shows, 13.5% (1,180 acres) of the graded natural areas in Winnipeg are considered "A" quality habitat. This includes known high-value sites such as large parts of Assiniboine Forest, the Living Prairie Museum, Rotary Prairie Nature Park, La Barrierie Park, Bois-des-Esprits and other parts of the Seine River corridor. More than 900 of these acres are owned by the City of Winnipeg.

In general, sites receiving grades of B or higher are considered to be good quality sites and worthy of consideration for preservation as part of Winnipeg's Ecologically Significant Natural Lands (ESNL) based on that assessment alone. 9.5% (832 acres) of natural areas on the map are graded "A/B" quality and 16.3% (1,423 acres) are graded "B" quality habitat. The majority of A/B and B class land is not owned by the City of Winnipeg. The total area receiving grades of B or higher is 3,434 acres, or 39% of the total area of graded sites.

"C" quality habitat is the most predominant, making up 24.5%, or 2,138 acres, of graded natural areas in Winnipeg. 74% of "C" quality habitat is on land not owned by the City of Winnipeg. The inventory also includes 655 acres of "C/D" quality habitat and 392 acres of "D" quality habitat. 7.9% of the land in the inventory (690 acres) was classified according to habitat type but did not receive a letter grade—a reason is not provided.

Habitat Type

Each natural area in Winnipeg's Natural Areas inventory is also classified according to habitat type. See *Map 2: Winnipeg Natural Areas Inventory – Habitat Type*. Distinct natural habitat types within the City include four habitat types that are considered at risk according to federal and international authorities such as the Canadian Wildlife Service and World Wildlife Fund:

- **Riverbottom forests,**
- **Grasslands/prairie,**
- **Oak forests;** and
- **Wetlands**

The inventory also identifies other natural areas with habitat types that are more common:

- **Aspen forests,**
- **Ponds,**
- **Rivers,**
- **Streams,** and
- **Other habitats**.

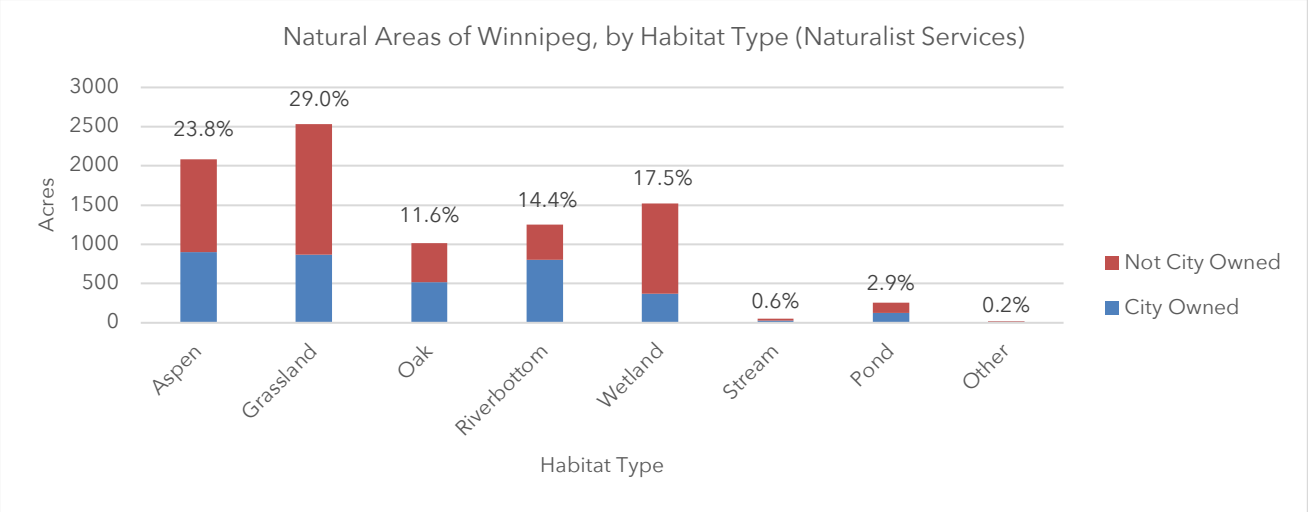


Figure 2: Natural Areas of Winnipeg, by Habitat Type (Naturalist Services, 2023)

Key highlights of this data include the following:

- **Grassland areas** are the most predominant habitat type in the inventory (at risk habitat type), making up 29% (2,534 acres) of the areas included in the data. 34% of identified grassland areas are on City-owned land.
- **Aspen forests** (more common habitat type) make up 23.8% (2,082 acres) of all identified sites, 43% of which are on City-owned land.
- **Wetland areas**, another at risk habitat type, make up 17.5% (1,525 acres) of the classified areas; only 24% of wetlands in the inventory are on City-owned land.
- **Riverbottom forests**, also at risk, make up 14.4% (1,253 acres) of the land in the inventory; 63% of these are on City-owned land.
- **Oak forests,** the fourth at risk habitat type, make up 11.6% (1,012 acres) of identified sites; 52% of the identified oak forests are on City-owned land.

Limitations to the Data

The natural areas inventory focuses on the highest value natural areas in Winnipeg. The inventory does not include smaller natural areas (particularly those on private property), park spaces or golf courses that are sodded or planted with non-native species, and other marginal natural areas. For example, the inventory does include riparian areas along the Red River near the University of Manitoba, but does not include many wooded or grassy areas around the campus and former golf course. Even though the areas omitted from the inventory may not be high grade natural areas, they could still play an important role in providing ecological services and corridor connections and could also provide opportunity for land management practices that can help restore the habitat and enhance the quality.

Winnipeg Parks and Open Space

The Public Works department has also published geospatial data representing all parks and open space in Winnipeg, including the spatial boundaries, names, area, and addresses. The total area for land included in this database is **8,921.8 acres** – making this similar in area to the Natural Areas Inventory (although there are many areas where the datasets do not overlap).

The dataset classifies parks and open spaces based on their size, use, and characteristics. See *Map 3: Winnipeg Parks and Open Space*. Categories include Buffer, Fragment, Linkage, Nature, Neighbourhood, Community, City, Regional / Regional Sport, and other.

Community parks and open space comprise the greatest total size by acres (2,456 acres, or 28% of the total area). There is also 1,577 acres of Regional parks (18%), 1,522 acres classified as Linkages (17%), and approximately 1,340 acres of both Nature and Neighbourhood classifications (15% each).

The data also classifies each polygon as either Parks and Open Space or Greenfield — Future Park. 94% of the area is identified as Parks and Open Space (8,353 acres), while 6% (568 acres) is classified as Greenfield – Future Park. For more information on the dataset, visit Parks and Open Space on the City's Open Data portal.

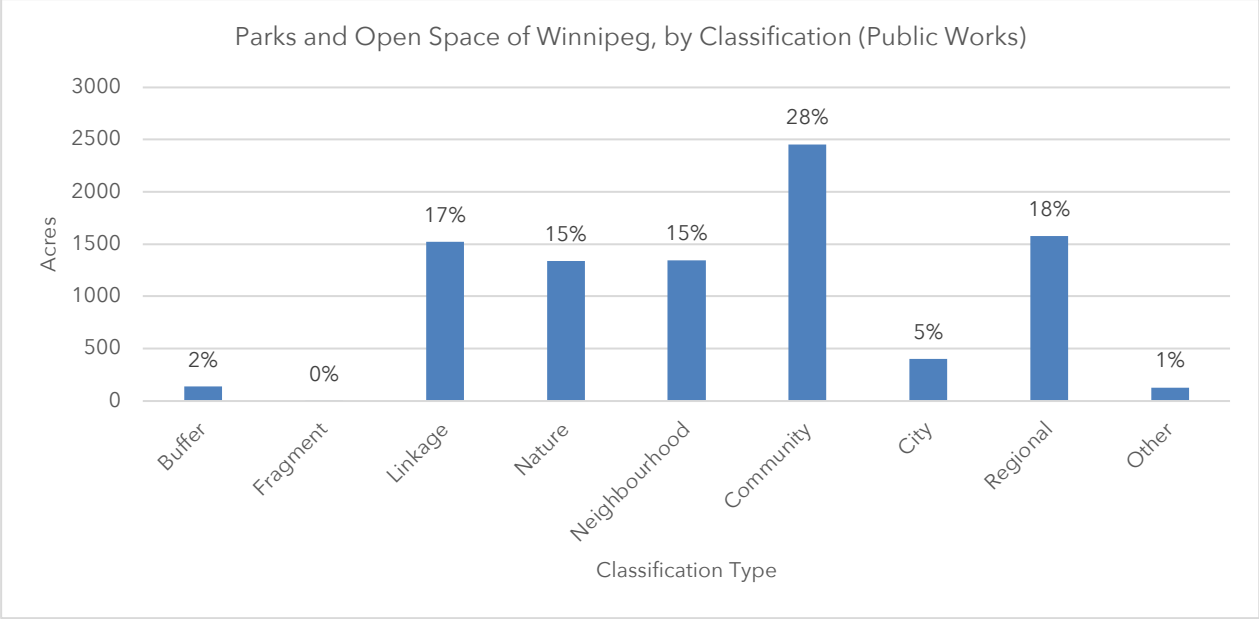


Figure 3: Parks and Open Space of Winnipeg, by Classification (Public Works, 2023)

Limitations to the Data

The dataset predominantly includes land owned by the City of Winnipeg; very few parcels of non-City-owned land are included. Exceptions include the Abinojii Mikanah Greenway (formerly Bishop Grandin) parts of the Taché Promenade, and some other small sites that may be parts of rights-of-way that are not owned by the City.

Winnipeg Tree Inventory & University of Manitoba Tree Inventory

Winnipeg's Tree Inventory, also published by the Public Works Department, includes a detailed list and map of **approximately 291,000 trees** in the City of Winnipeg. See *Map 4: Winnipeg Tree Inventory*. The data includes their botanical name, common name, diameter at breast height (dbh), location class, neighbourhood and precise location.

The University of Manitoba has also produced a tree inventory for the Fort Garry campus, which is comprised of **8,740 trees**. The original tree inventory was produced in 2018, with a revised version published in 2021. The 2018 version included polygons for tree stands in addition to points for trees. The tree stand information has been included in the tree inventory maps.

Limitations to the Data

The tree inventories are a rich resource but have limited use in identifying key parts of the greenspace and natural corridors network. The data in the inventory datasets are predominantly point data, in contrast to the polygon data in the other datasets described above, meaning further analysis would be required in order to identify areas of greenspace or natural corridors that are significant at a City-wide scale.

Furthermore, the Winnipeg dataset only includes trees on City-Owned public land, with a focus on boulevard trees and street edges. It does not inventory all trees in large natural areas like Assiniboine Park, Assiniboine Forest, and Bois-des-Esprits (for obvious logistical reasons), although some parks are mapped out to a greater extent than others. The Winnipeg Comprehensive Urban Forest Strategy: State of the Forest at a Glance report estimates **there are 3,075,000 total trees in Winnipeg**, meaning that the Winnipeg Tree Inventory and University of Manitoba datasets combined only map out approximately **9.7% of the trees in Winnipeg**.

Because the Winnipeg inventory only includes public land, it also misses out on large greenspaces such as privately owned and operated golf courses or large greenspaces on private or public land not owned by the City of Winnipeg, such as the greenspace at the Royal Canadian Mint.

By its nature, the tree inventory also excludes important natural greenspaces such as large parts of grasslands and wetlands, which—as the Natural Lands Inventory shows, make up significant areas of Winnipeg's natural areas.

Zoning & Assessment Parcels

While they were not designed with the purpose of identifying natural areas, the City of Winnipeg datasets for Assessment Parcels and Zoning and can aid in the identification of greenspaces and natural corridors that are not included in the other datasets described above.

The Assessment Parcels dataset (see *Map 5: Winnipeg Assessment Parcels)* is prepared by Winnipeg's Assessment and Taxation Department. All properties are given a code based on their use. Several codes are related to uses that indicate the parcel contains greenspace:

- PIMCE – Cemetery,
- PIRGC – Golf Course,
- PIRMU – Recreational Multi-Use, and
- VAPRK – Vacant Park

The total area with parcels of these codes in the City of Winnipeg is 7,819 acres.

The Assessment Parcels dataset also includes information the zoning of each parcel, as regulated under the City's zoning by-laws. See *Map 6: Winnipeg Zoning.* There are several zones that indicate a site contains greenspace:

- PR1 – Parks and Recreation – Passive
- PR2 – Parks and Recreation – Active
- PR3 – Parks and Recreation – Regional
- R – River Bank

In total, 9,020 acres of land is identified as a part of one of those four zones.

Limitations to the Data

The zoning and assessment parcels datasets should not serve as the primary basis for the inventory of greenspace and natural corridors in Winnipeg. Many of the sites zoned or identified for parks use have buildings, parking lots, or other development that do not contribute to the preservation or enhancement of biodiversity in the City of Winnipeg. In addition, many park properties are zoned in categories other than PR. However, these datasets are useful for identifying sites that are not included in the City's natural areas inventory that do contribute to the City's greenspace and natural corridors network, such as cemeteries.

Winnipeg Active Transportation & Other Trails

Winnipeg also has geospatial data for their Active Transportation Network (including cycling, walking, and multi-use paths) and other trails (for uses including cross-country skiing and skijoring). See *Map 7: Winnipeg Active Transportation Network & Other Trails.* **The Active Transportation Network contains more than 328 kilometres of trails. There are an additional 23 kilometres of other trails.**

The Active Transportation Network data includes information on the location of the path (neighbourhood, ward, and street name), whether the location is on road or off road, and the type of infrastructure (painted bicycle lane, neighbourhood greenway, buffered bicycle lane, shared use lane, shared bus / bicycle lane, etc.).

Limitations to the Data

The Winnipeg Active Transportation Network spatial data is made up of polyline shapefiles, meaning that they are represented as simple lines on a map. The maps show the length of active transportation corridors but not their width, making them less suitable for identifying greenspace areas alongside the pathways. Some of the routes included in this data set will be on road routes such as painted bike lanes.

The dataset also does not have an easy way of distinguishing routes with adjacent greenspace from those areas that do not, aside from assessing whether they run through parks or other greenspaces already identified in other datasets. Therefore, the usefulness of the Active Transportation Network dataset is limited other than for the purposes of exploring connections between greenspaces identified through other datasets.

Existing Spatial Data Related to Regional Greenspace and Natural Corridors

As described elsewhere in this report, it is also important for the subsequent phases of this work to consider connections to greenspace and natural corridors outside the City of Winnipeg limits. The Winnipeg Metropolitan Region is currently preparing a Natural Assets Network Plan, which will likely provide a detailed assessment of greenspace and natural corridors in the neighbouring municipalities, as well as the City of Winnipeg. However, in the event that work of phase two of Winnipeg's plan begins prior to the publishing of the Metro Region's plan, there are still a number of datasets that would be useful. See *Map 8: Regional Greenspace and Natural Corridors*. Datasets include, but are not limited to:

- **Forest Resource Inventory** (Manitoba Land Initiative): forested areas by predominant tree species
- **Manitoba Waterbodies** (Manitoba Land Initiative): water bodies by type
- **Parks and Protected Areas & Wildlife Management Areas** (Manitoba Land Initiative): parks and protected areas in Manitoba
- **Canadian Protected and Conserved Areas Database (CPCAD)**: all nationally recognized protected and conserved areas, including those owned and managed by nature trust organizations.
- **Canadian Wetland Inventory** (Ducks Unlimited Canada): fens, marshes, swamps, bogs, and shallow open water
- **Important Bird Areas** (IBA Canada): designated Important Bird Areas
- **Trans Canada Trail** (Trans Canada Trail): key trails and active transportation paths across the country, and
- **Development Plans and Zoning By-Laws** (Manitoba Land Use and Development): for municipalities outside of Winnipeg (not shown on the map).

Data Gaps

Despite the breadth of information available described above, there are a number of data gaps, particularly related to areas that may contain important greenspace or natural corridors currently not included in the database. In some cases, this information might not exist or be digitized. In other cases, further analysis would be needed before the data would be useful for analysis. Key data gaps include information on greenspaces, natural corridors, and tree stands located on:

- Rail rights-of-way
- Hydro rights-of-way
- School sites
- Federal lands (The Forks, Royal Canadian Mint, etc.)
- Provincial lands (Legislative grounds, etc.)
- Post-secondary institutions / colleges (Red River College, etc.)
- Privately-owned lands (e.g. residential properties)
- Parts of the river/creek corridor or City drainage network not included in other data sources

Synthesis & Recommendations

After reviewing all of the available data sources, we recommend using the Winnipeg Natural Areas Inventory as the foundation for the mapping component of future phases of the Master Greenspace and Natural Corridors Plan. The Winnipeg Natural Areas Inventory contains the most nuanced information related to the natural heritage features and habitat of each site, which will serve as a strong foundation to future planning work. It also includes information for several important sites that are not owned by the City of Winnipeg, which is essential for this work.

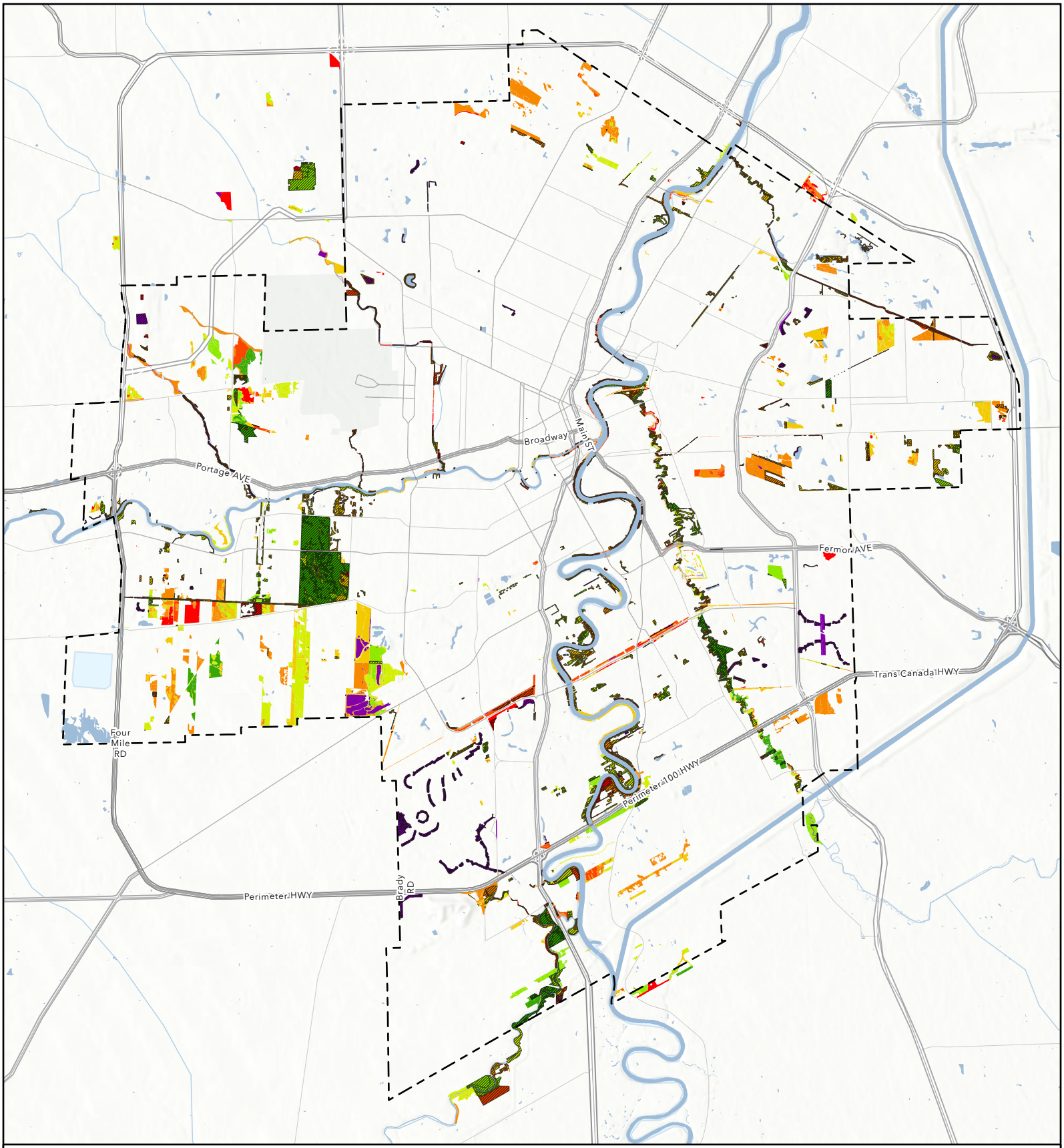
However, further mapping and inventorying work is necessary to address the gaps in this dataset that are highlighted by some of the other spatial layers covered in this review. *Map 9: Greenspace and Natural Corridors Composite Map* shows the areas covered by the different datasets within the City of Winnipeg (note that the map does not contain the Active Transportation Network or other trails data). The map provides a more comprehensive picture of Winnipeg's greenspaces and natural corridors and highlights areas where the other datasets could help to fill in gaps in Winnipeg's Natural Areas Inventory.

For future phases, the following questions will need to be addressed:

- Should mowed open space, vacant land, or other highly disturbed habitat in parks, cemeteries, golf courses, utility corridors, road rights-of-way, and other sites be considered in this plan? If so, the Natural Areas Inventory will need to be merged or analyzed in conjunction with other datasets including the Parks and Open Space dataset and the Assessment and Taxation dataset.
- Should all privately-owned forested riparian areas along rivers be considered in this plan? Right now, very little of this is captured in existing datasets.
- How important are street trees and boulevards to greenspace and natural corridors planning? Currently, these are only captured in the Trees Inventory data, which is not easily integrated into other datasets.

The answers to these questions could lead to additional tasks that may need to take place prior to—or as part of—the next phase of the Master Greenspace and Natural Corridors Plan project.

Appendices



Master Greenspace and Natural Corridors Plan - Phase I Scoping - Current State
Map 1: Winnipeg Natural Areas Inventory - Grading

Habitat Quality Grade

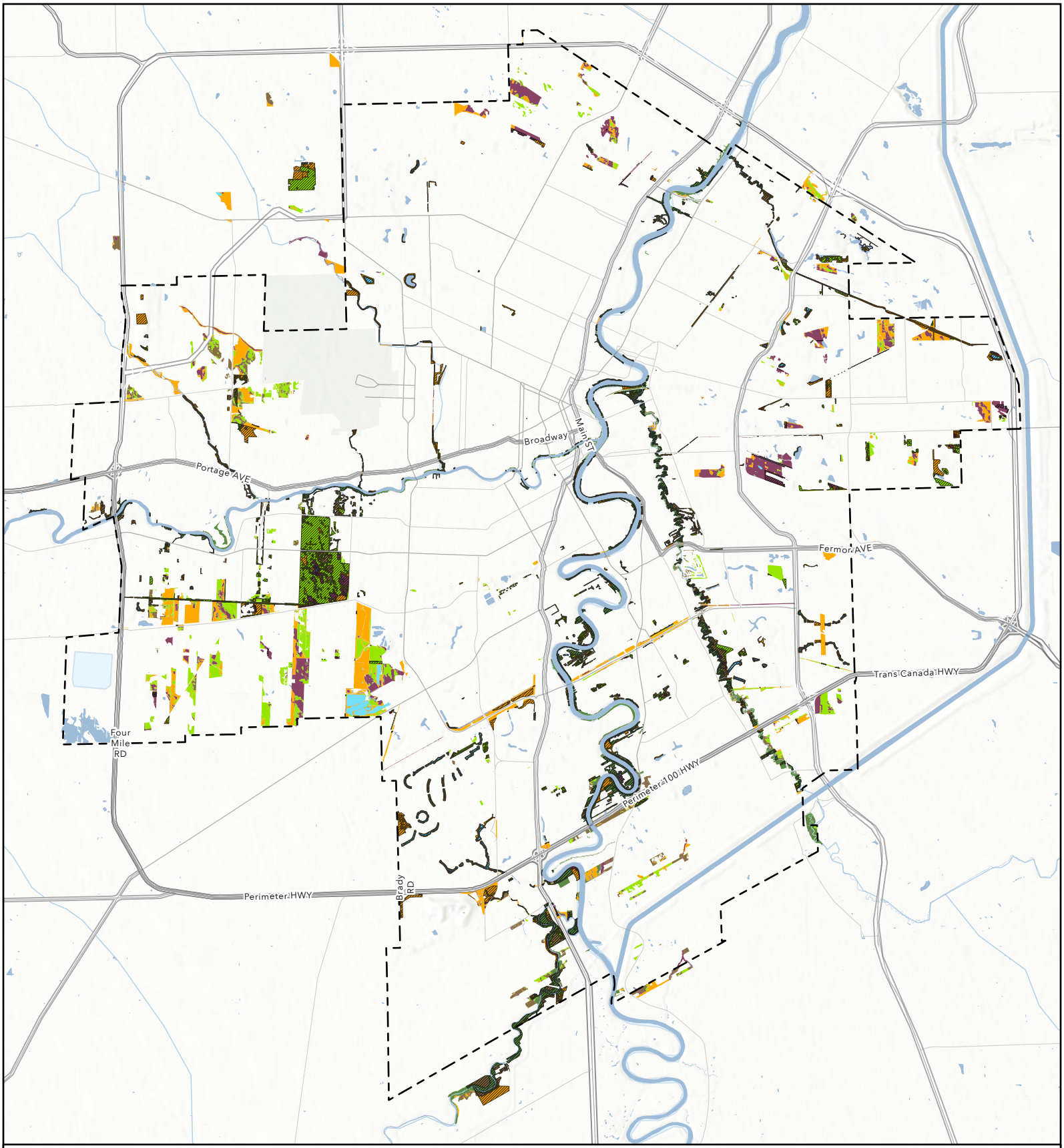
- A
- A/B
- B
- B/C
- C
- C/D
- D
- Other or N/A
- Winnipeg City Limit
- City-Owned Parcel

N

0 3.75 7.5 15 Kilometers

Source: Winnipeg Natural Areas Inventory, City of Winnipeg's Naturalist Services Branch (2022))

Path: D:\HTFC_GIS\Winnipeg\Map Documents\Master Greenspace and Natural Corridors\MGNC.aprx Name: Map 1 - Natural Areas Grading



Master Greenspace and Natural Corridors Plan - Phase I Scoping - Current State
Map 2: Winnipeg Natural Areas Inventory - Habitat Type

Habitat Type

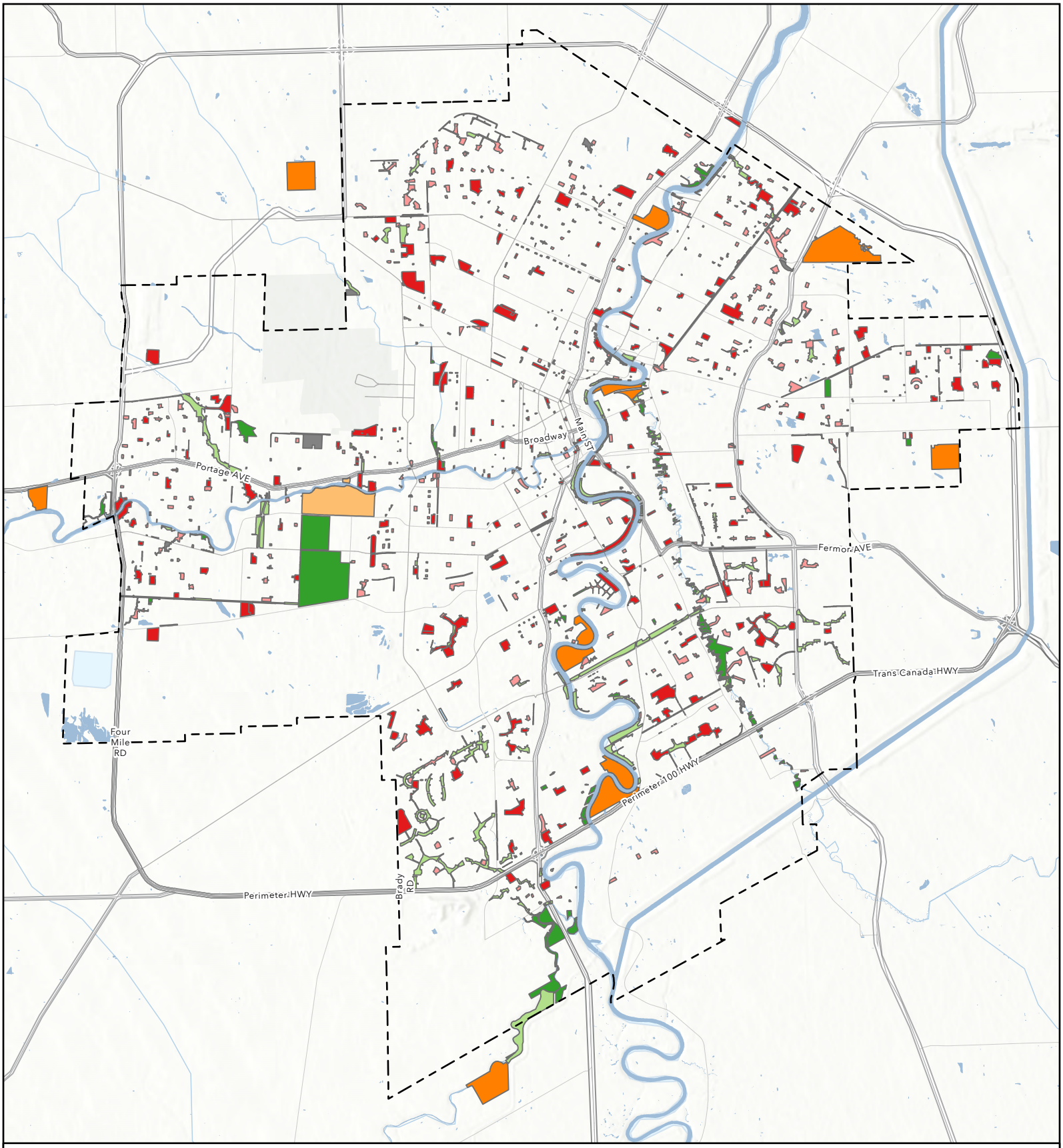
- Aspen Forest
- Grassland/Prairie
- Oak Forest
- Pond
- River Bottom Forest
- Stream
- Wetland
- Other
- Winnipeg City Limit
- City-Owned Parcel

N

0 3.75 7.5 15 Kilometers

Source: Winnipeg Natural Areas Inventory, City of Winnipeg's Naturalist Services Branch (2022))

Path: D:\HTFC_GIS\Winnipeg\Map Documents\Master Greenspace and Natural Corridors\MGNC.aprx Name: Map 2 - Natural Areas Type



Master Greenspace and Natural Corridors Plan - Phase I Scoping - Current State
Map 3: Winnipeg Parks and Open Space

Classification Type

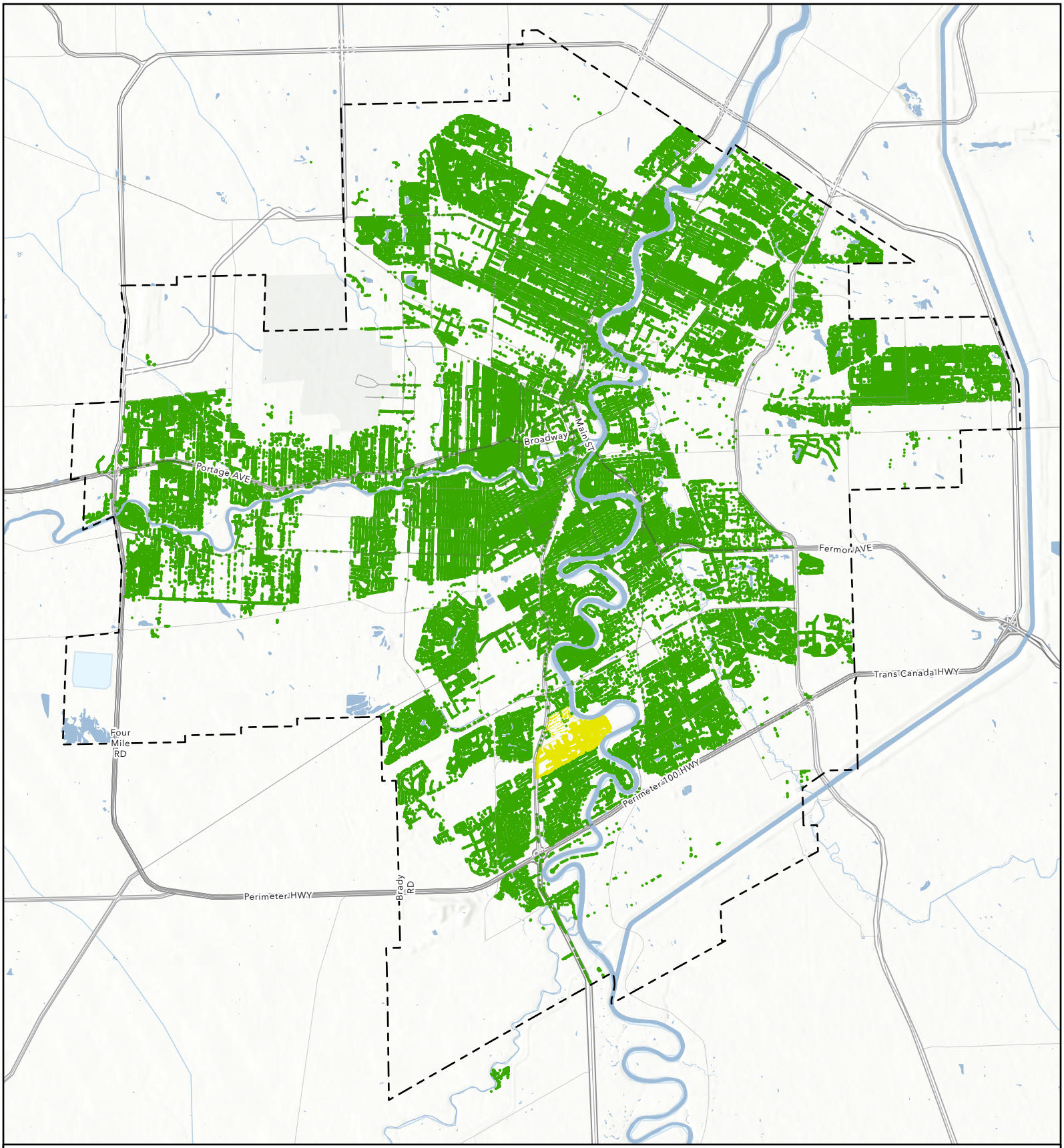
- Buffer
- Fragment
- Linkage
- Nature
- Neighbourhood
- Community
- City
- Regional
- Other
- Winnipeg City Limit

N

0 3.75 7.5 15 Kilometers

Source: Winnipeg Parks and Open Space (Winnipeg Public Works Department, 2022)

Path: D:\HTFC_GIS\Winnipeg\Map Documents\Master Greenspace and Natural Corridors\MGNC.aprx Name: Map 3 - Parks and Open Space



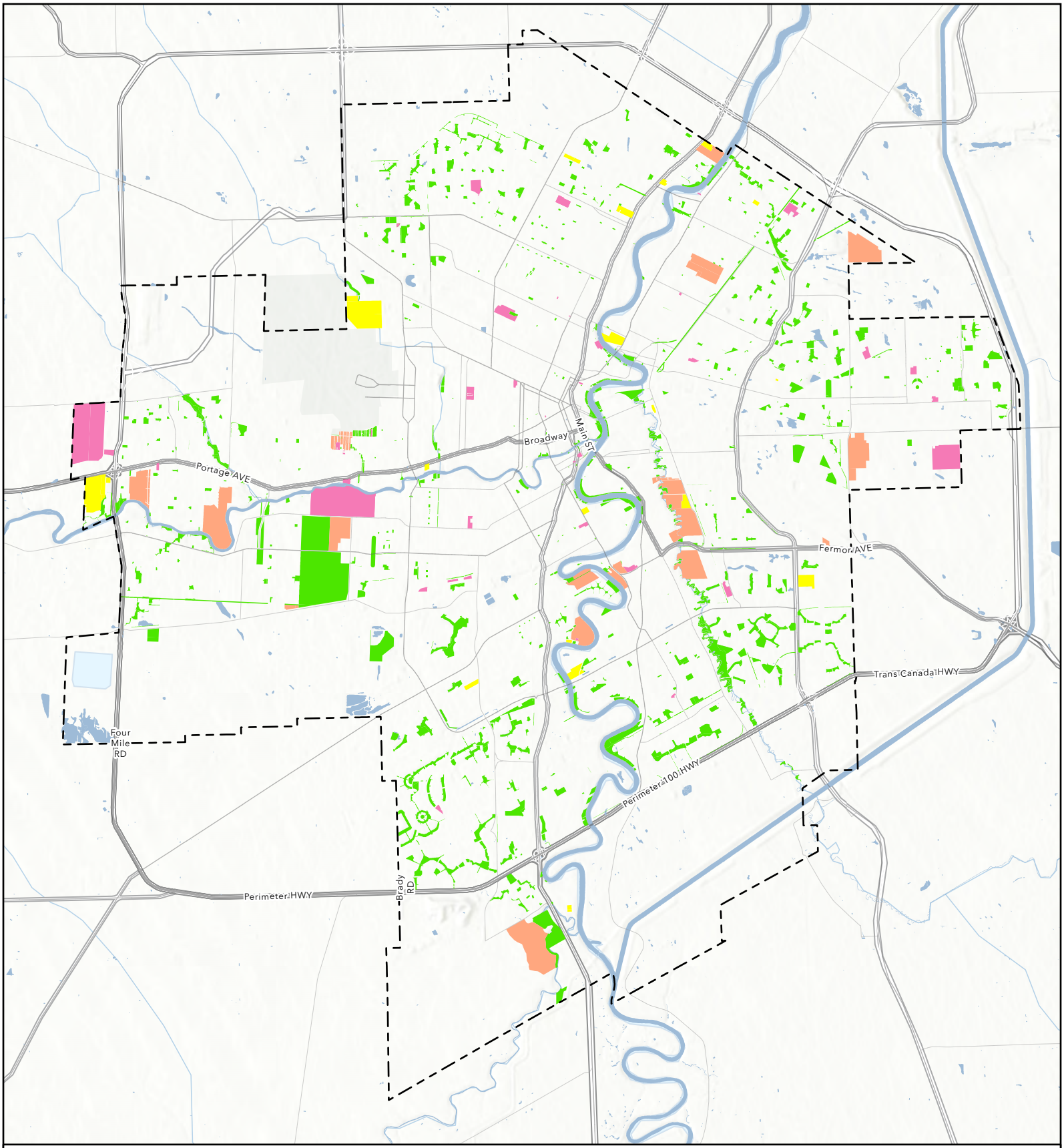
Master Greenspace and Natural Corridors Plan - Phase I Scoping - Current State
Map 4: Winnipeg Tree Inventory

Winnipeg Trees
University of Manitoba Trees
Winnipeg City Limit

N

0 3.75 7.5 15 Kilometers

Source: Winnipeg Tree Inventory (Public Works Department, 2022)
University of Manitoba Tree Inventory (2021 & 2018)



Master Greenspace and Natural Corridors Plan - Phase I Scoping - Current State
Map 5: Winnipeg Assessment Parcels

Property Use Code

- PIRGC - GOLF COURSE
- PIMCE - CEMETERY
- PIRMU - RECREATIONAL MULTIPLE USE
- VAPRK - VACANT PARK

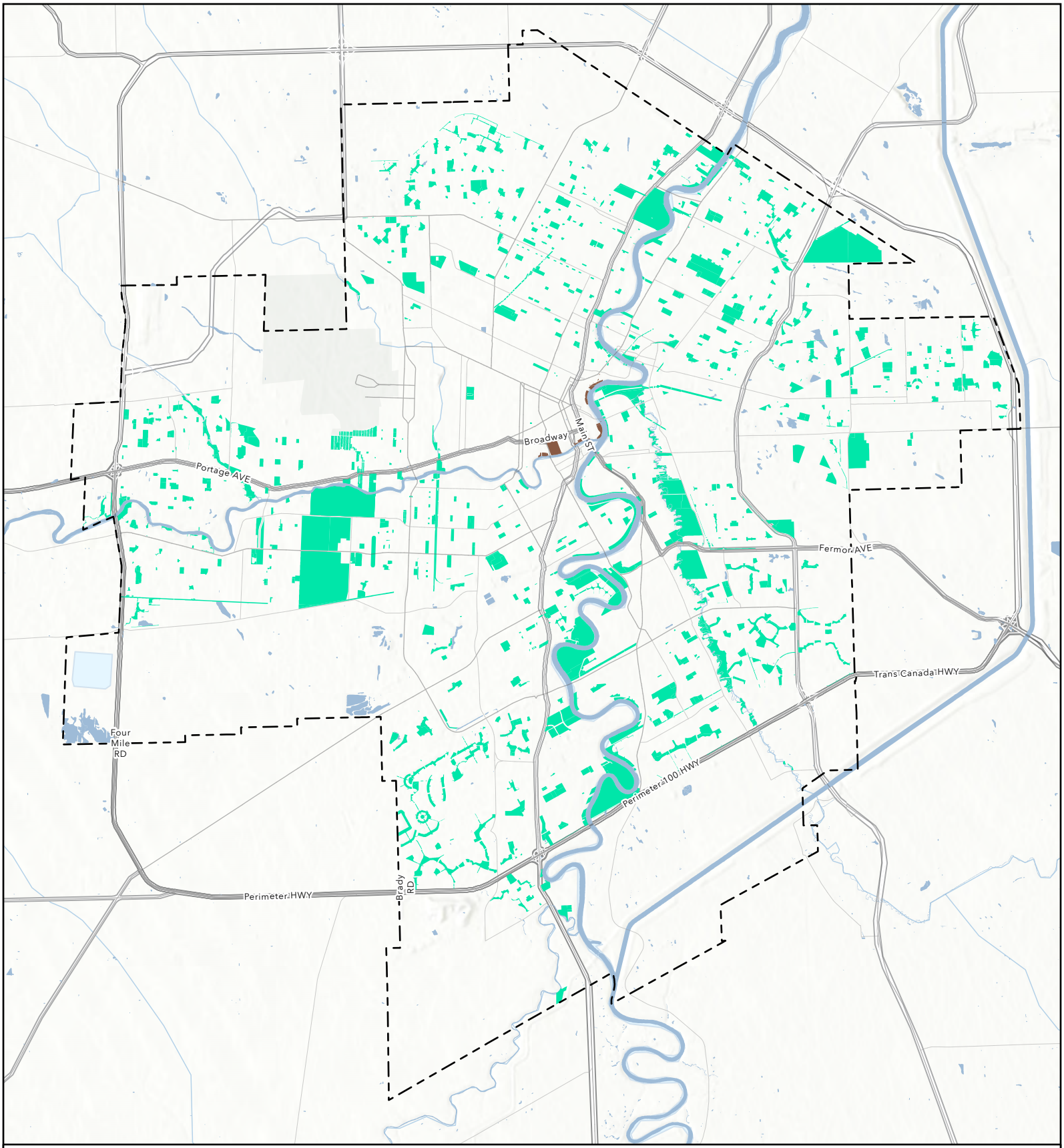
Winnipeg City Limit

N

0 3.75 7.5 15 Kilometers

Source: Winnipeg Assessment Parcels (Winnipeg Assessment and Taxation Department, 2022)

Path: D:\HTFC_GIS\Winnipeg\Map Documents\Master Greenspace and Natural Corridors\MGNC.aprx Name: Map 5 - Assessment Parcels



Master Greenspace and Natural Corridors Plan - Phase I Scoping - Current State
Map 6: Winnipeg Zoning

Zoning

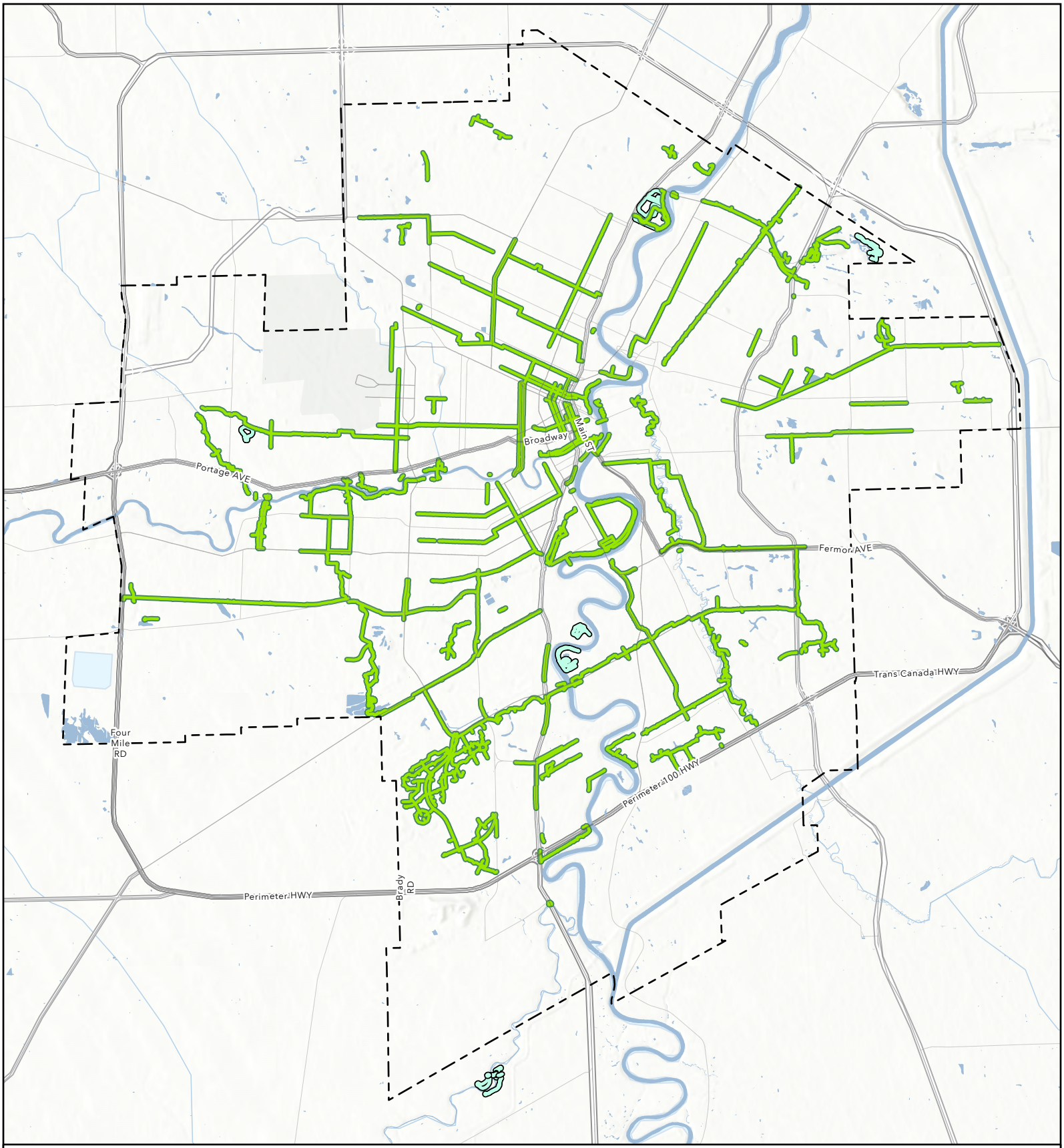
- R - River Bank
- PR - Parks and Recreation
- Winnipeg City Limit

N

0 3.75 7.5 15 Kilometers

Source: Winnipeg Zoning derived from Winnipeg Assessment Parcels (Winnipeg Assessment and Taxation Department, 2022)

Path: D:\HTFC_GIS\Winnipeg\Map Documents\Master Greenspace and Natural Corridors\MGNC.aprx Name: Map 6 - Zoning



Master Greenspace and Natural Corridors Plan - Phase I Scoping - Current State
Map 7: Winnipeg Active Transportation Network & Other Trails

Zoning

Winnipeg AT Network

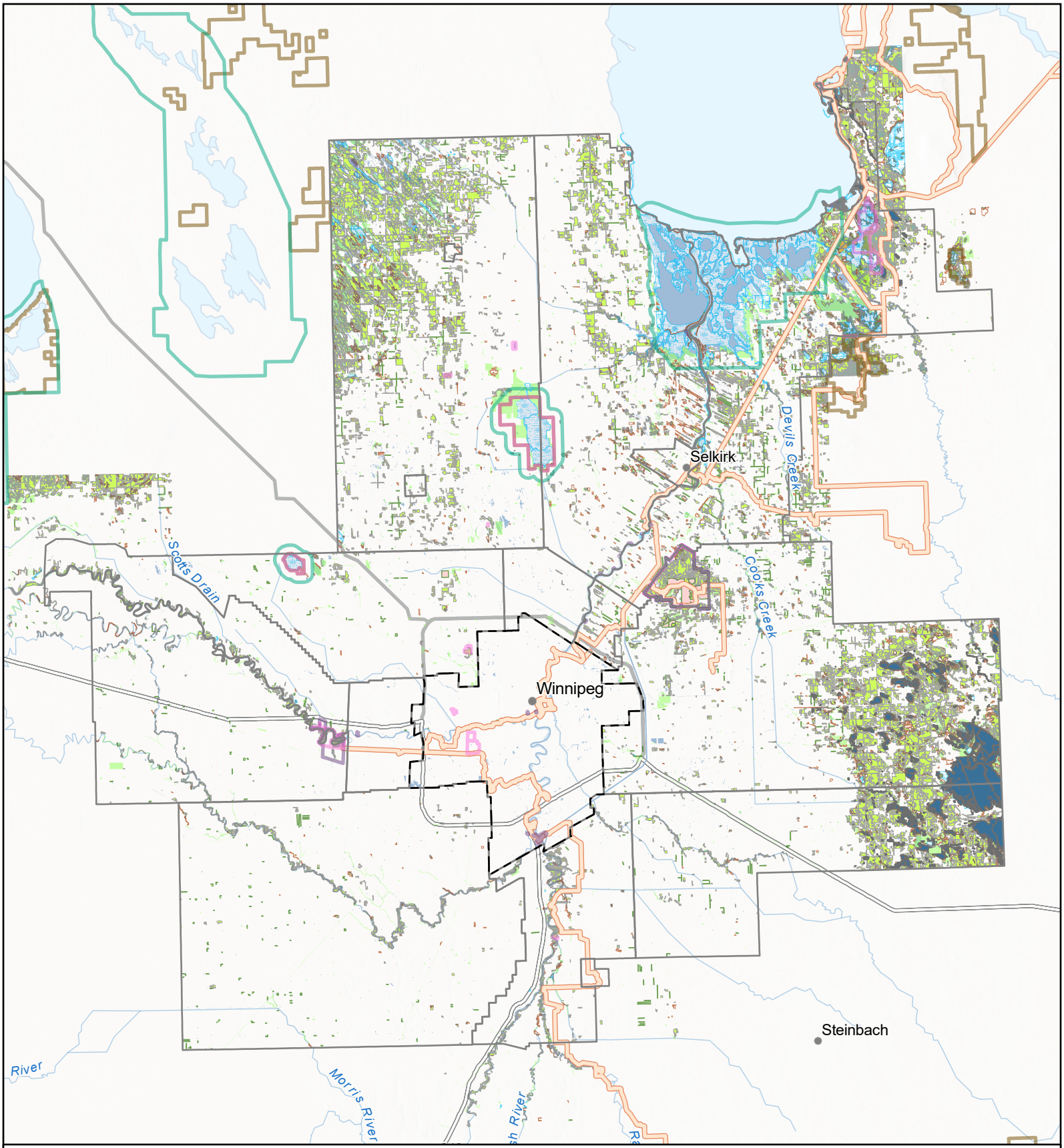
Winnipeg City Limit

Skiing / Skijoring Trails

N

0 3.75 7.5 15 Kilometers

Source: Winnipeg Active Transportation Network (Winnipeg Public Works Department, 2022)



Master Greenspace and Natural Corridors Plan - Phase I Scoping - Current State
Map 8: Regional Greenspace and Natural Corridors

Forest Resource Inventory

- Pine
- Tamarack
- Black Spruce
- White Spruce/Balsam Fir
- Cedar
- Aspen Hardwood and Mixedwood
- Basswood
- Oak
- Willow/Alder
- Protection Forest
- Meadow
- Marsh/Muskeg

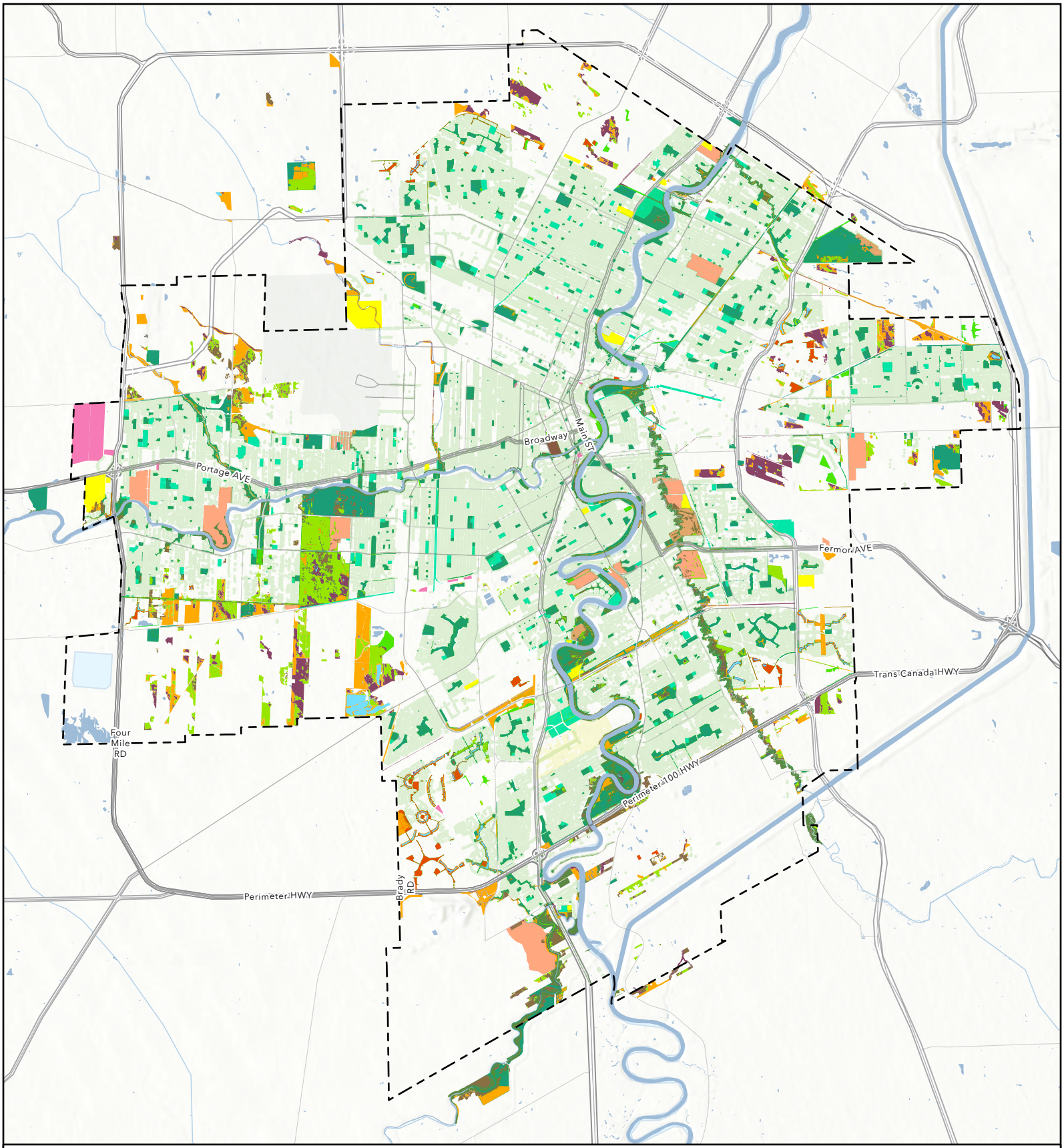
Other Data

- Wetland Inventory
- CPCAD Protected Areas
- Provincial Parks
- Important Bird Areas
- Winnipeg City Limit
- Metro Region Municipalities
- Wildlife Management Areas
- Trans Canada Trail

N

0 15 30 60 Kilometers

Source: Forest Resource Inventory, Manitoba Waterbodies, Parks and Protected Areas & Wildlife Management Areas (Manitoba Land Initiative, 2023). Canadian Protected and Conserved Areas Database, 2023. Canadian Wetland Inventory, 2022. Important Bird Areas, 2022. Trans Canada Trail, 2021.



Master Greenspace and Natural Corridors Plan - Phase I Scoping - Current State
Map 9: Greenspace and Natural Corridors Composite Map

- Aspen Forest
- Grassland/Prairie
- Oak Forest
- Pond
- River Bottom Forest
- Stream
- Wetland
- Other
- Park and Open Space
- Greenfield - Future Park
- R - River Bank
- PR - Parks and Recreation
- PIRGC - Golf Course
- PIRMU - Rec Multi Use
- PIMCE - Cemetery
- VAPRK - Vacant Park
- Winnipeg City Limit
- Winnipeg Trees
- University of Manitoba Trees

N

0 3.75 7.5 15 Kilometers

Sources: Winnipeg Naturalist Services Department, Winnipeg Public Works and Winnipeg Assessment and Taxation Department, 2022.

Path: D:\HTFC_GIS\Winnipeg\Map Documents\Master Greenspace and Natural Corridors\MGNC.aprx Name: Map 9 - Composite