

**GRAND RIVER, LONG POINT REGION,
CATFISH CREEK AND KETTLE CREEK
WATERSHED AREAS**

POPULATION FORECASTS

JANUARY 2010

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UPDATE TO POPULATION FORECASTS

Prepared by:

GSP Group Inc.
72 Victoria Street S., Suite 201
Kitchener, ON N2G 4Y9
P 519-569-8883 F 519-569-8643

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1.0 INTRODUCTION

This report provides an updated consolidation of existing population and employment forecasts for the municipalities in the jurisdictions of the Lake Erie Source Protection Region, being the Grand River Conservation Authority ("GRCA"), the Long Point Region Conservation Authority ("LPRCA"), the Catfish Creek Conservation Authority ("CCCA") and the Kettle Creek Conservation Authority ("KCCA") (Figure 1). A population forecasts consolidation report was submitted to the GRCA on behalf of the Conservation Authorities in 2005. Since that time, a number of municipalities within the Lake Erie Source Protection Region have undertaken updates to their population projections as part of Provincial Places to Grow conformity exercises and Official Plan reviews. As such, an update is required to provide a more accurate reflection of the projected populations within each of the Lake Erie Conservation Authorities jurisdictions. The forecasts collected for all areas within the study area will assist the Conservation Authorities in the planning for the protection of drinking water resources, as well as for use in other applicable projects. The forecasts contained in this report represent the available information as of August 2009.

In addition to consolidating the available forecasts, updated population and employment growth trends have been extrapolated to provide estimates of population at 5-year intervals to 2056. As part of the update to the 2005 report, an estimate of the forecast population within each Conservation Authority jurisdiction has been provided. The methodology used for determining the populations within the Lake Erie Source Protection Region in each Conservation Authority jurisdiction is provided in Sections 2.2 to 2.6 of this report.

In instances where a municipality is located partially within a Conservation Authority jurisdiction or is within multiple Conservation Authority jurisdictions, the estimated population and employment forecast within each jurisdiction are identified and extrapolated to 2056.

Additionally, 2006 Census populations are provided for each of the jurisdictions, municipalities and settlements to the extent possible. Where available, employment equivalent rates and forecasts have been identified for services areas (Waterloo Region).

Forecasts are broken down to the greatest extent possible. Particularly urban serviced areas are identified and forecasts/estimates are provided where the information is available.

This report identifies on-going growth management strategies, population and employment forecast exercises, Official Plan reviews and similar studies that should be monitored by the Conservation Authorities as these studies may update the information consolidated by this project.

It is anticipated that the work consolidated through this exercise will be continually up-dated as new population forecasts are developed through planning studies undertaken by the various levels of government. It should be noted that a number of growth forecasts referenced in this report are still considered 'draft' as they have not yet been adopted by the relevant municipal council. Additionally, a number of municipalities are in the process of preparing updated growth forecasts

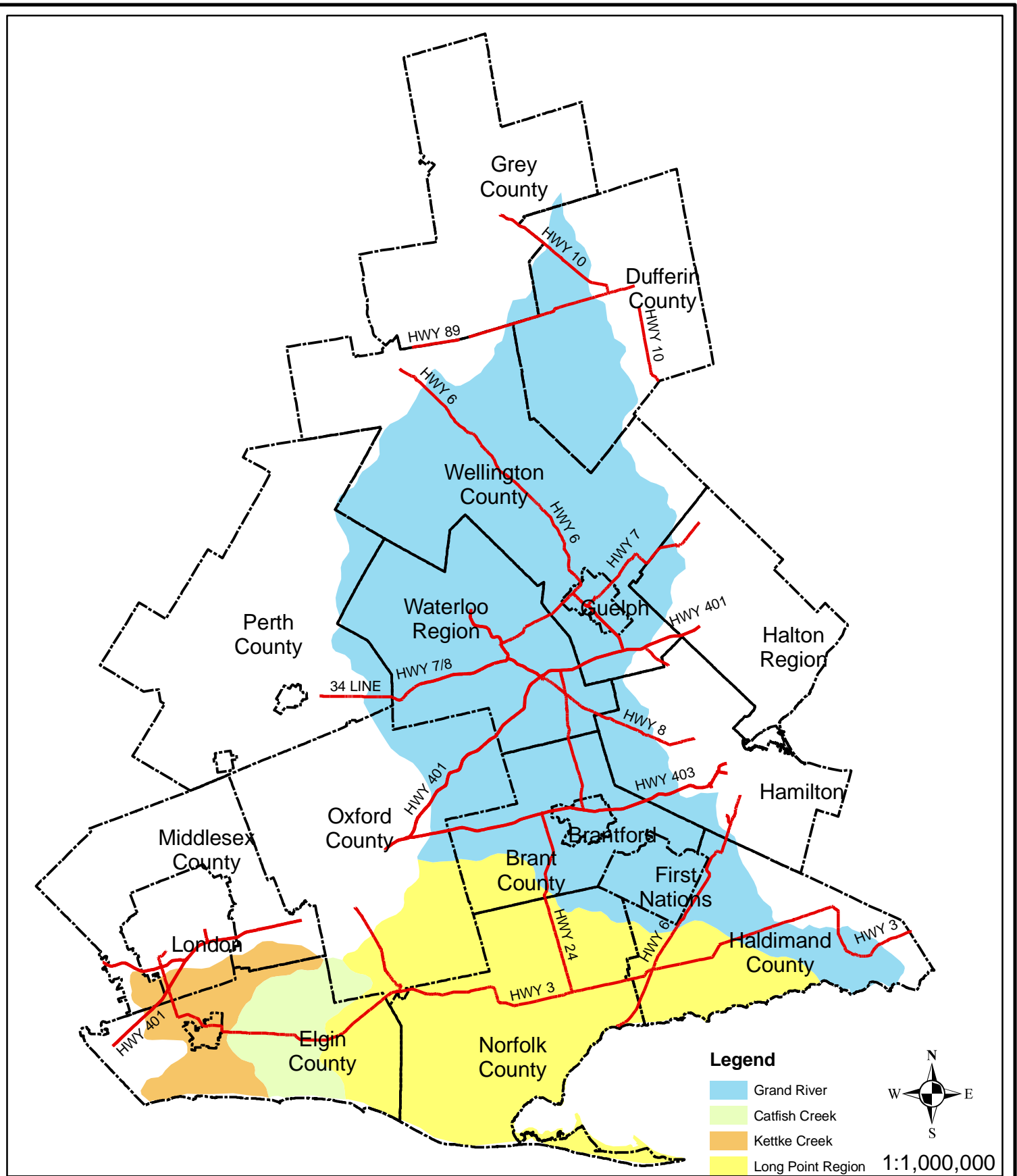


Figure 1
Study Area

which are anticipated to be completed later in 2009 to meet Places to Grow timelines. Instances such as these are noted in this report.

The methodology followed in consolidating these forecasts and used in the estimation of the portion of the population falling into the Study Area and into the respective Conservation Authority jurisdiction is also provided.

Through the course of this Study, there were some jurisdictions where updated population and employment forecast information was not available. This Report identifies these gaps and provides an indication as to the anticipated date the information will be available, if known.

2.0 GENERAL METHODOLOGY

There are a number of sources of information providing population and employment forecasts for varying levels of geography within the study area. For purposes of this update, we have used Municipal Council approved forecasts, except where specifically noted.

Projections presently available from most municipalities typically have a 2026 to 2031 time horizon, though some rural municipalities, typically experiencing slow rates of growth, have nearer term time horizons.

GSP Group contacted key municipal staff to obtain forecasts, population and employment data. This information was taken from a number of sources including:

- Statistics Canada – Census profiles (2006);
- Upper-tier and lower-tier municipal forecasts;
- Official Plan Review Updates;
- Development Charge Background Studies;
- Master Servicing/Engineering Plans; and,
- Other sources.

If the available data did not provide projections for individual serviced settlement areas, municipal staff was consulted in determining the breakdown of the population projections into shares anticipated by serviced settlement areas, urban areas and the rural area. It is noted that this information was not available for all jurisdictions.

2.1 Estimating Population beyond Current Forecast Horizons (to 2056)

When dealing with time periods 20 to 50 years from now, it is very difficult to anticipate factors which will influence growth in specific areas.

The general methodology in determining population estimates in this report was completed by calculating the average annual population change through the entire forecast period (i.e. 2006 to 2026 or 2031) of growth forecasts and extrapolating that population change into the future to 2056. This methodology is based on the assumption that population growth between 2031 and 2056 mirrors that of the 2006 to 2031 timeframe.

2.1.1 Forecasts Prepared by Upper-Tier Municipalities

If the upper-tier municipality produced population forecasts, the upper-tier population between the forecast horizon and 2056 was estimated using the method described above. Population estimates for the lower-tier municipalities were estimated by determining the lower-tier's share (percentage) of the upper-tier municipality's forecast growth and maintaining that percentage throughout the time period beyond the forecast horizon to 2056. Similarly, serviced urban area populations within the lower-tier municipally were estimated based on applying the urban area's

share (percentage) of growth forecast for the lower tier municipality and applying this percentage between the forecast horizons to 2056.

The rural share of forecast and estimated growth was calculated by subtracting the urban population from the municipal population. To determine the portion of the rural population within each respective municipality within the four Conservation Authority jurisdictions (in instances where a municipality is partially within one Conservation Authority jurisdiction or is situated within more than one jurisdiction), the 2006 Census population of the Dissemination Areas were used to determine the proportion of the rural population attributable to each Conservation Authority jurisdiction and forecast rural growth allocated to each jurisdiction on that proportional basis.

2.1.2 Forecasts Not Prepared By Upper-Tier Municipalities

In cases where the upper-tier municipality does not produce population forecasts, the population of the individual municipalities was determined using the methodology set out in Section 2.1 above. Population estimates for the lower tier municipality's urban areas were estimated by determining the urban area's share (percentage) of the municipal forecast growth and maintaining that percentage throughout the time period beyond the forecast horizon to 2056.

The rural share of forecast and estimated growth was calculated by subtracting the urban population from the municipal population. To determine the portion of the rural population within each respective municipality within the four Conservation Authority jurisdictions (in instances where a municipality is partially within one Conservation Authority jurisdiction or is situated within more than one jurisdiction), the 2006 Census population of the Dissemination Areas were used to determine the proportion of the rural population attributable to each Conservation Authority jurisdiction and forecast rural growth allocated to each jurisdiction on that proportional basis.

Updating this study on a regular basis will provide the Conservation Authorities with a more accurate picture of population growth in future years.

2.1.3 Limitations of Estimation Methodology

It is difficult to determine factors 20 to 50 years in the future that could influence economic and population change. Additionally, unforeseen changes to the rate of growth early in the forecast period could be magnified over a long time horizon.

Servicing capacity is also a limiting factor in accommodating growth. If water and wastewater treatment plants are not upgraded or capacities unavailable to accommodate growth estimations, the population estimated may not be realized. Additionally, most of the municipalities in the Study Area have been experiencing growth through immigration while growth due to natural increase has been declining. It is impossible to predict with any degree of certainty demographic and economic trends that will be occurring 20 to 50 years from today.

The long-range estimates contained in this Report should be viewed as providing a general indication of possible future population based on forecast trends.

It is important for the Conservation Authorities to continue to monitor municipal population forecast exercises to anticipate changes to future population and growth predictions.

2.2 Estimating Proportion of Growth for Municipalities Partially Situated within the Study Area

Municipal boundaries do not correspond to the boundaries of the Conservation Authority jurisdictions. Generally, areas along the Study Area boundary are rural.

To estimate the portion of the municipal population attributable to the Study Area, the following methodology was employed:

- 1) The proportion of the municipality's 2006 population within the Study Area was estimated. Generally the population of the urban areas outside of the Study Area and an estimate of the rural population outside of the study area were subtracted from the total population of the municipality. (In some cases, however, it was more appropriate to estimate the portion of the population within the Study Area using similar methodology).

To estimate the portion of the rural growth outside/inside of the Study Area, the following methodology was employed:

1. The 2006 rural population was determined by subtracting the urban populations from the municipal population for the entire municipality.
2. When available, the population of DAs entirely outside of the Study Area were also determined using Statistics Canada data for the 2006 Census and added to the estimated population of the "edge DAs" outside of the Study Area.
3. For each lower-tier municipality, the following information was available:
 - 2006 population for DAs which are bisected by the Study Area boundary ("edge DAs");
 - Land area of the entire edge DA; and,
 - Land area of edge DAs within the Study Area was measured.
4. Using the above information, the percentage of land area within the "edge DAs" within the Study Area was determined. This percentage was then applied to the total population of the DA to estimate the "edge DA" population within the Study Area.
5. Population of DAs entirely outside of the Study Area were also determined using Statistics Canada data for the 2006 Census and added to the estimated population "edge DAs" outside of the Study Area.

6. This provided the estimate for the rural/hamlet population outside the Study Area in 2006. This information was used to determine the percentage of the rural/hamlet population within the Study Area. This percentage was applied to the municipalities' rural/hamlet population throughout the population forecast/estimate period.

The lands along the Conservation Authority boundaries of the Study Area are, for the most part, rural.

2.3 Estimating Proportion of Growth for Municipalities Situated within More than One Conservation Authority Jurisdiction

Conservation Authority jurisdiction boundaries fall along the rural areas of the municipalities within the Study Area. Similar methodology to that outlined in Section 2.2 was employed.

To estimate the portion of growth within each Conservation Authority jurisdiction where a Dissemination Area falls within more than one Conservation Authority jurisdiction ("split DAs"), the following methodology was employed:

1. The lower-tier rural/hamlet population was determined by subtracting the urban population from the total population;
2. Mapping of the 2006 Census Dissemination Areas ("DAs") was overlaid onto the Study Area;
3. For each lower-tier municipality, the following information was available:
 - 2006 population for the DAs which are bisected by the Study Area Boundary ("edge DAs");
 - Land area of the entire edge DA;
 - Land area of edge DAs within the Conservation Authority jurisdiction was measured; and,
 - Land outside the Study Area was determined.
4. Population of the DAs within one of the Conservation Authority jurisdictions was determined based on the percentage of land area within the particular Conservation Authority boundary.

It is noted that in some municipalities, portions of land in the Study Area is in the Provincial Greenbelt, and/or, the rural/hamlet area within the Study Area is very small and not in proximity to settlement areas. In these instances, the 2006 population was used, and assumed to be stable to 2056. These specific instances are noted in Section 3.0 of this Report.

2.4 Estimating Proportion of Employment Growth

Employment growth forecasts were not available for all municipalities, and where available, they are generally provided on a municipality-wide basis with no urban/rural allocations. The exception to this is Oxford County.

In the instances where a municipality is partially situated within a watershed, or is situated within two or more watersheds, the methodology outlined in Sections 2.2 and 2.3 was employed to estimate employment growth per watershed. The percentage of the total population within a particular watershed was applied to the total employment of the municipality. For example if 25% of the 2006 population of a municipality was situated within the GRCA jurisdiction, then this report assumes that 25% of the employment in the municipality is also within the GRCA jurisdiction.

2.5 Employment Equivalent Populations

Where available, employment equivalent populations were requested from municipalities. These figures do not correspond to a one job equals one person ratio. These sources are also noted in Section 3.0 of this report.

2.6 Estimating 2006 Census Population for Serviced Communities

Tables 4.1.1 to 4.1.4 found in Appendix 3 provide a 2006 population snapshot for municipalities and their serviced and non-serviced communities by Conservation Authority Jurisdiction. It is noted that the 2006 Census information does not provide populations figures for many individual communities within municipalities, so in order to estimate the population of these individual communities, the following methodology was used:

For fully serviced communities within municipalities, Census Canada Dissemination Area mapping was overlaid on road, municipal boundary and watershed mapping. GSP Group then determined which Dissemination Areas comprised the serviced area of the community. In some instances air photos were also used to confirm developed area boundaries. The populations of the selected Disseminations Areas were totaled to provide a 2006 serviced population figure. All land outside of the fully serviced communities was deemed as rural/unserviced.

It is noted that in some instances the Dissemination Areas cover a larger area extending beyond the serviced area boundary. In these instances GSP made the assumption as to whether to include the population as part of the serviced or unserviced area. These instances are described in Section 3.0 of this report and shown on mapping provided in Appendix 4 of this report.

3.0 POPULATION PROJECTIONS AND ESTIMATES

This Section of the Report provides a summary of findings for the population forecasts for the jurisdictions within the Study Area. The forecasts are organized by upper-tier municipality (i.e. Region or County) with forecasts of the lower-tier municipalities contained as a subsection. Detailed tables of population forecasts are provided in Appendix 1.

The following upper-tier and single-tier municipalities fall within the Study Area:

- | | |
|----------------|--------------------------|
| ▪ Elgin | ▪ Six Nations/New Credit |
| ▪ St. Thomas | ▪ Perth County |
| ▪ London | ▪ Waterloo Region |
| ▪ Middlesex | ▪ Guelph |
| ▪ Oxford | ▪ Wellington County |
| ▪ Norfolk | ▪ Hamilton |
| ▪ Haldimand | ▪ Halton |
| ▪ Brant County | ▪ Dufferin |
| ▪ Brantford | ▪ Grey |

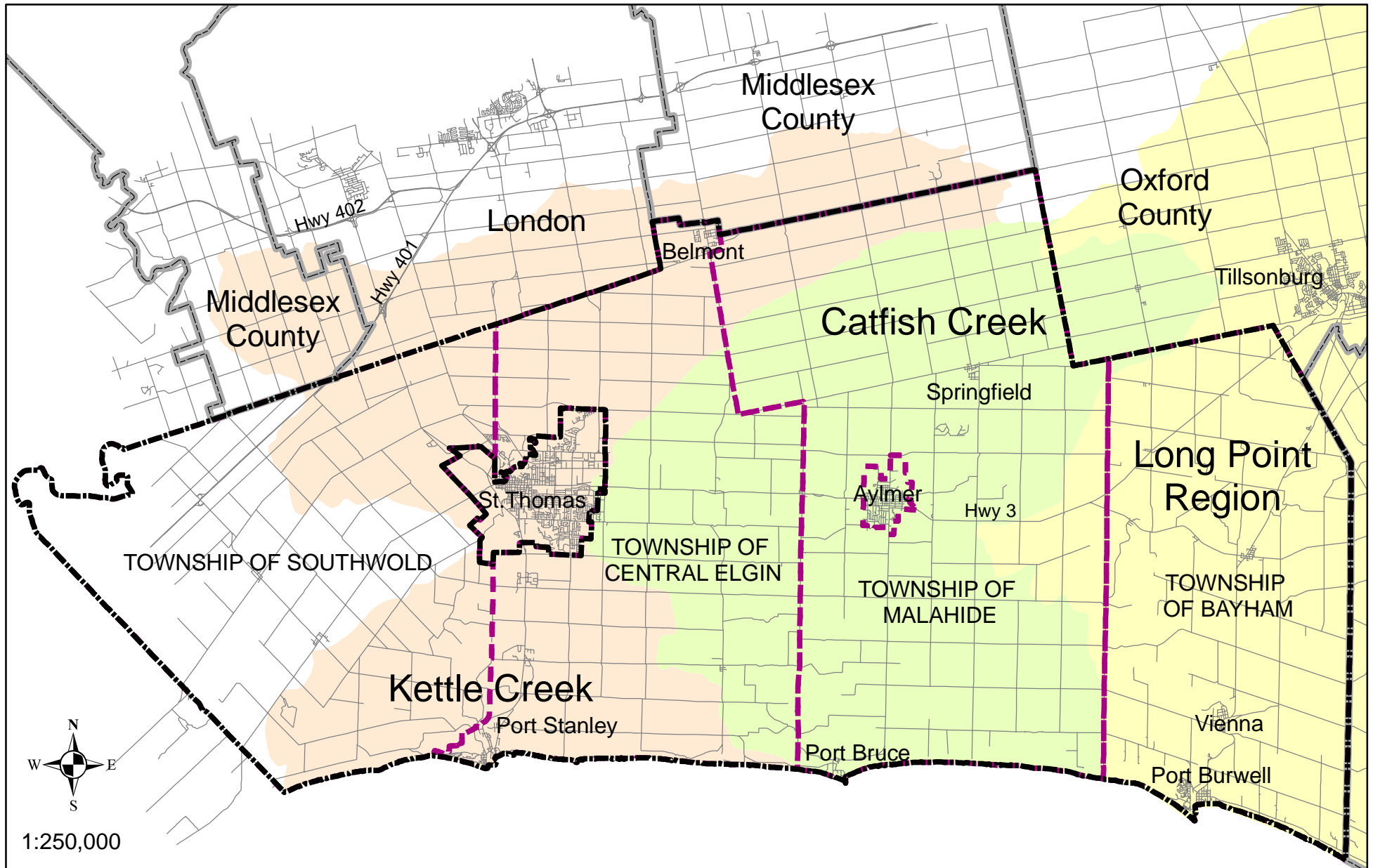
3.1 ELGIN COUNTY

Elgin County does not have an Official Plan or Planning Department and does not produce population forecasts for the County or its lower tier municipalities. Only part of the County falls within the Study Area. Municipalities within Elgin in the Study Area are shown in Figure 3.1 and include:

- Southwold Township;
- Municipality of Central Elgin;
- Town of Aylmer;
- Malahide Township; and,
- Municipality of Bayham.

We note that although the Townships of West Elgin and Dutton/Dunwich are within Elgin County they are outside of the Study Area boundaries.

Elgin County has not prepared population forecasts. Therefore population forecasts for the lower-tier municipalities within Elgin County have been used for determining future populations for the Study Area. Updated population forecasts used in Official Plan updates for the Municipality of Central Elgin have been provided by the Planning Office of the Municipality of Central Elgin. No new projections have been prepared for Southwold or Malahide Townships or the Municipality of Bayham since the 2005 draft of the Population Projections Consolidations Report.



The County is predominantly rural with three primary urban areas. Most of the growth in the County has been within the Municipality of Central Elgin and the Town of Aylmer. This is primarily because of their proximity to London and the influence of the London economy, as well as their own.

3.1.1 Southwold Township

3.1.1.1 Population Forecasts/Estimates

Southwold Township falls partially within the Study Area (KCCA). Updated population forecasts have not been prepared for Southwold Township. The most current population forecasts for Southwold Township are contained in the St. Thomas, Southwold and Yarmouth Population Projections and Housing and Land Requirements report, prepared by Lapointe Consultants Inc. and dated 1995. This report contains projections to the 2026 horizon. During this forecast period an average annual growth rate of 1.25% was calculated and an average annual population change of 47 people. For purposes of estimating population growth beyond 2006 to 2056 the average annual growth rate was maintained to 2056.

It is noted that a portion of Southwold adjacent to St. Thomas is connected to water and sewer services from St. Thomas.

3.1.1.2 Employment Forecasts/Estimates

No employment forecast information was available.

3.1.1.3 Notes/Information Gaps/Future Projections

Southwold is in the process of updating their Official Plan, and as part of that exercise the planning consultant for the Township will also be preparing an updated Demographic Profile, which will include population projections. The Deputy Clerk of the Township of Southwold has indicated that this information should be available in early to mid-2009.

It is noted that there is a discrepancy between the population projections that were prepared in 1995 and the Census populations for the Township of Southwold for 2001 and 2006. The 1995 study forecasts populations of 5,024 and 5,469 for 2001 and 2006 respectively, whereas the Census data indicates that the populations were actually 4,487 and 4,724 for 2001 and 2006 respectively.

3.1.2 Municipality of Central Elgin

3.1.2.1 Population Forecasts/Estimates

Population forecasts for the Municipality of Central Elgin were completed in 2007 by Lapointe Consulting Inc. in association with Dillon Consulting, providing forecasts out to 2031. Over this

forecast period, an average annual growth rate of 1.36% was calculated and the average annual population change was 228 people. For purposes of estimating growth beyond 2026 to 2056 the average annual population change was maintained to 2056.

The fully serviced communities in Central Elgin are Port Stanley and Belmont, which are within the KCCA jurisdiction. There were no population forecasts provided for these communities. The estimated 2006 serviced and unserved populations are found on Tables 4.1.3 and 4.1.4.

3.1.2.2 Employment Forecasts/Estimates

Employment forecasts for Central Elgin are provided in the May 2007 report prepared by Lapointe Consulting Inc. in association with Dillon Consulting, providing forecasts out to 2031. The forecasts are broken down by the following sectors of employment: Primary; Industrial; Service; and Institutional. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

Central Elgin staff could not provide population equivalent forecasts.

3.1.2.3 Notes/Information Gaps/Future Projections

No breakout of population forecasts are provided for the serviced settlement areas of Port Stanley or Belmont.

3.1.3 Town of Aylmer

3.1.3.1 Population Forecasts/Estimates

The Town of Aylmer is situated in the Catfish Creek Conservation Authority jurisdiction. The most current population forecasts are contained in the 2008 consolidation of the Official Plan, prepared by Monteith Brown Planning Consultants which provided a population target for the year 2026. In 2006, Aylmer had an estimated population of 7,500 and is forecast to grow to 9,371 by 2026. Growth forecast during this period averages an annual growth rate of 2.46% and an average annual population change of 94 people. For purposes of estimating population growth beyond 2021 to 2056 the average annual population change was used. For purposes of this report we have estimated that the total population of Aylmer is fully serviced.

3.1.3.2 Employment Forecasts/Estimates

No employment forecast information was available.

Aylmer staff could not provide population equivalent forecasts.

3.1.3.3 Notes/Information Gaps/Future Projections

A comparison of the 2006 estimated population provided in the 2008 OP consolidation was 7,500, which is higher than the 2006 Census population of 7,069. For purposes of this report, for Table 4.1.4, the 2006 Census figure is used.

3.1.4 Township of Malahide

3.1.4.1 Population Forecasts/Estimates

The Township of Malahide is mostly within the Catfish Creek Conservation Authority jurisdiction. The northern part of the municipality is within the Kettle Creek Conservation Authority jurisdiction and the northeast corner of the Township is outside of the Study Area. The most current population forecasts for the Township of Malahide are contained in the Official Plan. The OP provides a 2021 population target of 10,940 people. This results in an average annual population change of 154 and an average annual growth rate of 4.04%. For purposes of estimating Malahide's population beyond 2021 to 2056, the average annual population change was applied.

The fully serviced communities in Malahide are Springfield and Port Bruce, which are within the CCCA jurisdiction. There were no population forecasts provided for these communities. The estimated 2006 serviced and unserved populations are found on Tables 4.1.2, 4.1.3 and 4.1.4.

3.1.4.2 Employment Forecasts/Estimates

No employment forecast information was available.

There were no available population forecasts for Springfield or Port Bruce. For purposes of determining 2006 population, the methodology outlined in Section 2.6 of this report was used. Census Dissemination Areas for both these communities extended beyond the community boundaries, as such the population of the DAs which encompassed the majority of the settlement were used.

3.1.4.3 Notes/Information Gaps/Future Projections

A comparison of the 2006 estimated population provided in the Official Plan was 8,636, which is lower than the 2006 Census population of 8,817. For purposes of this report, we have continued to use the forecast population in the OP.

3.1.5 Municipality of Bayham

3.1.5.1 Population Forecasts/Estimates

The majority of Bayham is within the Long Point Region Conservation Authority's jurisdiction, with a very small portion of the municipality within the Catfish Creek Conservation Authority jurisdiction. Bayham's most current population forecasts are contained within the Official Plan Review Growth Study Discussion Paper #2, prepared by IBI Group, dated February 2008. The population forecasts contained in this paper extend to 2017. In 2006, the population of Bayham was 6,727 and is forecast to grow to 7,924 by 2017. For purposes of estimating future growth, the 2016 population target was used with an average annual population change of 95 people.

The fully serviced communities in Bayham are Vienna and Port Burwell, which are within the LPRCA jurisdiction. There were no population forecasts provided for these communities. A review of 2006 Census Dissemination Area mapping shows that the DA boundaries do not correspond with the settlement boundaries (see Appendix 4). However the February 2008 IBI report noted above notes the 2006 populations of these communities to be 600 for Vienna and 500 for Port Burwell. For purposes of the tables in this report, the IBI figures have been used. The estimated 2006 serviced and unserved populations are found on Tables 4.1.2 and 4.1.4.

3.1.5.2 Employment Forecasts/Estimates

No employment forecast information was available.

3.1.5.3 Notes/Information Gaps/Future Projections

At the time of this report's writing, the Municipality of Bayham's Official Plan is being reviewed by the Ministry of Municipal Affairs and Housing. There are no forecasts for the serviced communities of Vienna and Port Burwell.

3.2 CITY OF ST. THOMAS

3.2.1 Population Forecasts/Estimates

St. Thomas is situated wholly within the study area (LPRCA and CCCA) (Figure 3.2). Updated population forecasts for St. Thomas were completed in May 2007 by Lapointe Consulting Inc. in association with Dillon Consulting, providing forecasts out to 2031. Over this forecast period, an average annual growth rate of 1.23% was assumed and an average annual population change of 518 people. For purposes of estimating growth beyond 2031 to 2056 the average annual population change was maintained to 2056.

3.2.2 Employment Forecasts/Estimates

Employment forecasts for St. Thomas are provided in the May 2007 report prepared by Lapointe Consulting Inc. in association with Dillon Consulting, providing forecasts out to 2031. The

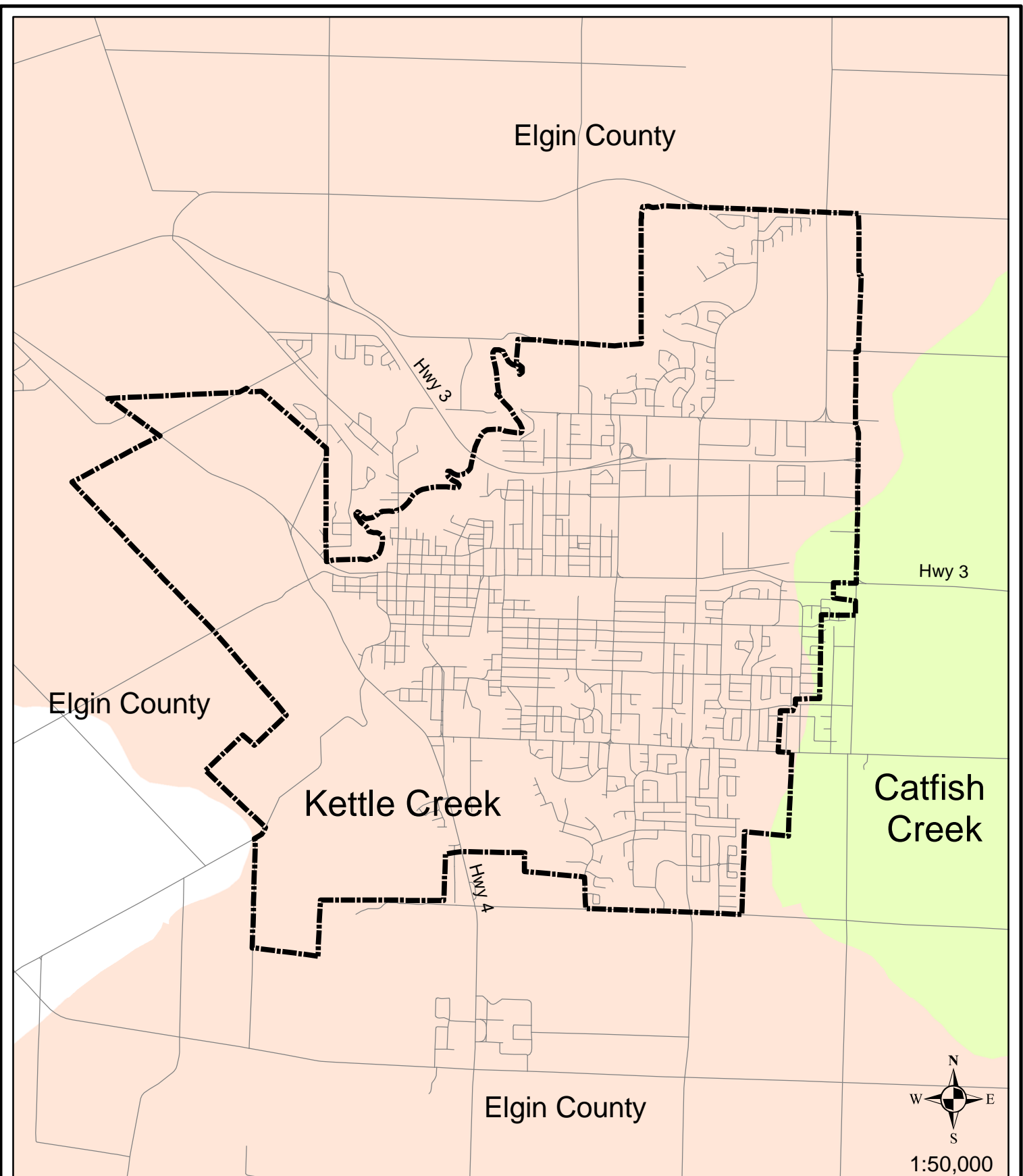


Figure 3.2
St. Thomas

--- City Boundary

forecasts are broken down by the following sectors of employment: Primary; Industrial; Service; and Institutional. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

4% of St. Thomas is within the CCA jurisdiction and 96% in the KCCA jurisdiction. For purposes of this report, population and growth are attributed to each jurisdiction in these percentages.

St. Thomas staff could not provide population equivalent forecasts.

3.2.3 Notes/Information Gaps/Future Projections

None.

3.3 CITY OF LONDON

Only a small portion of the City of London falls within the Study Area (see Figure 3.3). Only the southern fringes of the rural portion of the City of London are within the Study Area. Growth within the City of London portion of the Study Area would be expected in the much longer term, beyond the 2031 time horizon of current forecasts.

3.3.1 Population Forecasts/Estimates

Only the southern portion of the City of London falls within the Study Area (KCCA). The most current population forecasts were completed by Clayton Research in September 2006, providing forecasts to 2031. The forecasts contained in this report were not broken down by City Planning Districts. The total population for these Planning Districts in 2006 based on Census information was 786 people, being approximately 0.22% of the City's population. By 2031 the population of these Districts is forecast to be in the order of 957. It is noted that approximately 0.22% of the total land area of the City of London is within the Study Area. In estimating the portion of the population attributable to lands within the Study Area, the percentage of land in each Planning District within the Study Area was applied to the overall population figures. For purposes of estimating the population beyond 2031 to 2056, the annual average growth rate for the City of London (0.70%) was multiplied by the land area attributable to the Study Area.

3.3.2 Employment Forecasts/Estimates

The employment forecasts for the City of London are contained in the report prepared by Clayton Research, which was prepared in September 2006, and contains employment information and forecast for the years 1991, 2001, 2016 and 2031. The employment forecasts are broken down to the following sectors: Primary; Manufacturing; Construction; Transportation, Storage and Communications; Trade; Fire; Educational Services; Health Care Services; Public Administration; and Other Services. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

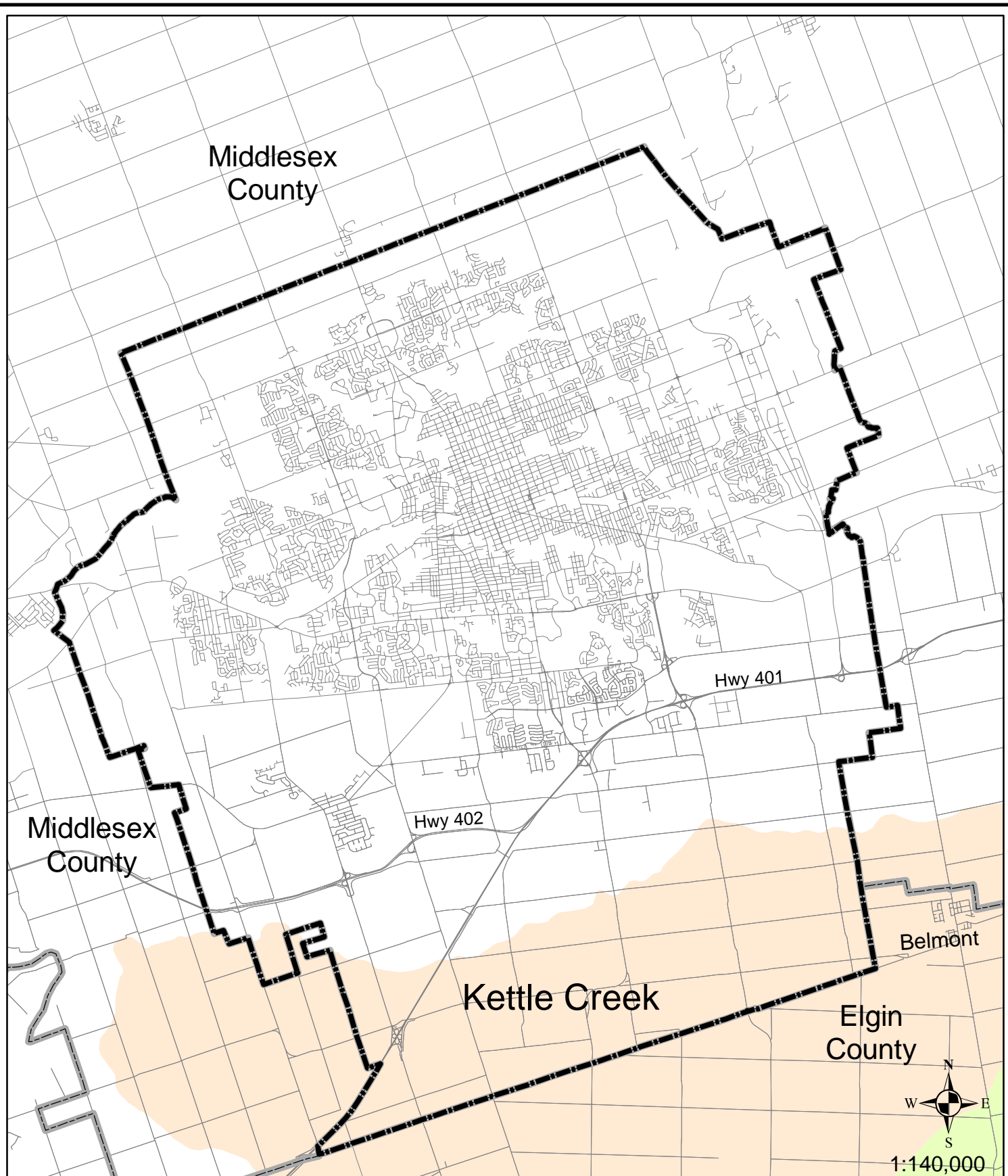


Figure 3.3
London

--- City Boundary

The portion of London within the Study area is not serviced and therefore population equivalent figures are not provided.

3.3.3 Notes/Information Gaps/Future Projections

The most recent population projections do not allocate populations to the Planning Districts.

3.4 MIDDLESEX COUNTY

Only a small portion of the County of Middlesex falls within the Study Area (see Figure 3.4). Within Middlesex County, only the southern portions of Middlesex Centre and Thames Centre are within the Study Area.

Middlesex County has undertaken population forecasts which are provided in this Report. Overall, little population growth is expected in the mainly rural areas of the Townships.

3.4.1 Township of Middlesex Centre

3.4.1.1 Population Forecasts/Estimates

Only a portion of Middlesex Centre is within the Study Area (KCCA). There are a few sources of population forecasts available for Middlesex Centre. The most recent forecasts are contained in the County of Middlesex Population Projection Report, 2001-2026, prepared for the County by Marshall Macklin Monaghan Limited in 2003. This report provides population forecasts for the Township to 2026. For purposes of this Report and estimating growth to 2056, the forecasts of the County of Middlesex have been used.

It is noted that none of the Township's settlement areas are within the Study Area and that only 1.9% of the land area is within the Study Area. In 2006 there were approximately 290 people living in the Middlesex Centre portion of the Study Area. Since this area is primarily rural/agricultural and is not in proximity to any of the Township's settlements, we do not anticipate significant population change to 2056.

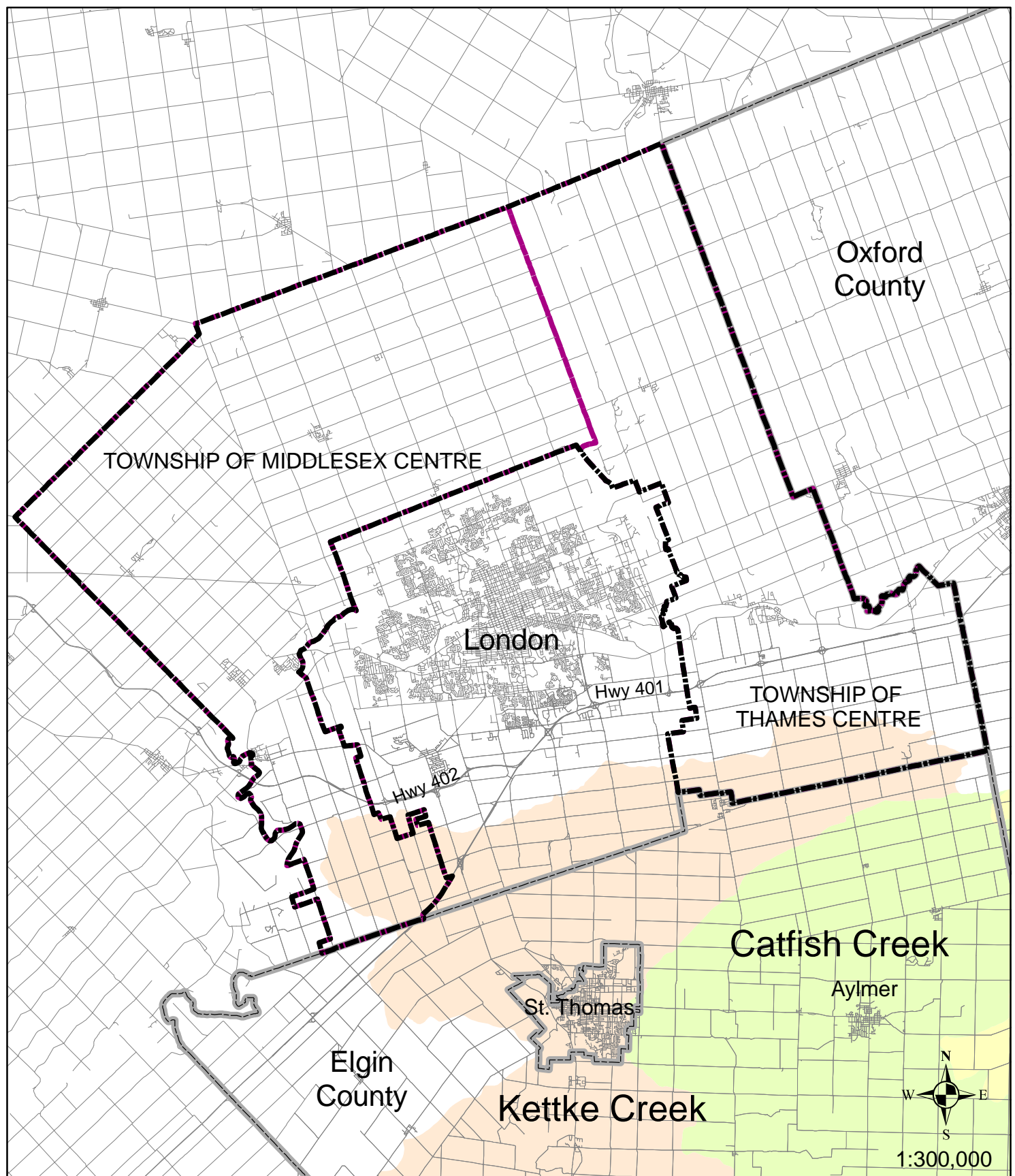
3.4.1.2 Employment Forecasts/Estimates

No employment forecast information was available.

The portion of Middlesex Centre within the Study area is not serviced and therefore population equivalent figures are not provided.

3.4.1.3 Notes/Information Gaps/Future Projections

There were no rural-urban breakdowns of population forecasts available for Middlesex Centre.



A comparison of the 2006 estimated population provided in the Population Projection Report was 15,717, which is higher than the 2006 Census population of 15,589. For purposes of this report, we have continued to use the forecast population from the Population Projection Report.

3.4.2 Township of Thames Centre

3.4.2.1 Population Forecasts/Estimates

The southern portion of Thames Centre is within the Study Area (KCCA). The most recent population forecasts are contained in the County of Middlesex Population Projection Report, 2001-2026, prepared by Marshall Macklin Monaghan Limited in 2003. In 2006 the population of Thames Centre was 13,706 and is forecast to be 19,419 by 2026. For purposes of this Report the forecasts produced for the County of Middlesex have been used to estimate population to 2056.

Only a small portion of the rural unserviced population is within the Study Area.

3.4.2.2 Employment Forecasts/Estimates

No employment forecast information was available.

The portion of Thames Centre within the Study area is not serviced and therefore population equivalent figures are not provided.

3.4.2.3 Notes/Information Gaps/Future Projections

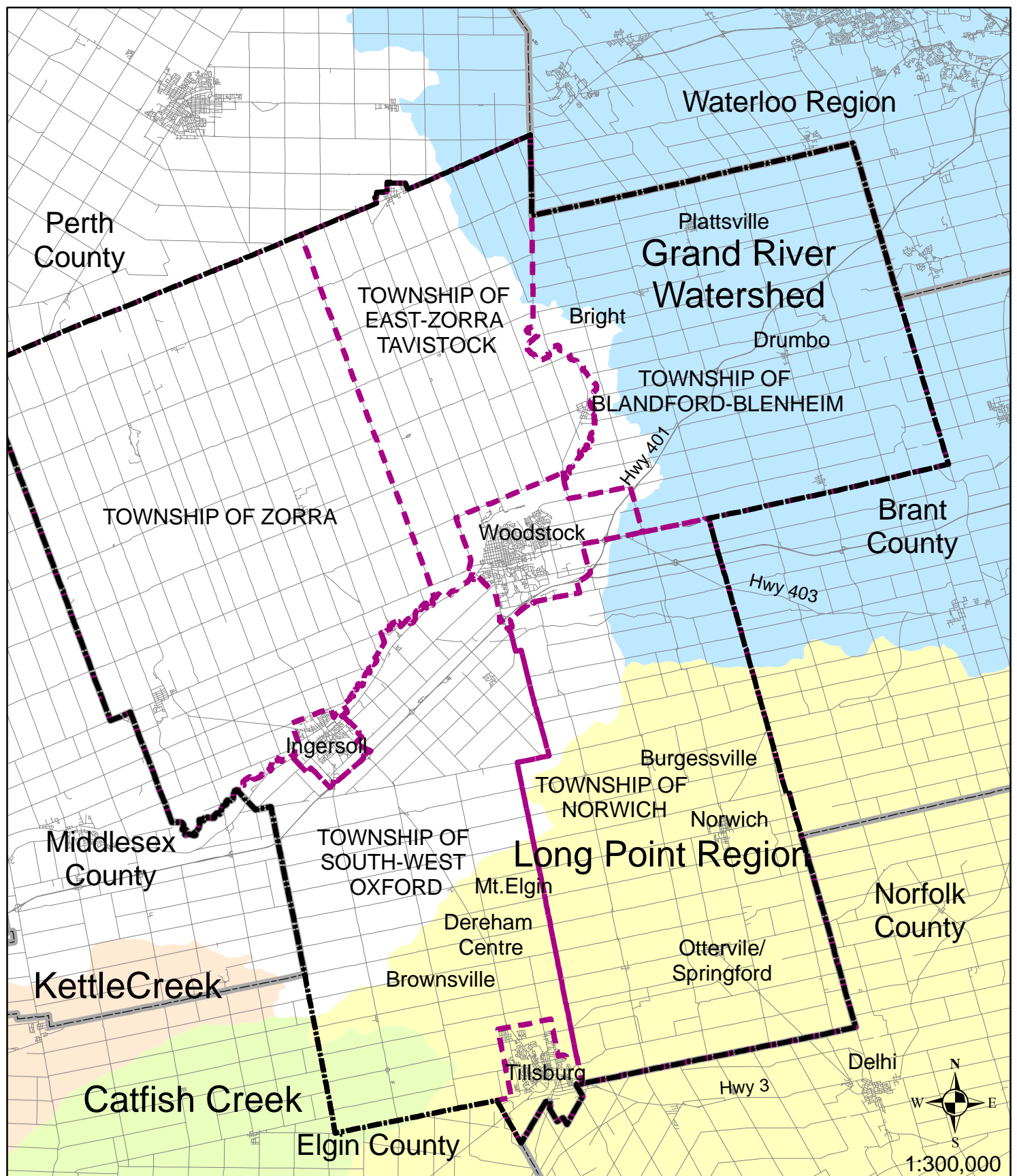
There were no rural-urban breakdowns of population forecasts available for Thames Centre.

A comparison of the 2006 estimated population provided in the Population Projection Report was 13,706, which is higher than the 2006 Census population of 13,085. For purposes of this report, we have continued to use the forecast population from the Population Projection Report.

3.5 OXFORD COUNTY

Only a portion of Oxford County falls within the Study Area (see Figure 3.5). The following Towns/Townships fall either entirely or at least partially within the study area:

- Township of Southwest Oxford
- Town of Tillsonburg
- Township of Norwich
- Township of Blandford-Blenheim
- Township of East Zorra-Tavistock
- City of Woodstock



Hemson Consulting Ltd. prepared population forecasts which provide forecasts for each of the Towns and Townships to the year 2031, entitled Population, Household and Employment Forecasts, 2001-2031. Over the forecast period, the County will experience an average annual growth rate of 1.21% which translates to an additional 1,500 people per year. In this Report, the average additional population per year was used for purposes of estimating County growth to 2056.

The County did not prepare official population forecasts for the settlement areas within its lower-tier municipalities; however population estimates for areas served by sewage treatment facilities were prepared as part of the background work of the Biosolids Management Master Plan prepared for the County by XCG Consultants Limited in June 2004. Background to this study provided population estimates to 2021 based on growth in dwelling units per year and persons per unit figure assumptions. For the purposes of this Report, GSP has included these growth rates at five-year intervals on the appended tables.

3.5.1 Southwest Oxford

3.5.1.1 Population Forecasts/Estimates

Only the southern portion of South-West Oxford is within the Study Area (CCCA and LPRCA). The most current population forecasts were prepared by Hemson Consulting Ltd. for the County and provide forecasts to 2031. The total population of South-West Oxford was 8,000 people in 2006. Based on the methodology outlined in Section 2.2 of this study, the estimated population within the Study Area was 2,665 in 2006 and is estimated to be 3,298 in 2031.

Based on the forecasts, the Township will accommodate 3% of total growth forecast for the County of Oxford from 2006 to 2031. For estimating population of the Township beyond 2031 to 2056, it is assumed that Southwest Oxford will continue to accommodate 3% of the County's estimated population.

The main community in South-West Oxford is Mount Elgin, which is on partial services. Mount Elgin is expected to grow by approximately 14 people a year. The communities of Brownsville and Dereham Centre are also partially serviced with municipal water. In the instances of the communities of Brownsville and Dereham Centre, there was no population data or forecast information available. The 2006 population for Brownsville was estimated using the methodology outlined in Section 2.6 of this report. The 2006 population for Dereham Centre was not discernable based on the methodology outlined in Section 2.6 of this report (see Appendix 4 for more information) and therefore has been included in the Rural/Hamlet population for the Township of South-West Oxford. For purposes of the 2006 population, this report uses the 2006 population figure from the Biosolids Management Master Plan for Mount Elgin.

3.5.1.2 Employment Forecasts/Estimates

Employment forecasts for Oxford County are contained in the report prepared by Hemson Consulting Ltd., which provide employment forecasts for each municipality to 2031. These forecasts are based on the following sectors of employment: Employment Land Employment; Rural and Rural Based Employment; and Population-related Employment. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

No population equivalent numbers were provided.

3.5.1.3 Notes/Information Gaps/Future Projections

Population allocations to the serviced settlement areas within each lower-tier municipality were not part of the projections to 2031. For purposes of this report, serviced settlement (urban) forecasts are based on population forecasts contained in the Biosolids Management Master Plan, June 2004.

3.5.2 Town of Tillsonburg

3.5.2.1 Population Forecasts/Estimates

Tillsonburg falls within the LPRCA jurisdiction. In 2006, its population was 15,300. The County population forecasts indicate a population of 21,500 by 2031. This is an average annual growth rate of 1%. For purposes of this report, it is assumed that all of the Town's population is fully serviced.

Based on the forecasts, the Town will accommodate 17% of total growth forecast for the County of Oxford from 2006 to 2031. For estimating population of the Town beyond 2031 to 2056, it is assumed that Tillsonburg will continue to accommodate 17% of the County's estimated population.

3.5.2.2 Employment Forecasts/Estimates

Employment forecasts for Oxford County are contained in the report prepared by Hemson Consulting Ltd., which provide employment forecasts for each municipality to 2031. These forecasts are based on the following sectors of employment: Employment Land Employment; Rural and Rural Based Employment; and Population-related Employment. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

No population equivalent numbers were provided.

3.5.2.3 Notes/Information Gaps/Future Projections

None.

3.5.3 Township of Norwich

3.5.3.1 Population Forecasts/Estimates

Most of Norwich is within the Study Area with the exception of the northwest portion of the Township. In 2006, the population of the Township was 11,000 people and is forecast to grow to 13,800 by 2031. The latest population forecasts for the County do not provide breakdowns for intervening years.

The community of Norwich is the main settlement area in the Township and is located within the Study Area. The community had a population of 2,495 in 2001. The communities of Otterville and Springford are also serviced. There was no population data or forecast information available for Otterville and Springford. The 2006 populations for Otterville and Springford were estimated using the methodology outlined in Section 2.6 of this report. For purposes of this report uses, the 2006 population figure from the Biosolids Management Master Plan for the community of Norwich was used.

For purposes of estimating the population of Norwich Township within the Study Area, the population of the Norwich Community was subtracted from the Township's population to provide the rural/hamlet population. The population of the rural lands within the Study Area was estimated based on the methodology outlined in Section 2.2 of this Report. This was then added to the population of the Norwich community. In 2006, the population of Norwich Township in the Study Area was 9,661 and is estimated to grow to 12,084 by 2031.

Between 2006 and 2031 the forecast growth rate averages 0.91% per year. Between 2006 and 2031 the Township is forecasted to accommodate 7% of the County's forecast growth. For purposes of estimating Township growth beyond 2031 to 2056, it was assumed Norwich would continue to accommodate 7% of population growth estimated for the County.

The fully serviced community in the Township of Norwich is Norwich, which is within the LPRCA jurisdiction. There were no population forecasts provided for the community of Norwich. A review of the 2006 Census Dissemination Area mapping (see Appendix 4) shows that the boundaries extend beyond the community boundaries of Norwich. For purposes of the 2006 population, this report uses the 2006 population figure from the Biosolids Management Master Plan. The estimated 2006 serviced and unserviced populations are found on Tables 4.1.1 and 4.1.2.

3.5.3.2 Employment Forecasts/Estimates

Employment forecasts for Oxford County are contained in the report prepared by Hemson Consulting Ltd., which provide employment forecasts for each municipality to 2031. These forecasts are based on the following sectors of employment: Employment Land Employment; Rural and Rural Based Employment; and Population-related Employment. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

No population equivalent numbers were provided.

3.5.3.3 Notes/Information Gaps/Future Projections

Population allocations to the serviced settlement areas within each lower-tier municipality were not part of the projections to 2031. For purposes of this report, serviced settlement (urban) forecasts are based on population forecasts contained in the Biosolids Management Master Plan, June 2004.

3.5.4 Township of Blandford-Blenheim

Most of Blandford-Blenheim is within the Study Area (GRCA) with the exception of the western portion of the Township. In 2006 the population of the Township was 7,500 and is forecast to grow to 9,400 by 2031.

3.5.4.1 Population Forecasts/Estimates

There are three serviced settlements within the Township; Drumbo, Plattsville and Bright. Specific population forecasts for Drumbo, Plattsville and Bright are not provided in the County's updated forecasts. According to the Biosolids Management Master Plan, the population of Drumbo is estimated to grow from 560 people in 2001 to 713 people in 2021. Plattsville is estimated to grow from 1,425 people in 2001 to 1,925 people by 2021. These forecasts have been the basis for the estimates of populations to 2056. Population forecasts for Bright were not provided in the Biosolids Management Master Plan. Therefore the 2006 population for Bright was estimated using the methodology outlined in Section 2.6 of this report (see Appendix 4).

For purposes of estimating the population of Blandford-Blenheim within the Study Area, the population of the Drumbo and Plattsville was subtracted from the Township population to provide the rural/hamlet population. The population of the rural/hamlet areas within the Study Area was estimated based on the methodology outlined in Section 2.2 of this report. This was then added to the population of the two serviced centres. In 2001 the population of Blandford-Blenheim in the Study Area was 6,777 and is estimated to grow to 7,703 by 2021.

Between 2006 and 2031, the forecast growth for the Township was 4% of the forecast County growth. This percentage of County growth was maintained in estimating Township population to 2056.

It is noted that approximately 3,100 acres of Blandford-Blenheim have been annexed to the City of Woodstock. This part of the municipality is not within the Study Area.

The fully and partially serviced communities in Blandford-Blenheim are Drumbo, Plattsville, Bright and Belmont, which are within the GRCA jurisdiction. A review of the 2006 Census Dissemination Area mapping (see Appendix 4) shows that the DA boundaries extend beyond the community boundaries of Blandford-Blenheim. For purposes of this report, the 2006 population figures for Drumbo and Plattsville from the Biosolids Management Master Plan are used. The estimated 2006 serviced and unserved populations are found on Table 4.1.1.

3.5.4.2 Employment Forecasts/Estimates

Employment forecasts for Oxford County are contained in the report prepared by Hemson Consulting Ltd., which provide employment forecasts for each municipality to 2031. These forecasts are based on the following sectors of employment: Employment Land Employment; Rural and Rural Based Employment; and Population-related Employment. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

No population equivalent numbers were provided.

3.5.4.3 Notes/Information Gaps/Future Projections

Population allocations to the serviced settlement areas within each lower-tier municipality were not part of the projections to 2031. For purposes of this report, serviced settlement (urban) forecasts are based on population forecasts contained in the Biosolids Management Master Plan, June 2004.

3.5.5 Township of East Zorra-Tavistock

3.5.5.1 Population Forecasts/Estimates

Most of the Township of East Zorra-Tavistock is outside of the Study Area. The serviced settlement areas of Tavistock and Innerkip are the major growth areas for the Township and are also outside of the Study Area boundary. Population forecasts for the Township are available to 2031.

For purposes of estimating the population of East Zorra-Tavistock within the Study Area, the population of Tavistock was subtracted from the Township population to provide the rural/hamlet population. The population of the rural/hamlet areas within the Study Area was estimated based on the methodology outlined in Section 2.2 of this Report. On this basis, the population of the Township within the Study Area was 208 people in 2006 and is estimated to be 252 people by 2031.

Within the Township of East Zorra-Tavistock there are no serviced communities within the Study Area. The area of the Township that falls within the Study Area is within the GRCA jurisdiction. The estimated 2006 unserved population is found on Table 4.1.1.

3.5.5.2 Employment Forecasts/Estimates

Employment forecasts for Oxford County are contained in the report prepared by Hemson Consulting Ltd., which provide employment forecasts for each municipality to 2031. These forecasts are based on the following sectors of employment: Employment Land Employment; Rural and Rural Based Employment; and Population-related Employment. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

The portion of East Zorra-Tavistock within the study area is not serviced and therefore population equivalent figures are not provided.

3.5.5.3 Notes/Information Gaps/Future Projections

None.

3.5.6 City of Woodstock

3.5.6.1 Population Forecasts/Estimates

Only a very small portion of the City of Woodstock is in the Study Area. Lands within the Study Area (GRCA) are rural and no settlement areas are in proximity to this part of the municipality.

The 2006 population of Woodstock is 35,480 based on 2006 Census data. This represents 45% of the Oxford County population. Using the methodology outlined in Section 2.5, the proportion of the population within the Study Area in the City of Woodstock was estimated. For purposes of this report we have assumed that the portion of Woodstock that is within the Study Area will continue to accommodate 0.64% of the City Growth.

3.5.6.2 Employment Forecasts/Estimates

Only a very small portion of the City of Woodstock is in the Study Area. Lands within the Study Area are rural and no settlement areas are in proximity to this part of the municipality.

3.5.6.3 Notes/Information Gaps/Future Projections

None.

3.6 NORFOLK COUNTY

3.6.1 Population Forecasts/Estimates

Norfolk County is entirely within the Study Area and is within the LPRCA and GRCA jurisdictions (see Figure 3.6). The most recent population forecasts prepared for Norfolk County are those contained in the Population and Employment Projections report, dated January 2004, which provides forecasts to 2026. The forecast population for the County in 2006 is 68,600, whereas the 2006 Census population was 62,563. By 2026, the population is forecasted to be 74,260 people. It is noted that updated population forecasts are being prepared by the County.

The population forecasts prepared in support of the Official Plan also include population estimates for the urban areas to 2026. The urban areas in Norfolk for which there are projections are:

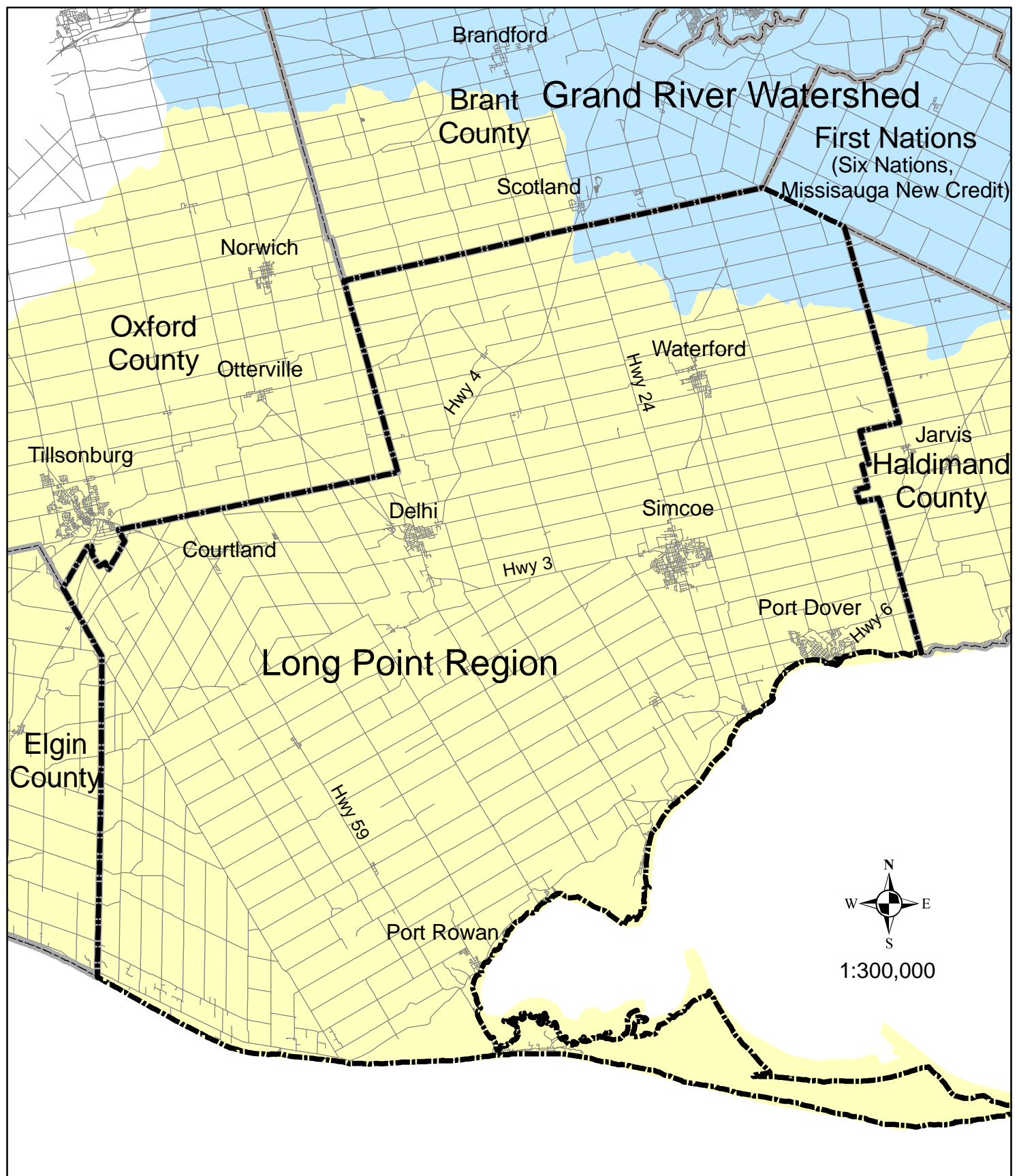
- Simcoe
- Port Dover
- Delhi
- Waterford
- Port Rowan
- Courtland

It is forecast that between 2001 and 2026, the County's population will increase by 13,410. This breaks-down to an average annual change in population of 536. To estimate the population beyond 2026 to 2056, this average annual change in population was applied to the 2026 forecast population and extrapolated to 2056.

Between 2001 and 2026 each of the urban settlement areas was allocated the following percentage of the forecast County growth:

- | | |
|--------------|--------|
| ▪ Simcoe | 24.7% |
| ▪ Port Dover | 6.04% |
| ▪ Delhi | 10.74% |
| ▪ Waterford | 5.82% |
| ▪ Port Rowan | 1.86% |
| ▪ Courtland | 1.64% |

Population growth estimates for the urban service areas were allocated based on the percentage of County growth forecast between 2001 and 2026. For example between 2001 and 2026, Simcoe's forecast growth accounted for 24.68% of the County's forecast growth. Between 2026 and 2031, it is estimated that Norfolk's population will grow by 2,682 people; therefore 24.68% of that population (662 people) is assigned to Simcoe. After the estimated population growth was allocated to the urban areas, the remainder of the County's estimated population is assigned to the Rural/Hamlet areas.



A review of the 2006 Census Dissemination Area mapping (see Appendix 4) shows that the DA boundaries extend beyond the community boundaries of Norfolk County. For purposes of the 2006 population, this report uses the 2006 estimated population figure from the 2004 Population and Employment Projections report. These figures are reflected in Tables 4.1.1 and 4.1.2.

3.6.2 Employment Forecasts/Estimates

Employment forecasts for Norfolk County are provided in the Population and Employment Projections report, dated January 2004, which provides forecasts to 2026. The employment forecasts are broken down into the following sectors: Management occupations; Business, finance and administrative occupations; Natural and applied sciences and related occupations; health occupations; Occupations in social science, education, government service and religion; Occupations in art, culture, recreation and sport; Sales and service occupations; Trades, transport and equipment operators and related occupations; Occupations unique to primary industry; Occupations unique to processing, manufacturing and utilities; and Occupations – not applicable. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

3.6.3 Notes/Information Gaps/Future Projections

Forecasts used in this report are the same as the forecasts that were used in the 2005 Population Projections Consolidation Report. Norfolk anticipates the completion of a report which will include updated population projections in mid-2009.

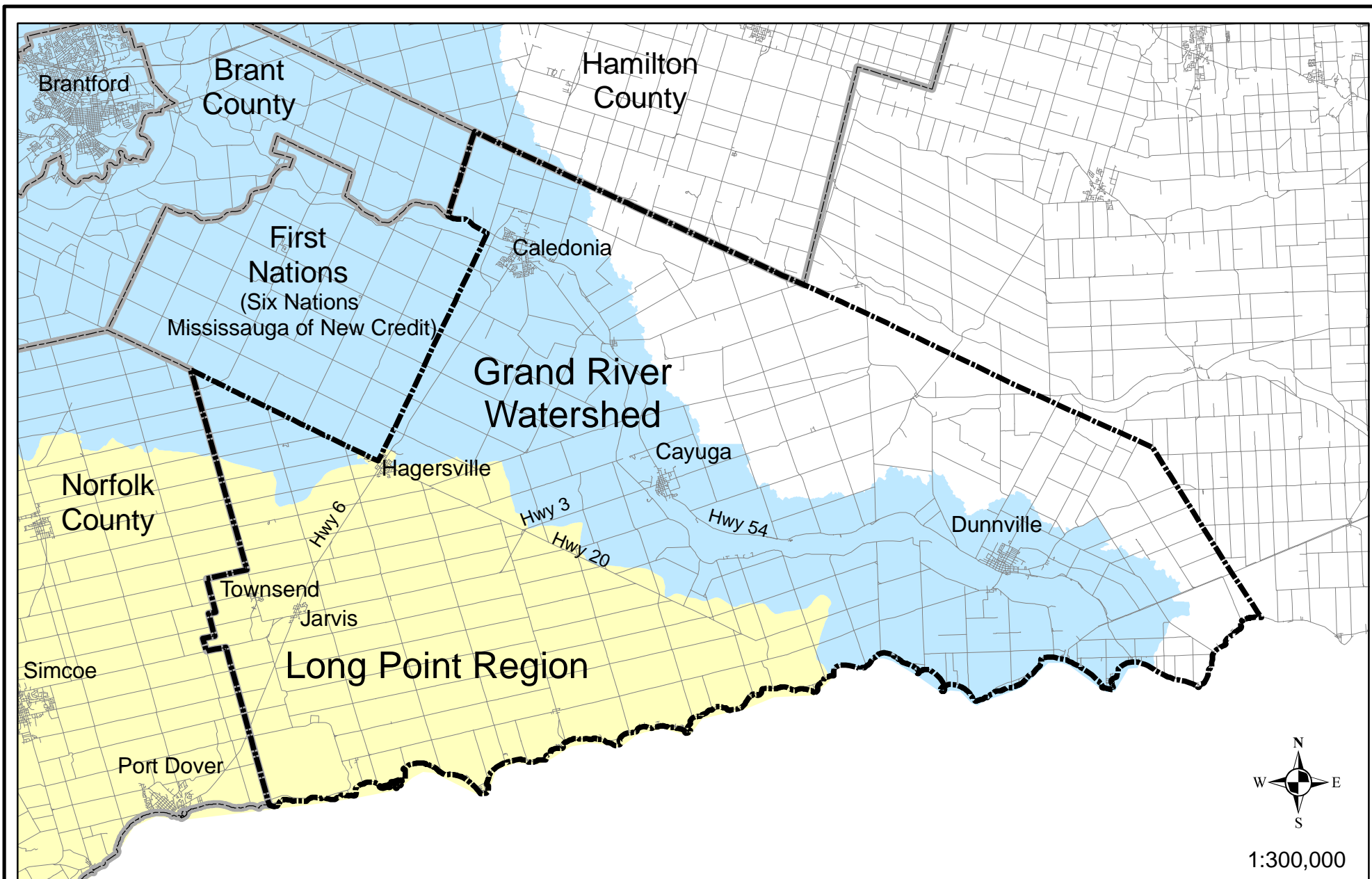
3.7 HALDIMAND COUNTY

3.7.1 Population Forecasts/Estimates

Most of Haldimand County is within the Study Area (GRCA and LPRCA jurisdictions) with the exception of some of the north and eastern portion of the County. All of its serviced urban areas fall within the Study Area (See Figure 3.7). The most recent population forecasts for Haldimand are contained in the Population and Household Forecasts, 2001-2026 report, prepared by Hemson Consulting Ltd. in May 2004. This report contains population forecasts to 2026.

The population forecasts contained in the Hemson report also include population estimates for the County's urban areas to 2026. The urban areas in Haldimand for which there are projections include:

- Caledonia
- Dunnville
- Hagersville
- Cayuga
- Jarvis
- Townsend



It is forecast that between 2001 and 2026, the County's population will increase by 11,660. This breaks-down to an average annual change in population of 466. To estimate the population beyond 2026 to 2056, this average annual change in population was applied to the 2026 forecast population and extrapolated to 2056.

Between 2001 and 2026 each of the urban settlement areas were allocated the following percentage of the forecast County growth:

▪ Caledonia	59%
▪ Dunnville	6%
▪ Hagersville	11%
▪ Cayuga	5%
▪ Jarvis	3%
▪ Townsend	2%
▪ Rural	14%

Population growth estimates for the urban areas were allocated based on the percentage of county growth forecast between 2001 and 2026. For example, between 2001 and 2026, Caledonia's forecast growth accounted for 59% of the County's forecast growth. Between 2026 and 2031, it is estimated that Haldimand's population will grow by 2,332 people; therefore 59% of that population growth (1,262 people) would be assigned to Caledonia. After the estimated population growth was allocated to the urban areas, the remainder is assigned to the Rural/Hamlet areas.

For purposes of this report, 2006 Census populations for each of the serviced communities were estimated using the methodology outlined in Section 2.5 of this report. These figures are reflected in Tables 16 and 17.

A review of the 2006 Census Dissemination Area mapping (see Appendix 4) shows that the DA boundaries extend beyond the community boundaries of Haldimand County. For purposes of the 2006 population, this report uses the 2006 estimated population figure from the 2004 Population and Household Forecast report. These figures are reflected in Tables 4.1.1 and 4.1.2.

3.7.2 Employment Forecasts/Estimates

Employment forecasts for Haldimand County are provided in the Population and Household Forecasts, 2001-2026 report, prepared by Hemson Consulting Ltd. in May 2004. This report contains employment forecasts to 2026. The employment forecasts are not broken down by sector or community. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

3.7.3 Notes/Information Gaps/Future Projections

Hemson Consulting has been retained by Haldimand County to provide updates to population forecasts. It is anticipated by the County that the report that will contain these updates will be completed in mid-2009.

A comparison of the 2006 estimated population provided in the Population and Households Forecast report was 45,050, which is slightly lower than the 2006 Census population of 45,212. For purposes of this report, we have continued to use the forecast population from the Population and Households Forecast report.

3.8 BRANT COUNTY

All of Brant County is within the Study Area, mainly in the Grand River Conservation Authority jurisdiction, though the south western part of the County of Brant is within the LPRCA jurisdiction (see Figure 3.8). The fully serviced settlement areas of the County of Brant include Paris and St. George, the largest of which is Paris. The settlements of Mount Pleasant/Tutela Heights and Oakhill are partially serviced.

Watson and Associates, Economists Ltd. prepared the most recent update to Brant's population forecasts, which were issued in June of 2008. These forecasts do not allocate populations to the settlement areas of Brant.

3.8.1 Population Forecasts/Estimates

The longest range forecasts endorsed by County Council were those prepared by Watson and Associates, Economists Ltd. entitled Brant County Official Plan Review Growth Analysis Study, 2006 to 2031, dated June 30, 2008, which provide County-wide projections to the 2031 time horizon.

During the forecast period, Brant County was forecast to experience an average annual growth rate of 1.07% and an average annual population growth of 468. For purposes of extending these forecasts beyond 2026 to 2056 the average annual population growth between 2006 and 2031 was applied to the 2031 population. Population forecasts for the County's urban and serviced settlements are not provided in the Watson and Associates report.

For purposes of this report we have estimated the population growth for Paris and St. George on the basis of information contained in Table 7-3A of the Watson and Associates Report. This table indicates that 77% of growth will be attributed to Paris and 1% to St. George. The partially serviced communities of Mount Pleasant/Tutela Heights and Oakhill will accommodate 3% of growth respectively while the rural/unserved areas will accommodate 18% of the growth.

For purposes of this report we have included the partially serviced communities in the serviced populations.

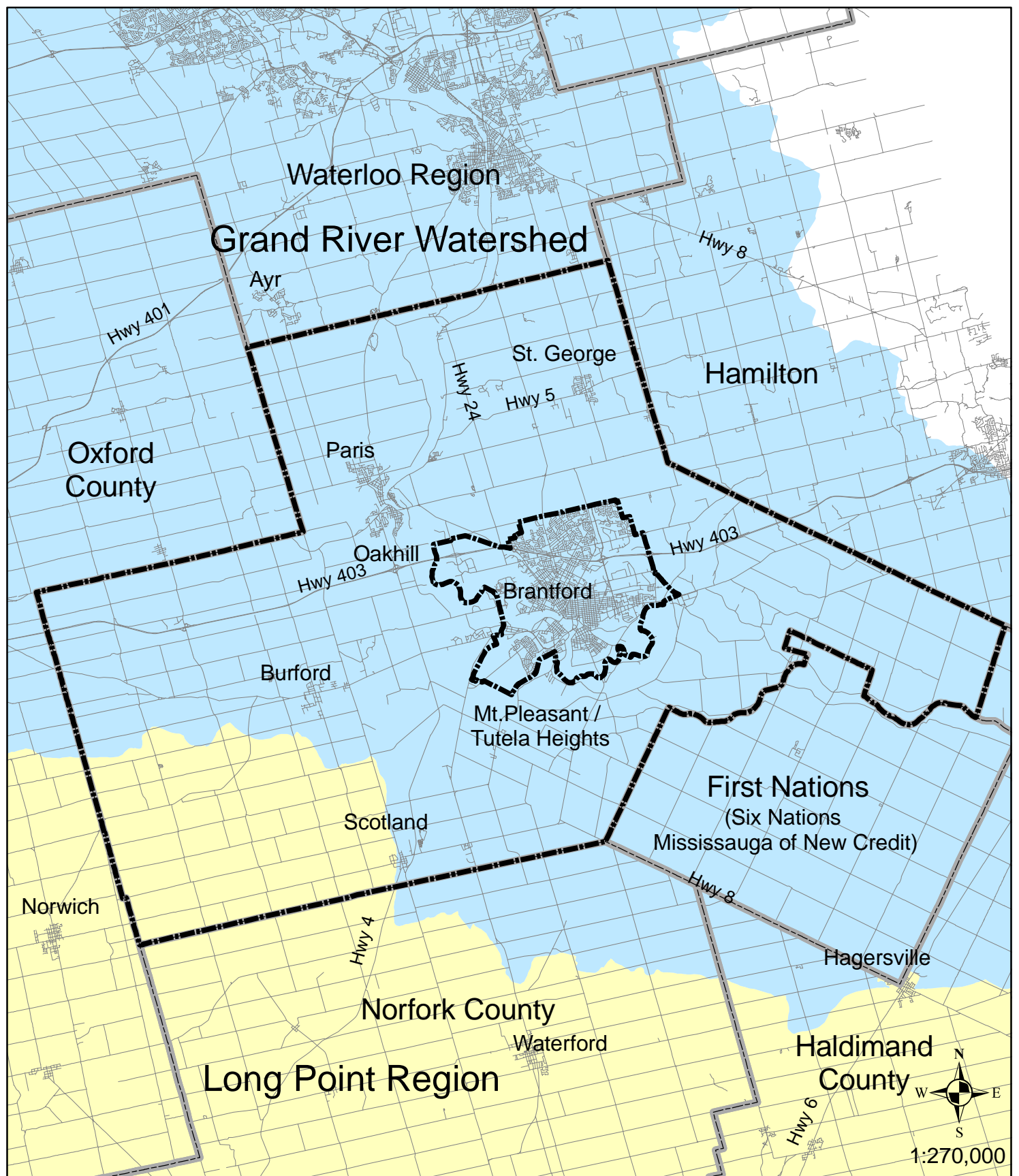


Figure 3.8
Brant County

----- County Boundary

The 2006 Census population for Paris, St. George, Mount Pleasant/Tutela Heights and Oakhill were estimated using the methodology outlined in Section 2.6 of this report and are shown on Tables 4.1.1 and 4.1.2. The maps contained in Appendix 4 of this report show the general boundary of the settlement and the Dissemination Area populations that were attributed to that settlement area in estimating the 2006 population.

3.8.2 Employment Forecasts/Estimates

Employment forecasts for Brant County are provided in the Brant County Official Plan Review Growth Analysis Study, 2006 to 2031, prepared by Watson and Associates, Economists Ltd. and dated June 30, 2008. This report contains employment forecasts for the entire County from 1996 to 2031. Employment by sector or community is not provided. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

Brant County Staff were not able to provide population equivalent figures for its serviced settlements.

3.8.3 Notes/Information Gaps/Future Projections

Brant County will be completing its Official Plan review exercise in late 2009. The Watson report notes that the population forecasts attribute 6% of forecast growth to Six Nations.

3.9 CITY OF BRANTFORD

The City of Brantford is entirely within the Grand River Conservation Authority jurisdiction (see Figure 3.9).

3.9.1 Population Forecasts/Estimates

For purposes of this report, the most recent population forecasts available are those prepared by Hemson Consulting Ltd. for the City's Development Charge Background Study. This document, released in draft form in January, 2009, has not yet been approved by City Council.

Over the forecast period, Brantford's forecast growth averages 1.18% per year. The average annual change in population was 1,235 which was applied to the 2031 forecast population to extrapolate the population between 2031 and 2056.

3.9.1.2 Employment Forecasts/Estimates

Employment forecasts for the City of Brantford are provided in the Draft Development Charge Background Study, prepared by Hemson Consulting Ltd. This study contains employment forecasts from 2006 to 2031. Employment forecasts are not broken down by sector or

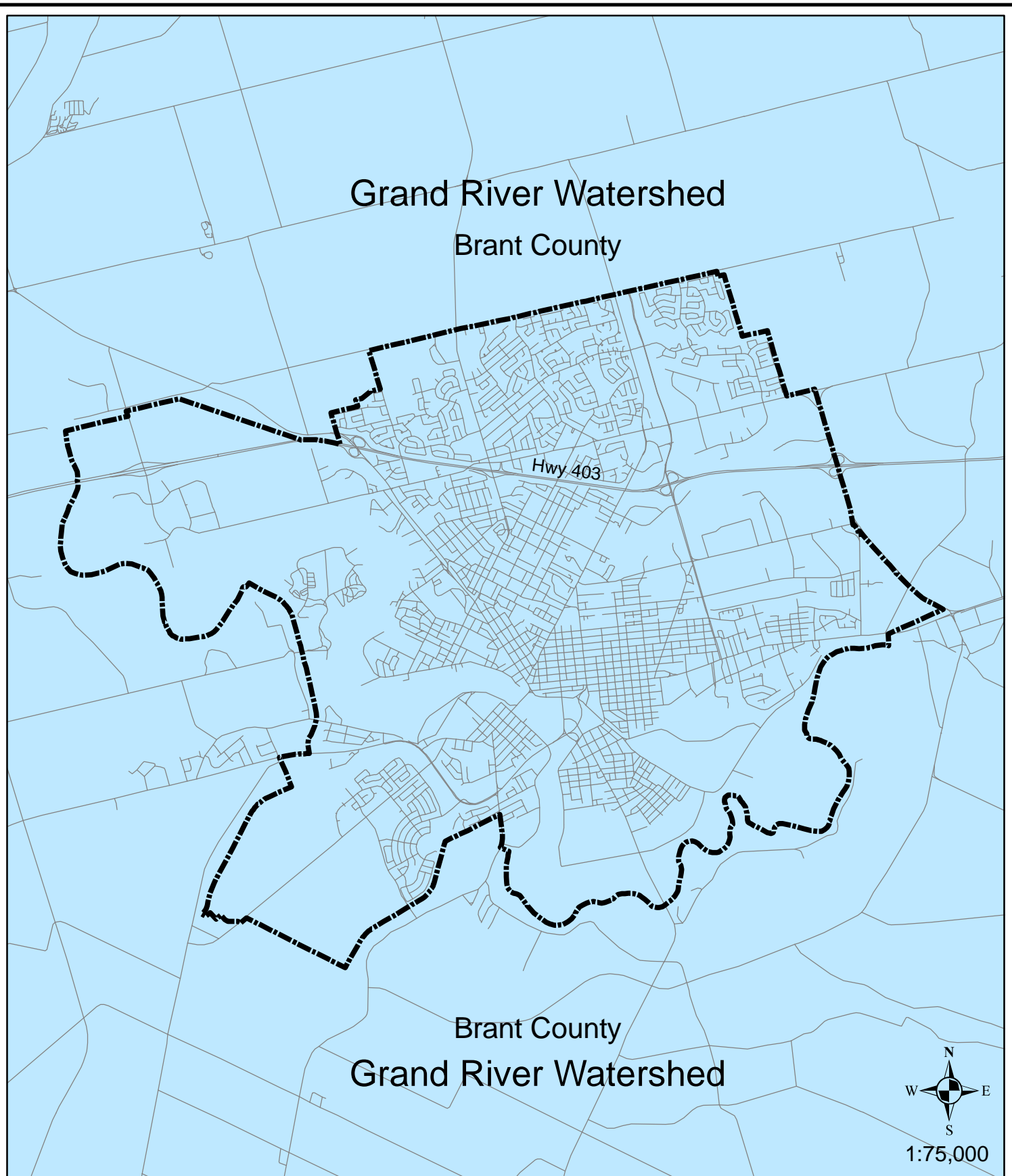


Figure 3.9
Brantford

----- City Boundary

community. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

City of Brantford Staff were not able to provide population equivalent figures.

3.9.1.3 Notes/Information Gaps/Future Projections

The report prepared by Hemson Consulting is still in draft form and the forecasts have not yet been adopted by Council.

The 2031 population target for the City of Brantford does not meet with the Province's Places to Grow target for the City. GRCA should continue to monitor the City's review exercise.

3.10 SIX NATIONS

Six Nations and New Credit Reserves are also within the Grand River Conservation Authority jurisdiction. Population forecasts for these areas were not available at the time of this Report's writing.

3.10.1 Population Forecast/Estimates

Population forecasts for these areas were not available at the time of this Report's writing with the exception of forecasts prepared by Hemson Consulting in background work for Places to Grow, 2005. The forecast is provided for Six Nations at 10-year intervals to 2031. These figures were provided to GSP Group from the Brant County Planning Department in 2005. For purposes of this Report, the "reference scenario" is used. This is the same source that was used for the 2005 Population Projections Consolidation Report. Additionally we note that the Watson and Associates population forecasts for Brant County noted that 6% of the forecast growth for the County was attributable to Six Nations.

For purposes of this Report, the intervening 5-year populations have been calculated by averaging. Between 2001 and 2031 Six Nations is forecast to grow by 2,501 which translates to an average annual change in population of 83. The average annual change in population was used to extrapolate the 2031 forecast population to 2056.

3.10.2 Employment Forecasts/Estimates

No employment forecast information was available.

3.10.3 Notes/Information Gaps/Future Projections

None.

3.11 PERTH COUNTY

Only a small portion of Perth County is within the Study Area. The Town of Milverton (served), a rural portion of the Township of Perth East and a smaller portion of the rural area of North Perth fall within the Grand River Conservation Authority jurisdiction (Figure 3.11).

Population forecasts have been prepared by the County Planning Department and are contained in the County Official Plan (consolidated in 2008) and provide a target population to 2016. Population forecasts for Perth East prepared by County Planning staff extend to 2021, while forecasts for North Perth extend to 2016.

3.11.1 Township of Perth East

3.11.1.1 Population Forecasts/Estimates

As noted above, the Perth County Planning Department has prepared population forecasts for the Perth East to 2021. Population forecasts are also prepared for the community of Milverton, the Township's largest community which is serviced by municipal water and sanitary services.

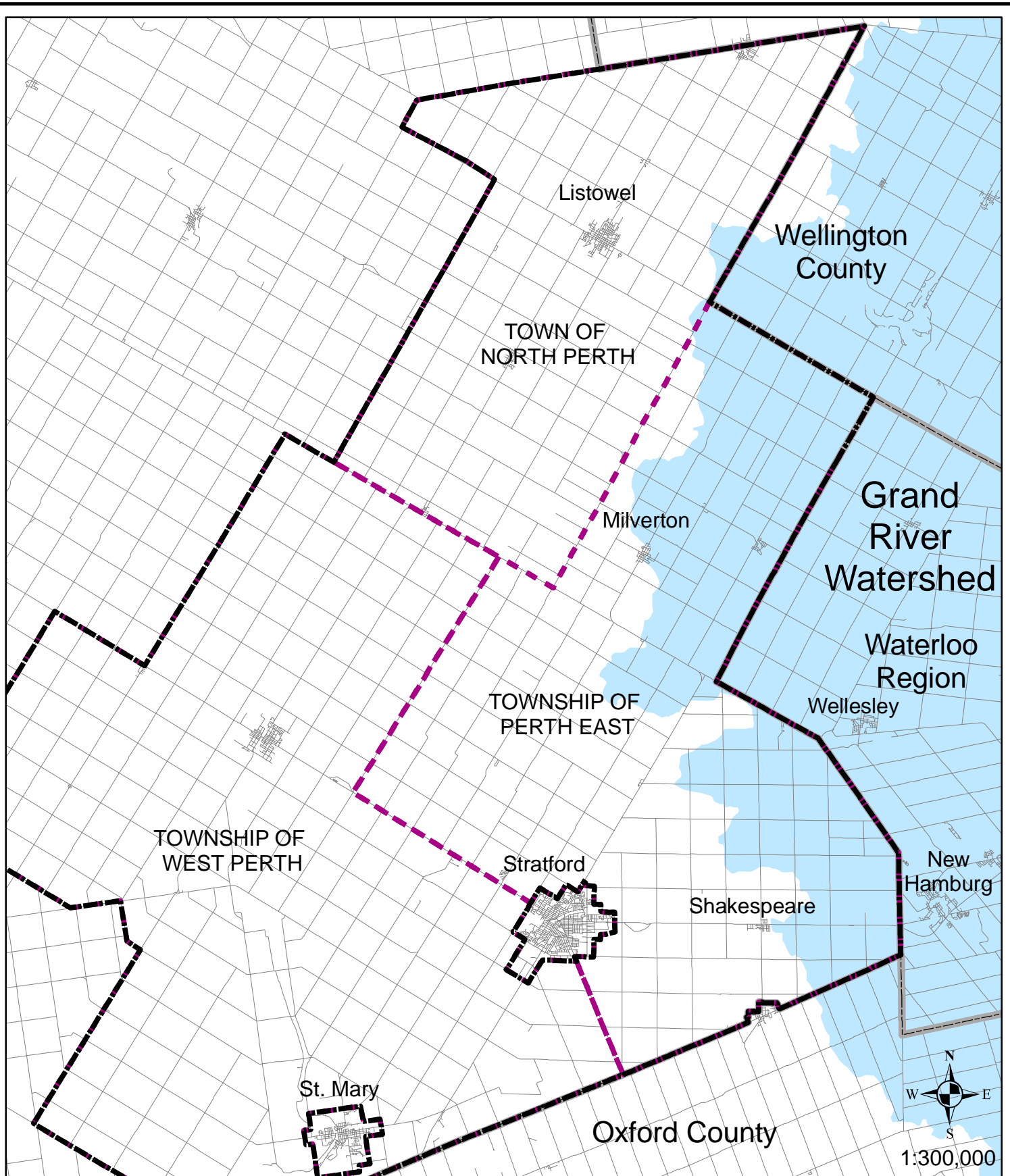
Perth East Census population in 2006 was 12,041, of which 1,824 lived in Milverton. Only a portion of the Township of Perth East falls within the Study Area. This portion includes the Town of Milverton.

By 2021, Perth East's population is forecasted to grow to 15,339 (16.79% of the forecast growth for the County), of which 2,228 are forecast to live in Milverton.

To estimate the population beyond 2021 to 2056, the average annual change in population for the County in the forecast period between 2001 and 2016 was determined. County-wide, the average annual growth rate was 0.85% and the average annual change in population is 690. For purposes of estimating the Township's growth from 2016 to 2056, the Township's forecast proportion of County growth, 9.7%, was applied to the County growth estimates beyond the currently available forecast horizon to 2056.

To estimate the rural population within the Study Area, the methodology described in Section 2.2 of this report was employed. It was estimated that 17.2% of the rural/hamlet population was attributed to the Study Area. This was added to the estimated population of Milverton to obtain the forecast population within the Study Area.

The only fully serviced community in Perth East is Milverton, which is assumed to be fully within the GRCA jurisdiction. The estimated 2006 serviced and unserved populations are found on Table 4.1.1. The 2006 Census Dissemination Areas do not readily correspond to the settlement boundary. For purposes of Table 4.1.1, the 2006 population for Milverton provided in the Perth County OP are used.



3.11.1.2 Employment Forecasts/Estimates

No employment forecast information was available.

3.11.1.3 Notes/Information Gaps/Future Projections

GSP did not receive any updated population information from County staff.

3.11.2 Township of North Perth

3.11.2.1 Population Forecasts/Estimates

As noted above, the Perth County Official Plan contains population forecasts for the North Perth to 2016. In 2006 North Perth's population was 13,566 people. The majority of growth in North Perth is directed to the serviced settlement of Listowel, which is not in the Study Area. In estimating the percentage of growth attributable to small portion of the rural area within the Study Area it was determined that only 0.1% of the Township's growth could be expected. Given that there are no settlements within the portion of the Township within the Study Area and growth levels were so low in the rural area it is assumed that the population will remain relatively stable throughout the forecast period and to 2056.

There are no serviced communities within the Township of North Perth in the Study Area. The estimated 2006 unserviced population is found on Table 4.1.1.

3.11.2.2 Employment Forecasts/Estimates

No employment forecast information was available.

3.11.2.3 Notes/Information Gaps/Future Projections

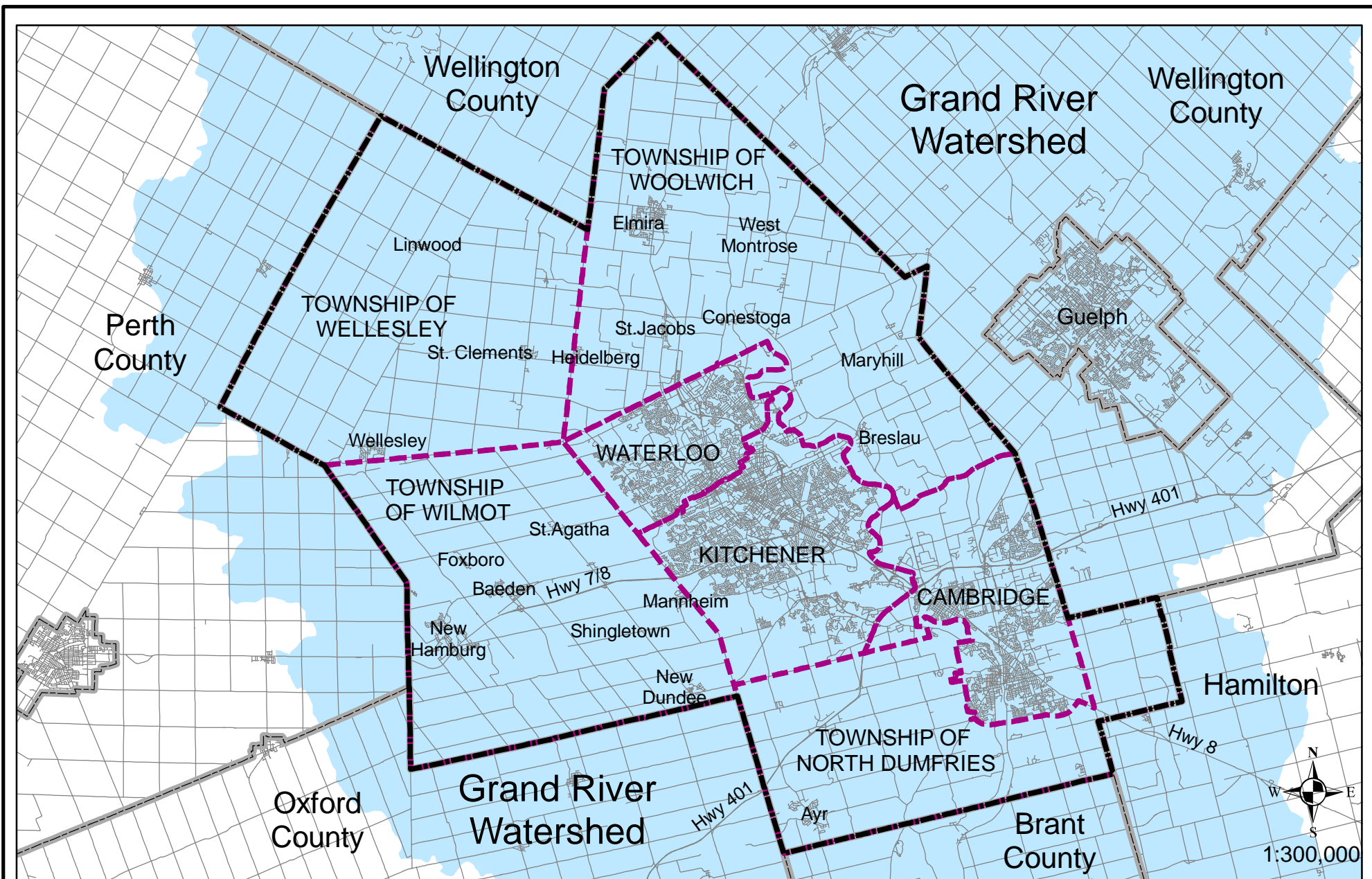
GSP did not receive any updated population information from County staff.

3.12 WATERLOO REGION

3.12.1 Population Forecasts/Estimates

The Region of Waterloo is located entirely within the Grand River Conservation Authority jurisdiction (see Figure 3.12). It is comprised of the three cities of Waterloo, Kitchener and Cambridge and the four Townships of Wellesley, North Dumfries, Woolwich and Wilmot.

To date, the Region has only provided population forecasts at the lower tier municipal level. It is anticipated that each municipality will develop population forecasts allocating growth to its communities over the coming year to bring their Official plans into conformity with the Growth



Plan and New Region of Waterloo Official Plan population and employment allocations. The lower-tier municipalities have not yet allocated populations to their respective settlement areas.

For purposes of this report, population growth estimates beyond 2031 have maintained proportionate shares of Regional growth allocated to the lower-tier municipalities.

For purposes of determining 2006 serviced vs. non serviced populations, two methods were used and the results provided. The first method uses the method outlined in section 2.6 of this report. Again as noted the census dissemination areas may not correspond directly to the urban serviced boundaries.

As a secondary reference source, this report refers to the Region of Waterloo Waste Water Treatment Master Plan prepared by Earthtech et al, August 2006 (the “WWTMP Report”). The WWTMP Report provides 2004 population and employment and a 2041 population and employment estimates for each of the waste water treatment plants in the Region (see Figure 3.12.2). The WWTMP Report does not provide a breakdown of service population/employment in interval time periods between 2004 and 2041.

It is noted that the service areas for each WWTMP also do not necessarily correspond to local municipal boundaries as some plants service portions of different serviced communities.

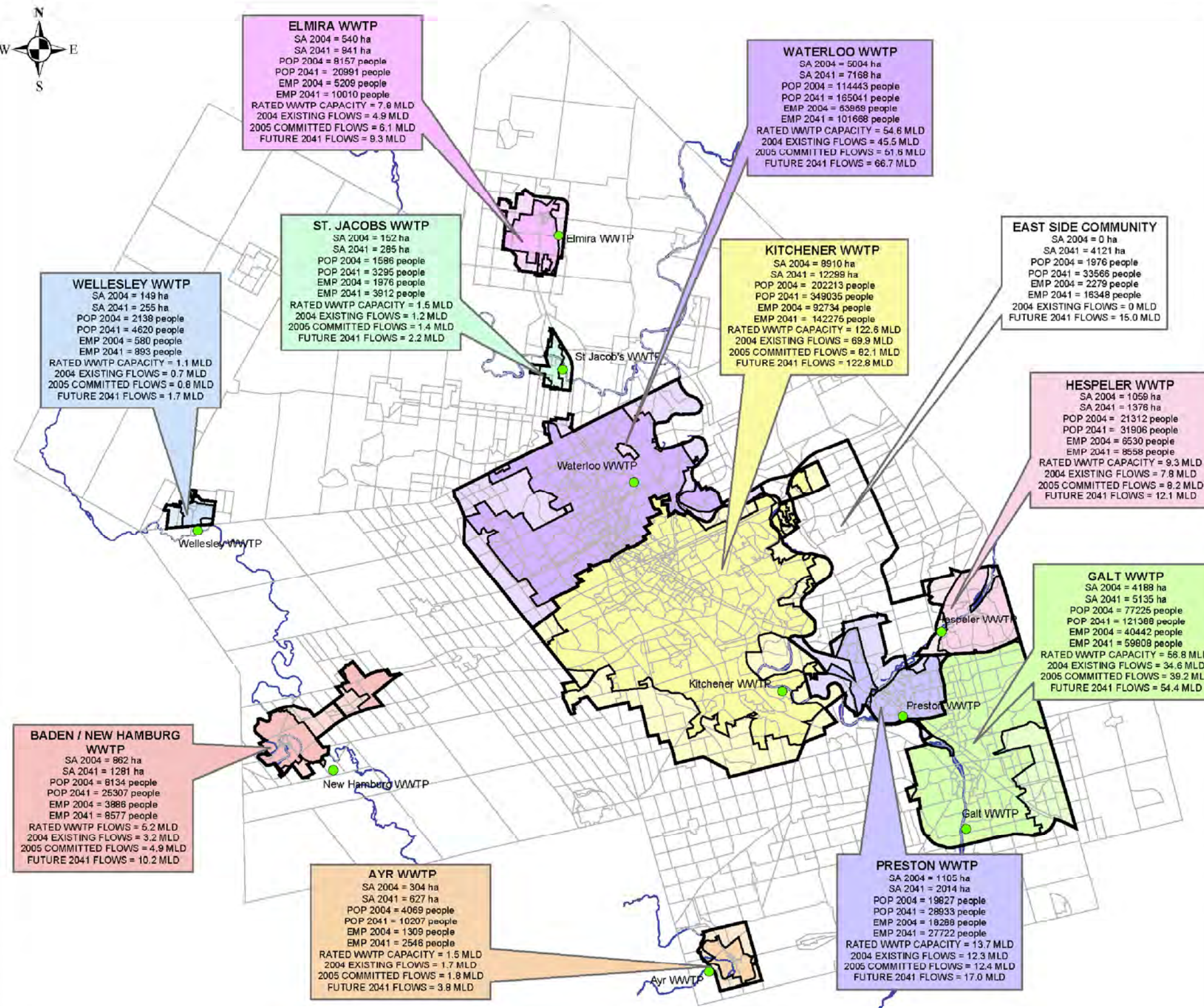
The current serviced population of the Breslau area of Woolwich is serviced by the Kitchener WWTP and in the future a portion of Woolwich will be served by the future East Side Community WWTP that will also serve parts of Cambridge. Therefore the serviced population from Breslau and the surrounding area is included in either Kitchener or Cambridge in the Waterloo Region population table where the WWTMP Report figures are referenced.

It is noted that the WWTMP Report uses the 2031 Growth Plan growth target.

For purposes of this report, we have estimated the growth of serviced areas based on the 2004 and 2041 population figures as outlined in the WWTMP. The difference in population was averaged and applied to the interval years in the table attached to this report. It is noted that these are not official population forecasts.

Serviced Cities/Communities include:

- Cambridge
- Kitchener
- Waterloo
- Elmira
- St. Jacobs
- Wellesley
- Baden/New Hamburg
- Ayr



Region of Waterloo

WASTEWATER TREATMENT MASTER PLAN

Legend

PLUM Zones (Population Land Use Model)

WWTP

WWSA - Mature State (2041 Presumed)

WWSA - Existing

WWTP Service Areas

Existing

Ayr

Baden/New Hamburg

Elmira

Galt

Hespeler

Kitchener

Preston

St. Jacobs

Waterloo

Wellesley

Mature State

Ayr

Baden/New Hamburg

Elmira

Galt

Hespeler

Kitchener

Preston

St. Jacobs

Waterloo

Wellesley

FIGURE 2.1

EXISTING AND FUTURE (2041) WWTP
SERVICE AREAS/FLOWS

SCALE: N.T.S.

DATE: JULY 2006

PN: 78148



A Tyco International Ltd. Company



Figure 3.12.1
Region of Waterloo
Wastewater Treatment Master Plan, August 2006

Partially Serviced Settlements include:

- St. Clements
- Linwood
- Heidelberg
- Conestogo
- Maryhill
- West Montrose
- Mannheim
- Shingletown
- New Dundee
- Foxboro Green
- St. Agatha

3.12.1.1 City of Cambridge

The City of Cambridge is on full municipal services.

Based on the forecasts provided, the Region of Waterloo will experience an average annual change in population of 8,868. Of the Region's forecasted growth, the City of Cambridge will see 25%. The City of Cambridge will experience an average annual change in population of 2,196 between the 2006 and 2031 forecast period. For purposes of estimating growth beyond 2031, this average annual change in population has been maintained.

3.12.1.2 City of Kitchener

The City of Kitchener is on full municipal services.

Based on the forecasts provided, the Region of Waterloo will experience an average annual change in population of 8,868. Of the Region's forecasted growth, it is anticipated that the City of Kitchener will see 44%. The City of Kitchener will experience an average annual change in population of 3,920 between the 2006 and 2031 forecast period. For purposes of estimating growth beyond 2031, this average annual change in population has been maintained.

3.12.1.3 City of Waterloo

The City of Waterloo is on full municipal services.

Based on the forecasts provided, the Region of Waterloo will experience an average annual change in population of 8,868. Of the Region's forecasted growth, the City of Waterloo will see 16%. The City of Waterloo will experience an average annual change in population of 1,404 between the 2006 and 2031 forecast period. For purposes of estimating growth beyond 2031, this average annual change in population has been maintained.

3.12.1.4Township of Woolwich

No detailed population forecasts have been prepared for the Township of Woolwich. Detailed population forecasts are expected with the update of the Woolwich Official Plan, in 2010.

Based on the forecasts provided, the Region of Waterloo will experience an average annual change in population of 8,868. Of the Region's forecasted growth, the Township of Woolwich will see 6%. The Township of Woolwich will experience an average annual change in population of 498 between the 2006 and 2031 forecast period. For purposes of estimating growth beyond 2031, this annual change in population has been maintained.

Within the Township of Woolwich, the communities of Elmira, St. Jacobs and portion of Breslau are on full municipal services. Communities on partial services include Conestogo, Maryhill, Heidelberg (which falls partially within the Township of Woolwich and partially within the Township of Wellesley) and West Montrose.

The 2006 population for the fully and partially serviced communities of the Township was determined by overlaying the Census Dissemination Area onto the general community boundaries. This population was then compared to the 2009 population for each respective community, contained in the Community Profile and Development Information for 2009 provided by the Township. In instances where the Census Dissemination Areas covered a much larger area than the community, the 2009 population was used as the 2006 population.

The 2041 population targets for Elmira and St. Jacobs are provided in the WWTMP report. Based on this target and the 2006 population, the intervening interval years were averaged. The rate of the Township's growth that has been allocated to Elmira and St. Jacobs through the available forecasts was prorated to 2056. In the instance of Breslau, no forecasts have been provided beyond 2016. For purposes of this report, Breslau's population has been maintained from 2016 to 2056. As there were no population targets for the remaining partially serviced communities (Conestogo, Maryhill, Heidelberg and West Montrose), the 2016 forecast population has been maintained to 2056. Updated forecasts are expected in 2010.

Information with respect to the serviced and partially serviced communities in Woolwich Township is sourced from the Township of Woolwich Community Profile and Development Information (2009) and was confirmed with Township Staff. Population forecasts to 2016 for Woolwich's three major serviced settlement areas, Elmira, St. Jacobs and Breslau, along with the partially serviced communities of Conestogo, Maryhill, Heidelberg and West Montrose, were provided in this report.

3.12.1.5Township of Wilmot

No detailed population forecasts have been prepared for the Township of Wilmot. Detailed population forecasts are expected with the update of the Wilmot Official Plan, in 2010.

Based on the forecasts provided, the Region of Waterloo will experience an average annual change in population of 8,868. Of Region's forecasted growth, the Township of Wilmot will see 6%. The Township of Wilmot will experience an average annual change in population of 510 between the 2006 and 2031 forecast period. For purposes of estimating growth beyond 2031, this average annual change in population has been maintained.

Within the Township of Wilmot, the communities of Baden and New Hamburg are on full municipal services. The communities of Mannheim, Shingletown, New Dundee and St. Agatha are on partial services. In certain instances (Mannheim and Shingletown) these partial services are provided by the City of Kitchener. The community of Foxboro Green is serviced through a communal septic and communal well that has been assumed by the Region of Waterloo.

The 2041 population targets for Baden and New Hamburg are provided in the WWTMP report. In the WWTMP report, the population forecast for the communities of Baden and New Hamburg were combined as they are served by the same WWTP. From discussions with Planning Staff at the Township, it is our understanding that the forecast growth identified for the serviced area of the Township of Wilmot will be split evenly between Baden and New Hamburg. On this basis, the growth for Baden and New Hamburg from 2006 to 2041 was attributed evenly between the two communities and populations in the intervening years averaged. Based on the 2041 target and the 2006 population, the intervening interval years were averaged. The rate of the Township's growth that has been allocated to Baden and New Hamburg through the available forecasts was prorated to 2056. As there were no population targets for the remaining partially serviced communities (Mannheim, Shingletown, New Dundee, Foxboro Green and St. Agatha), for purposes of this report, the 2006 population has been maintained to 2056.

Information with respect to the serviced and partially serviced communities in Wilmot Township is sourced from the Township of Wilmot Information Bulletin No. 4, Population Statistics, which provides populations by settlement areas for 2001 to 2008. This bulletin provides the 2006 population of the serviced and partially serviced communities within the Township. No forecasts are provided. This information was confirmed by Township of Wilmot Planning and Economic Development Staff.

3.12.1.6 Township of Wellesley

No detailed population forecasts have been prepared for the Township of Wellesley. Detailed population forecasts are expected with the update of the Wellesley Official Plan, in 2010.

Based on the forecasts provided, the Region of Waterloo will experience an average annual change in population of 8,868. Of the Region's forecasted growth, the Township of Wellesley will see 1%. The Township of Wellesley will experience an average annual change in population of 116 between the 2006 and 2031 forecast period. For purposes of estimating growth beyond 2031, this average annual change in population has been maintained.

Within the Township of Wellesley, the community of Wellesley is on full municipal services. The communities of St. Clements, Linwood and Heidelberg are on partial services.

The 2006 population for the fully and partially serviced communities of the Township was determined by overlaying the Census Dissemination Area onto the general community boundaries. This population was then compared to the 2009 population for each respective community, contained in the Community Profile and Development Information for 2009. In instances where the Census Dissemination Areas covered much larger areas than the community, the 2009 population was used as the 2006 population.

The 2041 population target for the community of Wellesley is provided in the WWTMP report. Based on this target and the 2006 population, the intervening interval years were averaged. The rate of the Township's growth that has been allocated to Wellesley through the available forecasts was prorated to 2056.

Information with respect to the serviced and partially serviced communities in Wellesley Township are sourced from the Region of Waterloo Planning and Information Research, 2009 Population by Settlement Area and confirmed by Township of Wellesley Planning Staff. This report provides the 2009 populations of the serviced and partially serviced communities. No forecasts are provided.

3.12.1 Township of North Dumfries

No detailed population forecasts have been prepared for the Township of North Dumfries. Detailed population forecasts are expected with the update of the North Dumfries Official Plan, in 2010.

Based on the forecasts provided, the Region of Waterloo will experience an average annual change in population of 8,868. Of the Region's forecasted growth, the Township of North Dumfries will see 3%. The Township of North Dumfries will experience an average annual change in population of 226 between the 2006 and 2031 forecast period. For purposes of estimating growth beyond 2031, this average annual change in population has been maintained.

The community of Ayr is the only settlement on full municipal services.

The 2041 population target for Ayr is provided in the WWTMP report. Based on this target and the 2006 population, the intervening interval years were averaged. The rate of the Township's growth that has been allocated to Ayr through the available forecasts was prorated to 2056.

3.12.2 Employment Forecasts/Estimates

Employment or population equivalent forecasts are available for 2004 and 2041 in the WWTMP report. The population equivalents and forecasts are provided for the following wastewater treatment plants in the Region of Waterloo:

- Kitchener
- Waterloo

- Galt
- Preston
- Hespeler
- Elmira
- St. Jacobs
- Wellesley
- Ayr
- Baden/New Hamburg
- East Side Community

3.12.3 Population Equivalent Forecasts/Estimates

Waterloo Region is one of the only jurisdictions which have readily available population equivalent forecasts for its serviced areas. The WWTMP Report provides population equivalents for each of its waste water treatment plant for 2006, 2016, 2031 and 2041. This is found on Table 2.7 of the WWTMP report and is attached as Appendix 4 to this report.

3.12.4 Notes/Information Gaps/Future Projections

Once the lower-tier municipalities have approved the Region's forecast population allocations, the lower-tier municipalities will allocate forecast growth to settlements within their jurisdictions. The Grand River Conservation Authority should monitor these municipal activities as greater detail in allocations where forecast growth is to be accommodated will be determined.

3.13 CITY OF GUELPH

The City of Guelph is located entirely within the Grand River Conservation Authority jurisdiction (see Figures 3.13). The City of Guelph is a separate political entity from Wellington County even though it is entirely surrounded by the County and as such, Guelph and Wellington have independent population forecasts.

Guelph's most current population forecasts were prepared based on a number of background growth management studies. City Planning Staff recommended a 2031 target population of 169,000. The Staff recommendation did not have population projections at five-year intervals. The City's Development Charges Study, prepared in 2008 by Watson and Associates Economists Ltd. includes five-year interval population projections, which informed this report and its estimates for the City of Guelph.

3.13.1 Population Forecasts/Estimates

The population forecasts for the City of Guelph were prepared by Watson and Associates Economists Ltd. in 2008 for the City's Development Charges Background Study. In 2006, Guelph's population was 115,000 and is forecast to grow to 169,000 by 2031. This corresponds to an average annual growth rate of 1.55% over the forecast period and average

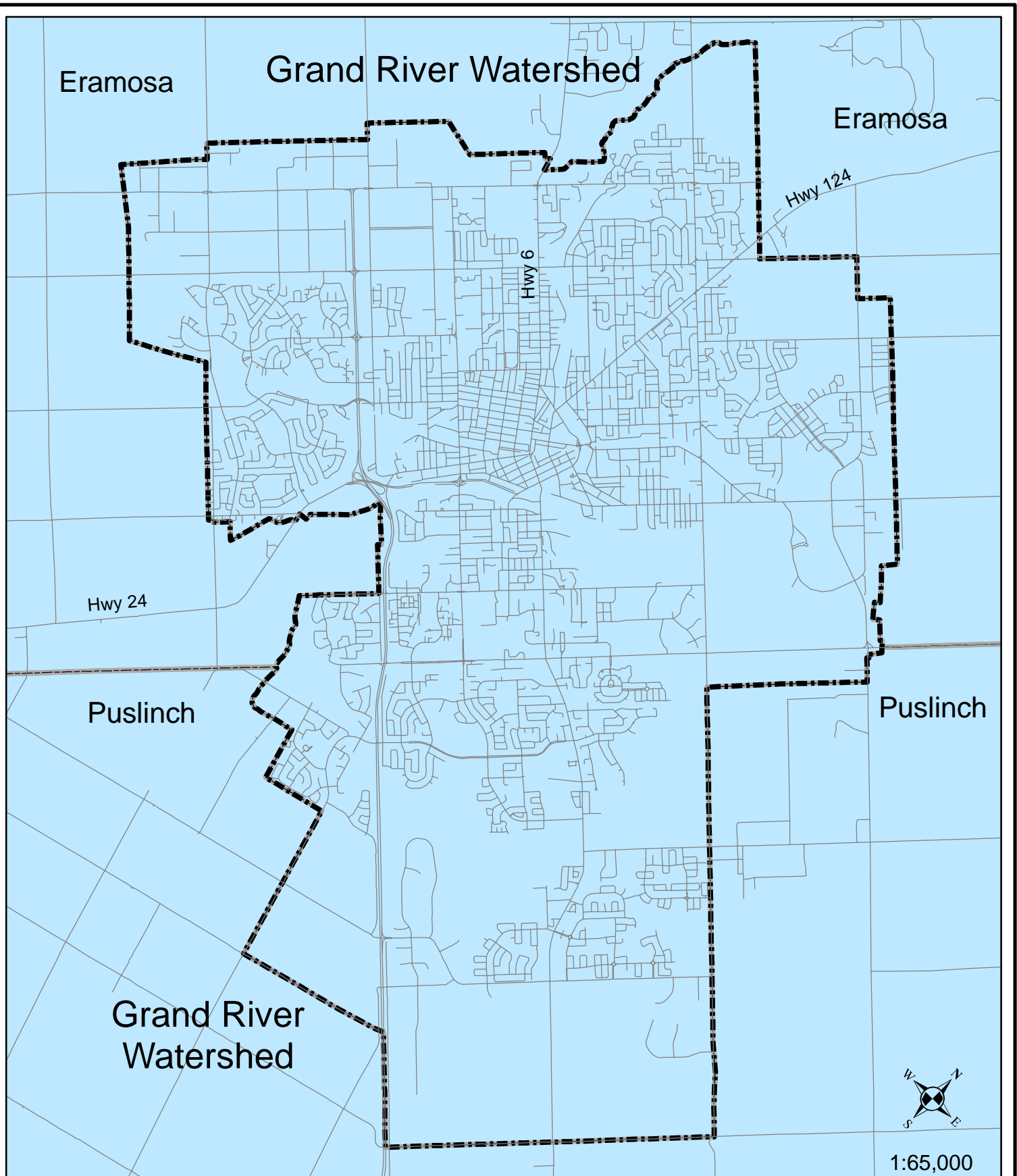


Figure 3.13
Guelph

----- City Boundary

annual population change of 2,160. This average annual population change is used in this Report to estimate Guelph's growth to from 2031 to 2056.

3.13.2 Employment Forecasts/Estimates

Employment forecasts for the City of Guelph are contained in the City's Development Charges Background Study, prepared by Watson and Associates Economists, Ltd. A target forecast for 2031 is provided. The forecast is not broken down by employment sector or community. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

Staff were not able to provide population equivalent figures.

3.13.3 Notes/Information Gaps/Future Projections

The City of Guelph's 2031 target population of 169,000 does not meet the Province's Places to Grow target population of 175,000 for the City. GRCA should continue to monitor Guelph's Growth Plan implementation process to determine if population forecasts will be revised.

3.14 WELLINGTON COUNTY

Most of Wellington County is located mostly within the Grand River Conservation Authority jurisdiction (see Figure 3.14).

Wellington County's population forecasts are contained in the Population, Housing and Employment Forecast Update, 2006-2031, prepared by Watson and Associates, Economists Ltd. in April, 2008. This report contains population forecasts for the County, its lower-tier municipalities and their major serviced settlements. These forecasts have been adopted and added to the County Official Plan through OPA 61, adopted June 16, 2008.

3.14.1 Township of Wellington North

3.14.1.1 Population Forecasts/Estimates

As noted above, the County's Official Plan contains population forecasts for Wellington North and includes forecasts for its serviced urban areas of Arthur and Mount Forest. Only a portion of the Township falls within the Study Area including the community of Arthur and parts of the rural/hamlet areas. In determining the portion of the Township's population attributable to the Study Area, the population of Arthur and Mount Forest were subtracted from the Township's total population to determine the Rural/Hamlet population. The percentage of rural/hamlet population was estimated using the methodology described in Section 2.2 of this Report, then the population of Arthur was added to provide population figures for parts of the municipality within the Study Area.

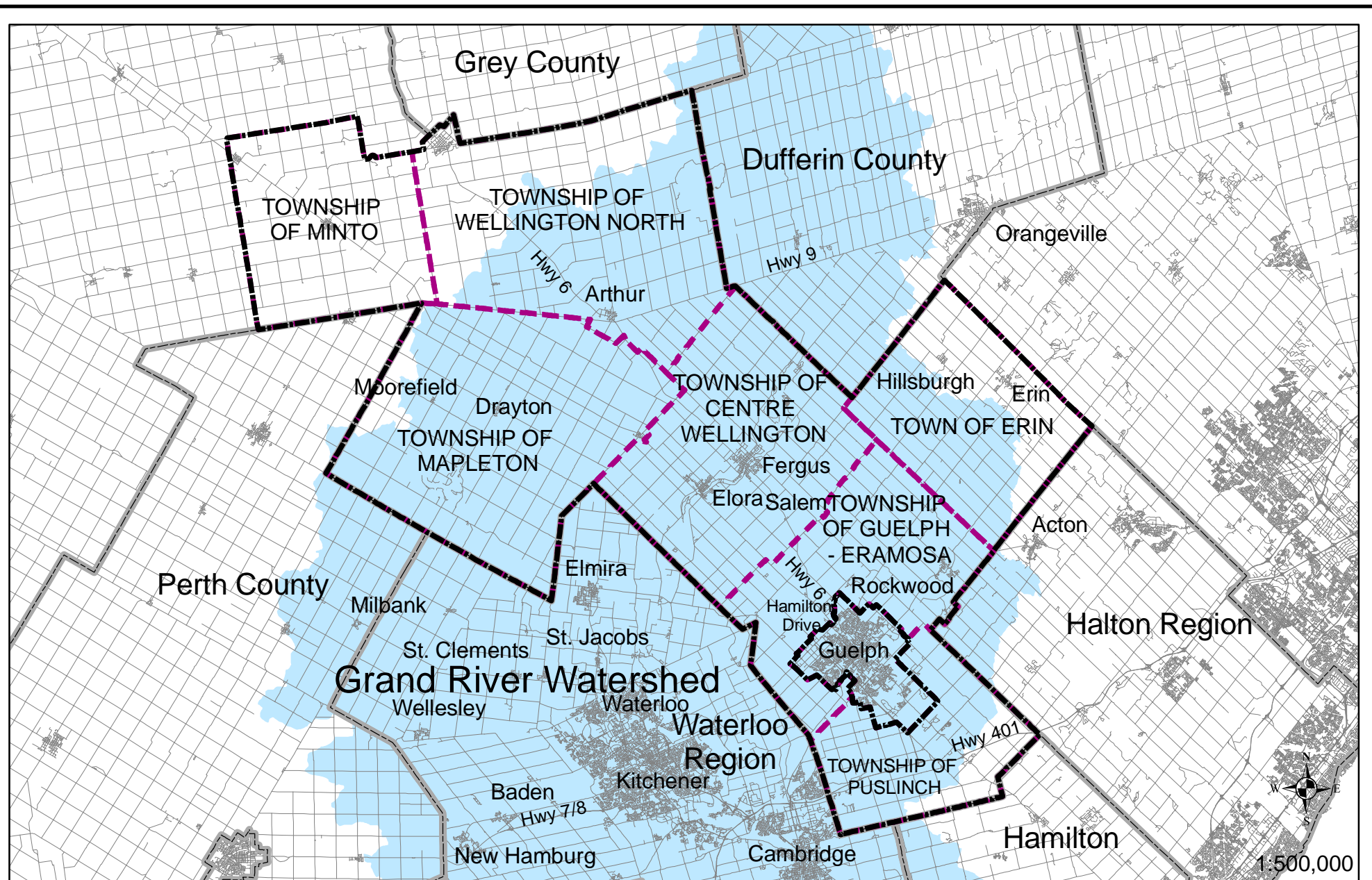


Figure 3.14
Wellington County

During the forecast period, Wellington North will see 12% of the County's forecast growth to 2031. For purposes of estimating the Township's population beyond 2031, it is assumed that this level of growth will be maintained.

Similarly, in estimating the populations of Arthur and Mount Forest, their respective percentage of the Township's growth between 2001 and 2031 (17% and 74% respectively) is maintained to 2056.

3.14.1.2 Employment Forecasts/Estimates

Employment forecasts for Wellington County are provided in the County Official Plan. These forecasts are not broken down by sector of employment or by community. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

County of Wellington staff were not able to provide population equivalent figures.

3.14.1.3 Notes/Information Gaps/Future Projections

None.

3.14.2 Township of Centre Wellington

3.14.2.1 Population Forecasts/Estimates

As noted previously, the Wellington County Official Plan contains population forecasts for Centre Wellington and includes forecasts for its serviced urban areas of Fergus and Elora-Salem. The entire township falls within the Grand River Conservation Authority jurisdiction.

During the forecast period, Centre Wellington will see 44% of the County's forecast growth to 2031. For purposes of estimating the Township's population beyond 2031, it is assumed that this percentage of the County's estimated population will be maintained to 2056.

Similarly, in estimating the populations of Fergus and Elora-Salem, their respective percentage of the Township's growth between 2006 and 2031 (66% and 31% respectively) are assumed to be maintained in estimating future population to 2056.

3.14.2.2 Employment Forecasts/Estimates

Employment forecasts for Wellington County are provided in the County Official Plan. These forecasts are not broken down by sector of employment or by community. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

County of Wellington staff were not able to provide population equivalent figures.

3.14.2.3 Notes/Information Gaps/Future Projections

None.

3.14.3 Township of Guelph-Eramosa

3.14.3.1 Population Forecasts/Estimates

As noted above, the Wellington County Official Plan contains population forecasts for Guelph-Eramosa and includes forecasts for its serviced urban area of Rockwood. The subdivision of Hamilton Drive is also serviced, however no population figures or forecasts are provided in the Wellington Official Plan. The entire Township falls within the Grand River Conservation Authority jurisdiction.

During the forecast period, Guelph-Eramosa will see 8% of the County's forecast growth to 2031. For purposes of estimating the Township's population beyond 2031, it is assumed that the Township will maintain this percentage of the County's estimated population.

Similarly, the population of Rockwood is forecast to capture 89% of Guelph-Eramosa's forecast growth from 2006 to 2031. For purposes of the estimating population between 2031 and 2056 it is assumed that Rockwood would maintain this portion of the Township's growth.

Population forecasts were not provided for Hamilton Drive in the County of Wellington Official Plan. To estimate the 2006 population of Hamilton Drive, the 2006 Census Dissemination Area was overlayed on the general community boundaries of the Hamilton Drive subdivision (see Appendix 4). Based on this methodology, the estimated population of Hamilton Drive is 487. This figure was not prorated, but was included as a serviced population in Table 4.1.

3.14.3.2 Employment Forecasts/Estimates

Employment forecasts for Wellington County are provided in the County Official Plan. These forecasts are not broken down by sector of employment or by community. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

County of Wellington staff were not able to provide population equivalent figures.

3.14.3.3 Notes/Information Gaps/Future Projections

None.

3.14.4 Township of Mapleton

3.14.4.1 Population Forecasts/Estimates

As noted above, the Wellington County Official Plan contains population forecasts for Mapleton and includes forecasts for its serviced urban areas of Drayton and Moorefield. The majority of the Township, including Drayton and Moorefield is within the Grand River Conservation Authority jurisdiction.

During the forecast period, Mapleton will see 7% of the County's forecast growth to 2031. For purposes of estimating the Township's population beyond 2031, it is assumed that the Township will maintain this percentage of the County's forecast population.

In determining the portion of the Township's population attributable to the Study Area, the population of Moorefield and Drayton were subtracted from the Township's total population to determine the Rural/Hamlet population. The percentage of rural/hamlet population was estimated using the methodology described in Section 2.2 of this Report, then the population of Moorefield and Drayton were added to provide population estimates for parts of the municipality within the Study Area.

Drayton and Moorefield are forecast to capture 60% and 28% respectively of Mapleton's forecast population growth from 2006 to 2031. For purposes of the estimating the population of these communities between 2031 and 2056 it is assumed Drayton and Moorefield would maintain these proportions of the Township's growth.

3.14.4.2 Employment Forecasts/Estimates

Employment forecasts for Wellington County are provided in the County Official Plan. These forecasts are not broken down by sector of employment or by community. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

County of Wellington staff were not able to provide population equivalent figures.

3.14.4.3 Notes/Information Gaps/Future Projections

None.

3.14.5 Township of Puslinch

3.14.5.1 Population Forecasts/Estimates

As noted above, the Wellington County Official Plan contains population forecasts for Puslinch and includes forecasts for its communities of Aberfoyle and Morriston (both of which are not

served). Most of the Township falls within the Grand River Conservation Authority jurisdiction with the exception of its southeast part.

During the forecast period, Puslinch will see 9 % of the County's forecast growth to 2031. For purposes of estimating the Township's population beyond 2031, it is assumed that the Township will maintain this percentage of the County's estimated population.

Similarly, the population of Aberfoyle and Morriston are forecast to capture 7% and 3% respectively of Puslinch's forecast growth from 2006 to 2031. For purposes of the estimating population between 2031 and 2056 it is assumed that these communities would maintain this portion of the Township's growth.

In determining the portion of the Township's population attributable to the Study Area, the population of Aberfoyle and Morriston were subtracted from the Township's total population to determine the Rural/Hamlet population. The percentage of rural/hamlet population was estimated using the methodology described in Section 2.2 of this Report, then the population of Aberfoyle and Morriston were added to provide population estimates for parts of the municipality in the Study Area.

3.14.5.2 Employment Forecasts/Estimates

Employment forecasts for Wellington County are provided in the County Official Plan. These forecasts are not broken down by sector of employment or by community. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

County of Wellington staff were not able to provide population equivalent figures.

3.14.5.3 Notes/Information Gaps/Future Projections

None.

3.14.6 Town of Erin

3.14.6.1 Population Forecasts/Estimates

The Wellington County Official Plan contains population forecasts for Erin and includes forecasts for the serviced urban areas of Erin and Hillsburgh. Only a portion of the Rural/Hamlet area is within the Grand River Conservation Authority jurisdiction (Erin and Hillsburgh are not within the Study Area).

During the forecast period, the Town will see 12% of the County's forecast growth to 2031. For purposes of estimating the Town's population beyond 2031, it is assumed that the Town will maintain this percentage of the County's forecast population.

Similarly, Erin and Hillsburgh are forecast to capture 36% and 22% of Erin's forecast population growth from 2001 to 2031. For purposes of the estimating the population of these communities between 2031 and 2056 it is assumed Erin and Hillsburgh would maintain these proportions of the Town's growth.

In determining the portion of the Town's population attributable to the Study Area, the population of Erin and Hillsburgh were subtracted from the Town's total population to determine the Rural/Hamlet population. The percentage of rural/hamlet population within the Study Area was estimated using the methodology described in Section 2.2 of this report.

3.14.6.2 Employment Forecasts/Estimates

Employment forecasts for Wellington County are provided in the County Official Plan. These forecasts are not broken down by sector of employment or by community. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

County of Wellington staff were not able to provide population equivalent figures.

3.14.6.3 Notes/Information Gaps/Future Projections

None.

3.14.7 Township of Minto

3.14.7.1 Population Forecasts/Estimates

The Wellington County Official Plan contains population forecasts for Minto, however, only 0.5 ha of the Township is within the Study Area. This portion of Minto is in the rural/agricultural area and is not in proximity to any settlements, therefore this Report does not provide population estimates for this part of the Study Area.

3.15 CITY OF HAMILTON

The City of Hamilton is partially within the Grand River Conservation Authority jurisdiction of the Study Area (see Figure 3.15). The areas are mainly the rural areas of the former municipalities of Flamborough, Glanbrook and part of the urban area of former Town of Ancaster. The serviced former Town of Lynden is also located within the Grand River Conservation Authority jurisdiction.

For purposes of this report, with the exception of the former Town of Lynden, we have assumed all growth within the Study Area to be unserviced. The information used in this report for the City of Hamilton was provided by the City's planning department, who prepared growth forecasts for the communities within the Study Area (GRCA jurisdiction). The rate of growth that the area within the Study Area has experienced over the past 25 years is 0.70% of the total City growth. The

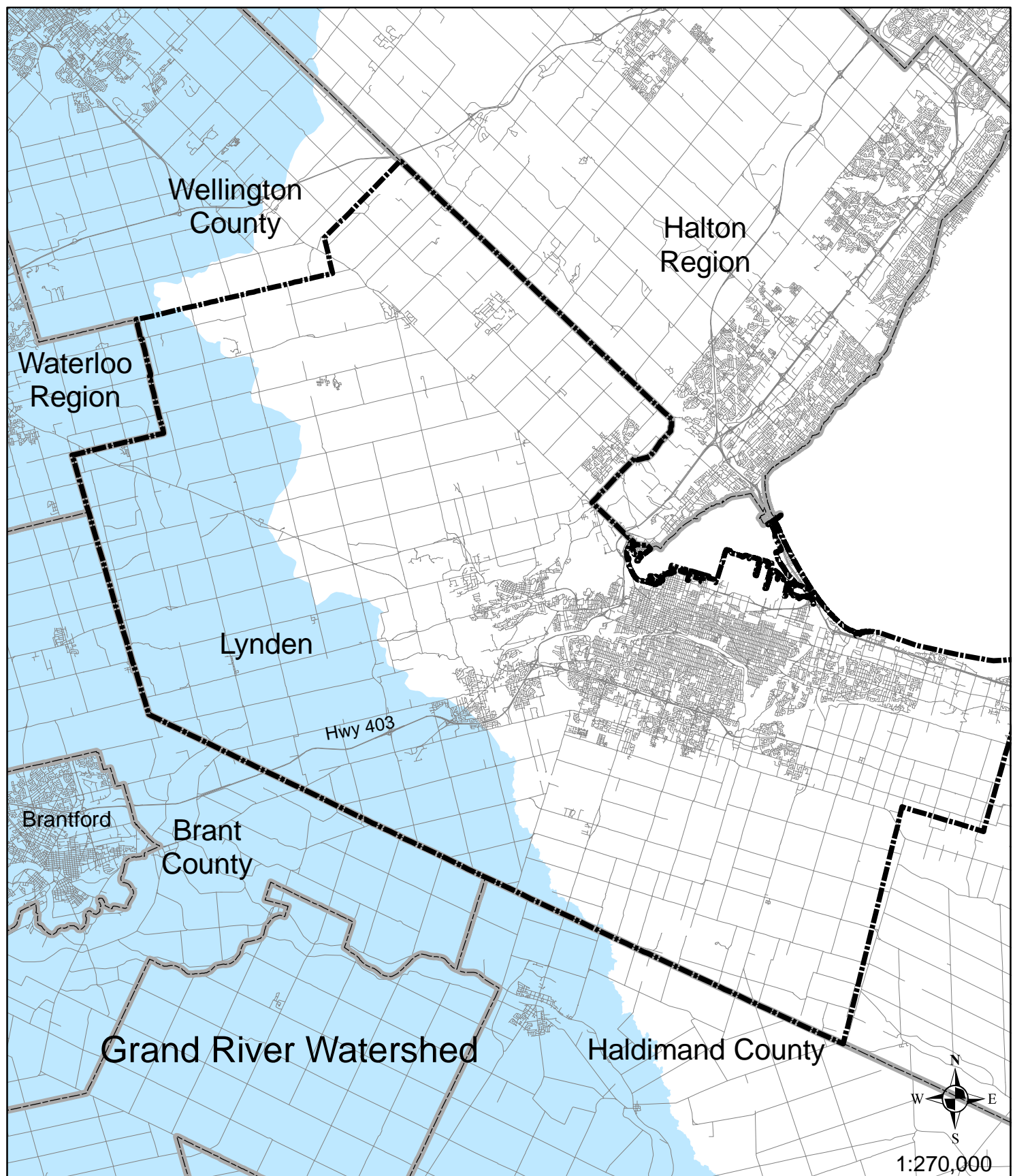


Figure 3.15
Hamilton
----- City Boundary

served community of Lynden had a 2006 population of approximately 500. Based on this information, Lynden has experienced approximately 0.026% of the Hamilton portion of the Study Area. This growth rate has been maintained. As the communities within the Study Area are not serviced, the percentage of City growth has also been maintained to 2056.

3.15.1 Population Forecasts/Estimates

In 2006, Hamilton's population was 515,213. Using the methodology set out in Section 2.2 of this Report, it is estimated that 19,404 people lived in the portion of Hamilton within the Study Area.

Most of the City of Hamilton that is in the Study Area is subject to the Provincial Greenbelt legislation and as such, growth in the Hamilton portion of the Study Area is likely to be limited.

3.15.2 Employment Forecasts/Estimates

No employment forecast information was available.

3.16 HALTON REGION

A relatively small portion of Halton Region is in the Study Area (see Figure 3.16). Portions of the Town of Milton and the Town of Halton Hills are within the Grand River Conservation Authority jurisdiction. All of these areas are subject to the Provincial Greenbelt Legislation and as such, growth in the Halton portion of the Study Area is likely to be limited.

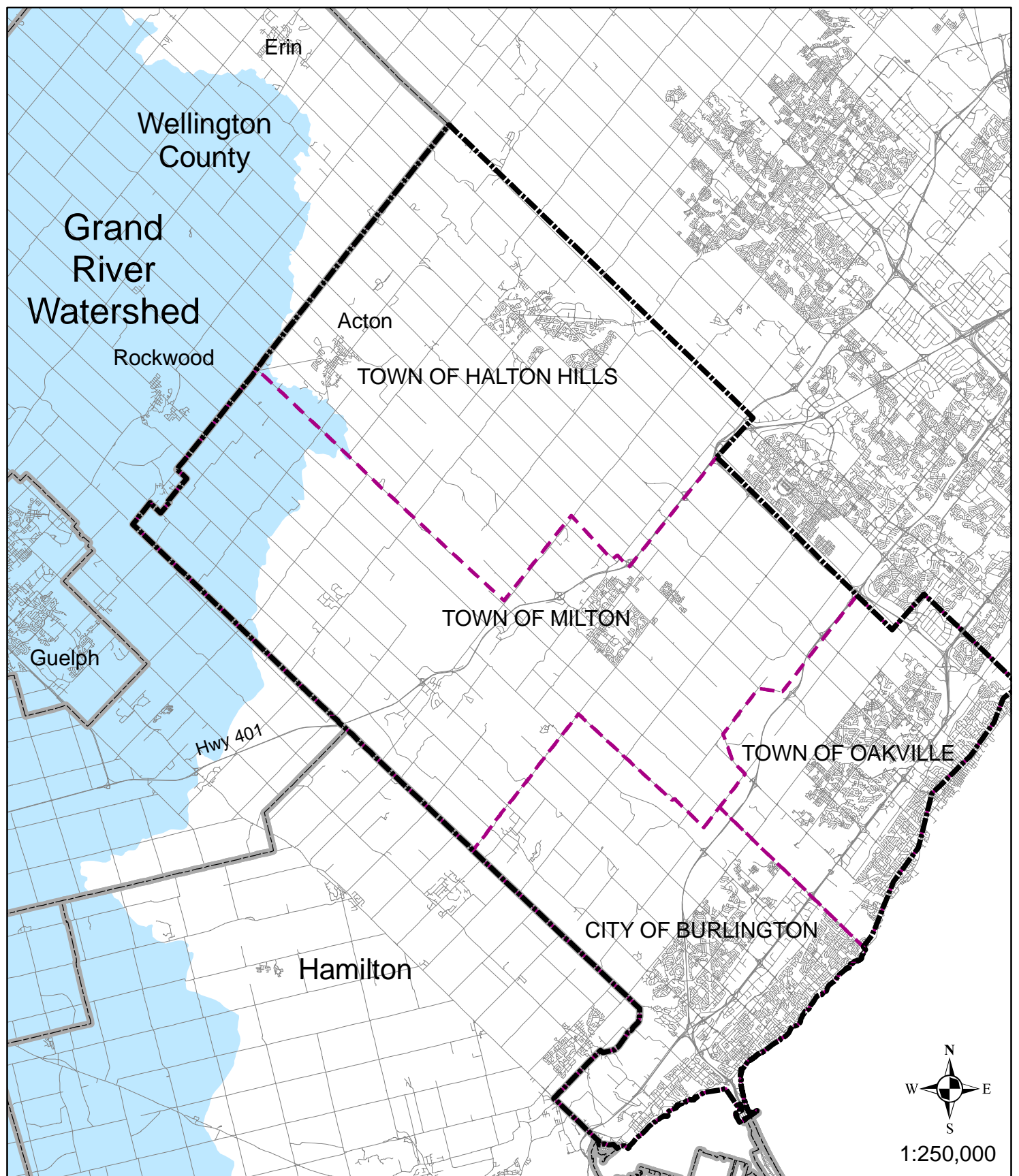
For purposes of estimating the population of Milton and Halton Hills within the Study Area, the methodology outlined in Section 2.2 of this Report was followed to estimate the 2006 population. Given that these are rural areas with relatively small populations, little growth is anticipated and for purposes of this report, the population has been shown to be stable to 2056.

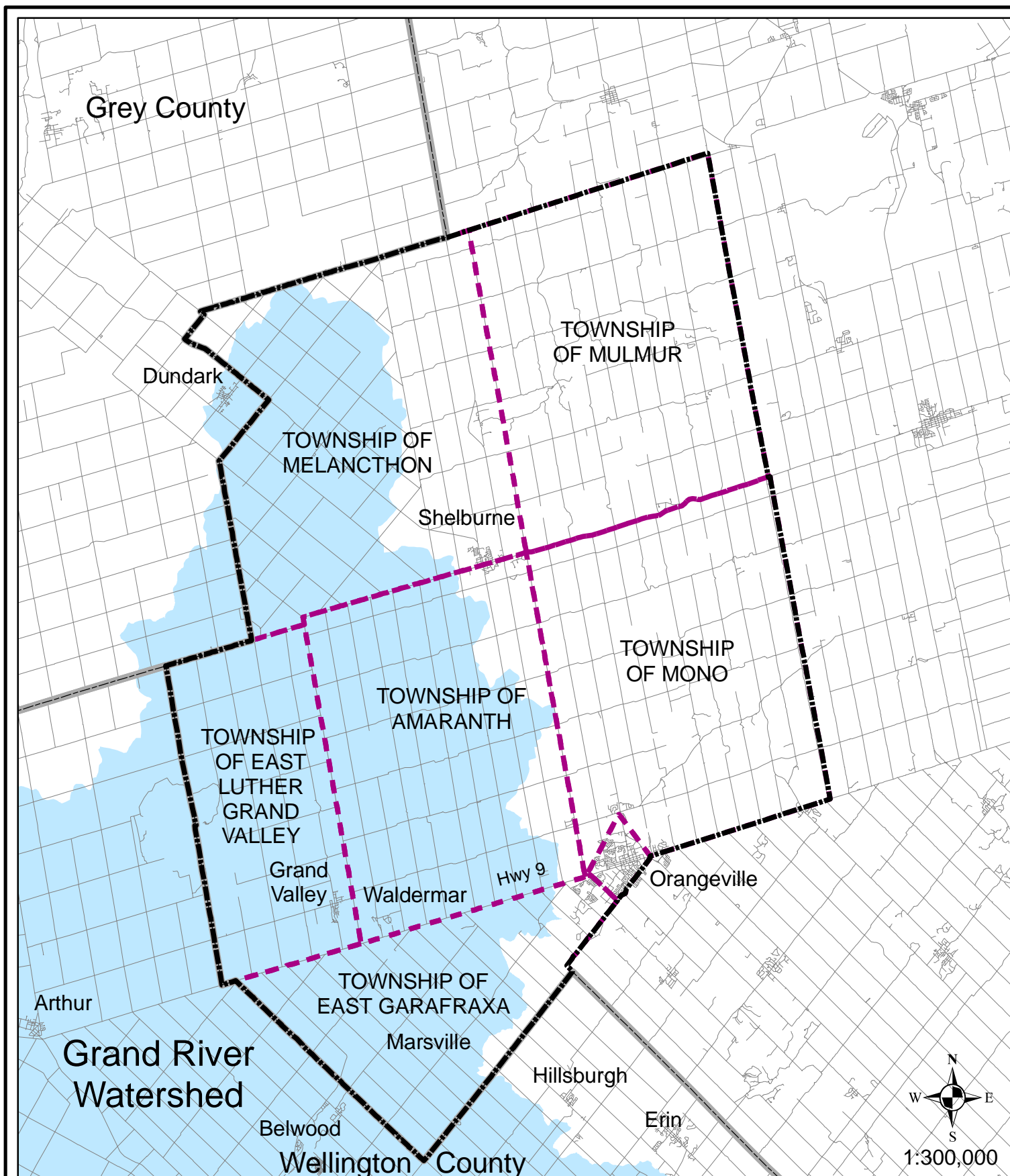
3.17 DUFFERIN COUNTY

Dufferin County does not have an Official Plan or Planning Department. Dillon Consulting and Watson and Associates Economists Ltd., prepared the Phase I and II Growth Management Study for Dufferin County and its member municipalities. This report is in draft form. This report does not contain projections at every five-year interval and provides only a 2031 target population for the lower-tier municipalities. Based on the 2031 target and the populations for the lower-tier municipalities in 2006, the interval years were estimated at a steady growth rate.

Approximately half of the County falls within the Study Area (GRCA). Municipalities within Dufferin within the Study Area are shown on Figure 3.17 and include:

- Amaranth Township
- East Garafraxa Township
- East Luther Grand Valley





- Melancthon Township
- Town of Mono

We note that the Township of Mulmur, the Town of Shelburne and the Town of Orangeville are within Dufferin County, though outside of the Study Area boundaries.

The majority of the County lands within the Study Area are rural and small hamlets, with the exception of the Grand Valley community in East Luther-Grand Valley which is serviced by municipal water and sanitary services.

We note that the Growth Management Study has not been approved or adopted by Dufferin County Council. The lower-tier municipalities within the County have made a request to the Ministry of Energy and Infrastructure ("MEI") that the population and employment density targets per hectare be lowered, from 50 people and jobs per hectare, to 46 people and jobs per hectare. To date no formal approval has been granted by MEI.

3.17.1 Amaranth Township

3.17.1.1 Population Forecasts/Estimates

Most of Amaranth Township is within the Study Area (GRCA). The most current population forecasts were taken from the draft Growth Management Study prepared by Dillon Consulting and Watson and Associates Economists for Dufferin County and its member municipalities. Waldemar is the only serviced community of Amaranth and the communities of Laurel and Waldemar are the largest centres in the Township.

The only fully serviced community in Amaranth is Waldemar, which is within the GRCA jurisdiction. There were no population forecasts provided for this community. The estimated 2006 serviced and unserved populations are found on Table 4.1.1.

The 2006 Census Dissemination Areas for Waldemar covers areas which extend beyond the boundary of the community. For purposes of this report, the 2006 Census population was estimated by taking the DA population for the DAs covering the majority of the community of Waldemar. The DAs for Laurel cover a very rural area. Therefore, for purposes of this report, the population for Laurel is included in the rural population.

There were no available forecasts for Waldemar and Laurel within the Township at the time of this report's writing.

3.17.1.2 Employment Forecasts/Estimates

Employment forecasts for the County of Dufferin are provided in the draft Growth Management Study prepared by Dillon Consulting and Watson and Associates Economists for Dufferin County and its member municipalities. This study contains target forecasts for 2001, 2006, 2011, 2021 and 2031. The forecasts are not broken down by sector of employment or community. The

methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

Staff did not provide any population equivalent figures.

3.17.1.3 Notes/Information Gaps/Future Projections

The Growth Management Study is still in draft form and is expected to be finalized in 2010.

3.17.2 Township of East Garafraxa

3.17.2.1 Population Forecasts/Estimates

Most of East Garafraxa Township is within the Study Area (GRCA). The most current population forecasts were taken from the draft Growth Management Study prepared by Dillon Consulting and Watson and Associates Economists for Dufferin County and its member municipalities. The Growth Management Study has a 2031 target population of 3,080 for East Garafraxa. Based on this target and the 2006 population, East Garafraxa is forecast to have an average annual change in population of 28 and is forecast to see 3% of Dufferin County's growth. This growth rate has been maintained to 2056.

Marsville is the only serviced community and Marsville and Orton are the Township's largest communities.

The fully serviced community in East Garafraxa is Marsville, which is within the GRCA jurisdiction. There were no population forecasts provided for this community. The 2006 Census Dissemination Areas covering Marsville extend well into rural areas beyond the community boundary (see Appendix 4). For purposes of estimating the 2006 population, this report used the population of the DA covering most of the community. The estimated 2006 population is found on Table 16. For purposes of the Dufferin County population forecasts, the 2006 population is kept stable through the forecast/estimated period.

3.17.2.2 Employment Forecasts/Estimates

Employment forecasts for the County of Dufferin are provided in the draft Growth Management Study prepared by Dillon Consulting and Watson and Associates Economists for Dufferin County and its member municipalities. This study contains target forecasts for 2001, 2006, 2011, 2021 and 2031. The forecasts are not broken down by sector of employment or community. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

3.17.2.3 Notes/Information Gaps/Future Projections

The Growth Management Study is still in draft form and is expected to be finalized in 2010.

3.17.3 East Luther Grand Valley

3.17.3.1 Population Forecasts/Estimates

East Luther/Grand Valley falls entirely within the Grand River Conservation Authority jurisdiction. It is primarily a rural municipality with the exception of the community of Grand Valley.

Population forecasts for East Luther Grand Valley are provided in the draft Growth Management Study prepared by Dillon Consulting and Watson and Associates Economists for Dufferin County and its member municipalities. This report provides a 2031 target population of 8,360 for East Luther-Grand Valley. Based on this target and the 2006 population, East Luther-Grand Valley is forecast to have an average annual change in population of 221 and is forecast to see 24% of Dufferin County's growth. This growth rate has been maintained to 2056.

The only fully serviced community in East Luther-Grand Valley is Grand Valley, which is within the GRCA jurisdiction. There were no updated population forecasts provided for this community. The estimated 2006 population is found on Table 4.1.1.

3.17.3.2 Employment Forecasts/Estimates

Employment forecasts for the County of Dufferin are provided in the draft Growth Management Study prepared by Dillon Consulting and Watson and Associates Economists for Dufferin County and its member municipalities. This study contains target forecasts for 2001, 2006, 2011, 2021 and 2031. The forecasts are not broken down by sector of employment or community. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

3.17.3.3 Notes/Information Gaps/Future Projections

The Growth Management Study is still in draft form and is expected to be finalized in 2010. Updated population forecasts could be provided for Grand Valley, the Town's serviced urban settlement.

3.17.4 Township of Melancthon

3.17.4.1 Population Forecasts/Estimates

The Township of Melancthon is partially within the Study Area (Grand River Conservation Authority jurisdiction). Population projections for Melancthon are provided in the draft Growth Management Study prepared by Dillon Consulting and Watson and Associates Economists for Dufferin County and its member municipalities. This report provides a 2031 target population of 3,850 for Melancthon. Based on this target and the 2006 population, Melancthon is forecast to have an average annual change in population of 38 and is forecast to see 4% of Dufferin County's growth. This growth rate has been maintained to 2056. There are no serviced

settlements in the Township and provision of public water and sanitary services are not anticipated.

Melancthon is forecast to grow from 2,895 in 2006 to 9,850 in 2031. This forecast growth averages 4% of the County's annual growth. For purposes of estimating growth beyond the forecast period to 2056, this rate was applied.

Population estimates for population attributable to the portion of the municipality within the Study Area were determined using the methodology described in Section 2.2 of this Report.

3.17.4.2 Employment Forecasts/Estimates

Employment forecasts for the County of Dufferin are provided in the draft Growth Management Study prepared by Dillon Consulting and Watson and Associates Economists for Dufferin County and its member municipalities. This study contains target forecasts for 2001, 2006, 2011, 2021 and 2031. The forecasts are not broken down by sector of employment or community. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

3.17.4.3 Notes/Information Gaps/Future Projections

The Growth Management Study is still in draft form.

3.18 GREY COUNTY

Only a portion of Southgate Township is within the Study Area (GRCA) (see Figure 3.18). Malone Given Parsons Ltd. ("MGP") in association with the Centre for Spatial Economics prepared the Grey County Growth Management Strategy in April of 2008. This report provided projections for the County and lower-tier municipalities to a 2031 time horizon. The projections prepared as part of this study were incorporated into the County's Official Plan.

The County lands within the Study Area are primarily rural/agricultural, with the exception of the serviced Village of Dundalk in Southgate Township.

3.18.1 Southgate Township

3.18.1.1 Population Forecasts/Estimates

Only a small portion of southern Southgate falls within the Study Area (GRCA). The most current population forecast information is found in the Grey County Growth Management Strategy, which provides population forecasts to 2031. The 2031 population target for the Township of Southgate is 11,400. Allocations to the settlement areas in Southgate, in particular the former Village of Dundalk, are not provided in the MGP report. A review of the 2006 Census Dissemination area mapping (see Appendix 4) shows that the DA boundaries extend beyond the

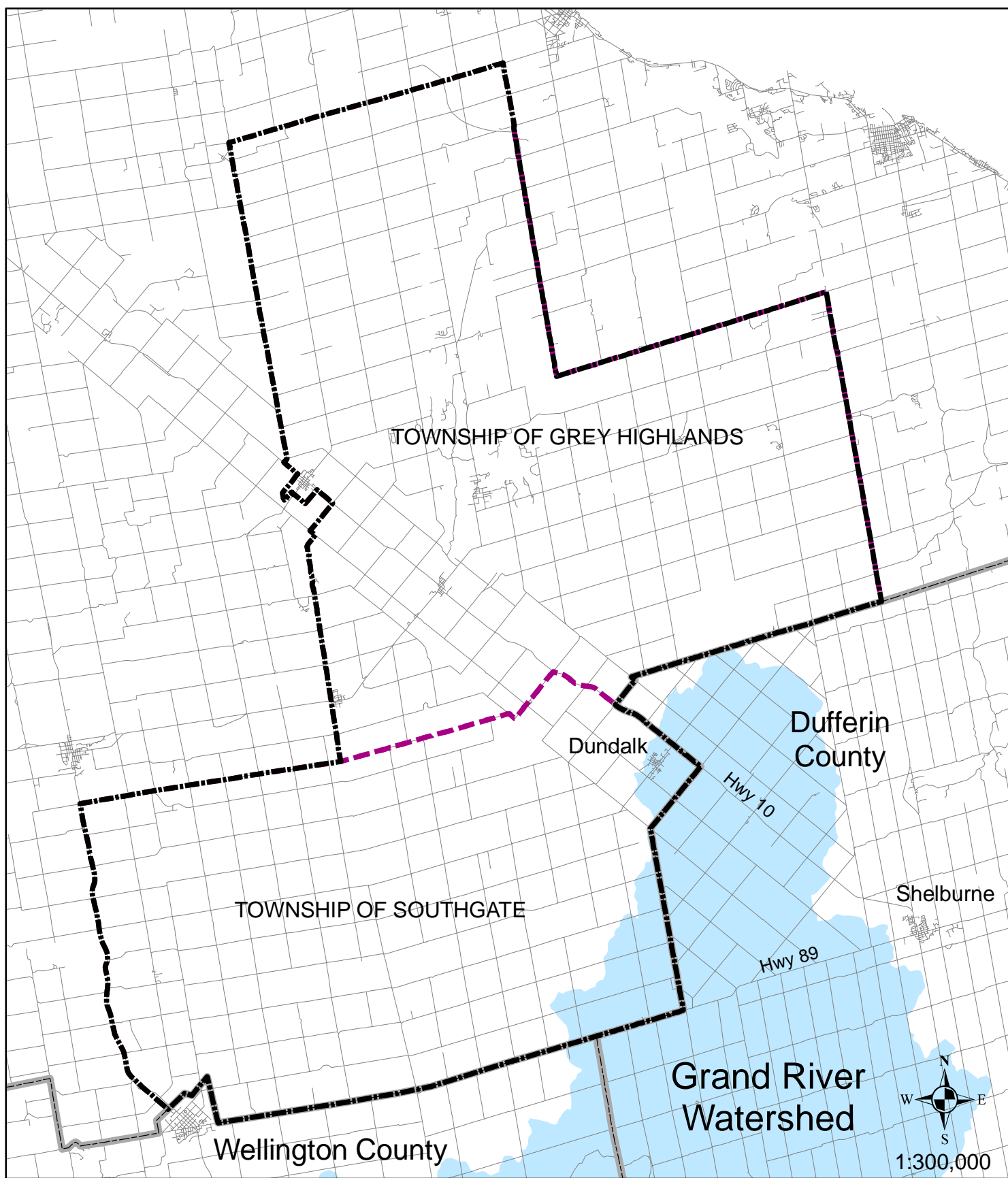


Figure 3.18
Grey County

--- County Boundary

community boundaries for Dundalk. For purposes of the 2006 population, this report uses the 2006 population figure from the Southgate Official Plan (July 2005).

The Township's forecast growth averages 2.52% per year during the forecast period and an average annual population change of 156. For purposes of estimating growth beyond the forecast period to 2056, this average annual population change was applied.

The population for the portion of the Township that is within the Study Area (including Dundalk) is estimated by the methodology outlined in Section 2.2 of the Report. The estimated 2006 serviced and unserved populations are found on Table 16.

3.18.1.2 Employment Forecasts/Estimates

Employment forecasts for the County of Grey are provided in the Grey County Growth Management Strategy. This study contains employment forecasts for the entire County to 2031, with forecasts allocated to the local municipalities for 2006 and 2031. The forecasts are not broken down by employment sector. The methodology outlined in Section 2.4 of this report was employed to estimate the employment forecast attributable to the study area, and the respective watersheds.

3.18.1.3 Notes/Information Gaps/Future Projections

None.

4.0 POPULATION AND EMPLOYMENT WITHIN EACH CONSERVATION AUTHORITY JURISDICTION

4.1 Population within Each Conservation Authority Jurisdiction

Table 4.0, Population Growth (2006-2056) by Conservation Authority Jurisdiction (appended to this report) contains population forecast and estimate totals for each Conservation Authority Jurisdiction.

Conservation Authority	Forecast/Estimated Intervals - Population				
	2006	2021	2031	2041	2056
GRCA	887,408	1,102,052	1,246,641	1,390,891	1,606,817
LPRCA	112,971	123,100	134,238	144,648	160,264
KCCA	48,941	61,379	67,788	75,315	86,606
CCCA	19,898	24,559	27,414	30,420	34,930
TOTAL STUDY AREA	1,069,218	1,311,089	1,476,082	1,641,274	1,888,616

4.1.1 Grand River Conservation Authority

Upper-tier and single-tier municipalities wholly or partially situated within the Grand River Conservation Authority jurisdiction:

- Brant
- Brantford
- Dufferin
- Grey
- Guelph
- Haldimand
- Halton
- Hamilton
- Norfolk
- Mississauga of the New Credit
- Oxford
- Perth
- Six Nations of the Grand River
- Waterloo
- Wellington

A summary of 2006 serviced and unserved populations within the GRCA jurisdiction is provided on Table 4.1.1 of this report.

4.1.2 Long Point Region Conservation Authority

Upper-tier and single-tier municipalities wholly or partially situated within the Long Point Region Conservation Authority jurisdiction:

- Brant
- Elgin
- Haldimand
- Norfolk
- Oxford

A summary of 2006 serviced and unserved populations within the LPRCA jurisdiction is provided on Table 4.1.2 of this report.

4.1.3 Kettle Creek Conservation Authority

Upper-tier and single-tier municipalities wholly or partially situated within the Kettle Creek Conservation Authority jurisdiction:

- Elgin
- London
- Middlesex
- St. Thomas

A summary of 2006 serviced and unserved populations within the KCCA jurisdiction is provided on Table 4.1.3 of this report.

4.1.4 Catfish Creek Conservation Authority

Upper-tier and single-tier municipalities wholly or partially situated within the Catfish Creek Conservation Authority jurisdiction:

- Elgin
- Oxford
- St. Thomas

A summary of 2006 serviced and unserved populations within the CCA jurisdiction is provided on Table 4.1.4 of this report.

4.2 Employment within Each Conservation Authority Jurisdiction

Table 5.0, Employment Growth (2006-2056) by Conservation Authority Jurisdiction (appended to this report) contains the summary of available employment growth forecasts and estimates. As

noted in previous sections of this report, employment forecasts were not available for all municipalities at the time of this report's writing. These information gaps are noted.

Further, we note that in the some instances, limited employment forecasts were available (for example employment forecasts for Central Elgin and St. Thomas were available for Elgin County, but employment forecasts for Aylmer, Bayham, Malahide and Southwold were not available). These information gaps are noted.

Conservation Authority	Forecast/Estimated Intervals - Employment				
	2006	2021	2031	2041	2056
GRCA	118,620	142,407	260,787	177,261	200,470
LPRCA	56,272	62,077	66,923	72,334	80,992
KCCA	20,500	27,240	31,401	35,763	42,307
CCCA	924	1,188	1,314	1,470	1,704
TOTAL STUDY AREA	196,316	232,912	360,425	286,828	325,473

5.0 CENSUS POPULATIONS

As previously noted, Tables 4.1.1 to 4.1.4, 2006 Base Population by Conservation Authority Jurisdiction contains the 2006 census populations for municipalities in the Study Area. In the instance of upper-tier municipalities that have 'City' status, the Census populations were not available for the former municipalities or communities. In certain instances where the Census information was not available for smaller communities, the methodology outlined in Section 2.6 was used to determine the population of the serviced and unserved settlement areas. These instances are noted on the respective tables.

6.0 LISTING OF FUTURE POPULATION AND EMPLOYMENT FORECASTS

Through the course of consolidating available forecasts and consulting with municipal staff, planning exercises and other studies were identified for which updated population forecasts are anticipated. The following is a listing of upcoming studies and forecast exercises for jurisdictions within the Study Area:

Elgin County

Southwold

- Updated population forecasts are anticipated by the Township in mid-2009

Bayham

- Official Plan review to be completed in mid-2009

Norfolk County

- Updated population forecasts are anticipated in mid-2009

Haldimand County

- Updated population forecasts are anticipated in mid-2009

Brant County

Brant County

- Official Plan review to be completed in early 2010

City of Brantford

Brantford

- Draft population forecasts to 2031 are to become official in mid-2009

Perth County

- No information received from County Staff

Waterloo Region

- Population forecasts to 2031 have been adopted by Regional Council through the adoption of the new Regional Official Plan
- Draft employment forecasts to 2031 are to be available in late June 2009
- It is anticipated that the lower-tier municipalities will produce allocations to the settlement areas in 2010

Dufferin County

- The Dufferin Growth Management Strategy (GMS) was not approved or adopted by County Council. The local municipalities in Dufferin County have requested a lower population target per hectare of the Ministry of Energy and Infrastructure (46 people and jobs per hectare instead of 50). No formal approval of the lower target has been granted to date.
- Draft population forecasts to 2031 have not yet been adopted by County Council.

7.0 REFERENCES

Statistics Canada Census. <http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E>

This link is to the Statistics Canada Community Profiles, which provides populations for the municipalities within the Lake Erie Source Protection Region.

BRANT

Brant County Official Plan Review Growth Analysis Study 2006 to 2031. Watson & Associates Economists. June, 2008.

This study was prepared in support of the County's five-year Official Plan review and part of the provincial Growth Plan conformity exercise under the Growth Plan. This study provides historic population and employment statistics, as well as population and employment projections for the County in five-year intervals from 2006 to 2031. The population and employment projections are contained in Table 7-1 in Section 7-3 and Table 7-4 in Section 7-8 respectively.

BRANTFORD

City of Brantford Development Charges Background Study - Draft Growth Forecasts. Hemson Consulting Ltd. January, 2009.

This report was prepared as a background study concerning to development charges in the City of Brantford, and as part of the provincial conformity exercise under the Growth Plan. This study provides projections for population and employment growth within the City in five-year intervals from 2006 to 2031. The population and employment projections are contained on pages 11 and 16 of the study respectively.

DUFFERIN

County of Dufferin Growth Management Study (Draft). Dillon Consulting Ltd., Watson & Associates Economists Ltd. December, 2008.

The Growth Management Study was prepared as part of the County of Dufferin's provincial conformity exercise. This study identifies where, when and how growth within the County of Dufferin and its lower-tier municipalities should occur. The study is broken down to two phases: phase one of the study looks at the County and its municipalities existing capacity to accommodate growth, and phase two of the study examines how additional growth beyond the existing capacity can be accommodated in the future. Population and employment growth targets for 2031 are provided for the local municipalities on page 178 and 179 of the study.

ELGIN

Background Study Official Plan of the Township of Malahide. Cumming Cockburn Limited. 2001.

This study provided background information to the preparation of the Township of Malahide Official Plan. As part of that background information, population information for the Township was compiled and forecasts were prepared. Population forecasts are provided in Table 1 of the study.

Municipality of Bayham Growth Study (5 Year Official Plan Review). Discussion Paper #2. IBI Group. February, 2008.

This discussion paper was prepared as part of the Municipality's five-year review of its Official Plan, and examines the Municipality's potential for growth. Population forecasts are provided on a yearly basis from 2007 to 2017. Population forecasts are provided on pages 6 and 7 of the paper.

Population, Housing and Employment Projections, Central Elgin, 2006-2026 (Strategic Growth Scenario). Lapointe Consulting in Association with Dillon Consulting Inc. May, 2007.

The population and employment projections were prepared for the Municipality as part of the update to its Official Plan. The projections provide background information in planning for future growth, including the designation of land for development and planning for infrastructure needs. Three growth scenarios are provided for population and employment in the Municipality; Council endorsed the strategic growth scenario. The strategic growth population forecasts are found in table 21 on page 31 of the report, and the strategic growth employment forecasts are found in table 36 on page 52 of the report.

St. Thomas, Southwold, and Yarmouth Population Projections and Housing and Land Requirements: Final Report. LaPointe Consultants Inc. September, 1995.

This report was prepared collectively between the three municipalities within Elgin County as a recent annexation from Southwold and Yarmouth Townships to the City of St. Thomas had occurred. Following the annexation, the report was to identify land supply and housing requirements and provide population forecasts as background to that information. This report was used as a reference for the Township of Southwold. The Growth Management Strategy population forecasts are provided in Table 24b, page 44 of the report.

Town of Aylmer Official Plan (Office Consolidation 2008). Monteith Brown Planning Consultants. June, 2008.

This is the Official Plan for the Town of Aylmer. Section 2.2.3 of the OP, Accommodating Future Growth, provides a target population for 2026. Population forecast information is provided on pages 5 and 6 of the OP.

FIRST NATIONS

The Growth Outlook for the Greater Golden Horseshoe, Reference Forecast Scenarios. Hemson Consulting Ltd., 2005.

Personal Communication with Barbara Craig, statistics from the last 5 years. Six Nations Council Brantford., August 2005.

Registered Indian Population by Sex and Residence 1998. Indian and Northern Affairs., 1999.

Registered Indian Population by Sex and Residence 2001. Indian and Northern Affairs., 2002.

Registered Indian Population by Sex and Residence 2003. Indian and Northern Affairs., 2004.

Registered Indian Population by Sex and Residence 2004. Indian and Northern Affairs. 2005.

GREY

Growth Projection Study (Official Plan Amendment). Grey County. October, 2008.

This Study constituted an amendment to the County of Grey's Official Plan, as part of the County's five-year OP review. The projections were prepared in order for the County to assess its future need for housing, infrastructure and land to accommodate growth. Population projections in five-year intervals from 2006 to 2026 are provided on page 9 of the Study.

Grey County Growth Management Strategy. Malone Given Parsons Ltd. in Association with the Centre for Spatial Economics (C₄SE). April, 2008.

The Growth Management Strategy was prepared for Grey County as part of its five-year Official Plan review exercise. The strategy included growth projections and a supply and demand analysis of County land. The population and employment growth projections at are provided in five-year intervals from 2006 to 2031 on pages 2 and 3 of the strategy.

Township of Southgate Official Plan. D.C. Slade Consultants. July, 2005, consolidated to June, 2008.

This is the Township of Southgate's Official Plan. Population targets are provided for 2011 and 2021. The population forecast information is contained on pages 34-37 of the Official Plan.

GUELPH

Guelph Development Charges Study. Watson and Associates Economists Ltd., January, 2008.

The Development Charges Study contains information on population and housing growth anticipated to 2031 in the City of Guelph.

Guelph Local Growth Management Strategy Recommendations. City of Guelph. June 23, 2008.

The Local Growth Management Strategy was prepared by the City of Guelph as part of its provincial conformity exercise. The strategy contains a target population and employment forecast for 2031. The 2031 target population growth target is 169,000 and the 2031 target employment growth target is 31,000.

HALDIMAND

Haldimand County Population and Household Forecasts 2001-2026. Hemson Consulting Ltd. May, 2004.

Hemson Consulting prepared forecasts for Haldimand County based on the 2001 census population information. These forecasts were used as background information for a number of documents, including the County's Economic Strategic Plan, Development Charges Background Study and Official Plan.

HALTON

Best Planning Estimates of Population, Occupied Dwelling Units and Employment, 2002-2021. Regional Municipality of Halton. September, 2003.

This is a research paper that was prepared by the Region of Halton's Planning and Transportation Services Division in 2003. The estimates were prepared for the Region, its local municipalities and the private sector to have a better understanding of the anticipated growth of the Region. Population estimates are provided on a yearly basis for the local municipalities of Halton Region, from 1996 to 2021. Table 1 on page 8 of the report contains the population forecasts and Table 11 on page 18 the employment forecasts.

HAMILTON

Land Use data (Year-end 2006). City of Hamilton Planning and Economic Development Department. January 2009.

This information was provided by the City of Hamilton's Planning Department and consists of a map showing the areas within the Grand River Conservation Authority/Lake Erie Source Protection Region and an excel spreadsheet which shows the 2006 populations of the communities within the area forecasted to 2031. This information was available through the work undertaken in support of the Growth Related Integrated Development Strategy (GRIDS) Population Projections.

Land Use data (Year-end 2006). City of Hamilton Planning and Economic Development Department. October 2009.

This information was provided by the City of Hamilton's Planning Department and consists of the 2006 population of the former Town of Lynden and the surrounding areas. This information was available through the work undertaken in support of the Growth Related Integrated Development Strategy (GRIDS) Population Projections.

LONDON

City of London Employment, Population, Housing and Non-Residential Construction Projections 2006 Update. Clayton Research Associates. September 29, 2006.

This report is an update to a report originally prepared in 2003. This report includes population, employment and housing forecasts, and was prepared to help the City of London better understand how and where growth will occur. Population and employment forecasts are provided in five-year intervals from 1996 to 2031. Employment forecasts are broken down by sector. Population forecasts are found in Figure 31 on page 54 of the report and employment forecasts are found in Figure 12 on page 32 of the report.

Residential - Estimates of Population by Planning District 2004 – 2031. City of London Planning Department. September, 2003.

These estimates were provided by the City of London's planning department for the preparation of the 2005 report. A map showing the planning districts that comprise the City, as well as estimates of the population and housing units by planning district are included in the material.

MIDDLESEX

County of Middlesex Population Projection Report, 2001-2026. Marshall, Macklin, Monaghan Limited. 2003

This report contains projections that were prepared based on the 2001 census information. The County of Middlesex updated its 25 year projections, providing forecasts to 2026. The projections are provided at the County and local municipal level. Three growth scenarios are presented in the report; the reference scenario was endorsed by County Council. The reference scenario population projections are contained in table 3-15 on page 15 of the report.

NORFOLK

Population and Employment Projections. Norfolk County. January, 2004

Norfolk County's population and employment projections were prepared as a precursor to the County's growth management strategy, and to inform the new Official Plan. The population and

employment projections contained in the report are in five-year intervals from 2001 to 2026. The employment projections are broken down by sector. Three growth scenarios are presented in the report; the reference scenario was endorsed by County Council. The reference scenario population projections are contained in table 4 on page 14 of the report, and the reference scenario employment projections are contained in table 8 on page 22 of the report.

OXFORD

Population, Household and Employment Forecasts, 2001-2031. Hemson Consulting Ltd. April, 2006.

This report was prepared by Hemson Consulting for the County of Brant in conjunction with the County's Economic Development Strategy. The population, employment and housing forecasts are intended to provide the County with an understanding of the growth that is anticipated, and to determine how best to accommodate that growth. The forecasts are provided at the County and local municipal level. The forecasts are provided in tables 8, 9 and 12, which are found on pages 12 and 13 of the report.

Technical Memorandum - Review of Current Biosolids Management Practices and Future Projections in Oxford County (as appended to the Biosolids Management Master Plan). XCG Consultants Limited. June 7, 2004.

The Review of Biosolids Management Practices and Future Projections in Oxford County was prepared as an appendix to the Biosolids Management Master Plan. The Review and Future Projections contains population forecasts for the County, its member municipalities and their communities were prepared to better anticipate the future quantities of biosolids. Population projections are contained in table 3.1 on page 3-1 of the memorandum.

PERTH

County of Perth Official Plan, April 2008 Consolidation. County of Perth. April 2008.

This is the Official Plan for the County of Perth, which has been consolidated too April, 2008. Section 2.1 of the Perth County OP, on page 2-2, contains population information at the County level, including a projected target population for 2021.

ST. THOMAS

Housing and Employment Projections, St. Thomas Population. Lapointe Consulting in Association with Dillon Consulting Inc. May, 2007.

The population and employment projections were prepared for the City as part of the update to its Official Plan. The projections provide background information for a number of planning documents and also help to shape the City's future vision. Three growth scenarios are provided

for population and employment in the City; Council endorsed the strategic growth scenario. The strategic growth population forecasts are found in table 26 on page 36 of the report, and the strategic growth employment forecasts are found in table 42 on page 59 of the report.

WATERLOO

Region of Waterloo Interim Population Forecasts. Region of Waterloo. February, 2009.

These population forecasts were developed by the Region of Waterloo as part of the Provincial conformity exercise under the Growth Plan.

Region of Waterloo Wastewater Treatment Master Plan. Region of Waterloo. January, 2006.

The Wastewater Treatment Master Plan was prepared in 2006 as an update to a previous Master Plan, completed in 1995. Growth projections were done in order to better understand future servicing needs for the Region and its thirteen wastewater treatment plants. This Master Plan provides a 2004 base population for the communities within the Region of Waterloo on municipal services as well as a 2041 target population for those serviced communities. Population and employment forecasts are found on Figure 2.1, Existing and Future (2041) Waste Water Treatment Plan (WWTP) Service Areas/Flows. Population equivalents for each WWTP are provided on Table 2.7.

WELLESLEY

2009 Year-end Estimates – Township of Wellesley. Region of Waterloo, Planning and Information Research. Extracted September 24, 2009.

This information was provided by Township of Wellesley Planning staff in the form of an excel spreadsheet. This spreadsheet contains the estimated population and occupied dwellings for the settlements within the Township. The settlement areas that were included in this report were confirmed by Township of Wellesley Planning staff to be either fully or partially serviced.

WELLINGTON

Population, Housing and Employment Forecast Update, 2006-2031. Watson & Associates. April 24, 2008.

This update was prepared as part of the County of Wellington's provincial conformity exercise and as a background report to the County's five-year Official Plan review. Population forecasts are provided in five-year increments from 2006 to 2031, at the County, local municipal and community level, and employment forecasts at the County and local municipal level. Population forecasts are found on pages 16-23, and employment forecasts on page 16.

Official Plan Amendment No. 61. County of Wellington. June 12, 2008

Official Plan Amendment No. 61 (OPA 60) is the amendment that brought the population, employment and household forecasts from the Watson and Associates report into the County Official Plan.

WILMOT

Population Statistics. Township of Wilmot. 2009

This one page report contains the populations for the settlement areas of the Township of Wilmot for 1991, and from 2001 to 2008. The settlement areas that were included in this report were confirmed by Township of Wilmot Planning and Economic Development staff to be either fully or partially serviced. This report also provides a comparison of forecasted growth in the Township to the forecasted growth in the Region of Waterloo.

WOOLWICH

Community Profile and Development Information. Township of Woolwich. 2009.

This document contains the most up-to-date locational, demographic and economic information for the Township of Woolwich in 2009. The 2009 population for the settlements within the Township of Woolwich are found on page 5 of the report. The settlements that were included in the report were confirmed by Township of Woolwich staff to be either fully or partially serviced. The population targets for the communities of Elmira, St. Jacobs and Breslau for 2016 are also found on page 5.

APPENDIX 1

Population Forecasts/Estimates Charts

TABLE 3.1 - POPULATION
ELGIN COUNTY

UPPER TIER	LOWER TIER	POPULATION														
		1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Elgin County	County Wide ¹				81,553	85,351	89,149	92,947	96,745	100,543	104,341	108,139	111,937	115,735	119,533	123,331
	Central Elgin ¹	10,817	11,574	12,156	12,293	12,723	14,079	15,352	16,596	17,633	18,433	19,575	20,717	21,859	23,001	24,143
	Census Population				12,293	12,723										
	Population in Study Area (100%)					12,723	14,079	15,352	16,596	17,633	18,433	19,575	20,717	21,859	23,001	24,143
	Port Stanley (Serviced) ⁶					1,828										
	Belmont (Serviced) ⁶					1,699										
	KCCA (77.65%)					9,879	10,932	11,921	12,887	13,692	14,313	15,200	16,087	16,974	17,860	18,747
	CCCA (22.35%)					2,844	3,147	3,431	3,709	3,941	4,120	4,375	4,630	4,885	5,141	5,396
	Bayham ²			6,234	6,375	6,727	7,247	7,807	8,284	8,762	9,239	9,716	10,194	10,671	11,148	11,626
	Census Population				6,375	6,727										
	Port Burwell (Serviced) ³					500										
	Vienna (Serviced) ³					600										
	Population in Study Area					6,727	7,247	7,807	8,284	8,762	9,239	9,716	10,194	10,671	11,148	11,626
	CCCA (0.56%)					38	41	44	46	49	52	54	57	60	62	65
	LPRCA (99.44%)					6,689	7,206	7,763	8,238	8,713	9,187	9,662	10,137	10,611	11,086	11,561
	Aylmer ³ (serviced)	5,250	6,255	8,025	7,158	7,500	7,968	8,436	8,903	9,371	9,839	10,307	10,774	11,242	11,710	12,178
	Census Population				7,158	7,069										
	Population in Study Area (100%)					7,500	7,968	8,436	8,903	9,371	9,839	10,307	10,774	11,242	11,710	12,178
	CCCA					7,500	7,968	8,436	8,903	9,371	9,839	10,307	10,774	11,242	11,710	12,178
	Malahide ⁴		8,072		8,299	8,636	10,260	10,600	10,940	11,708	12,476	13,244	14,012	14,781	15,549	16,317
	Census Population				8,777	8,828										
	Population in Study Area (99%)					8,550	10,158	10,494	10,831	11,591	12,352	13,112	13,872	14,633	15,393	16,154
	Springfield (Serviced) ⁶					601										
	Port Bruce (Serviced) ⁶					570										
	KCCA (5.76%)					497	591	611	630	674	719	763	807	851	896	940
	CCCA (85.48%)					7,382	8,770	9,061	9,352	10,008	10,665	11,321	11,978	12,634	13,291	13,947
	LPRCA (7.76%)					670	796	823	849	909	968	1,028	1,087	1,147	1,207	1,266
	Southwold ⁵	4,336	4,510	4,590	5,024	5,469	5,993	6,486	6,822	7,048	8,101	8,627	9,153	9,680	10,206	10,732
	Census Population				4,487	4,724										
	Population in Study Area (39.61%)					2,166	2,374	2,569	2,702	2,792	3,209	3,417	3,626	3,834	4,043	4,251
	KCCA (39.61%)					2,166	2,374	2,569	2,702	2,792	3,209	3,417	3,626	3,834	4,043	4,251
Total Population	Study Area					37,666	41,825	44,658	47,316	50,149	53,071	56,127	59,183	62,239	65,295	68,352
	KCCA					12,543	13,897	15,101	16,219	17,158	18,241	19,380	20,520	21,659	22,798	23,938
	CCCA					17,763	19,926	20,972	22,010	23,369	24,675	26,058	27,439	28,822	30,204	31,587
	LPRCA					7,359	8,003	8,586	9,087	9,621	10,155	10,689	11,224	11,758	12,292	12,827

SOURCES:

¹ Population, Housing and Employment Projections, Central Elgin, 2006-2026 (Strategic Growth Scenario)
Lapointe Consulting in association with Dillon Consulting Inc., May 2006

² Municipality of Bayham Growth Study, 5 Year Official Plan Review
IBI Group, February 2008

³ Town of Aylmer Official Plan, 2008 Consolidation
Monteith Brown Planning Consultants, 2008

⁴ Background Study, Official Plan of the Township of Malahide
Cumming Cockburn Limited, 2001

⁵ St. Thomas, Southwold, and Yarmouth Population Projections and Housing and Land Requirements: Final Report
Lapointe Consultants Inc., 1995

⁶ The 2006 population figures have been estimated using the methodology outlines in Section 2.6 of this Report. No forecasts for population were available for these communities.

NOTES:

- Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
- Population counts for 1986 to 2001 sourced from Statistics Canada.
- Numbers may not add due to rounding.

	Existing Forecast
	Estimated Population
	Serviced Population
	Unserviced Population

TABLE 3.2 - POPULATION
ST. THOMAS

SINGLE TIER	POPULATION														
	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
St. Thomas' (Serviced)	28,943	30,332	31,407	33,303	36,110	39,171	42,116	44,881	47,236	49,063	51,654	54,244	56,835	59,425	62,016
Census Population				33,303	36,110										
Population in Study Area (100%)					36,110	39,171	42,116	44,881	47,236	49,063	51,654	54,244	56,835	59,425	62,016
KCCA (96%)					34,666	37,604	40,431	43,086	45,347	47,100	49,587	52,074	54,561	57,048	59,535
CCCA (4%)					1,444	1,567	1,685	1,795	1,889	1,963	2,066	2,170	2,273	2,377	2,481
Study Area					36,110	39,171	42,116	44,881	47,236	49,063	51,654	54,244	56,835	59,425	62,016
KCCA					34,666	37,604	40,431	43,086	45,347	47,100	49,587	52,074	54,561	57,048	59,535
CCCA					1,444	1,567	1,685	1,795	1,889	1,963	2,066	2,170	2,273	2,377	2,481

SOURCE:

Housing and Employment Projections, St. Thomas Population,
Lapointe Consulting in association with Dillon Consulting Inc., May 2007

Existing Forecast

- NOTES:
- 1. Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
 - 2. Population counts for 1986 to 2001 sourced from Statistics Canada.
 - 3. Numbers may not add due to rounding.

TABLE 3.3
CITY OF LONDON

SINGLE TIER	POPULATION														
	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
City of London ¹			325,640	336,530	355,900	374,200	392,300	409,700	426,000	441,200	455,417	469,633	483,850	498,067	512,283
Census Population				336,539	352,395										
Total Population in Study Area (0.22%)					722	759	796	831	864	895	924	953	982	1,010	1,039
KCCA					722	759	796	831	864	895	924	953	982	1,010	1,039

SOURCE:

	Existing Forecasts
	Estimated Population

¹ Employment, Population, Housing and Non-Residential Construction Projections, City of London 2006 Update
Clayton Research Associates
September 29, 2006

NOTES:

- 1. Projections shaded in grey were provided by the municipality.
- 2. Population counts for 1986 to 2001 sourced from Statistics Canada.
- 3. Numbers may not add due to rounding.

TABLE 3.4
COUNTY OF MIDDLESEX

UPPER TIER	LOWER TIER	POPULATION														
		1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Middlesex County	County Wide ¹		61,859		66,635	71,502	75,399	78,558	81,791	88,896	93,245	97,593	101,942	106,290	110,639	114,987
	Census Population															
	Middlesex Centre ¹				14,242	15,717	16,897	18,378	19,734	22,939	24,745	26,550	28,356	30,161	31,967	33,772
	Census Population				14,242	15,589										
	Population in Study Area (1.9%)					289	311	338	363	422	455	488	521	555	588	621
	Thames Centre ¹				12,473	13,706	14,612	15,726	16,730	19,419	20,847	22,276	23,704	25,132	26,560	27,989
	Census Population				12,473	13,085										
	Population in Study Area 5.26%)					721	769	827	880	1,022	1,097	1,172	1,247	1,322	1,397	1,472
TOTAL POPULATION	Total Population in Study Area					1,010	1,079	1,165	1,243	1,443	1,552	1,660	1,768	1,877	1,985	2,093
	KCCA					1,010	1,079	1,165	1,243	1,443	1,552	1,660	1,768	1,877	1,985	2,093

SOURCES:

¹ County of Middlesex Population Projection Report, 2001-2026
Marshall, Macklin, Monaghan Limited, 2003

	Existing Forecasts
	Estimated Population

NOTES:

- 1. Projections shaded in grey were provided by the municipality.
- 2. Numbers may not add due to rounding.

TABLE 3.5 - Population
OXFORD COUNTY

UPPER TIER	LOWER TIER	POPULATION														
		1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
	County Wide¹				99,300	106,400	114,100	122,900	131,200	138,000	143,900	151,400	158,900	166,400	173,900	181,400
	Census Population				99,270	102,756										
	Blandford-Blenheim¹				7,600	7,500	8,400	8,700	9,000	9,200	9,400	9,780	10,160	10,540	10,920	11,300
	Census Population				7,422	7,149										
	Plattsville²				1,425	1,550	1,675	1,800	1,925	2,050	2,175	2,300	2,425	2,550	2,675	2,800
	Drumbo²				560	602	644	686	713	755	797	1,567	2,336	3,106	3,876	4,646
	Bright⁴					512										
	Rural/Hamlet				5,615	5,348	6,081	6,214	6,362	6,395	6,428	5,913	5,399	4,884	4,369	3,854
	Rural within Study Area (89.30%)				5,014	4,776	5,430	5,549	5,681	5,711	5,740	5,281	4,821	4,361	3,902	3,442
	Total Population in GRCA				6,999	6,928	7,749	8,035	8,319	8,516	8,712	9,147	9,582	10,017	10,453	10,888
	Norwich¹				10,500	11,000	11,500	12,200	12,800	13,400	13,800	14,360	14,920	15,480	16,040	16,600
	Census Population				10,478	10,481										
	Norwich²				2,495	2,581	2,667	2,753	2,838	2,924	3,010	3,096	3,182	3,267	3,353	3,439
	Otterville³					1,112										
	Springford⁴					613										
	Rural				8,005	8,419	8,833	9,447	9,962	10,476	10,790	11,264	11,738	12,213	12,687	13,161
	Rural within Study Area (89%)				7,124	7,493	7,861	8,408	8,866	9,324	9,603	10,025	10,447	10,869	11,291	11,713
	Total Population in Study Area (GRCA,LPRCA)				9,619	10,074	10,528	11,161	11,704	12,248	12,613	13,121	13,629	14,137	14,644	15,152
	Total Rural Population in GRCA (11.72%)				938	987	1,035	1,107	1,168	1,228	1,265	1,320	1,376	1,431	1,487	1,542
	Total Rural Population in LPRCA (77.28%)				6,186	6,506	6,826	7,301	7,699	8,096	8,339	8,705	9,071	9,438	9,804	10,171
	Total Population in LPRCA (Urban and Rural)				8,681	9,087	9,493	10,054	10,537	11,020	11,349	11,801	12,253	12,705	13,158	13,610
	South-West Oxford¹				7,800	8,000	8,300	8,600	8,900	9,100	9,300	9,560	9,820	10,080	10,340	10,600
	Census Population				7,782	7,589										
	Mount Elgin²				330	400	470	540	610	680	750	820	890	960	1,030	1,100
	Brownsville³					676										
	Rural/Hamlet				7,470	7,600	7,830	8,060	8,290	8,420	8,550	8,740	8,930	9,120	9,310	9,500
	Rural within Study Area (32.84%)				2,453	2,496	2,571	2,647	2,722	2,765	2,808	2,870	2,933	2,995	3,057	3,120
	Total Population in Study Area (LPRCA, CCCA)				2,783	2,896	3,041	3,187	3,332	3,445	3,558	3,690	3,823	3,955	4,087	4,220
	Total Rural Population in LPRCA (23.76%)				1,775	1,806	1,860	1,915	1,970	2,001	2,031	2,077	2,122	2,167	2,212	2,257
	Total Rural Population in CCCA (9.08%)				678	690	711	732	753	765	776	794	811	828	845	863
	Tillsonburg ¹				14,100	15,300	16,500	18,000	19,400	20,600	21,500	22,740	23,980	25,220	26,460	27,700
	Census Population				14,052	14,822										
	East Zorra-Tavistock¹				7,200	7,500	7,900	8,200	8,600	8,900	9,100	9,420	9,740	10,060	10,380	10,700
	Census Population				7,238	7,350										
	Rural/Hamlet				4,870	5,062	5,354	5,546	5,838	6,030	6,122	6,334	6,546	6,758	6,970	7,182
	Rural within Study Area (4.16%)				203	211	223	231	243	251	255	263	272	281	290	299
	Total Population in GRCA				203	211	223	231	243	251	255	263	272	281	290	299
	Woodstock¹				33,000	36,000	39,500	43,100	46,900	49,700	52,800	56,160	59,520	62,880	66,240	69,600
	Census Population				33,269	35,480										
	Population within Study Area				211	230	253	276	300	318	338	359	381	402	424	445
TOTAL POPULATION	TOTAL POPULATION IN STUDY AREA				33,704	35,408	38,042	40,614	42,999	45,059	46,638	48,962	51,286	53,610	55,934	58,258
	Grand River Conservation Authority				8,351	8,355	9,260	9,649	10,030	10,312	10,569	11,090	11,611	12,132	12,653	13,174
	Long Point Region Conservation Authority				24,556	26,193	27,854	29,969	31,906	33,620	34,880	36,617	38,355	40,092	41,830	43,567
	Catfish Creek Conservation Authority				678	690	711	732	753	765	776	794	811	828	845	863

SOURCE:
County of Oxford Population, Housing and Employment Forecasts, 2001-2031
Hemson Consulting Ltd., April 2006

Existing Forecast
Estimated Population

Technical Memorandum: Review of Current Biosolids Management Practices and Future Projections in Oxford County
XCG Consultants Limited, 2004

Communities where 2006 populations figures were not available were estimated using the methodology outlined in Section 2.6 of this report. These figures were not added to the totals for the County and were not prorated to 2056.

- NOTES:
- Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
 - Population counts for 1986 to 2001 sourced from Statistics Canada
 - Numbers may not add due to rounding.
 - Only part of the County is within the Study Area

TABLE 3.6
NORFOLK COUNTY

SINGLE TIER		POPULATION																
		1976	1981	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Norfolk County	County Wide¹				59,410	60,400	60,850	68,600	75,820	72,410	70,180	74,260	76,942	79,624	82,306	84,988	87,670	90,352
	Census Population						60,847	62,563										
	Simcoe¹						14,180	16,160	17,860	17,050	16,530	17,490	18,152	18,814	19,476	20,138	20,800	21,462
	Total Population in LPRCA						14,180	16,160	17,860	17,050	16,530	17,490	18,152	18,814	19,476	20,138	20,800	21,462
	Port Dover¹						5,530	5,860	6,470	6,180	5,990	6,340	6,502	6,664	6,826	6,988	7,150	7,312
	Total Population in LPRCA						5,530	5,860	6,470	6,180	5,990	6,340	6,502	6,664	6,826	6,988	7,150	7,312
	Delhi¹						4,000	5,020	5,550	5,300	5,140	5,440	5,728	6,016	6,304	6,592	6,880	7,168
	Total Population in LPRCA						4,000	5,020	5,550	5,300	5,140	5,440	5,728	6,016	6,304	6,592	6,880	7,168
	Waterford¹						2,870	3,370	3,730	3,560	3,450	3,650	3,806	3,962	4,118	4,274	4,430	4,586
	Total Population in LPRCA						2,870	3,370	3,730	3,560	3,450	3,650	3,806	3,962	4,118	4,274	4,430	4,586
	Port Rowan¹						790	960	1,070	1,020	990	1,040	1,090	1,140	1,190	1,240	1,290	1,340
	Total Population in LPRCA						790	960	1,070	1,020	990	1,040	1,090	1,140	1,190	1,240	1,290	1,340
	Courtland¹						700	850	940	900	870	920	964	1,008	1,052	1,096	1,140	1,184
	Total Population in LPRCA						700	850	940	900	870	920	964	1,008	1,052	1,096	1,140	1,184
	Rural Area						32,780	36,380	40,200	38,400	37,210	39,380	40,700	42,020	43,340	44,660	45,980	47,300
	Rural Population in LPRCA (94.62%)						31,016	34,423	38,037	36,334	35,208	37,261	38,510	39,759	41,008	42,257	43,506	44,755
	Rural Population in GRCA (5.38%)						1,764	1,957	2,163	2,066	2,002	2,119	2,190	2,261	2,332	2,403	2,474	2,545
	Urban Area (LPRCA)						28,070	32,220	35,620	34,010	32,970	34,880	36,242	37,604	38,966	40,328	41,690	43,052
	Total Population in Study Area						60,850	68,600	75,820	72,410	70,180	74,260	76,942	79,624	82,306	84,988	87,670	90,352
	Total LPRCA Population						59,086	66,643	73,657	70,344	68,178	72,141	74,752	77,363	79,974	82,585	85,196	87,807
	Total GRCA Population						1,764	1,957	2,163	2,066	2,002	2,119	2,190	2,261	2,332	2,403	2,474	2,545

SOURCE:

¹ Norfolk County Population and Employment Projections, Final Report
Marshall, Macklin, Monaghan Limited
January 6, 2004

	Existing Forecasts
	Estimated Population

NOTES:

- 1. Projections shaded in grey were provided by the municipality.
- 2. Numbers may not add due to rounding.
- 3. It is anticipated that updated population forecasts will be available in mid-2009.
- 4. Census Data not available for Serviced Communities.

TABLE 3.7
HALDIMAND COUNTY

SINGLE TIER		POPULATION															
		1981	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Haldimand County	County Wide¹	35,692	39,906	42,081	42,730	43,730	45,050	46,620	48,560	50,510	52,050	53,714	55,378	57,042	58,706	60,370	62,034
	Census Population					43,728	45,212										
	Caledonia¹ (Serviced)					9,555	10,325	11,265	12,415	13,565	14,475	15,459	16,443	17,427	18,411	19,395	20,379
	Dunnville¹ (Serviced)					5,575	5,665	5,765	5,885	6,005	6,105	6,211	6,317	6,423	6,529	6,635	6,741
	Hagersville¹ (Serviced)					2,565	2,705	2,865	3,075	3,285	3,455	3,633	3,811	3,989	4,167	4,345	4,523
	Cayuga¹ (Serviced)					1,675	1,735	1,815	1,915	2,015	2,085	2,167	2,249	2,331	2,413	2,495	2,577
	Jarvis¹ (Serviced)					1,460	1,500	1,540	1,600	1,660	1,700	1,748	1,796	1,844	1,892	1,940	1,988
	Townsend¹ (Serviced)					925	925	985	1015	1055	1095	1,129	1,163	1,197	1,231	1,265	1,299
	Rural					21,975	22,165	22,385	22,655	22,925	23,135	23,367	23,599	23,831	24,063	24,295	24,527
	Rural within LPRCA					3,035	6,286	6,348	6,425	6,502	6,561	6,627	6,693	6,758	6,824	6,890	6,956
	Rural within GRCA					3,035	10,311	10,414	10,539	10,665	10,762	10,870	10,978	11,086	11,194	11,302	11,410
	Urban within LPRCA (Hagersville, Jarvis, Townsend)					4,950	5,130	5,390	5,690	6,000	6,250	6,510	6,770	7,030	7,290	7,550	7,810
	Urban within GRCA (Caledonia, Dunnville, Cayuga)					16,805	17,725	18,845	20,215	21,585	22,665	23,837	25,009	26,181	27,353	28,525	29,697
	Total Population within LPRCA (26.71%)					7,985	11,416	11,738	12,115	12,502	12,811	13,137	13,463	13,788	14,114	14,440	14,766
	Total Population within GRCA (45.37%)					19,840	28,036	29,259	30,754	32,250	33,427	34,707	35,987	37,267	38,547	39,827	41,107

SOURCE:
Population and Household Forecasts 2001-2026
Haldimand County
Hemson Consulting Ltd.
REFERENCE SCENARIO
May 2004

Existing Forecast

Estimated Population

- NOTES:**
- 1. Projections shaded in grey were provided by the municipality.
 - 2. Population counts for 1986 to 2001 sourced from Statistics Canada.
 - 3. Numbers may not add due to rounding.
 - 4. Hemson Consulting Ltd. is currently in the process of updating population forecasts. The County anticipates having the updates by mid-2009.

TABLE 3.8 - POPULATION
COUNTY OF BRANT

UPPER TIER	LOWER TIER	POPULATION														
		1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
County of Brant	County Wide ¹	26,220	28,345	29,790	34,800	38,400	40,500	42,700	44,500	47,200	50,100	52,440	54,780	57,120	59,460	61,800
	Census Population				31,669	34,415										
	Paris (Serviced) ²	7,910	8,590	8,980	9,881	11,249	12,866	14,560	15,946	18,025	20,258	22,060	23,862	25,663	27,465	29,267
	St. George (Serviced) ²				2,510	3,210	3,231	3,253	3,271	3,298	3,327	3,350	3,374	3,397	3,421	3,444
	Mount Pleasant/Tutela Heights (Partially Serviced) ³				1,044	1,152	1,215	1,281	1,335	1,416	1,503	1,573	1,643	1,714	1,784	1,854
	Oakhill (Partially Serviced) ³				348	384	405	427	445	472	501	524	548	571	595	618
	Rural/Unserviced ³				21,017	22,405	22,783	23,179	23,503	23,989	24,511	24,932	25,353	25,775	26,196	26,617
	Rural/Unserviced GRCA (93.93%)				19,741	21,045	21,400	21,772	22,076	22,533	23,023	23,419	23,814	24,210	24,606	25,001
	Rural/Unserviced LPRCA (6.07%)				1,276	1,360	1,383	1,407	1,427	1,456	1,488	1,513	1,539	1,565	1,590	1,616
	Total GRCA				33,524	37,040	39,117	41,293	43,073	45,744	48,612	50,927	53,241	55,555	57,870	60,184
	Total LPRCA				1,276	1,360	1,383	1,407	1,427	1,456	1,488	1,513	1,539	1,565	1,590	1,616

SOURCE:

Brant County Official Plan Review Growth Analysis Study, 2006 to 2031, Watson & Associates Economists Ltd., June 30, 2008
Brant County Official Plan Review Growth Analysis Study, 2006 to 2031. Serviced growth estimated by attributing 77% of growth to Paris and 1% to St. George in accordance with Table 7-3a.
Brant County Official Plan Review Growth Analysis Study, 2006 to 2031. Also includes partially serviced population estimated by attributing 3% of growth to Mt. Pleasant/Tutela Heights and 1% to Oakhill in accordance with Table 7-3a.

NOTES:

- 1. Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
- 2. Population counts for 1986 to 2001 sourced from Statistics Canada.
- 3. Numbers may not add due to rounding.

Existing Forecast

Estimated Population

TABLE 3.9 - POPULATION
CITY OF BRANTFORD

SINGLE TIER	POPULATION														
	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
City of Brantford¹ (Serviced)	78,430	84,597	87,130	86,417	90,190	95,600	101,340	107,420	113,970	121,070	127,246	133,422	139,598	145,774	151,950
Census Population				86,417	90,192										
Total Population in GRCA (100%)				86,417	90,190	95,600	101,340	107,420	113,970	121,070	127,246	133,422	139,598	145,774	151,950

SOURCE:
City of Brantford Development Charges Background Study, Draft Growth Forecasts
Hemson Consulting Ltd.
January 2009

Existing Forecast

Estimated Population

- NOTES:**
- 1. Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
 - 2. Numbers may not add due to rounding.
 - 3. Population forecasts are still in draft form and have not yet been approved by municipal Council
 - 4. Population forecasts are not in line with Places to Grow

TABLE 3.11 - POPULATION
PERTH COUNTY

UPPER TIER	LOWER TIER	POPULATION												
		1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Perth County	County Wide ¹	72,106	76,574	80,339	83,628	86,928	90,379	93,831	97,282	100,733	104,185	107,636	111,087	114,539
	Census Population		73,675	74,344										
	North Perth ¹	12,172	12,844	13,566	14,317	12,711	13,046	13,381	13,715	14,050	14,385	14,720	15,054	15,389
	Census Population		12,055	12,254										
	Total within Study Area (0.49%)			66	70	62	64	66	67	69	70	72	74	75
	Perth East ¹	12,109	12,984	13,586	14,205	14,759	15,339	15,918	16,498	17,077	17,657	18,237	18,816	19,396
	Milverton ¹ (serviced)	1,618	1,707	1,824	1,950	2,084	2,228	2,105	2,183	2,260	2,338	2,415	2,493	2,570
	Census Population		12,119	12,041										
	Rural ¹			11,762	12,255	12,675	13,111	13,813	14,315	14,817	15,319	15,822	16,323	16,826
	Rural within Study Area (17.2%)			2,023	2,108	2,180	2,255	2,376	2,462	2,549	2,635	2,721	2,808	2,894
	Total within in Study Area (37.65%)			3,847	4,058	4,264	4,483	4,481	4,645	4,809	4,973	5,136	5,301	5,464
TOTAL POPULATION IN STUDY AREA (GRCA)				3,914	4,128	4,326	4,547	4,546	4,712	4,877	5,043	5,208	5,374	5,539

SOURCE:

¹ County of Perth Official Plan, April 2008 Consolidation
County of Perth, April 2008

	Existing Forecasts
	Estimated Population

NOTES:

- 1. Projections shaded in grey were provided by the municipality
- 2. Numbers may not add due to rounding.

TABLE 3.12 - POPULATION
WATERLOO REGION

UPPER TIER	LOWER TIER	POPULATION																
		1986	1991	1996	2001	2004	2006	2009	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Waterloo Region	Region Wide¹	329,404	377,762	405,435	459,800	489,629	507,300		550,400	594,800	638,700	684,400	729,000	773,340	817,680	862,020	906,360	950,700
	Serviced²				427,708	459,651	488,835		533,667	578,089	620,068	664,742	706,522	749,595	791,531	834,385	877,240	920,094
	Unserviced³				32,092	29,978	18,415		16,783	16,761	18,582	19,708	22,479	23,755	26,169	27,665	29,160	30,656
	Census Population⁴				438,515		478,121											
	Kitchener¹	150,604	168,282	178,420	194,680		213,500		232,300	252,100	272,400	292,600	311,500	331,100	350,700	370,300	389,900	409,500
	Serviced⁵					202,213									349,035			
	Census Population¹				190,399		204,668											
	Waterloo¹	58,718	71,181	77,950	100,960		114,900		122,300	128,900	135,600	143,300	150,000	157,020	164,040	171,060	178,080	185,100
	Serviced⁵					114,443									165,041			
	Census Population¹				86,543		97,475											
	Cambridge¹	79,920	92,772	101,430	112,170		122,100		133,300	143,900	154,200	165,500	177,000	187,980	198,960	209,940	220,920	231,900
	Serviced⁵					118,364									215,793			
	Census Population¹				110,372		120,371											
	Wellesley¹	7,064	8,234	8,665	9,560		10,100		10,700	11,250	11,800	12,400	13,000	13,580	14,160	14,740	15,320	15,900
	Wellesley (serviced)⁵ ⁶					2,138	2,158	2,709	2,466	3,017	2,774	3,325	3,081	3,632	4,620	4,972	5,323	5,675
	St. Clements (portions on partial services - water)⁷						1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421
	Linwood (portions on partial services - water)⁷						831	831	831	831	831	831	831	831	831	831	831	831
	Heidelberg (portions on partial services - water)⁷						450	454	454	454	454	454	454	454	454	454	454	454
	Unserviced Population						5,240		5,528	5,527	6,321	6,370	7,213	7,242	6,834	7,062	7,291	7,519
	Census Population¹				9,365		9,789											
	Woolwich¹	16,732	17,365	17,325	18,360		20,050		21,950	24,800	27,150	29,600	32,500	34,990	37,480	39,970	42,460	44,950
	Elmira (serviced)⁵ ⁷					8,157	9,047	10,011	10,098	12,200	14,313	16,427	18,540	20,653	20,991	22,697	24,404	26,110
	St. Jacobs (serviced)⁵ ⁷					1,586	1,790	1,896	1,890	2,090	2,291	2,492	2,693	2,893	3,295	3,510	3,725	3,940
	Breslau (portions are serviced)⁵ ⁷						1,057	1,453	1,790	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750
	Conestogo (partial services)⁷						1,311	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330
	Maryhill (partial services)⁷						525	525	525	525	525	525	525	525	525	525	525	525
	Heidelberg (partial services)⁷						1,438	1,438	1,438	1,438	1,438	1,438	1,438	1,438	1,438	1,438	1,438	1,438
	West Montrose (partial services)⁷						220	220	220	220	220	220	220	220	220	220	220	220
	Unserviced Population						4,662	4,659	4,659	3,247	3,283	3,419	4,005	4,180	5,931	6,500	7,068	7,637
	Census Population¹				18,201		19,658											
	Wilmot¹	11,145	13,107	13,830	15,160		17,250		19,500	22,250	24,650	27,100	30,000	32,550	35,100	37,650	40,200	42,750
	Baden (serviced)⁵ ⁸					8,134	3,576	4,711	5,845	6,980	8,115	9,249	10,384	11,519	12,654	13,950	15,247	16,544
	New Hamburg (serviced)⁵ ⁸						6,779	7,513	8,248	8,982	9,716	10,451	11,185	11,919	12,654	13,493	14,332	15,171
	Mannheim (partial services, serviced by City of Kitchener)⁸						1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064
	Shingletown (partial services, serviced by City of Kitchener)⁸						110	110	110	110	110	110	110	110	110	110	110	110
	New Dundee (portions are on partial services - water only)⁸						1,214	1,214	1,214	1,214	1,214	1,214	1,214	1,214	1,214	1,214	1,214	1,214
	Foxboro Green (private communal services assumed by RMOW)⁸						430	430	430	430	430	430	430	430	430	430	430	430
	St. Agatha (portions are on partial services - water only)⁸						624	624	624	624	624	624	624	624	624	624	624	624
	Unserviced Population						3,453		1,965	2,846	3,377	3,958	4,989	5,670	6,351	6,765	7,179	7,593
	Census Population¹				14,866		17,097											
	North Dumfries¹	5,221	6,821	7,820	8,930		9,350		10,400	11,650	12,850	13,950	15,000	16,130	17,260	18,390	19,520	20,650
	Ayr (serviced)⁵					4,069	4,290	5,030	5,769	6,509	7,249	7,988	8,728	9,467	10,207	11,052	11,898	12,743
	Unserviced Population						5,060		4,631	5,141	5,602	5,962	6,272	6,663	7,053	7,338	7,622	7,907
	Census Population⁴				8,769		9,063											
TOTAL POPULATION (GRCA)					459,820		507,250		550,450	594,850	638,650	684,450	729,000	773,350	817,700	862,050	906,400	950,750

SOURCES:
Region of Waterloo Interim Population Forecasts - February 7, 2009 and February 24, 2009
Region of Waterloo Wastewater Treatment Master Plan, Table 2.2 provides Region's forecast population and serviced population for 2001and 2004. The 2006 serviced population is based on the sum of total serviced populations from lower-tier settlements taken form a variety of sources as noted.
Unserviced calculated by subtracting the Region's serviced population from the total population.
Population for 1986 to 2006 sourced from Statistics Canada - population figures differ from Region's figures in part because Region's figures include student population and have been corrected for Census undercount.
Region of Waterloo Wastewater Treatment Master Plan, January 2006, Figure 2.2 provides 2004 population serviced by 11 wastewater treatment plants. These generally correspond to serviced areas within the lower-tier municipalities with the exception of the future East Side Community Wastewater Facility which will service parts of Kitchener, Woolwich and Cambridge. For purposes of this table, we have included the future population to be serviced by the East Side Community Facility in the City of Cambridge. For further explanation see Section 3.11 of this Report.
Region of Waterloo, Planning and Information Research: 2009 Population by Settlement Area provided by Township of Wellesley Planning Staff (Sarah Peck)
Township of Woolwich, Community Profile and Development Information. 2009 population by settlement area provided in report
Population forecasts to 2016 provided for three major settlement areas (Elmira, St. Jacobs and Breslau)
Township of Wilmot, Information Bulletin No. 4, Population Statistics. Population by settlement area provided from 2001-2008.
Serviced and partially serviced community information provided by Township of Wilmot Planning Staff (Andrew Martin)

NOTES:
1. Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
2. Population counts for 1986 to 1996 sourced from Statistics Canada.
3. Census populations sourced from Statistics Canada may differ from forecast populations for 2001 and 2006, in part because the Region of Waterloo figures include the student population and have been corrected for the Census undercount.
4. Some of the serviced/unserviced totals of lower-tier municipalities may not add due to rounding.
5. Populations are considered draft and will be finalized in 2010
6. Population allocations to settlement areas not yet available. See section 3.11 of the report for assumptions.
7. Where forecasts were not provided, intervals were calculated by averaging growth between forecast years to estimate growth at interval years.
8. In instances where no forecasts or target populations are provided for smaller communities of the rural Townships, the settlement area population has been maintained to 2056.
9. In instances where no 2006 population was available for settlement areas, the general boundary of the settlement area was overlayed on the Census dissemination areas to determine an approximate population.
10. Where a 2009 population was available for a settlement area but a 2006 population was not, the 2006 population was estimated by using either the method indicated in note 9, or the 2009 population was used as the 2006 population.
11. The 2041 population target for Baden and New Hamburg (which was provided as one population) has been split evenly between the two settlements as per discussions with Township of Wilmot Planning Staff (Harold O’Krafka)
12. No target population was provided for Breslau in the Township of Woolwich. It is very likely that along with Elmira and St. Jacobs, Breslau will accommodate most of the Township's growth.
However, as no forecasts have been prepared at the Township level, we have maintained the 2016 forecast population.

Existing Forecasts

Estimated Population

TABLE 3.13 - POPULATION
CITY OF GUELPH

SINGLE TIER	POPULATION														
	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
City of Guelph ^{1 2} (Serviced)				106,200	115,000	124,700	137,000	148,800	158,900	169,000	179,800	190,600	201,400	212,200	223,000
Census Population				106,170	114,943										
Total Population in GRCA (100%)				106,200	115,000	124,700	137,000	148,800	158,900	169,000	179,800	190,600	201,400	212,200	223,000

SOURCES:

City of Guelph Local Growth Management Strategy Recommendations
June 23, 2008

	Existing Forecast
	Estimated Population

City of Guelph Development Charges Study
Growth Forecast Study
August 2008

NOTES:

- 1. Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
- 2. Numbers may not add due to rounding.
- 3. Population forecasts excludes census undercounts.
- 4. Population forecasts are not in line with original Places to Grow (IR target for 2031 is 175,000).

TABLE 3.14 - POPULATION
WELLINGTON COUNTY

UPPER TIER	LOWER TIER	COMMUNITY	POPULATION														
			1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Wellington County	County Wide ^{1 2}						85,480	90,370	97,090	103,390	109,670	116,010	122,116	128,222	134,328	140,434	146,540
		Census Population				187,313	200,425										
	Wellington North ^{1 2}						11,710	12,100	12,840	13,680	14,530	15,390	16,126	16,862	17,598	18,334	19,070
		Census Population				11,305	11,175										
		Arthur ^{1 2}					2,320	2,420	2,570	2,700	2,830	2,960	3,088	3,216	3,344	3,472	3,600
		Rural ^{1 2}					4,320	4,300	4,330	4,370	4,410	4,460	4,488	4,516	4,544	4,572	4,600
		Rural within Study Area (82.12%)					3,548	3,531	3,556	3,589	3,621	3,663	3,686	3,709	3,732	3,755	3,778
		Total Population within Study Area					5,868	5,951	6,126	6,289	6,451	6,623	6,774	6,925	7,076	7,227	7,378
	Mapleton ^{1 2}		6,546	7,539	8,070	8,926	9,850	10,140	10,600	11,030	11,470	11,920	12,334	12,748	13,162	13,576	13,990
		Census Population				9,303	9,851										
		Drayton ^{1 2}					1,710	1,930	2,200	2,450	2,700	2,960	3,210	3,460	3,710	3,960	4,210
		Moorefield ^{1 2}					470	570	700	810	920	1,040	1,154	1,268	1,382	1,496	1,610
		Rural ^{1 2}					7,670	7,630	7,700	7,770	7,840	7,920	7,970	8,020	8,070	8,120	8,170
		Rural within Study Area (95.97%)					7,361	7,323	7,390	7,457	7,524	7,601	7,649	7,697	7,745	7,793	7,841
		Total Population within Study Area					9,541	9,823	10,290	10,717	11,144	11,601	12,013	12,425	12,837	13,249	13,661
	Centre Wellington ^{1 2}		17,240	21,112	22,805	26,335	26,050	28,530	31,680	34,180	36,650	39,480	42,166	44,852	47,538	50,224	52,910
		Census Population				24,260	26,049										
		Fergus ^{1 2}					12,820	14,570	16,730	18,300	19,840	21,730	23,512	25,294	27,076	28,858	30,640
		Elora/Salem ^{1 2}					6,340	7,070	7,960	8,790	9,620	10,450	11,272	12,094	12,916	13,738	14,560
		Rural ^{1 2}					6,890	6,890	6,980	7,090	7,190	7,290	7,370	7,450	7,530	7,610	7,690
		Total Population in Study Area					26,050	28,530	31,670	34,180	36,650	39,470	42,154	44,838	47,522	50,206	52,890
	Guelph-Eramosa ^{1 2}		7,710	9,237	9,595	10,704	12,070	12,710	13,420	13,920	14,410	14,600	15,106	15,612	16,118	16,624	17,130
		Census Population				11,174	12,066										
		Rockwood ^{1 2}					3,620	4,300	4,940	5,360	5,780	5,870	6,320	6,770	7,220	7,670	8,120
		Hamilton Drive ³					487										
		Rural ^{1 2}					8,450	8,400	8,480	8,560	8,640	8,720	8,774	8,828	8,882	8,936	8,990
		Total Population in Study Area					12,070	12,700	13,420	13,920	14,420	14,590	15,094	15,598	16,102	16,606	17,110
	Puslinch ¹		4,648	4,843	4,750	6,300	6,690	7,160	7,760	8,330	8,890	9,470	10,026	10,582	11,138	11,694	12,250
		Census Population				5,885	6,689										
		Aberfoyle ^{1 2}					200	230	270	310	350	390	428	466	504	542	580
		Rural ^{1 2}					6,060	6,480	7,020	7,530	8,040	8,560	9,060	9,560	10,060	10,560	11,060
		Rural within Study Area (76.63%)					4,644	4,966	5,379	5,770	6,161	6,560	6,943	7,326	7,709	8,092	8,475
		Total Population within Study Area					4,844	5,196	5,649	6,080	6,511	6,950	7,371	7,792	8,213	8,634	9,055
	Erin ^{1 2}						11,150	11,390	11,920	12,900	13,870	14,820	15,554	16,288	17,022	17,756	18,490
		Census Population				11,052	11,148										
		Rural ^{1 2}					7,080	7,300	7,650	7,980	8,300	8,640	8,952	9,264	9,576	9,888	10,200
		Rural within Study Area (50.38%)					3,567	3,678	3,854	4,020	4,182	4,353	4,510	4,667	4,824	4,982	5,139
		Total Population within Study Area					3,567	3,678	3,854	4,020	4,182	4,353	4,510	4,667	4,824	4,982	5,139
	Total GRCA Population						61,939	65,877	71,009	75,206	79,358	83,586	87,915	92,244	96,574	100,903	105,232

SOURCES:

¹ Population, Housing and Employment Forecast Update, 2006-2031
Watson & Associates
April 24, 2008

² Official Plan Amendment No. 60
County of Wellington
June 12, 2008

³ Population for Hamilton Drive was determined by using the methodology outlined in Section 2.6 of this report. This figure was not included in the totals and was not prorated to 2056.

NOTES:

- 1. Projections shaded in grey were provided by the municipality
- 2. Population counts for 1986 to 2001 sourced from Statistics Canada
- 3. Numbers may not add due to rounding.

	Existing Forecasts
	Estimated Population

TABLE 3.15 - POPULATION
CITY OF HAMILTON

SINGLE TIER	FORMER MUNICIPALITIES	POPULATION											
		2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
City of Hamilton	City Wide¹		515,213	531,057	555,681	594,681	624,317	659,743	688,649	717,555	746,461	775,367	804,273
	Census Population	490,268	504,559										
	Ancaster		34,127	37,164	41,319	42,814	42,681	42,896	44,650	46,404	48,158	49,911	51,665
	Dundas		25,074	25,918	25,435	25,847	25,782	26,271	26,510	26,750	26,989	27,229	27,468
	Flamborough		39,458	40,455	43,014	52,114	55,596	55,427	58,621	61,815	65,008	68,202	71,396
	Glanbrook		17,427	21,772	30,735	35,751	49,602	64,403	73,798	83,194	92,589	101,984	111,379

Study Area (GRCA)	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Hamilton City Wide		515,213	531,057	555,681	594,681	624,317	659,743	688,649	717,555	746,461	775,367	804,273
Area within GRCA Boundary²		19,404	19,731	19,873	20,485	20,426	20,410	20,612	20,813	21,015	21,216	21,417
Serviced Area												
Lynden (serviced)³		500	513	517	533	531	531	536	541	546	552	557
Unserviced Area		18,904	19,218	19,356	19,952	19,895	19,880	20,076	20,272	20,468	20,664	20,861

SOURCES:

Land Use data (Year-end 2006).

Growth Related Integrated Development Strategy (GRIDS) Population Projections. City of Hamilton Planning and Economic Development Department., December 2008.

City of Hamilton Planning and Economic Development Department., December 2008.

Land Use data (Year-end 2006).

City of Hamilton Planning and Economic Development Department., January 2009.

GRCA area populations are calculated on the basis of traffic zones overlapping GRCA area within Hamilton; rural settlement areas within GRCA include Sheffield, Kirkwall, Rockton, Troy, Lynden, Orkney, Copetown and Jerseyville

Land Use data

City of Hamilton Planning and Economic Development Department, October 2009

Serviced population of Lynden was estimated based on Census population information and the surrounding areas' population

NOTES;

- 1. Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
- 2. Population counts for 1986 to 2001 sourced from Statistics Canada.
- 3. Numbers may not add due to rounding.
- 4. Based populations and forecasts provided by the City of Hamilton.

	Existing Forecasts
	Estimated Population

TABLE 3.16 - POPULATION
HALTON REGION

UPPER TIER	LOWER TIER	POPULATION												
		1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Halton Region	Region Wide¹	339,875	375,229	439,000	498,000	553,000	592,300							
			375,229	439,256										
	Halton Hills¹	42,390	48,184	55,000	60,000	65,000	70,000							
			48,184	55,289										
	Population within Study Area (GRCA)		467	467	467	467	467	467	467	467	467	467	467	467
	Milton¹		32,104	31,471	58,700	79,300	94,100	106,000						
			31,471	53,939										
	Population within Study Area (GRCA)		1,423	1,423	1,423	1,423	1,423	1,423	1,423	1,423	1,423	1,423	1,423	1,423
	Total Population within Study Area (GRCA)		1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890

SOURCE:
Best Planning Estimates of Population, Occupied Dwelling Units and Employment 2002-2021
Regional Municipality of Halton, 2003

Existing Forecast
Estimated Population

- NOTES:**
- 1. Projections shaded in grey were provided by the municipality, 2036 to 2056 were estimated.
 - 2. Numbers may not add due to rounding.
 - 3. Acton (Town of Halton Hills) is just outside the study area but within Greenbelt, expansion only within 10 yr. review of greenbelt.
 - 4. Greenbelt covers all lands within the GRCA watershed. For puproses of this exercise, the current (2006) population attributable to the Study Area was estimated and held constant to 2056.

TABLE 3.17 - POPULATION
DUFFERIN COUNTY

UPPER TIER	LOWER TIER	POPULATION														
		1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Dufferin County	County Wide ¹				53,000	57,000	62,000	66,333	71,000	75,467	80,000	84,600	89,200	93,800	98,400	103,000
	Melancthon ¹				2,739	2,895	3,086	3,277	3,468	3,659	3,850	4,041	4,232	4,423	4,614	4,805
	Census Population				2,739	2,895										
	Population within GRCA (44.42%)				1,217	1,286	1,371	1,456	1,540	1,625	1,710	1,795	1,880	1,965	2,050	2,134
	E Luther-Grand Valley ¹				2,842	2,844	3,947	5,050	6,154	7,257	8,360	9,463	10,566	11,670	12,773	13,876
	Census Population				2,842	2,844										
	Grand Valley ² (Serviced)				1,600	1,942	2,284	2,626	2,968	3,310	3,652	3,994	4,336	4,678	5,020	5,362
	Population within GRCA (100%)				2,842	2,844	3,947	5,050	6,154	7,257	8,360	9,463	10,566	11,670	12,773	13,876
	Amaranth ¹				3,736	3,845	4,012	4,179	4,346	4,513	4,680	4,847	5,014	5,181	5,348	5,515
	Census Population				3,736	3,845										
	Waldemar ² (Serviced)					537	537	537	537	537	537	537	537	537	537	537
	Population within GRCA (71.76%)				2,681	2,759	2,879	2,999	3,119	3,239	3,358	3,478	3,598	3,718	3,838	3,958
	E Garafraxa ¹				2,214	2,389	2,527	2,665	2,804	2,942	3,080	3,218	3,356	3,495	3,633	3,771
	Census Population				2,214	2,389										
	Marsville ² (Serviced)					436	436	436	436	436	436	436	436	436	436	436
	Population within GRCA (72.79%)				1,612	1,739	1,840	1,940	2,041	2,141	2,242	2,343	2,443	2,544	2,644	2,745
	Total Population in GRCA				8,351	8,628	10,037	11,445	12,854	14,262	15,670	17,079	18,487	19,896	21,304	22,713

SOURCE:

County of Dufferin: Growth Management Study (Draft)
Dillon Consulting Ltd., Watson & Associates Economists Ltd.
December 2008

	Existing Forecast
	Estimated Population

The 2006 population figures have been estimated using the methodology outlined in Section 2.6 of this Report. No forecasts for population were available for these communities.

NOTES:

- 1. Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
- 2. Numbers may not add due to rounding.
- 3. Projections are still in draft form.
- 4. Where forecasts were not provided, intervals were calculated by averaging growth between 2006 to 2031 to estimate growth at interval years.

TABLE 3.18 - POPULATION
GREY COUNTY

UPPER TIER	LOWER TIER	POPULATION														
		1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Grey County	County Wide ^{1 2}	74,759	84,071	87,621	89,073	95,900	102,200	107,700	113,800	116,900	119,500	124,220	128,940	133,660	138,380	143,100
	Census Population				89,073	92,411										
	Southgate ^{1 2 3}	4,855	6,012	6,449	6,907	7,500	8,400	9,300	10,200	10,800	11,400	12,180	12,960	13,740	14,520	15,300
	Census Population				6,907	7,167										
	Dundalk ³ (Serviced)	1,295	1,972	1,776	1,972	2,143	2,313	2,484	2,654	2,778	2,903	3,064	3,226	3,387	3,549	3,710
	Rural Population in Study Area (21.48%)					1,611	1,804	1,998	2,191	2,320	2,449	2,616	2,784	2,951	3,119	3,286
	Total Population of Southgate in Study Area					3,754	4,117	4,481	4,845	5,098	5,351	5,680	6,009	6,339	6,668	6,997
	Total Population in GRCA					3,754	4,117	4,481	4,845	5,098	5,351	5,680	6,009	6,339	6,668	6,997

SOURCES:
Growth Projection Study (Official Plan Amendment)
Grey County
October 2008

Existing Forecast
Estimated Population

Grey County Growth Management Strategy
Malone Given Parsons Ltd. in association with the Centre for Spatial Economics (C4SE)
April 2008

Township of Southgate Official Plan
Township of Southgate
July 2005

NOTES:
1. Projections shaded in grey were provided by the municipality, 2031 to 2056 are estimated.
2. Population counts for 1986 to 2001 sourced from Statistics Canada
3. Numbers may not add due to rounding.
4. Only a very small portion (2.33ha) of Grey Highlands is in the Study Area. Lands within the Study Area are rural and no settlement areas are in proximity to this part of the municipality.
A breakdown of population forecast or estimates are not provided in this report.

APPENDIX 2

Employment Forecasts/Estimates Charts

TABLE 3.1.2 - EMPLOYMENT
ELGIN COUNTY
Employment Projections

Municipality	Lower-Tier	Sector of Employment	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Elgin	Central Elgin ¹	Primary				465	481	533	581	628	667	697					
		Industrial				485	522	585	648	712	768	824					
		Service				1,425	1,475	1,630	1,779	1,925	2,045	2,135					
		Institutional				885	916	1,014	1,105	1,195	1,270	1,327					
		TOTAL				3,260	3,394	3,762	4,113	4,460	4,750	4,983	5,301	5,619	5,936	6,254	6,572
	KCCA (77.65%)					2,531	2,635	2,921	3,194	3,463	3,688	3,869	4,116	4,363	4,610	4,856	5,103
	CCCA (22.35%)					729	759	841	919	997	1,062	1,114	1,185	1,256	1,327	1,398	1,469
	TOTAL - KCCA					2,531	2,635	2,921	3,194	3,463	3,688	3,869	4,116	4,363	4,610	4,856	5,103
	TOTAL - CCCA					729	759	841	919	997	1,062	1,114	1,185	1,256	1,327	1,398	1,469

SOURCES:

¹ Population, Housing and Employment Projections, Central Elgin, 2006-2026 (Strategic Growth Scenario)
Lapointe Consulting in association with Dillon Consulting Inc., May 2006

	Existing Forecast
	Estimated Employment

NOTES:

- 1. Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
- 2. Population counts for 1986 to 2001 sourced from Statistics Canada.
- 3. Numbers may have been rounded and as such may not add up.

TABLE 3.2.2 - EMPLOYMENT
ST. THOMAS
Employment Projections

Single-Tier	Sector of Employment	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
St. Thomas ¹	Primary				145	158	171	184	196	206	214					
	Industrial				7,500	8,665	9,887	11,145	12,455	13,795	15,263					
	Service				6,025	6,547	7,103	7,634	8,138	8,562	8,894					
	Institutional				2,580	2,803	3,041	3,269	3,484	3,667	3,809					
	TOTAL				16,250	18,173	20,202	22,232	24,273	26,230	28,160	30,157	32,155	34,152	36,150	38,147
KCCA (96%)					15,600	17,446	19,394	21,343	23,302	25,181	27,034	28,951	30,869	32,786	34,704	36,621
CCCA (4%)					650	727	808	889	971	1,049	1,126	1,206	1,286	1,366	1,446	1,526
TOTAL - KCCA					15,600	17,446	19,394	21,343	23,302	25,181	27,034	28,951	30,869	32,786	34,704	36,621
TOTAL - CCCA					650	727	808	889	971	1,049	1,126	1,206	1,286	1,366	1,446	1,526

SOURCES:

¹ Housing and Employmenet Projections, St. Thomas Population,
Lapointe Consulting in association with Dillon Consulting Inc., May 2007

	Existing Forecast
	Estimated Employment

NOTES:

1. Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
2. Population counts for 1986 to 2001 sourced from Statistics Canada.
3. Numbers may have been rounded and as such may not add up.

TABLE 3.3.2 - EMPLOYMENT
CITY OF LONDON
Employment Projections

Municipality	Sector of Employment	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
London ¹	Primary		1,400		1,700	1,700	1,700	1,700	1,700	1,700	1,700					
	Manufacturing		22,300		23,300	24,933	26,567	28,200	28,700	29,200	29,700					
	Construction		8,800		8,900	9,067	9,233	9,400	9,500	9,600	9,700					
	Transport., storage, comm.		10,400		12,200	12,833	13,467	14,100	14,367	14,633	14,900					
	Trade		31,000		30,000	32,033	34,067	36,100	36,933	37,767	38,600					
	Fire		14,000		14,700	16,033	17,367	18,700	19,633	20,567	21,500					
	Educational Services		14,900		14,700	15,633	16,567	17,500	18,100	18,700	19,300					
	Health Care Services		22,200		24,900	26,100	27,300	28,500	29,467	30,433	31,400					
	Public Admin.		9,400		6,500	6,567	6,633	6,700	6,733	6,767	6,800					
	Other Services		30,400		42,500	44,967	47,433	49,900	50,800	51,700	52,600					
	TOTAL		164,700		179,400	189,867	200,333	210,800	215,933	221,067	226,200	234,000	241,800	249,600	257,400	265,200
	KCCA (0.22%)		362	0	395	418	441	464	475	486	498	515	532	549	566	583

SOURCE:

¹ Employment, Population, Housing and Non-Residential Construction Projections, City of London 2006 Update
 Clayton Research Associates
 September 29, 2006

	Existing Forecast
	Estimated Employment

NOTES:

1. Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
2. Population counts for 1986 to 2001 sourced from Statistics Canada.
3. Numbers may have been rounded and as such may not add up.
4. Where employment forecasts were not provided, intervals were calculated by averaging growth.

**TABLE 3.5.2 - EMPLOYMENT
COUNTY OF OXFORD
Employment Projections**

Municipality	Lower-Tier	Sector of Employment	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Oxford ¹	Woodstock	Employment Land Employment			8,870	9,660	10,170	12,560	14,360	14,530	14,600	14,610					
		Rural & Rural Based Employment			0	0	0	0	0	0	0	0					
		Population-related Employment			8,250	7,410	9,010	10,130	10,780	11,430	11,530	12,050					
		TOTAL			17,100	17,100	19,200	22,700	25,100	26,000	26,100	26,700					
	Tillsonburg	Employment Land Employment			5,150	6,210	6,480	7,580	8,420	8,490	8,530	8,530					
		Rural & Rural Based Employment			0	0	0	0	0	0	0	0					
		Population-related Employment			3,710	3,350	3,830	4,130	4,500	4,860	5,140	5,380					
		TOTAL			8,900	9,600	10,300	11,700	12,900	13,400	13,700	13,900	14,620	15,340	16,060	16,780	17,500
		LPRCA (100%)			8,900	9,600	10,300	11,700	12,900	13,400	13,700	13,900	14,620	15,340	16,060	16,780	17,500
	Norwich	Employment Land Employment			700	890	940	1,160	1,330	1,340	1,350	1,350					
		Rural & Rural Based Employment			1,850	1,860	2,360	2,510	2,740	2,940	2,930	3,070					
		Population-related Employment			1,040	1,100	1,160	1,220	1,280	1,350	1,410	1,450					
		TOTAL			3,600	3,900	4,500	4,900	5,400	5,600	5,700	5,900	6,180	6,460	6,740	7,020	7,300
		GRCA (8.93%)			321	348	402	438	482	500	509	527	552	577	602	627	652
		LPRCA (82.67%)			2,976	3,224	3,720	4,051	4,464	4,630	4,712	4,878	5,109	5,340	5,572	5,803	6,035
	Southwest Oxford	Employment Land Employment			410	270	290	370	440	440	440	450					
		Rural & Rural Based Employment			1,190	1,040	1,140	1,190	1,230	1,270	1,300	1,330					
		Population-related Employment			410	470	490	500	520	540	550	560					
		TOTAL			2,000	1,800	1,900	2,100	2,200	2,200	2,300	2,300	2,380	2,460	2,540	2,620	2,700
		LPRCA (22.76%)			455	410	432	478	501	501	523	523	542	560	578	596	615
		CCCA (8.69%)			174	156	165	182	191	191	200	200	207	214	221	228	235
	Blandford-Blenheim	Employment Land Employment			450	640	670	810	910	920	920	920					
		Rural & Rural Based Employment			1,270	1,070	1,120	1,200	1,240	1,290	1,320	1,350					
		Population-related Employment			690	620	710	840	970	1,000	1,030	1,050					
		TOTAL			2,400	2,300	2,400	2,900	3,100	3,200	3,300	3,300	3,480	3,660	3,840	4,020	4,200
		GRCA (92.10%)			2,210	2,118	2,210	2,671	2,855	2,947	3,039	3,039	3,205	3,371	3,537	3,702	3,868
	East Zorra Tavistock	Employment Land Employment			390	590	620	760	860	870	880	880					
		Rural & Rural Based Employment			1,160	1,250	1,500	1,570	1,650	1,720	1,780	1,820					
		Population-related Employment			1,230	890	940	980	1,030	1,070	1,110	1,140					
		TOTAL			2,800	2,700	3,100	3,300	3,500	3,700	3,800	3,800	3,940	4,080	4,220	4,360	4,500
		GRCA (2.82%)			79	76	87	93	99	104	107	107	111	115	119	123	127
	COUNTY TOTAL				47,200	48,000	52,800	60,500	66,600	68,700	69,700	71,100	74,760	78,420	82,080	85,740	89,400
	GRCA				2,611	2,543	2,700	3,202	3,436	3,552	3,655	3,673	3,868	4,063	4,258	4,452	4,647
	LPRCA				12,331	13,234	14,453	16,229	17,865	18,530	18,936	19,301	20,271	21,240	22,210	23,180	24,149
	CCCA				174	156	165	182	191	191	200	200	207	214	221	228	235

SOURCE:

¹ County of Oxford Population, Housing and Employment Forecasts, 2001-2031
Hemson Consulting Ltd., April 2006

	Existing Forecast
	Estimated Employment

NOTES:

1. Projections shaded in grey were provided by the municipality, 2036 t 2056 are estimated.
2. Population counts for 1986 to 2001 sourced from Statistics Canada.
3. Numbers may have been rounded and as such may not add up.
4. Only part of the County is within the Study Area.

TABLE 3.6.2 - EMPLOYMENT
COUNTY OF NORFOLK
Employment Projections

Municipality	Community	Sector of Employment	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Norfolk ¹		Management occupations				2,370	2,690	2,940	2,820	2,750	2,920						
		Business, finance & administrative occupations				3,680	4,170	4,560	4,370	4,270	4,530						
		Natural and applied sciences & related occupations				900	1,020	1,110	1,070	1,040	1,110						
		Health occupations				1,330	1,500	1,640	1,570	1,530	1,630						
		Occupations in social science, education, government service & religion				1,820	2,060	2,260	2,160	2,110	2,240						
		Occupations in art, culture, recreation & sport				440	490	540	510	500	530						
		Sales & service occupations				6,530	7,390	8,100	7,760	7,570	8,040						
		Trades, transport and equipment operators & related occupations				5,870	6,650	7,280	6,980	6,810	7,230						
		Occupations unique to primary industry				5,270	5,880	6,370	6,100	5,950	6,330						
		Occupations unique to processing, manufacturing & utilities				3,570	4,040	4,430	4,240	4,140	4,400						
		TOTAL OCCUPATIONS				31,780	35,890	39,230	37,580	36,670	38,960						
		Occupations - not applicable				310	350	380	360	350	370						
		TOTAL LABOUR FORCE				32,070	36,250	39,610	37,930	37,020	39,320	40,770	42,220	43,670	45,120	46,570	48,020
	LPRCA (97.11%)					31,143	35,202	38,465	36,834	35,950	38,184	39,592	41,000	42,408	43,816	45,224	46,632
	GRCA (2.89%)					927	1,048	1,145	1,096	1,070	1,136	1,178	1,220	1,262	1,304	1,346	1,388

SOURCE:

¹ Norfolk County Population and Employment Projections, Final Report
Marshall, Macklin, Monaghan Limited
January 6, 2004

	Existing Forecast
	Estimated Population

NOTES:

1. Projections shaded in grey were provided by the municipality 2036 to 2056 are estimated.
2. Numbers may have been rounded and as such may not add up.
3. It is anticipated that updated employment forecasts will be available in mid-2009.

TABLE 3.7.2 - EMPLOYMENT
Haldimand County
Employment Projections

Municipality	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Haldimand (Total) ¹	14,658	16,389	15,917	16,400	17,320	17,920	18,720	19,240	19,360	19,952	20,544	21,136	21,728	22,320	22,912
GRCA (45.37%)	6,650	7,436	7,222	7,441	7,858	8,130	8,493	8,729	8,784	9,052	9,321	9,589	9,858	10,127	10,395
LPRCA (26.71%)	3,915	4,378	4,251	4,380	4,626	4,786	5,000	5,139	5,171	5,329	5,487	5,645	5,804	5,962	6,120

SOURCE:

Existing Forecast

Estimated Employment

¹ Population and Household Forecasts 2001-2026
Haldimand County
Hemson Consulting Ltd.
REFERENCE SCENARIO
May 2004

NOTES:

- Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
- Population counts for 1986 to 2001 sourced from Statistics Canada.
- Numbers may have been rounded and as such may not add up.
- Hemson Consulting Ltd. is currently in the process of updating population forecasts. The County anticipates having the updates by mid-2009.

TABLE 3.8.2 - EMPLOYMENT
COUNTY OF BRANT
Employment Projections

Municipality	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Brant County (Total) ¹			14,300	15,700	17,500	18,800	20,200	21,800	23,400	24,800	26,900	29,000	31,100	33,200	35,300
GRCA (93.93%)			13,432	14,747	16,438	17,659	18,974	20,477	21,980	23,295	25,267	27,240	29,212	31,185	33,157
LPRCA (6.07%)			868	953	1,062	1,141	1,226	1,323	1,420	1,505	1,633	1,760	1,888	2,015	2,143

SOURCE:

¹ Brant County Official Plan Review Growth Analysis Study, 2006 to 2031
Watson & Associates Economists
June 30, 2008

	Existing Forecast
	Estimated Population

NOTES:

1. Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
2. Population counts for 1986 to 2001 sourced from Statistics Canada
3. Numbers may have been rounded and as such may not add up.
4. Allocations to the former municipalities were not available at the time of this report's writing.

**TABLE 3.9.2 - EMPLOYMENT
CITY OF BRANTFORD
Employment Projections**

Municipality	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Brantford (Total) ¹					44,810	48,330	51,890	54,780	57,170	59,280	62,147	65,068	67,962	70,856	73,750
GRCA (100%)					44,810	48,330	51,890	54,780	57,170	59,280	62,147	65,068	67,962	70,856	73,750

SOURCE:

¹ City of Brantford Development Charges Background Study, Draft Growth Forecasts
Hemson Consulting Ltd.
January 2009

	Existing Forecast
	Estimated Employment

NOTES:

- Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
- Population counts for 1986 to 2001 sourced from Statistics Canada.
- Numbers may have been rounded and as such may not add up.
- Population forecasts are still in draft form and have not yet been approved by municipal Council.
- Population forecasts are not in line with Places to Grow.

TABLE 3.12.2
 Region of Waterloo
 Employment Equivalent Populations
 Wastewater Treatment Master Plan

UPPER TIER	Wastewater Treatment Plant (WWTP)	POPULATION								
		1986	1991	1996	2001	2004	2041	2046	2051	2056
Waterloo Region	Kitchener					95,734	142,275			
	Waterloo					63,969	101,668			
	Galt					40,442	59,808			
	Preston					18,288	27,722			
	Hespeler					6,530	8,558			
	Elmira					5,209	10,010			
	St. Jacobs					1,976	3,912			
	Wellesley					580	893			
	Baden/New Hamburg					3,886	8,577			
	Ayr					1,309	2,546			
	East Side Community					2,279	16,348			
	TOTAL					240,202	382,317			

TABLE 3.13.2 - EMPLOYMENT
CITY OF GUELPH
Employment Projections

Municipality		1986	1991	1996	2001	2006	2011	2016	2021	2026	2031
Guelph ^{1 2}											104,000
	GRCA (100%)										104,000

SOURCES:

¹ City of Guelph Local Growth Management Strategy Recommendations
June 23, 2008

² City of Guelph Development Charges Study
Growth Forecast Study
August 2008

NOTES:

- 1. Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
- 2. Population forecasts are not in line with Places to Grow.

**TABLE 3.14.2 - EMPLOYMENT
COUNTY OF WELLINGTON
Employment Projections**

Municipality	Lower-Tier	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Wellington ^{1 2}	Centre Wellington					8,680	9,930	11,290	11,960	12,900	13,560	14,536	15,512	16,488	17,464	18,440
	GRCA (100%)					8,680	9,930	11,290	11,960	12,900	13,560	14,536	15,512	16,488	17,464	18,440
	Erin					2,720	2,760	2,900	3,530	3,860	4,320	4,640	4,960	5,280	5,600	5,920
	GRCA (31.99%)					1,064	1,079	1,134	1,381	1,510	1,690	1,815	1,940	2,065	2,190	2,315
	Guelph-Eramosa					3,350	3,590	3,840	4,090	4,320	4,490	4,718	4,946	5,174	5,402	5,630
	GRCA (100%)					3,350	3,590	3,840	4,090	4,320	4,490	4,718	4,946	5,174	5,402	5,630
	Mapleton					3,850	4,010	4,190	4,400	4,570	4,740	4,918	5,096	5,274	5,452	5,630
	GRCA (96.86%)					3,729	3,884	4,058	4,262	4,427	4,591	4,764	4,936	5,108	5,281	5,453
	Puslinch					3,230	3,460	3,720	4,020	4,260	4,500	4,754	5,008	5,262	5,516	5,770
	GRCA (72.41%)					2,339	2,505	2,694	2,911	3,085	3,258	3,442	3,626	3,810	3,994	4,178
	Wellington North					5,470	5,730	6,030	6,420	6,710	7,020	7,330	7,640	7,950	8,260	8,570
	GRCA (50.11%)					2,741	2,871	3,022	3,217	3,362	3,518	3,673	3,828	3,984	4,139	4,294
	COUNTY TOTAL					30,100	32,410	35,050	37,680	40,030	42,170	44,584	46,998	49,412	51,826	54,240
	GRCA (Total)					21,903	23,860	26,038	27,820	29,603	31,107	32,948	34,789	36,629	38,470	40,311

SOURCES:

¹ Population, Housing and Employment Forecast Update, 2006-2031
Watson & Associates
April 24, 2008

² Official Plan Amendment No. 60
County of Wellington
June 12, 2008

NOTES:

- 1. Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
- 2. Numbers may have been rounded and as such may not add up.

	Existing Forecast
	Estimated Employment

**TABLE 3.17.2 - EMPLOYMENT
COUNTY OF DUFFERIN
Employment Projections**

Municipality	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Dufferin ¹				19,000	21,000	21,000	22,000	23,000	25,000	27,000	28,200	29,400	30,600	31,800	33,000
GRCA (18%)				3,420	3,780	3,780	3,960	4,140	4,500	4,860	5,076	5,292	5,508	5,724	5,940

SOURCE:

¹ County of Dufferin: Growth Management Study (Draft)
Dillon Consulting Ltd., Watson & Associates Economists Ltd.
December 2008

	Existing Forecast
	Estimated Employment

NOTES:

- Projections shaded in grey were provided by the municipality, 2036 to 2056 are estimated.
- Population counts for 1986 to 2001 sourced from Statistics Canada.
- Numbers may have been rounded and as such may not add up.
- Projections are still in draft form.
- Where forecasts were not provided, intervals were calculated by averaging growth.

TABLE 3.18.2 - EMPLOYMENT
COUNTY OF GREY
Employment Projections

Municipality	Lower-Tier	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056
Grey																
	Southgate ^{1 2}					1,980	2,122	2,264	2,406	2,548	2,690	2,832	2,974	3,116	3,258	3,400
	GRCA (21.48%)					425	456	486	517	547	578	608	639	669	700	730
	COUNTY TOTAL					38,400	41,000	42,500	44,000	44,000	44,000	45,120	46,240	47,360	48,480	49,600

SOURCES:

¹ Grey County Growth Management Strategy
 Malone Given Parsons Ltd. in association with the Centre for Spatial Economics (C.S.E)
 April 2008

	Existing Forecast
	Estimated Population

² Growth Projection Study (Official Plan Amendment)
 Grey County
 October 2008

NOTES:

- Projections shaded in grey were provided by the municipality, 2036 to 2056 were estimated.
- Population counts for 1986 to 2001 sourced from Statistics Canada.
- Numbers may have been rounded and as such may not add up.
- Only a very small portion (2.33ha) of Grey Highlands is in the Study Area. Lands within the Study Area are rural and no settlement areas are in proximity to this part of the municipality. A breakdown of population forecast or estimates are not provided in this report.

APPENDIX 3

**Base Population by Conservation Authority Jurisdictions
Population Growth by Conservation Authority Jurisdiction**

Table 4.0
Population Growth (2006-2056) By Conservation Authority Jurisdiction

[illegible]

TABLE 4.1.1
2006 Base Population by Watershed
GRAND RIVER CONSERVATION AUTHORITY

UPPER TIER			LOWER/SINGLE TIER		SERVICED POPULATION WIHTIN WATERSHED				UNSERVICED POPULATION WITHIN WATERSHED
Municipality	2006 Population	2006 Population within Watershed	Municipality	2006 Population	2006 Population within Watershed	Community	2004 Population*	2006 Population	2006 Population
Wellington County ^{1 19}	85,480	61,940	Wellington North	11,180	5,868	Arthur		2,320	3,548
			Mapleton	9,850	9,541	Drayton		1,710	7,361
			Centre Wellington	26,050	26,050	Moorefield		470	
						Fergus		12,820	6,890
			Guelph-Eramosa	12,070	12,070	Elora/Salem		6,340	
						Rockwood		3,620	7,963
			Puslinch	6,690	4,844	Hamilton Drive		487	
			Erin	11,150	3,567	Aberfoyle		200	4,644
City of Brantford ²	90,190	90,190	Minto	8,500	Not within GRCA jurisdiction				3,567
			Brantford	90190	90,190			90,190	
			Southgate	7,500	3,754	Dundalk		2,143	1,611
			Single Tier	115,000	115,000			115,000	
City of Guelph ³	115,000	115,000							
Haldimand County ⁷	45,050	28,036	Single Tier	45,050	28,036	Caledonia		10,325	10,311
						Dunnville		5,665	
						Cayuga		1,735	
Halton Region ⁸	439,000	1,890	Halton Hills	55,000	467				467
			Milton	31,471	1423				1,423
			Burlington	164,415	Not within GRCA jurisdiction				
			Oakville	165,613	Not within GRCA jurisdiction				
Norfolk County ⁹	68,600	1,957	Single Tier	68,600	1,957				1,957
Oxford County ^{10 11 19}	106,200	8,355	Blandford-Blenheim	7,800	6,928	Plattsville		1,550	4,264
						Drumbo		602	
						Bright		512	
			Norwich	11,000	987				987
			East Zorra-Tavistock	7,500	211				211
			Woodstock	36,000	230				230
			Tilsonburg	15,300	Not within GRCA jurisdiction				
			Southwest Oxford	8,000	Not within GRCA jurisdiction				
			Zorra	8,500	Not within GRCA jurisdiction				
			Ingersoll	12,000	Not within GRCA jurisdiction				
			North Perth	13,556	66				66
			Perth East	13,586	3,847	Milverton		1,824	2,023
			Kitchener	213,500	213,500		202,213	213,500	
Waterloo Region ^{13 14}	507,300	507,300	Waterloo	114,900	114,900		114,443	114,900	
			Cambridge	122,100	122,100		118,364	122,100	
			Wellesley	10,100	10,100	Wellesley	2,138	2,158	5,240
						St. Clements		1,421	
						Linwood		831	
						Heidelberg		450	
			Woolwich	20,050	20,050	Elmira	8,157	9,047	4,662
						St. Jacobs	1,586	1,790	
						Breslau		1,057	
						Conestogo		1,311	
						Maryhill		525	
						Heidelberg		1,438	
						West Montrose		220	
			Wilmot	17,250	17,250	Baden	8,134	3,576	3,453
						New Hamburg		6,779	
						Mannheim		1,064	
						Shingletown		110	
						New Dundee		1,214	
						Foxboro Green		430	
						St. Agatha		624	
			North Dumfries	9,350	9,350	Ayr	4,069	4,290	5,060
Dufferin County ^{15 19}	57,000	8,628	Melancthon	2,895	1,286				1,286
			East Luther Grand Valley	2,844	2,844	Grand Valley		1,942	902
			Amaranth	3,845	2,759	Waldemar		537	2,222
			East Garafraxa	2,389	1,739	Marsville		436	1,303
			Orangeville	26,925	Not within GRCA jurisdiction				
			Shelburne	5,149	Not within GRCA jurisdiction				
			Mulmur	3,318	Not within GRCA jurisdiction				
			Mono	7,071	Not within GRCA jurisdiction				
Brant County ^{16 17 19}	38,400	37,040	Single Tier	38,400	37,040	Paris		11,249	21,045
						St. George		3,210	
						Mt. Pleasant/Tutela Heights		1,152	
						Oakhill		384	
City of Hamilton ¹⁸	515,213	19,404	Single Tier	515,213	19,404	Lynden		500	18,904
Total Population (2006)	2,243,672	887,408		2,076,870	887,358			765,758	121,600

SOURCES

* Region of Waterloo Wastewater Treatment Master Plan, January 2006, Figure 2.2 provides 2004 population serviced by 11 wastewater treatment plants. These generally correspond to serviced areas within the lower-tier municipalities with the exception of the future East Side Community Wastewater Facility which will service parts of Kitchener, Woolwich and Cambridge. For purposes of this table, we have included the future population to be serviced by the East Side Community Facility in the City of Cambridge. For further explanation see Section 3.8 of this Report. The 2004 serviced and unserved populations for the Region of Waterloo are included in this table for reference purposes only.

¹ Population, Housing and Employment Forecast Update, 2006-2031. Watson and Associates. April 24, 2008.
² City of Brantford Development Charges Background Study, Draft Growth Forecasts. Hemson Consulting. January, 2009.
³ Growth Projection Study (Official Plan Amendment). Grey County. October, 2008.
⁴ Grey County Growth Management Strategy. MGP and C&SE. April, 2008.
⁵ Township of Southgate Official Plan. Township of Southgate. July, 2006.
⁶ City of Guelph Local Growth Management Strategy Recommendations. City of Guelph. June 23, 2008.
⁷ Population and Household Forecasts 2001-2026. REFERENCE SCENARIO. Hemson Consulting Ltd. May, 2004.
⁸ Best Planning Estimates of Population, Occupied Dwelling Units and Employment 2002-2021. Regional Municipality of Halton. 2003.
⁹ Norfolk County Population and Employment Projections, Final Report. MMM Ltd. January, 2004.

¹⁰ County of Oxford Population, Housing and Employment Forecasts, 2001-2031. Hemson Consulting Ltd. April, 2006.
¹¹ Technical Memorandum: Review of Current Biosolids Management Practices and Future Projections in Oxford County. XCG Consultants Ltd. 2004.
¹² County of Perth Official Plan, April 2008 Consolidation. County of Perth. April, 2008.
¹³ Region of Waterloo Interim Population Forecasts - February 7, 2009 and February 24, 2009. Region of Waterloo.
¹⁴ Region of Waterloo Wastewater Treatment Master Plan, Table 2.2 provides Region's forecast population and serviced population from 2001 to 2004.
¹⁵ County of Dufferin: Growth Management Study (Draft). Dillon Consulting Ltd. and Watson and Associates. December, 2008.
¹⁶ Brant County Official Plan Review Growth Analysis Study, 2006 to 2031, Watson & Associates Economists Ltd., June 30, 2008
¹⁷ Brant County Official Plan Review Growth Analysis Study, 2006 to 2031. Serviced growth estimated by attributing 77% of growth to Paris and 1% to St. George in accordance with Table 7-3a.
¹⁸ Land Use data (Year-end 2006). Growth Related Integrated Development Strategy (GRIDS) Population Projections. City of Hamilton. December, 2008.
¹⁹ 2006 Populations for settlement areas with no forecasts was estimated using the methodology outlined in Section 2.6 of this report.

TABLE 4.1.2
2006 Base Population by Watershed
LONG POINT REGION CONSERVATION AUTHORITY

UPPER TIER			LOWER TIER			SERVICED POPULATION WITHIN WATERSHED		UNSERVICED POPULATION WITHIN WATERSHED
Municipality	2006 Population	2006 Population within Watershed	Municipality	2006 Population	2006 Population within Watershed	Community	2006 Population	2006 Population
Elgin County ^{1 2}	85,351	7,359	Bayham	6,727	6,689	Vienna	600	5,589
			Malahide	670	670	Port Burwell	500	
								670
Haldimand County ³	45,212	11,416	Single Tier	45,212	11,416	Hagersville	2,705	6,286
						Jarvis	1,500	
						Townsend	925	
Norfolk County ⁴	68,600	66,643	Single Tier	68,600	66,643	Simcoe	16,160	34,423
						Port Dover	5,860	
						Delhi	5,020	
						Waterford	3,370	
						Port Rowan	960	
						Courtland	850	
Oxford County ^{5 6 9}	106,400	26,193	Norwich	11,000	9,087	Norwich	2,581	4,781
						Otterville	1,112	
						Springford	613	
			South-West Oxford	8,000	1,806	Mount Elgin	400	730
						Brownsville	676	
			Tillsonburg	15,300	15,300	Tillsonburg	15,300	
Brant County ^{7 8}	68,400	1,360	Single Tier	68,400	1,360	Single Tier		1,360
Total Population (2006)	373,963	112,971		223,909	112,971		59,132	53,839

SOURCES

¹ Municipality of Bayham Growth Study, 5 Year Official Plan Review. IBI Group. February, 2008.

² Background Study, Official Plan of the Township of Malahide. Cumming Cockburn Ltd. 2001.

³ Population and Household Forecasts 2001-2026. REFERENCE SCENARIO. Hemson Consulting Ltd. May, 2004.

⁴ Norfolk County Population and Employment Projections, Final Report. MMM Ltd. January, 2004.

⁵ County of Oxford Population, Housing and Employment Forecasts, 2001-2031. Hemson Consulting Ltd. April, 2006.

⁶ Technical Memorandum: Review of Current Biosolids Management Practices and Future Projections in Oxford County. XCG Consultants Ltd. 2004.

⁷ Brant County Official Plan Review Growth Analysis Study, 2006 to 2031. Serviced growth estimated by attributing 77% of growth to Paris and 1% to St. George in accordance with Table 7-3a.

⁸ Brant County Official Plan Review Growth Analysis Study, 2006 to 2031, Watson & Associates Economists Ltd., June 30, 2008

⁹ 2006 Populations for settlement areas with no forecasts was estimated using the methodology outlined in Section 2.6 of this report.

TABLE 4.1.3
2006 Base Population by Watershed
KETTLE CREEK CONSERVATION AUTHORITY

UPPER TIER			LOWER TIER			SERVICED POPULATION WITHIN WATERSHED		UNSERVICED POPULATION WITHIN WATERSHED
Municipality	2006 Population	2006 Population within Watershed	Municipality	2006 Population	2006 Population within Watershed	Community	2006 Population	2006 Population
Elgin County ^{1 2 3 4}	85,351	47,209	Central Elgin	12,723	9,879	Port Stanley	1,828	6,352
						Belmont	1,699	
			Malahide	8,828	497			497
			Southwold	5,469	2,166			2,166
St. Thomas ^{1 5}	36,110	34,666	Single Tier	36,110	34,666		34,666	
City of London ^{1 6}	355,900	722	Single Tier		722			722
Middlesex County ⁷	71,502	1,010	Middlesex Centre	15,717	289			289
			Thames Centre	13,706	721			721
Total Population (2006)	548,863	83,607		92,553	48,940		38,193	10,747

SOURCES

¹ 2006 populations for upper and lower-tier municipalities sourced from Statistics Canada (Census)
² Population, Housing and Employment Projections, Central Elgin, 2006-2026 (Strategic Growth Scenario). Lapoint Consulting, Dillon Consulting. May, 2006.
³ Background Study, Official Plan of the Township of Malahide. Cumming Cockburn Ltd. 2001.
⁴ St. Thomas, Southwold, and Yarmouth Population Projections and Housing and Land Requirements: Final Report. Lapoint Consultants Inc. 1995.
⁵ Housing and Employment Projections, St. Thomas Population. Lapoint Consulting, Dillon Consulting. May, 2007.
⁶ Employment, Population, Housing and Non-Residential Construction Projections, City of London 2006 Update. Clayton Research Associates. September 29, 2006.
⁷ County of Middlesex Population Projection Report, 2001-2026. MMM Ltd., 2003.

TABLE 4.1.4
2006 Base Population by Watershed
CATFISH CREEK CONSERVATION AUTHORITY

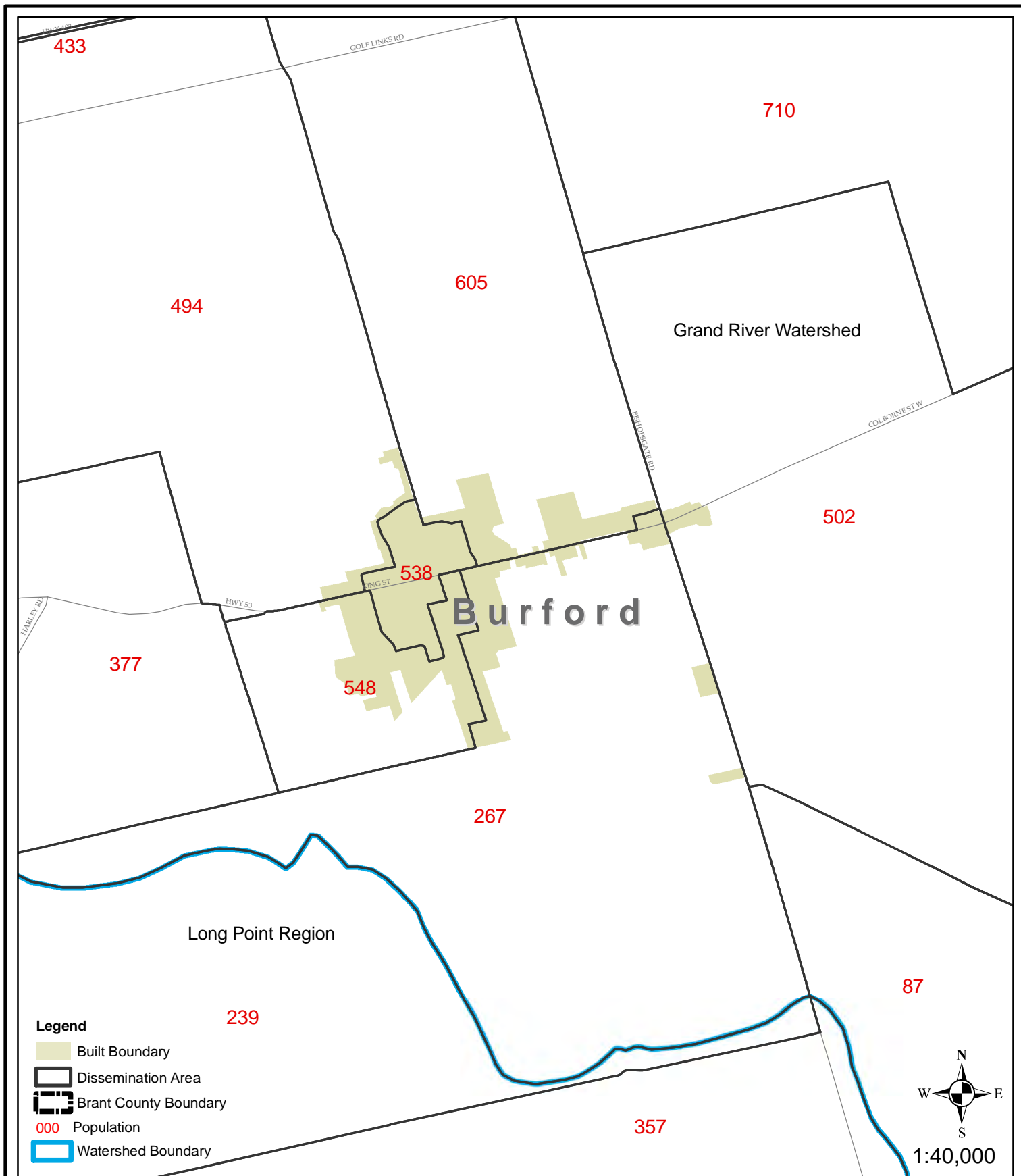
UPPER TIER			LOWER TIER			SERVICED POPULATION WITHIN WATERSHED		UNSERVICED POPULATION WITHIN WATERSHED
Municipality	2006 Population	2006 Population within Watershed	Municipality	2006 Population	2006 Population within Watershed	Community	2006 Population	2006 Population
Elgin County ^{1 2 3 4 5}	23,351	17,333	Central Elgin	12,723	2,844			2,844
			Bayham	6,727	38			38
			Aylmer	7,069	7,069	Aylmer	7,069	
			Malahide	8,828	7,382	Springfield	601	6,211
St. Thomas ^{1 6}	36,110	1,444	Single Tier	36,110	1,444	Port Bruce	570	
Oxford County ^{1 7 8}	106,400	690	South-West Oxford	8,000	690		1,444	
Total Population (2006)	165,861	19,467		79,457	19,467		9,684	9,783

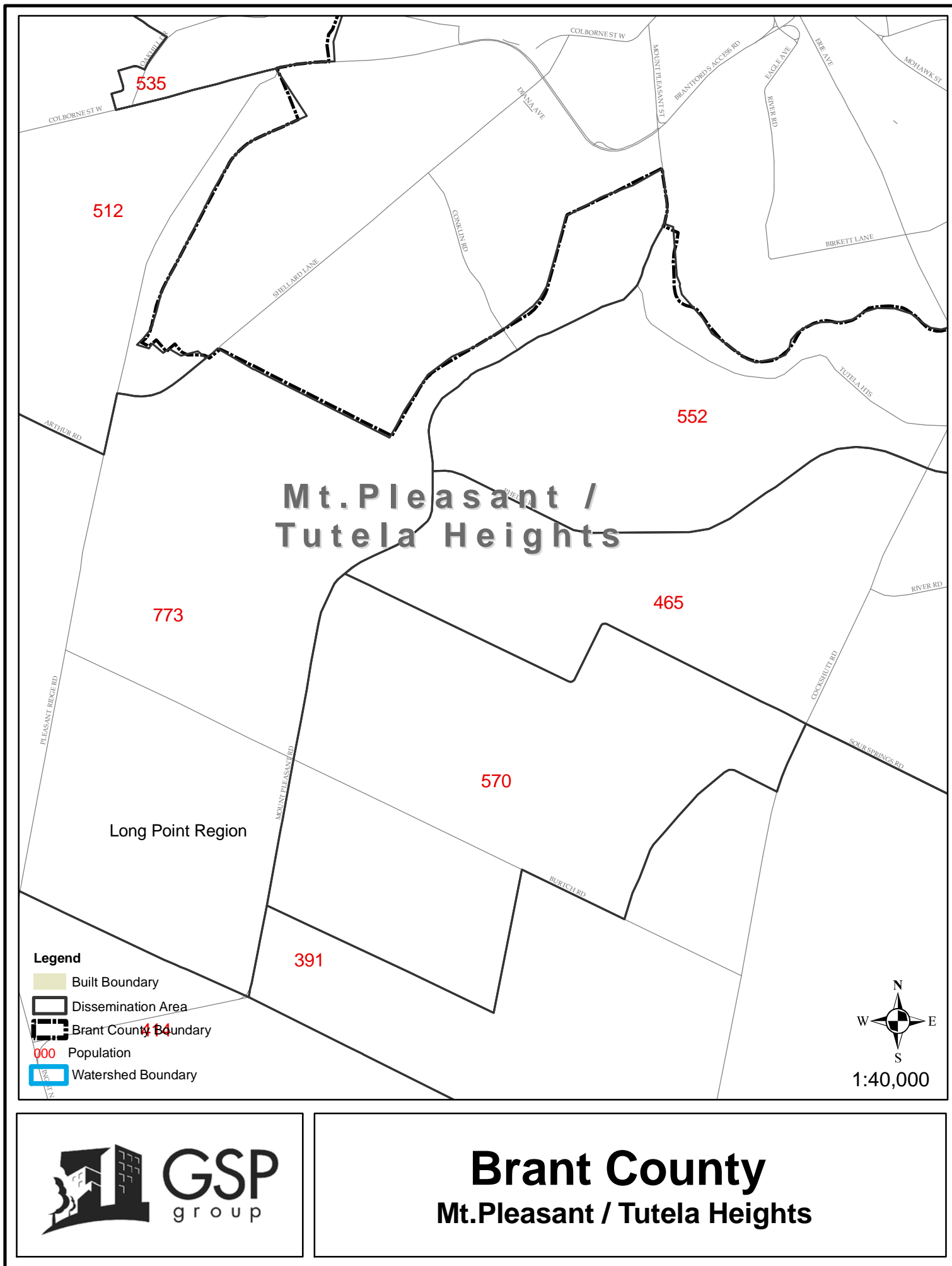
SOURCES

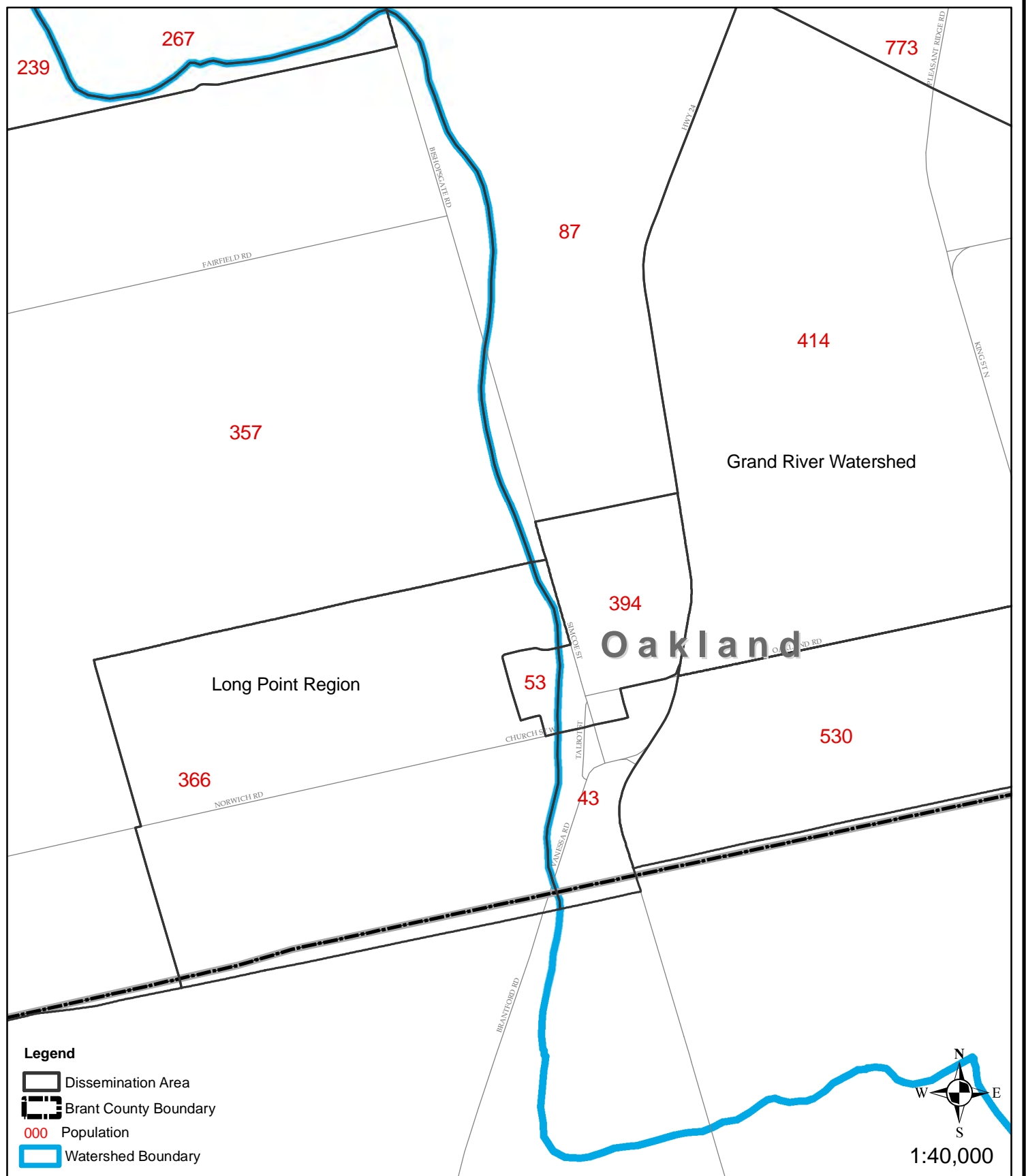
¹ 2006 populations for upper and lower-tier municipalities sourced from Statistics Canada (Census)
² Population, Housing and Employment Projections, Central Elgin, 2006-2026 (Strategic Growth Scenario). Lapoint Consulting, Dillon Consulting. May, 2006.
³ Municipality of Bayham Growth Study, 5 Year Official Plan Review. IBI Group. February, 2008.
⁴ Town of Aylmer Official Plan, 2008 Consolidation. Monteith Brown Planning Consultants. 2008.
⁵ Background Study, Official Plan of the Township of Malahide. Cumming Cockburn Ltd. 2001.
⁶ Housing and Employment Projections, St. Thomas Population. Lapoint Consulting, Dillon Consulting. May, 2007.
⁷ County of Oxford Population, Housing and Employment Forecasts, 2001-2031. Hemson Consulting Ltd. April, 2006.
⁸ Technical Memorandum: Review of Current Biosolids Management Practices and Future Projections in Oxford County. XCG Consultants Ltd. 2004.

APPENDIX 4

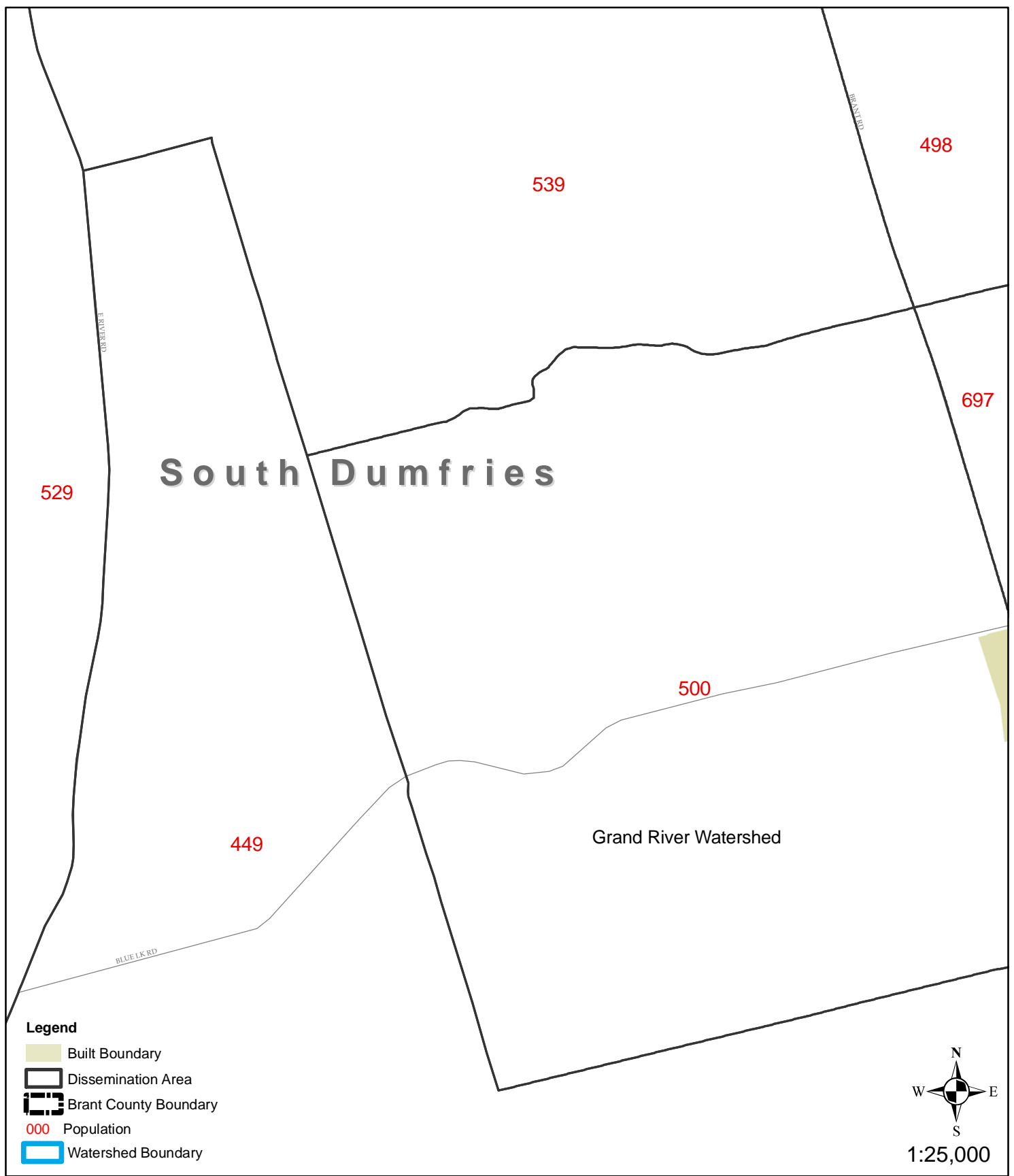
Detailed Mapping by Settlement Area





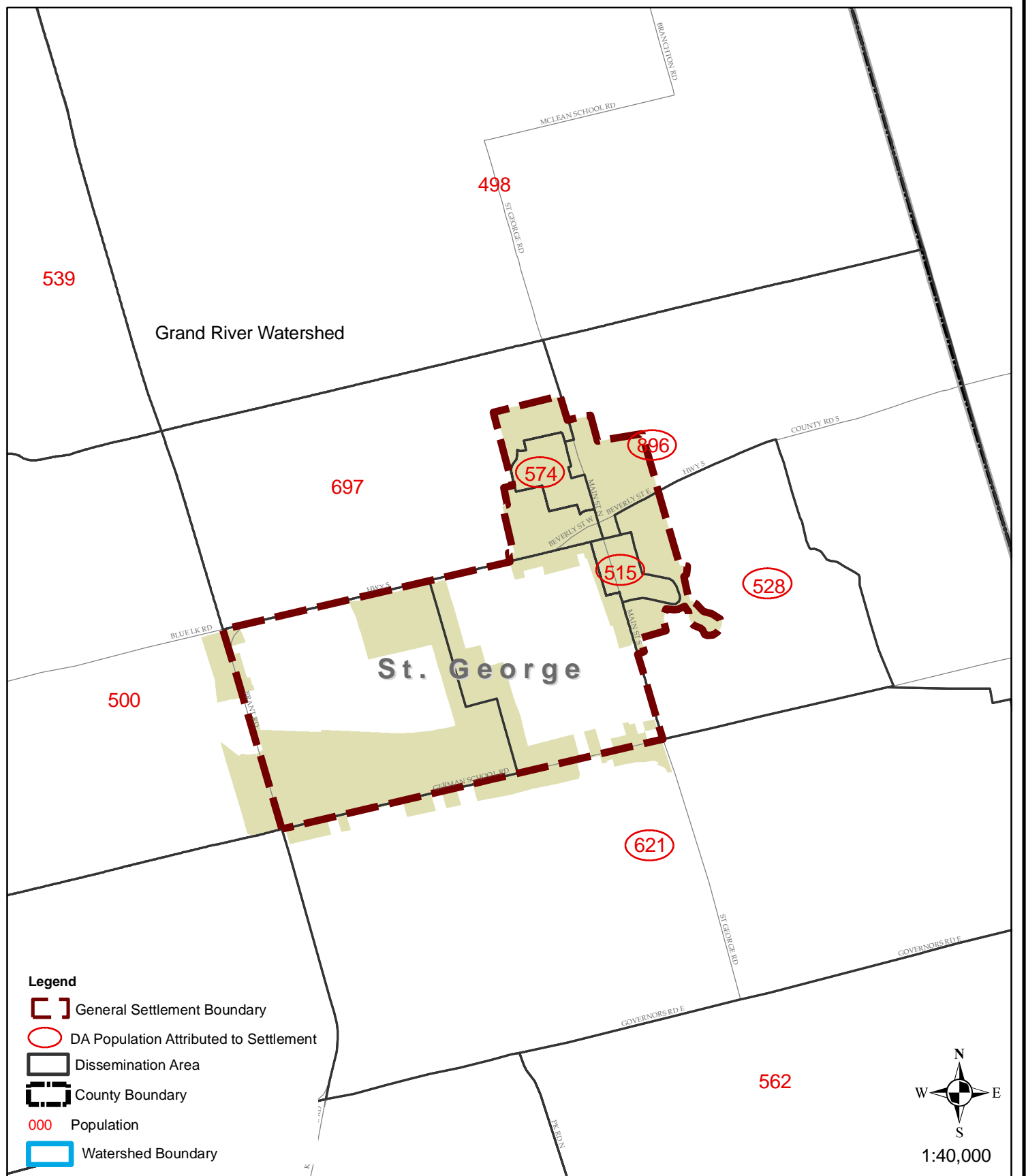


Brant County
Oakland



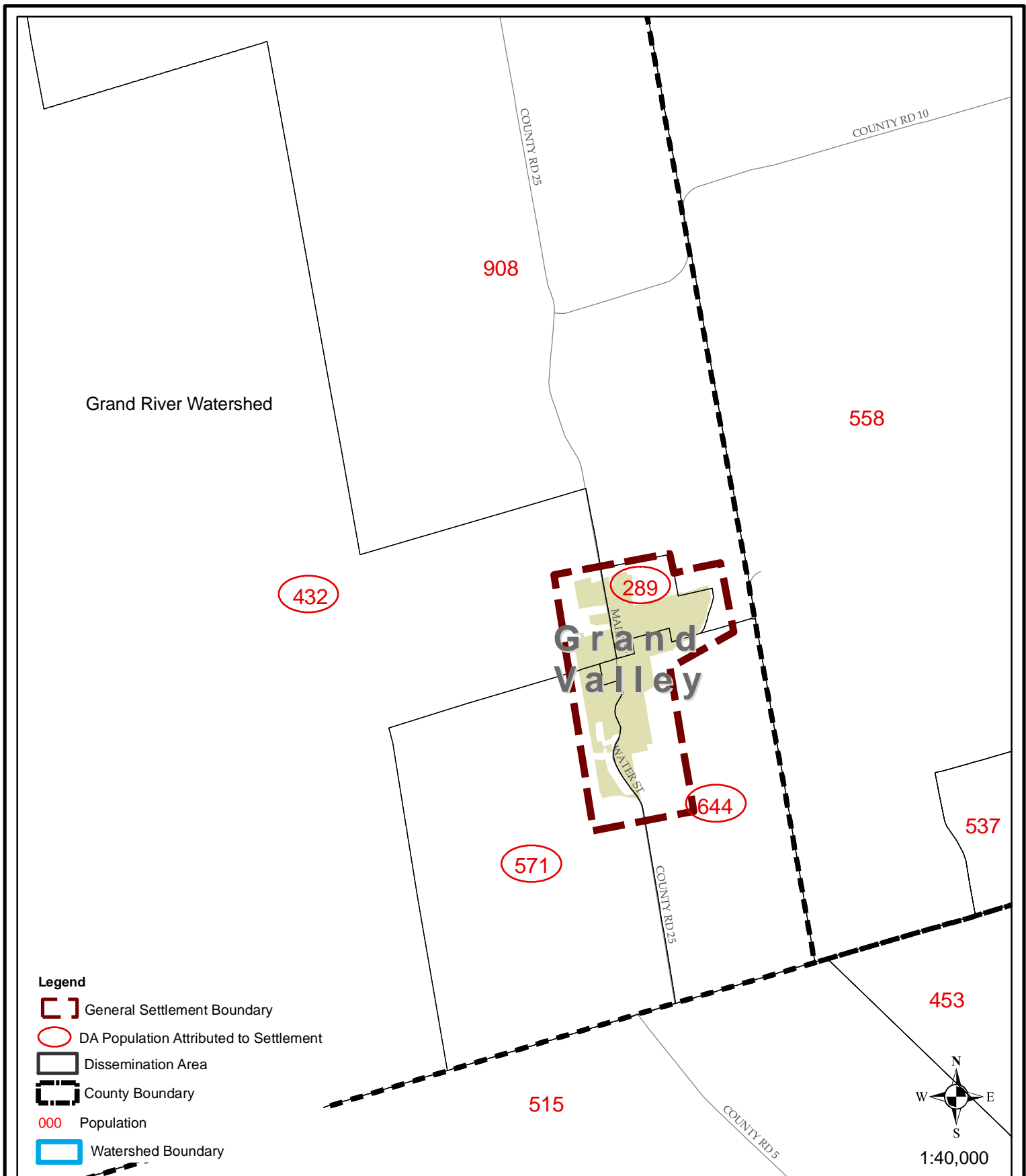
Brant County

South Dumfries



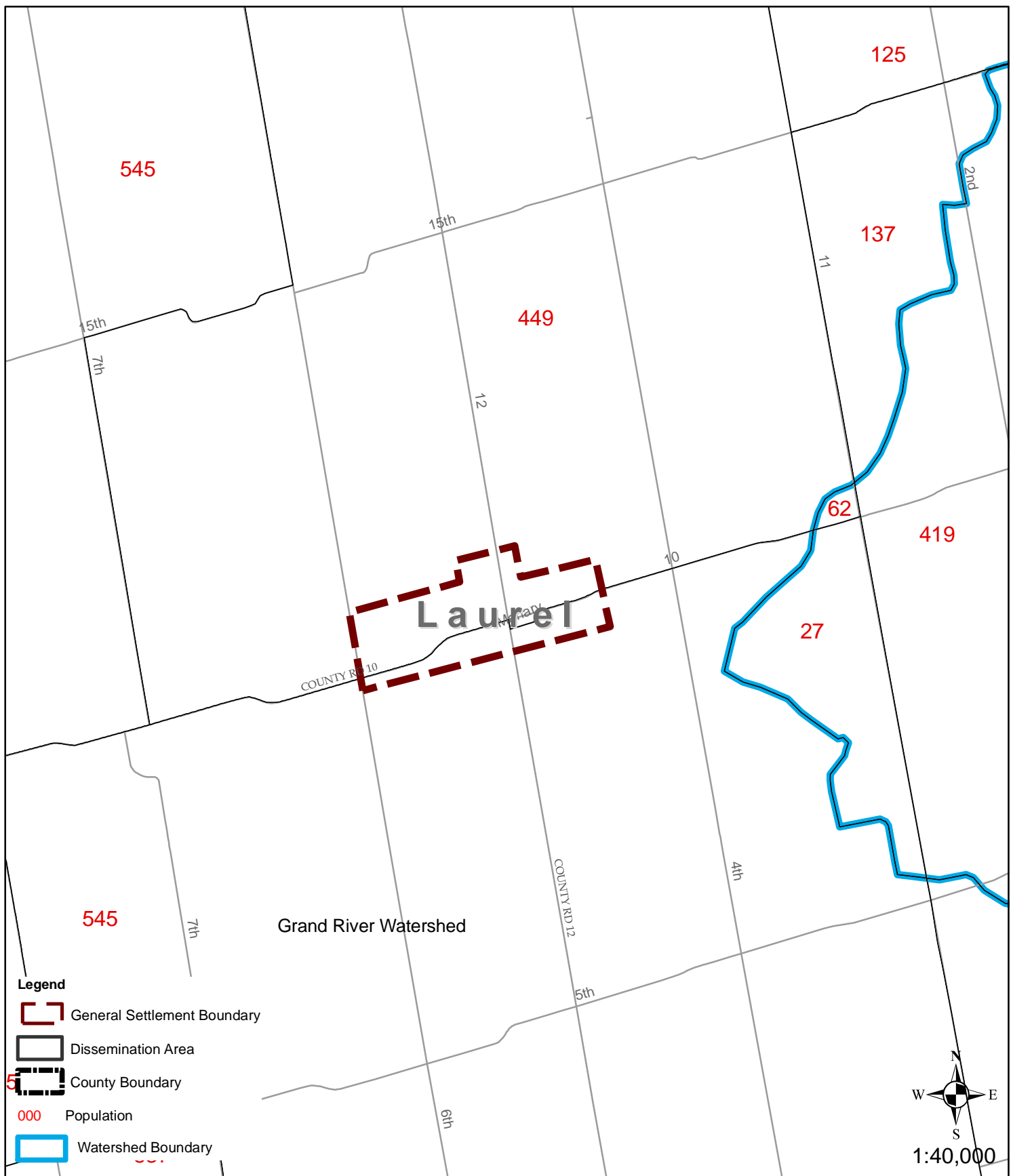
Brant County

St. George



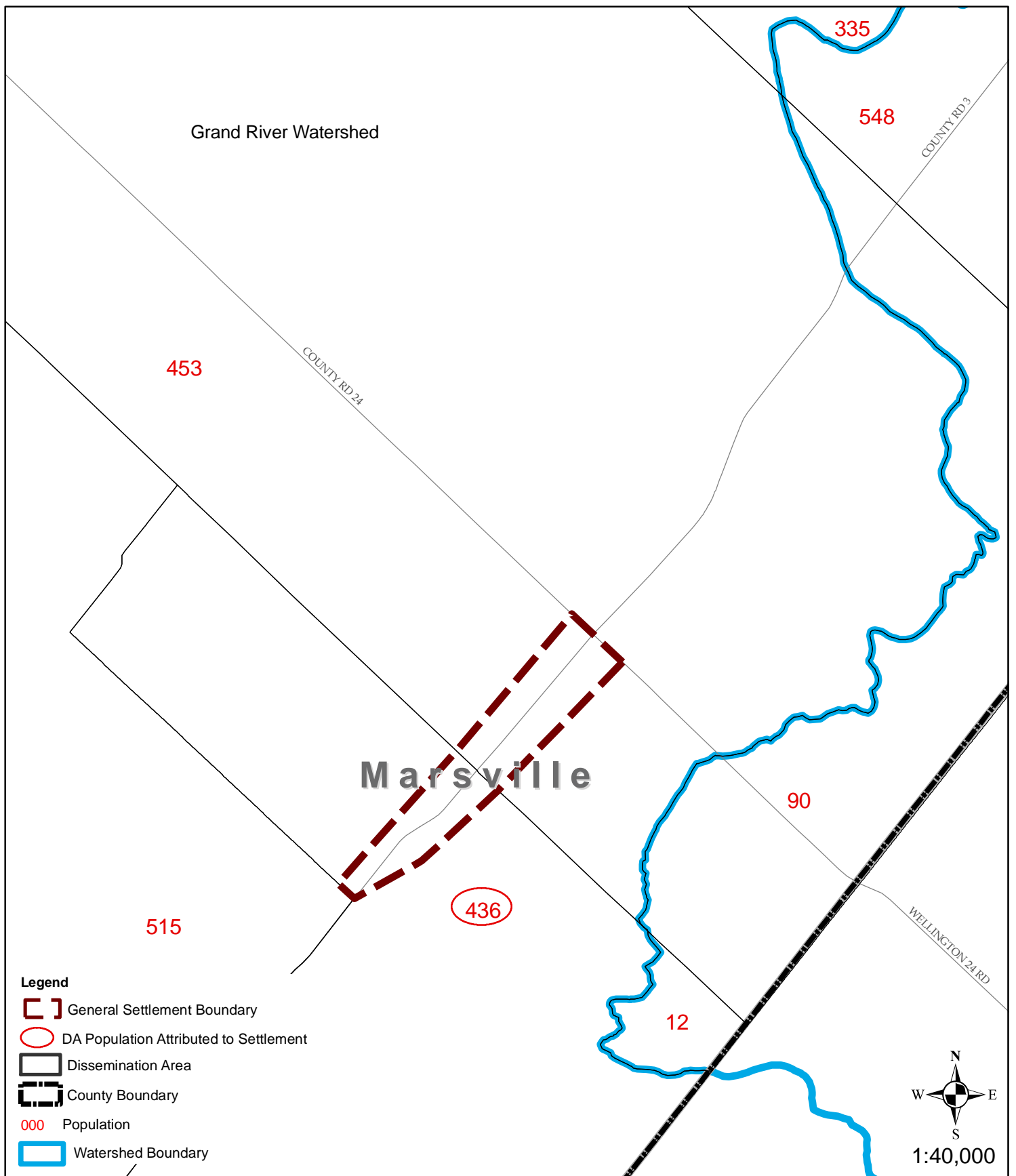
Dufferin County

Grand Valley



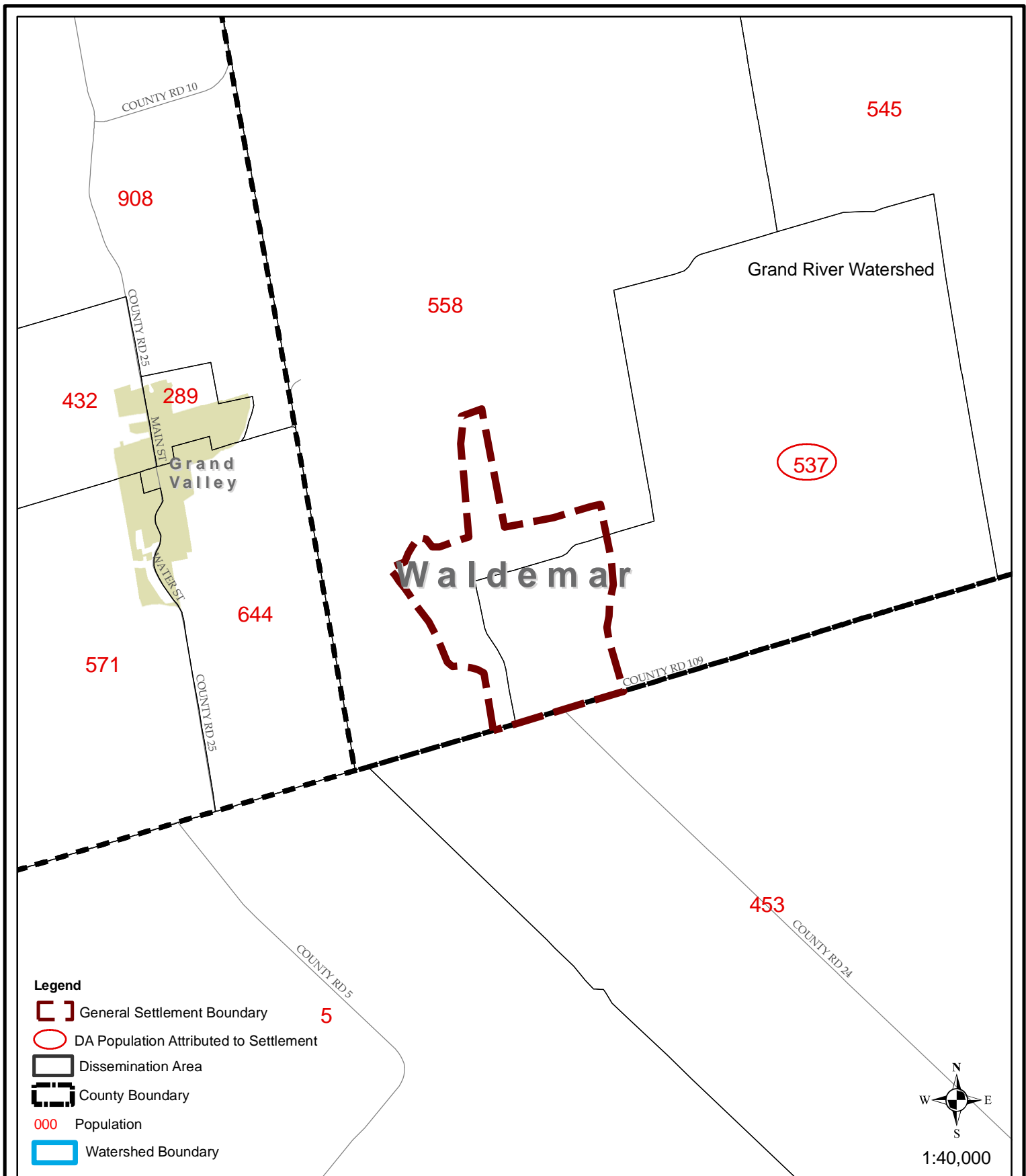
Dufferin County

Laurel



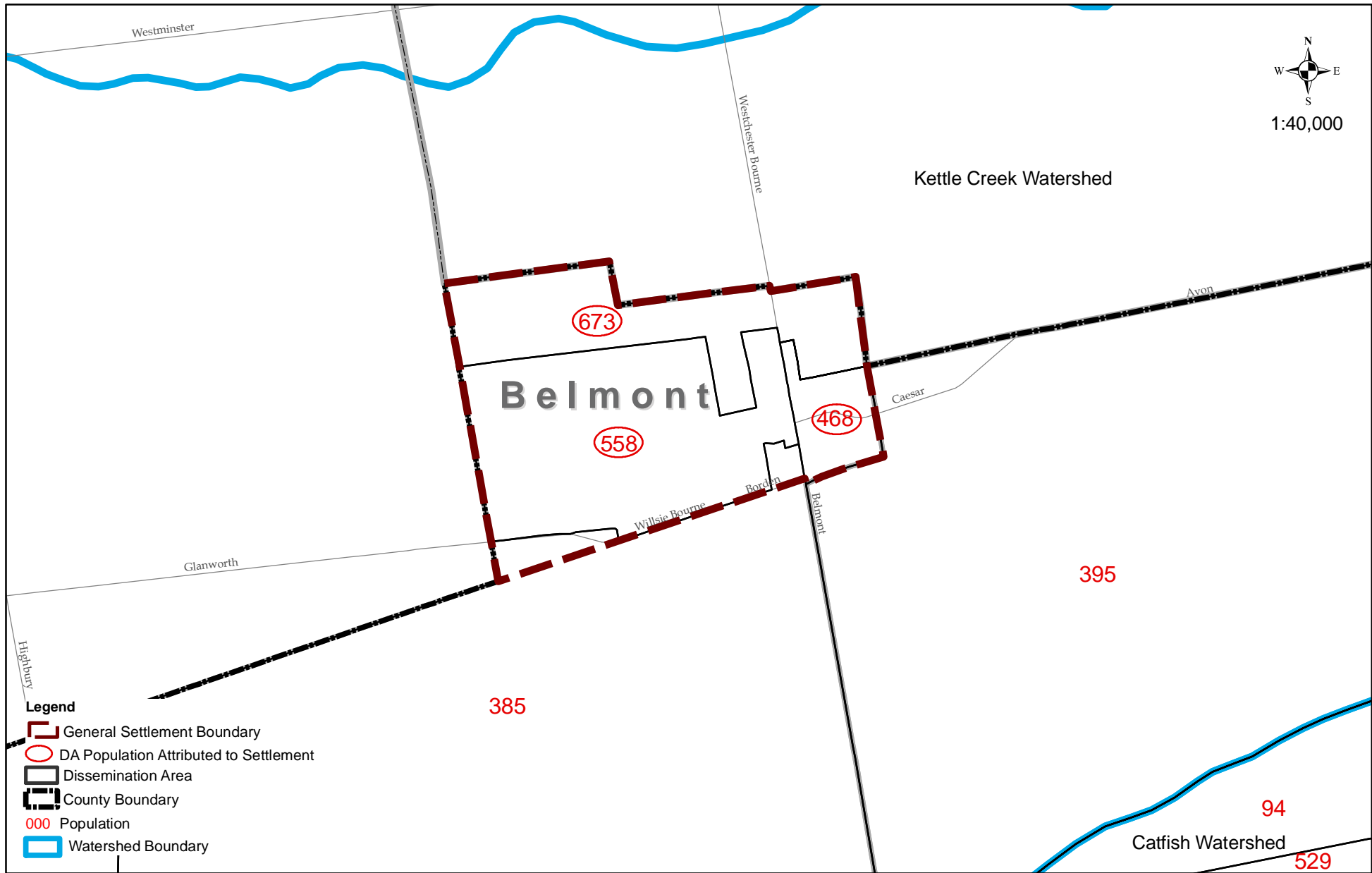
Dufferin County

Marsville



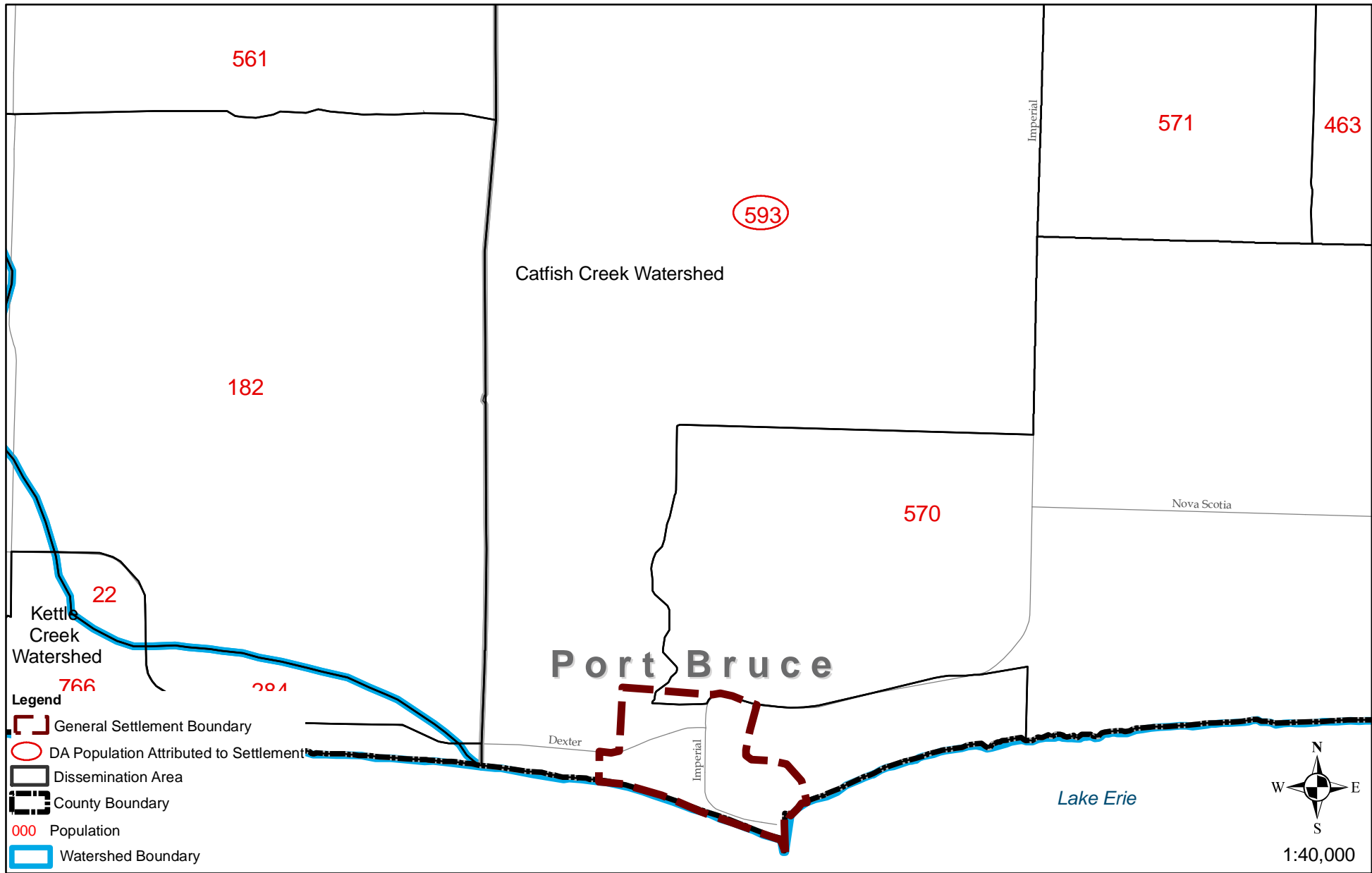
Dufferin County

Waldemar



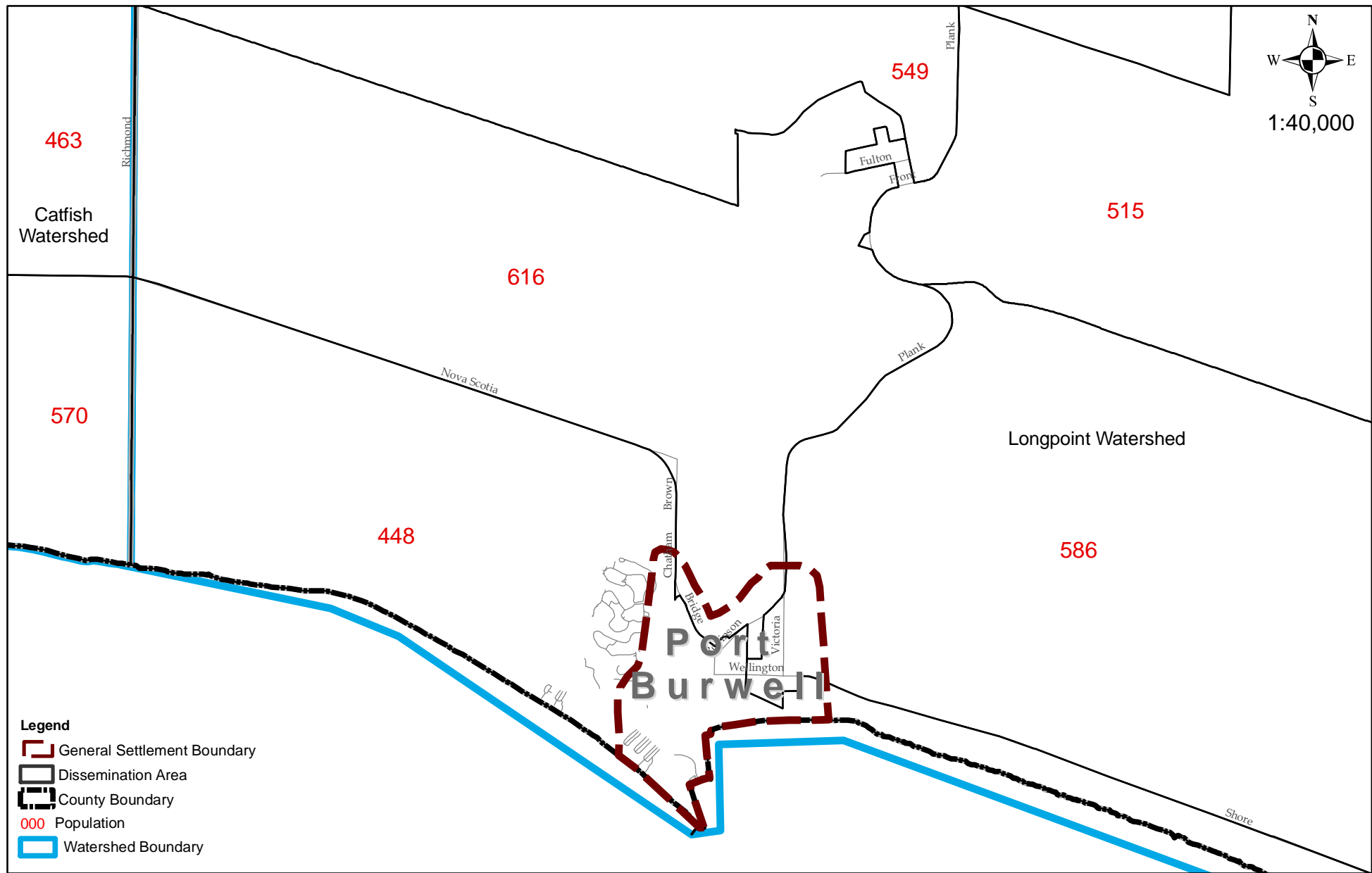
Elgin County

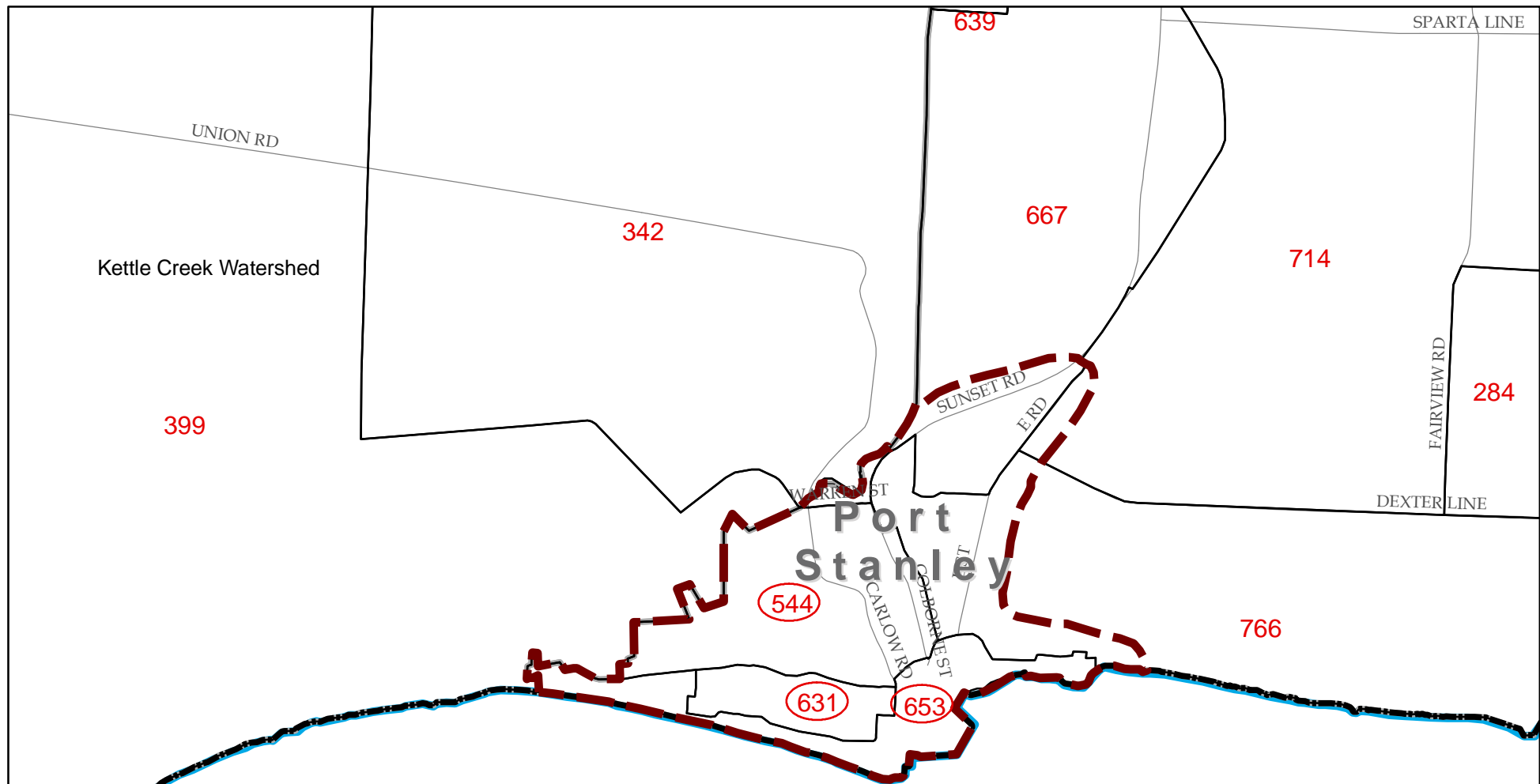
Belmont



Elgin County

Port Bruce





- Legend
- General Settlement Boundary
 - DA Population Attributed to Settlement
 - Dissemination Area
 - County Boundary
 - Population
 - Watershed Boundary

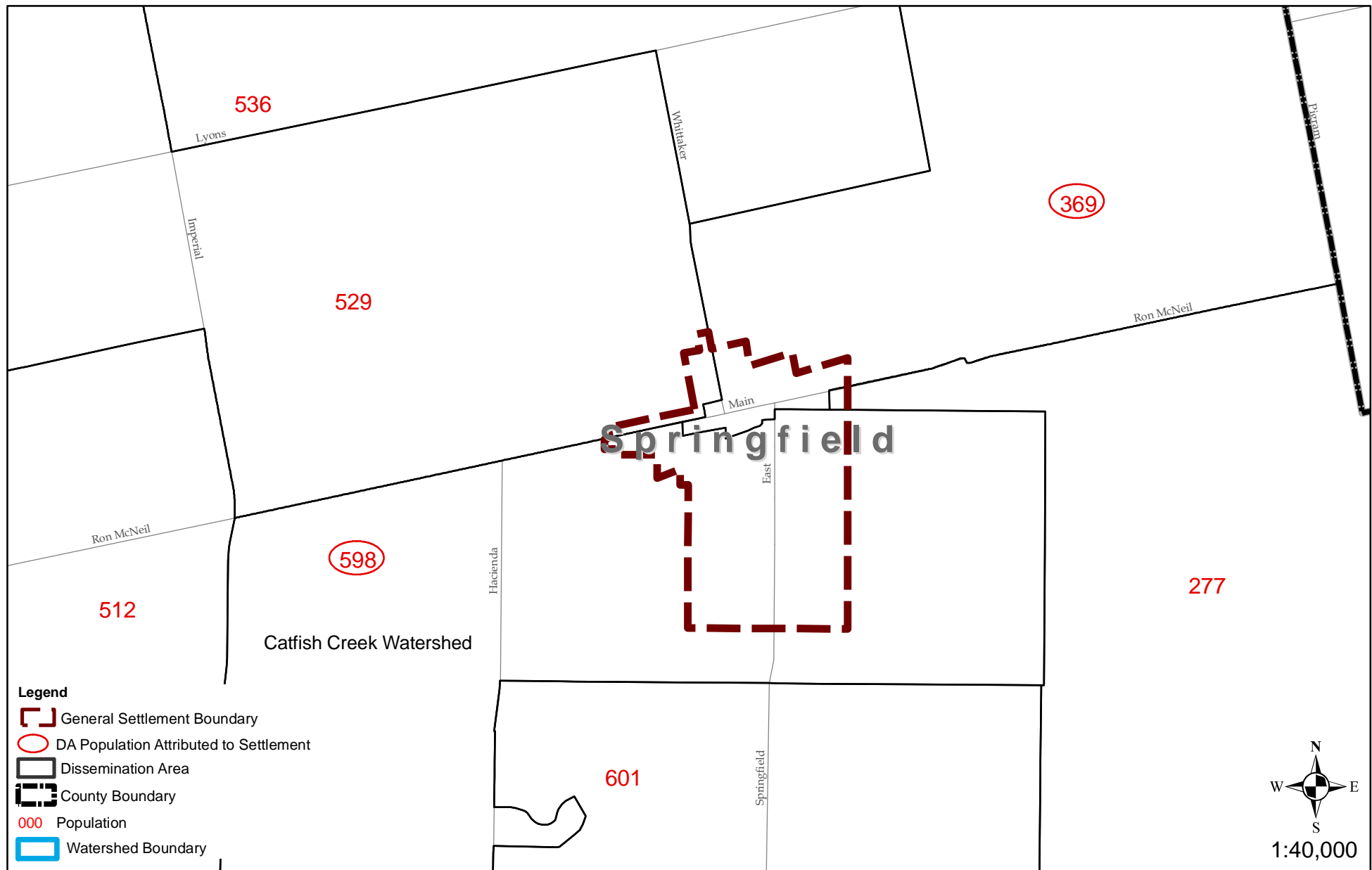


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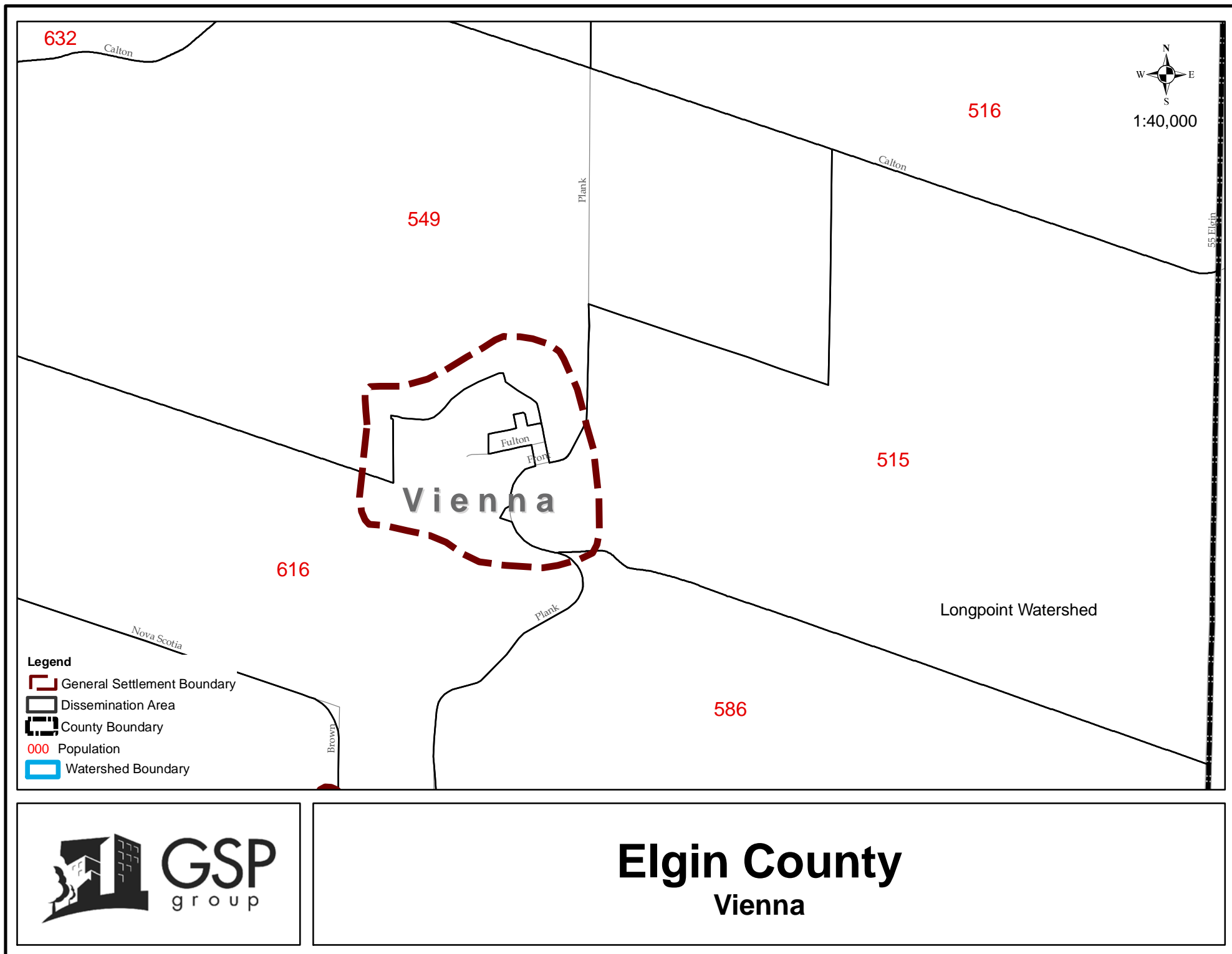
Elgin County

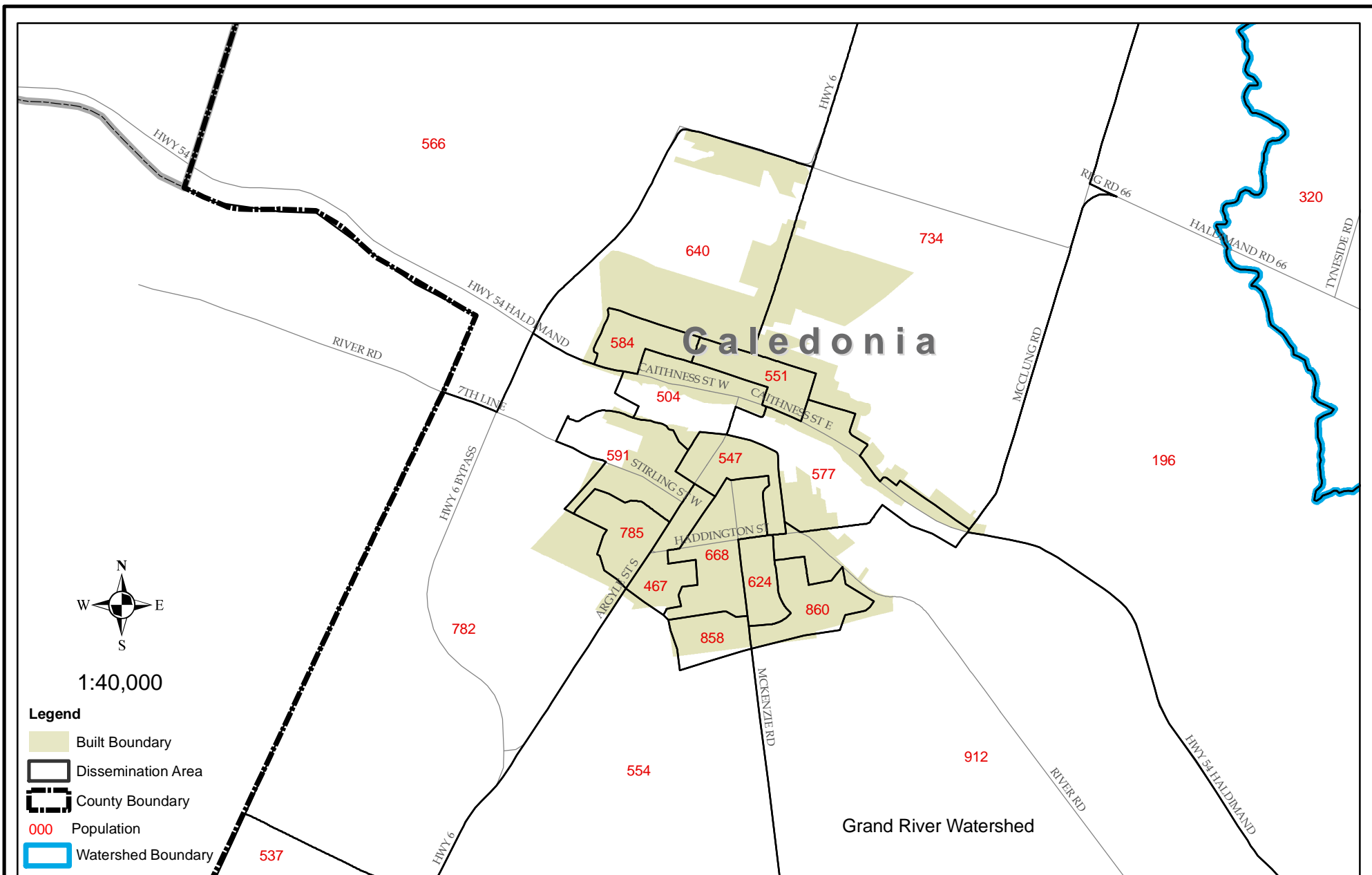
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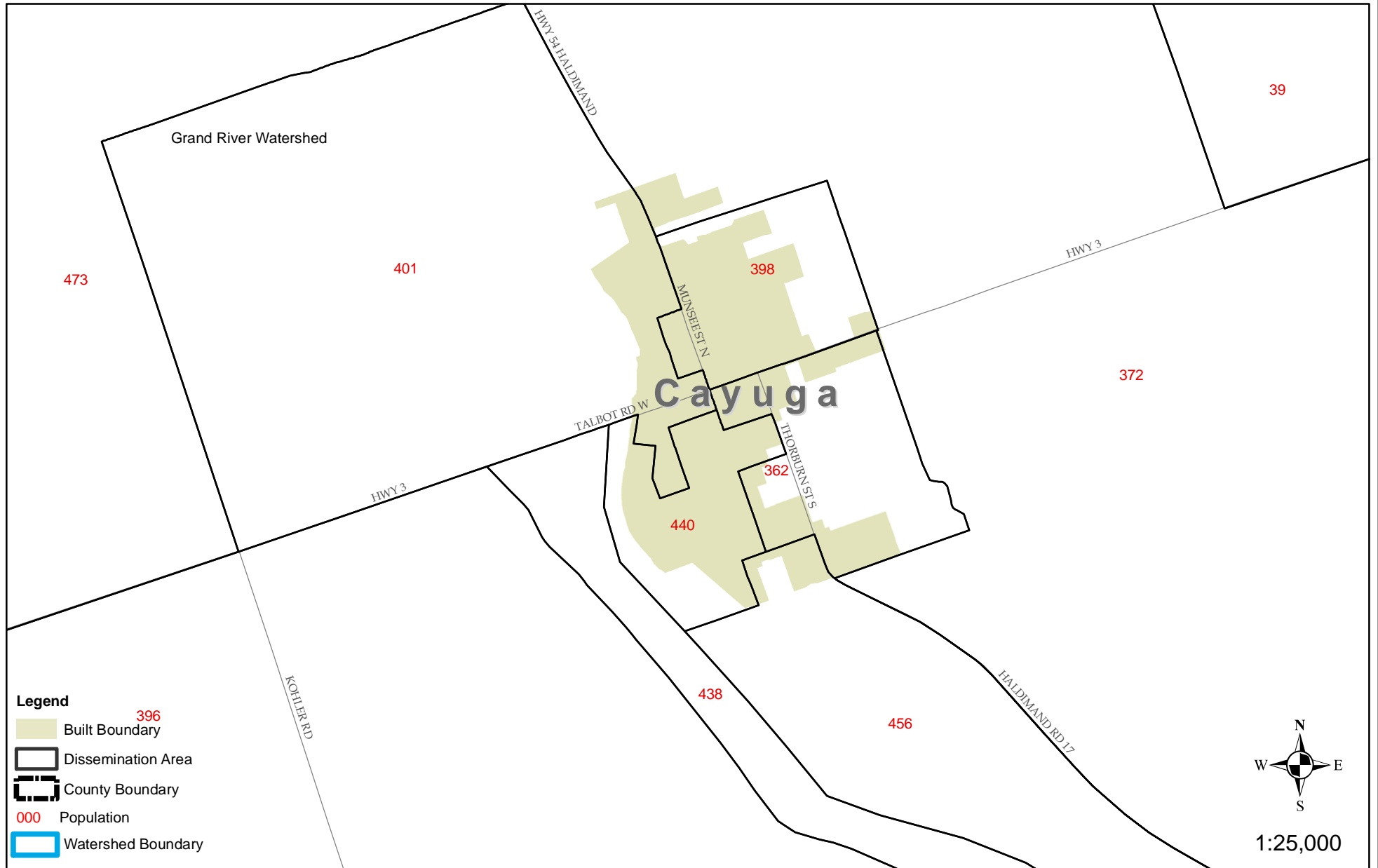


Elgin County

Springfield

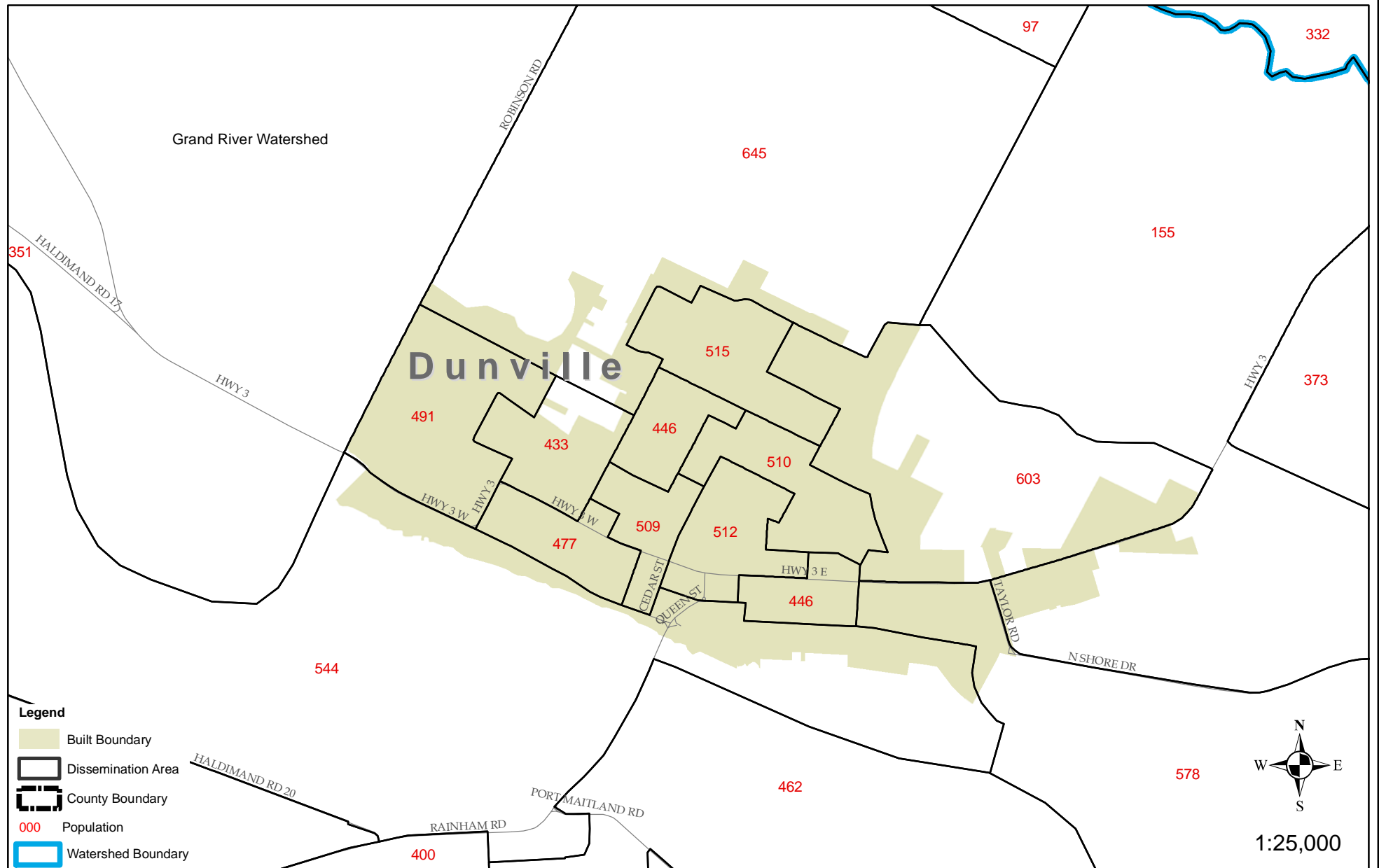






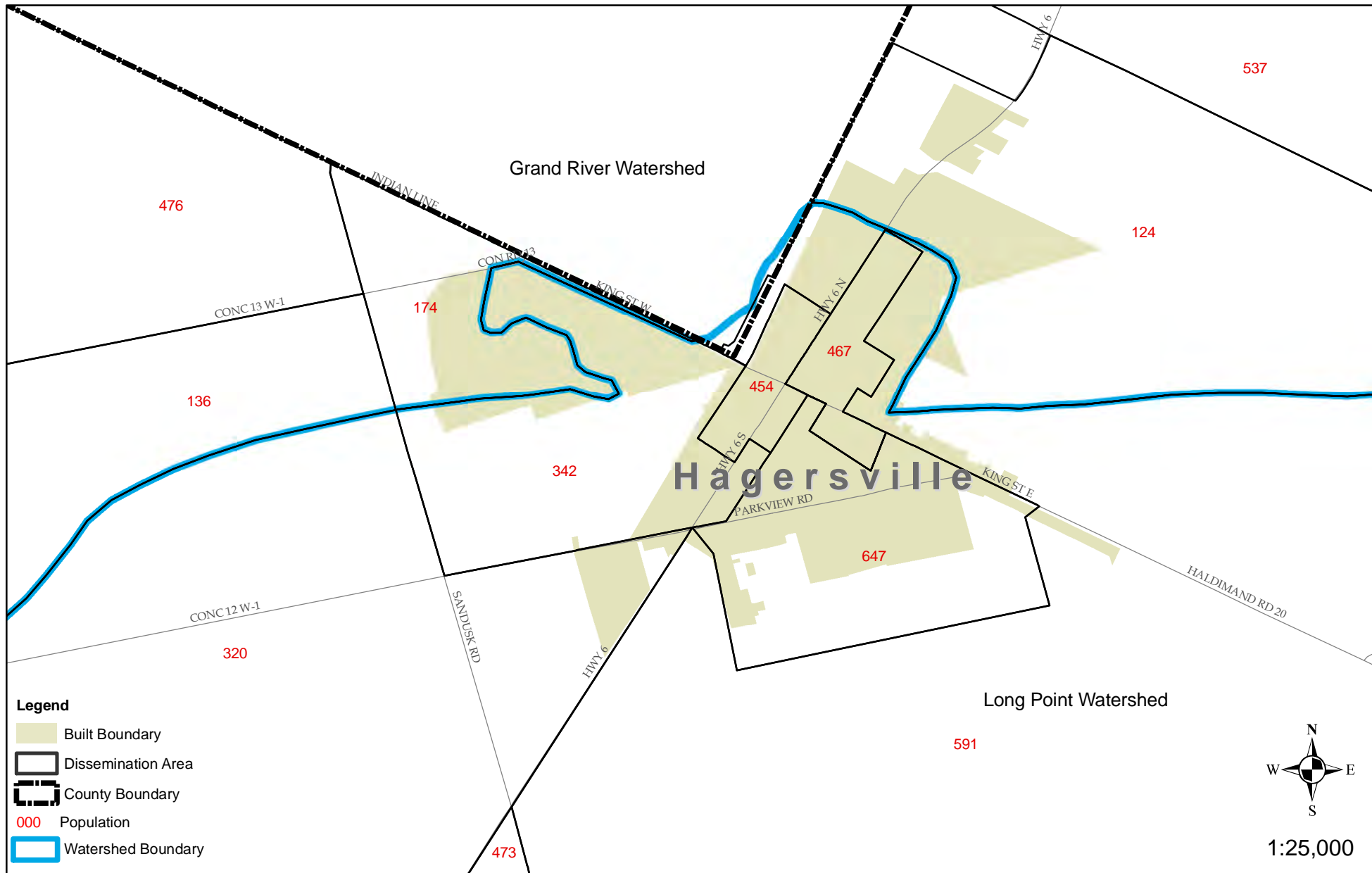
Haldimand County

Cayuga



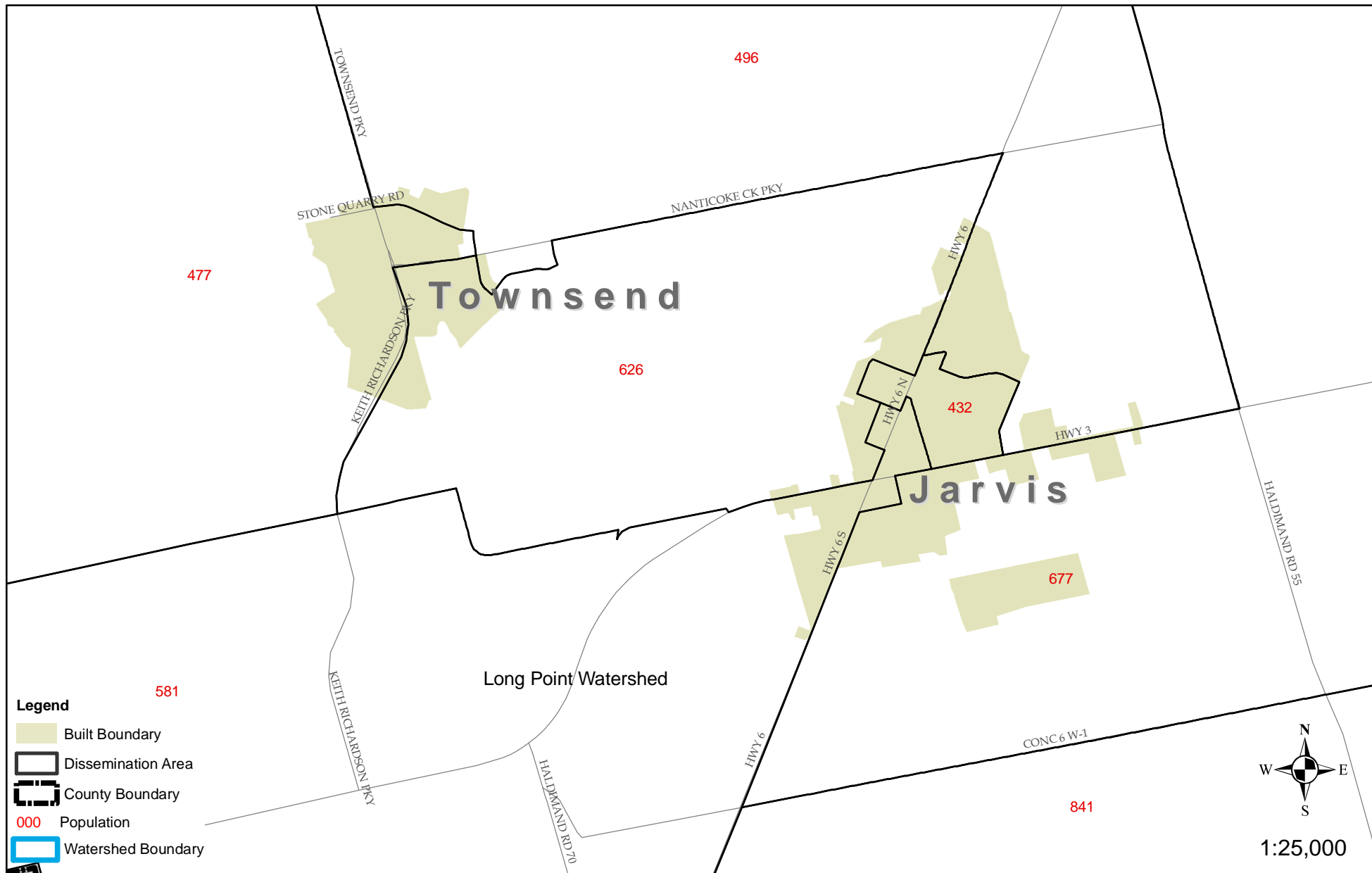
Haldimand County

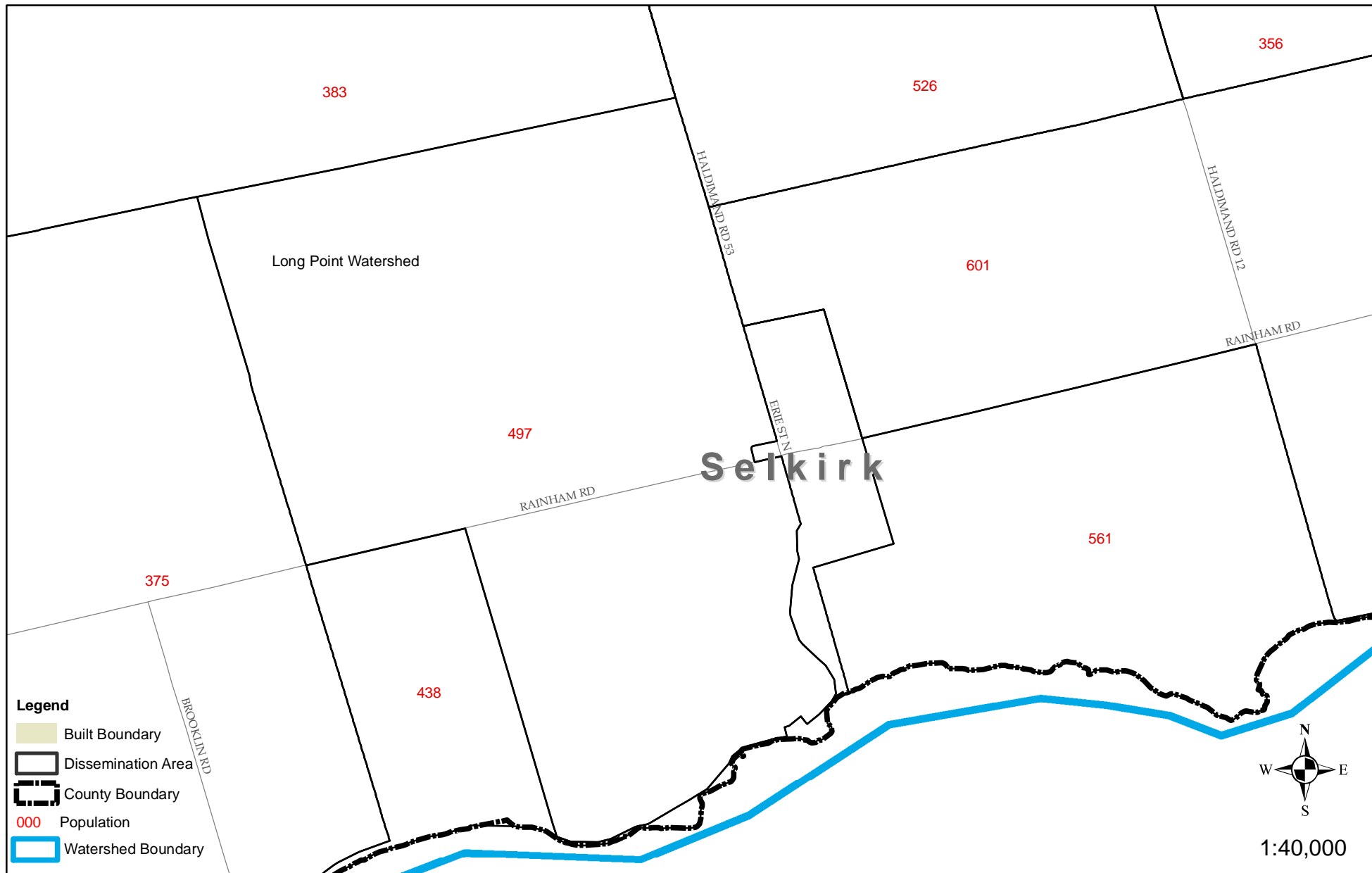
Dunville

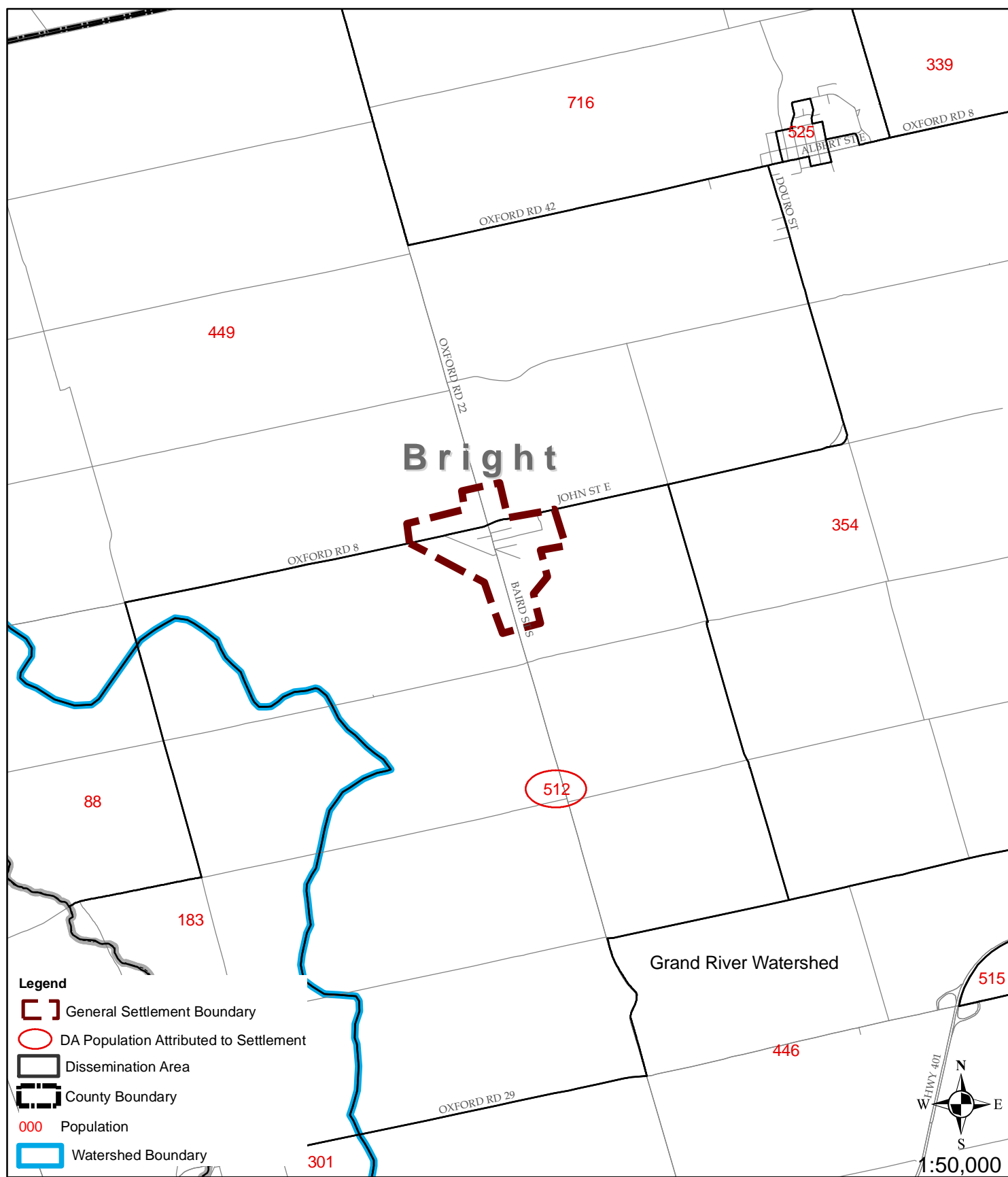


Haldimand County

Hagersville

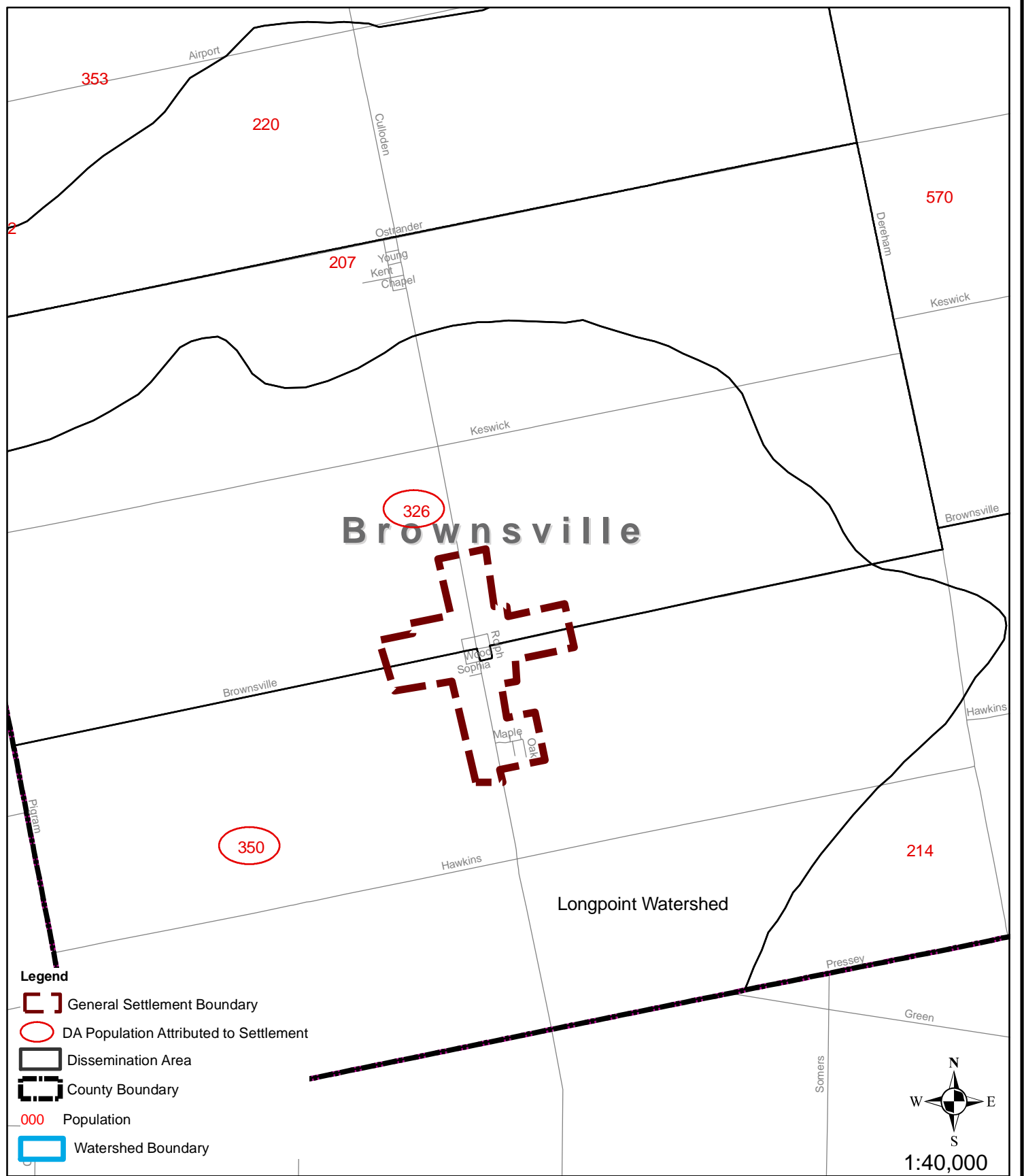






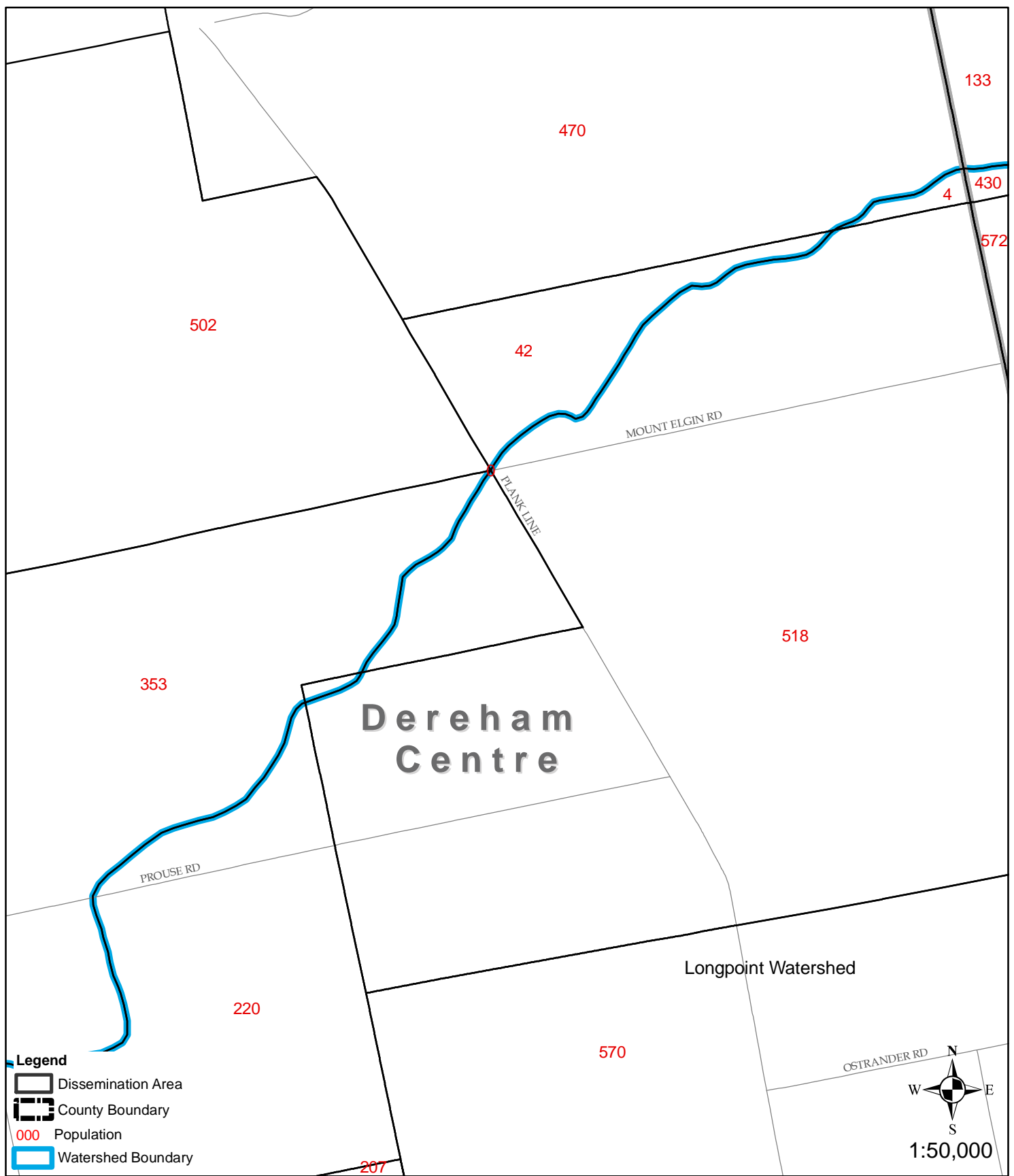
Oxford County

Bright



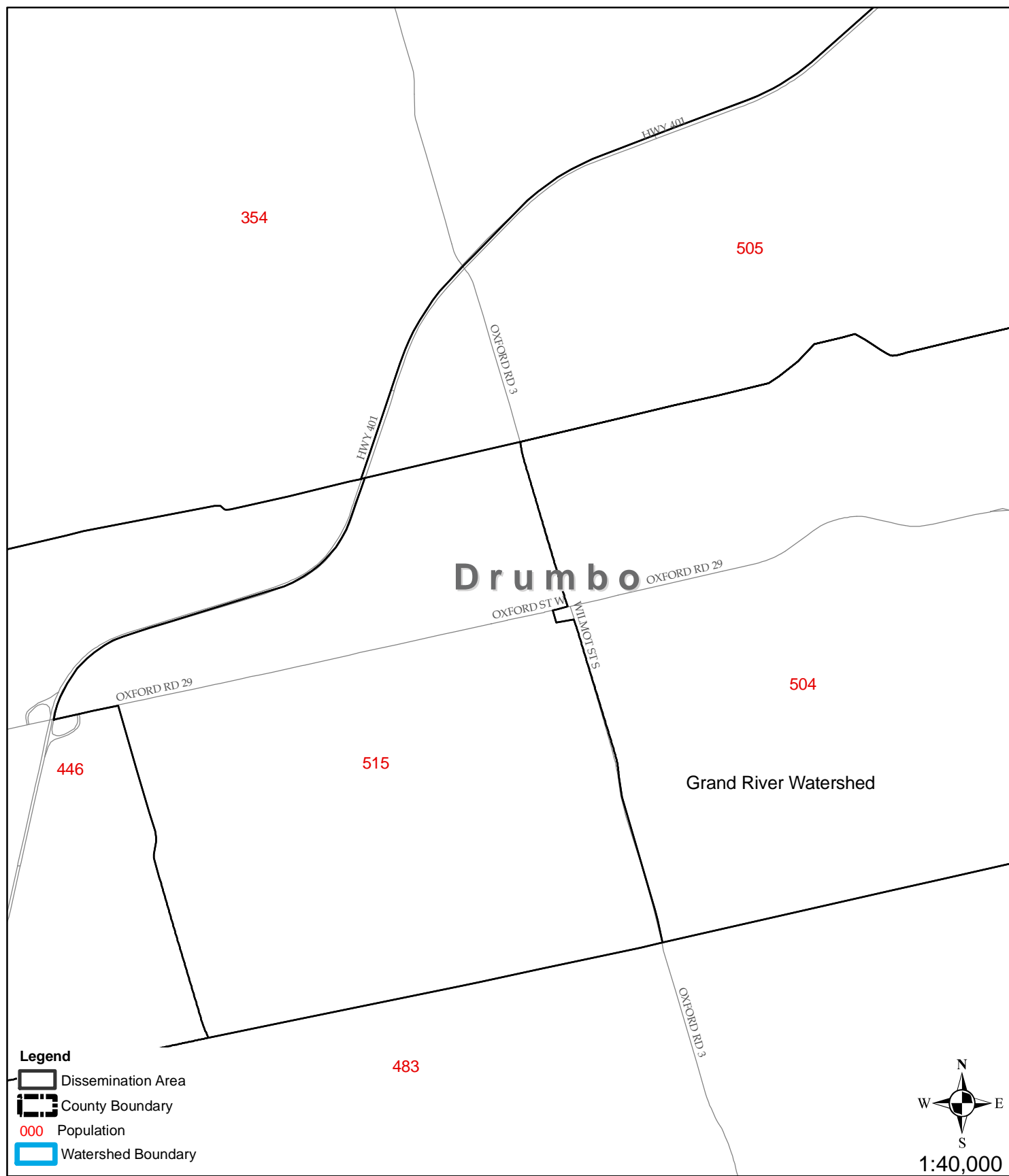
Oxford County

Brownsville



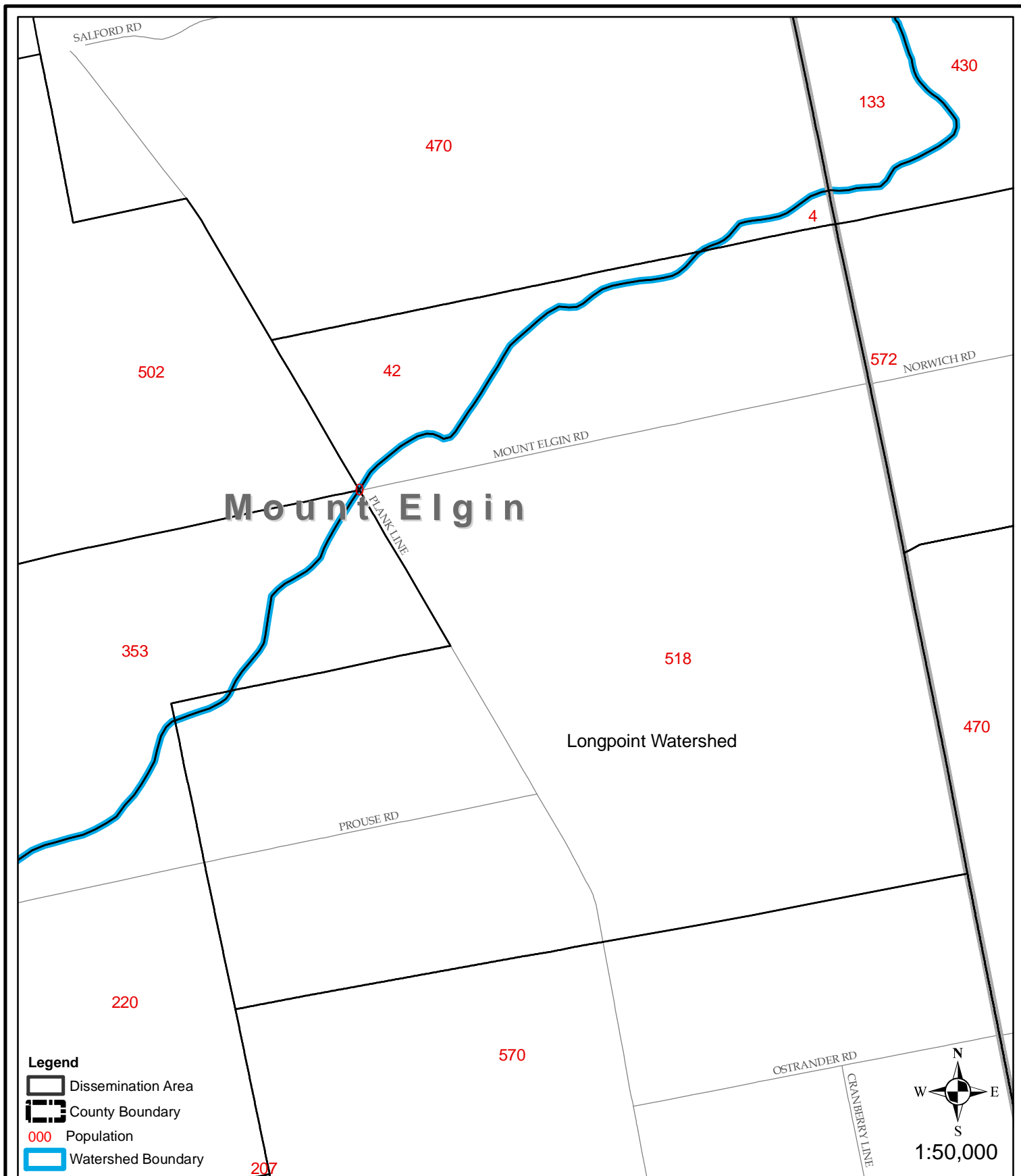
Oxford County

Dereham Centre



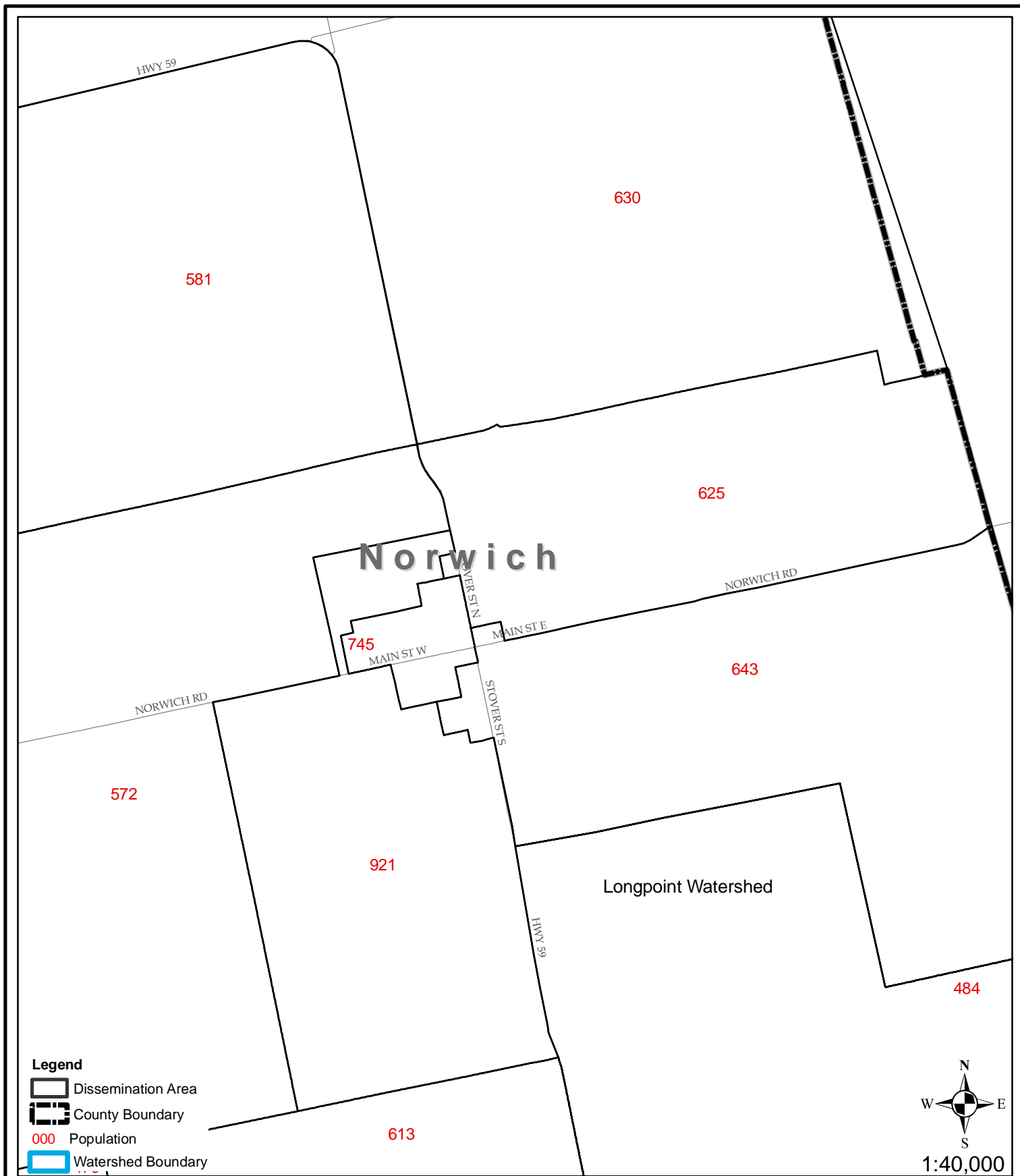
Oxford County

Drumbo



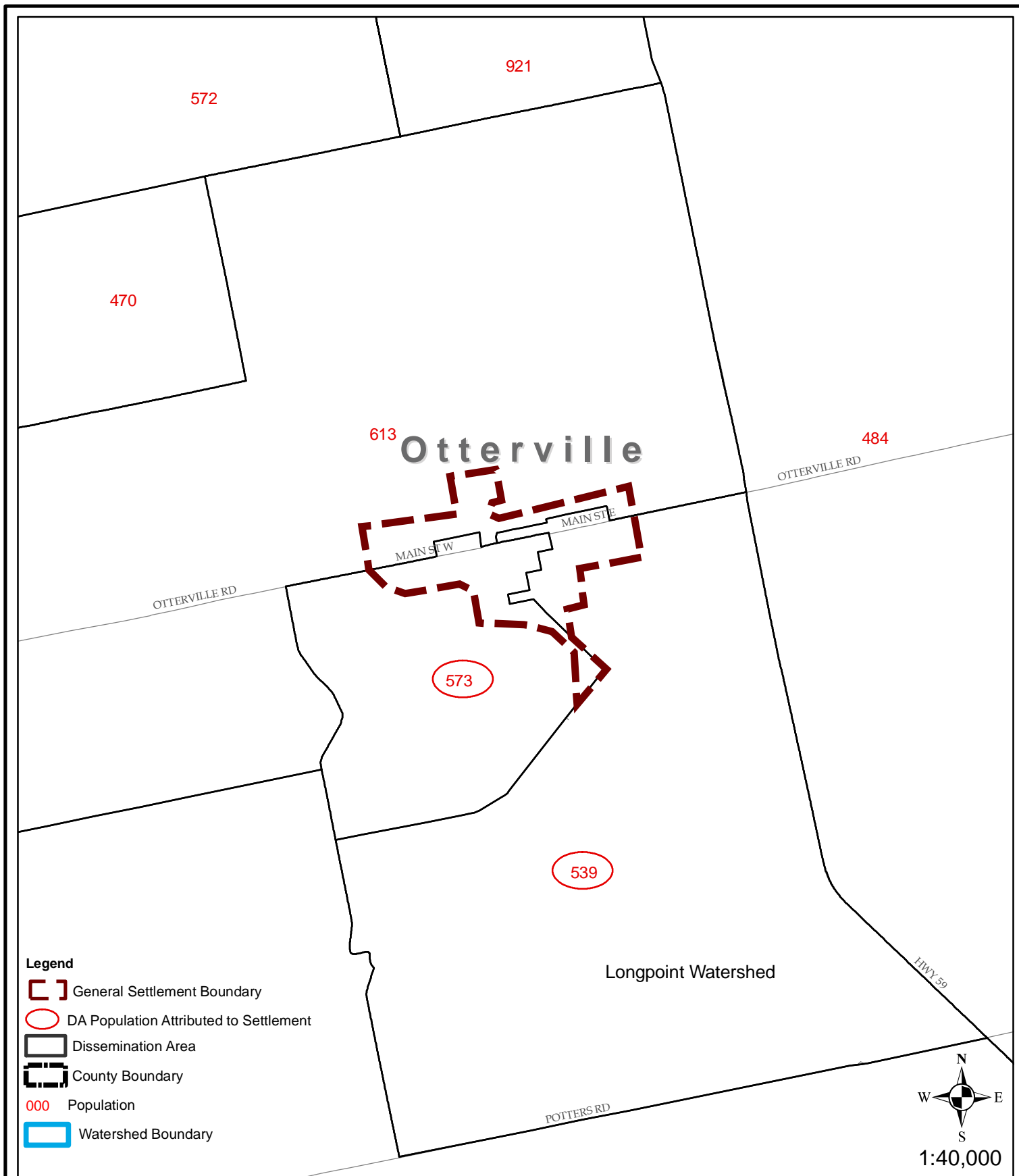
Oxford County

Mount Elgin



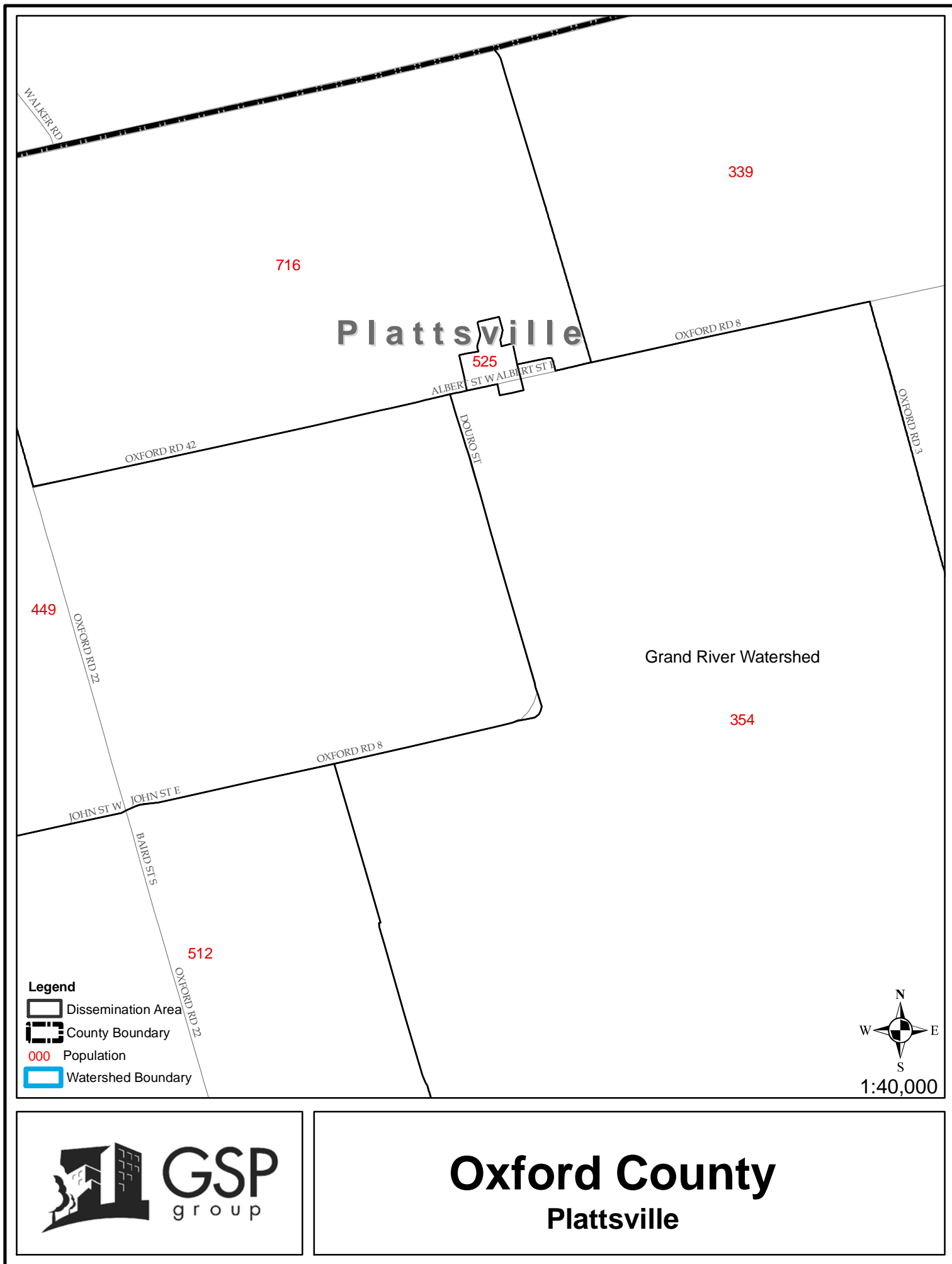
Oxford County

Norwich



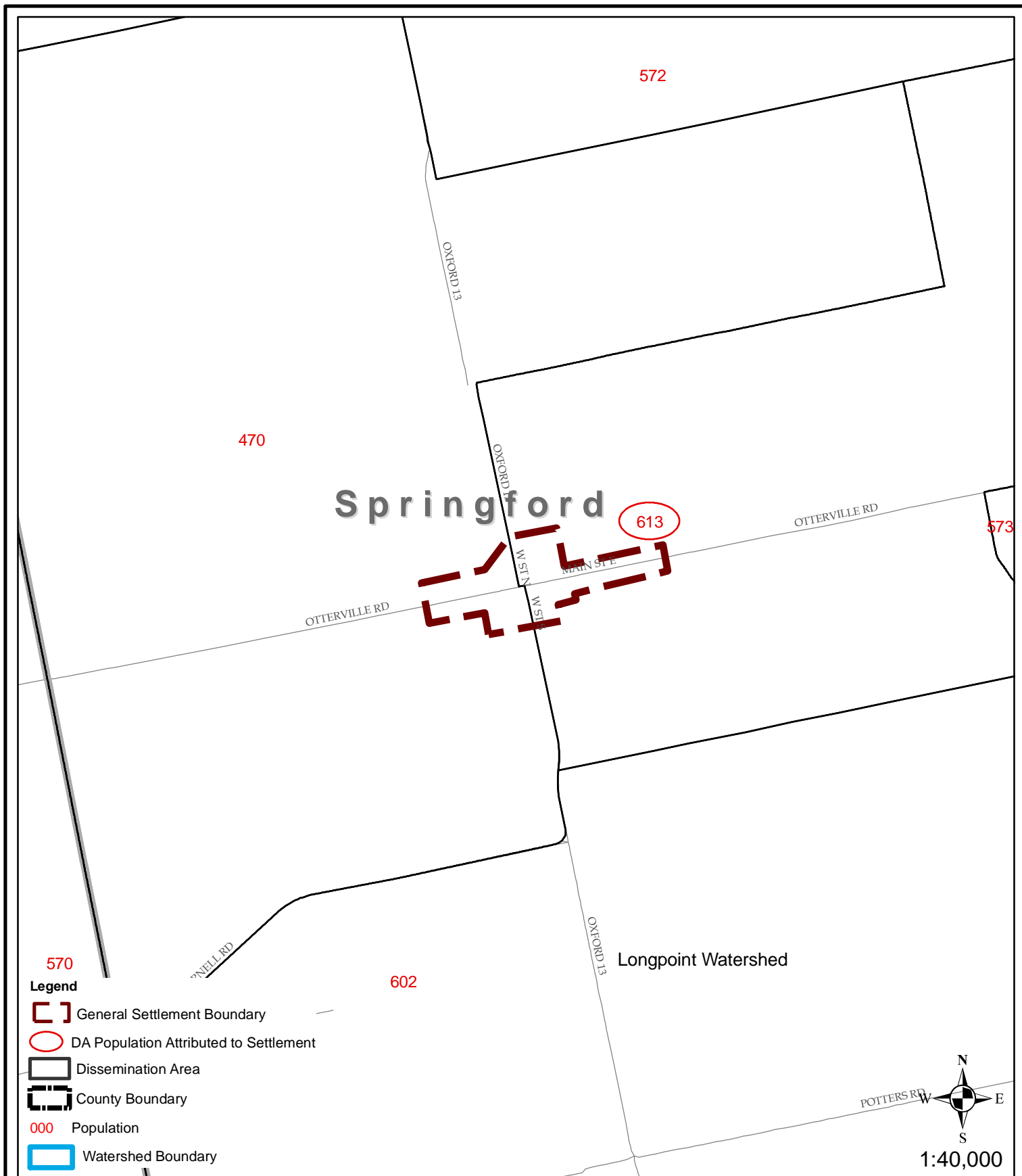
Oxford County

Otterville



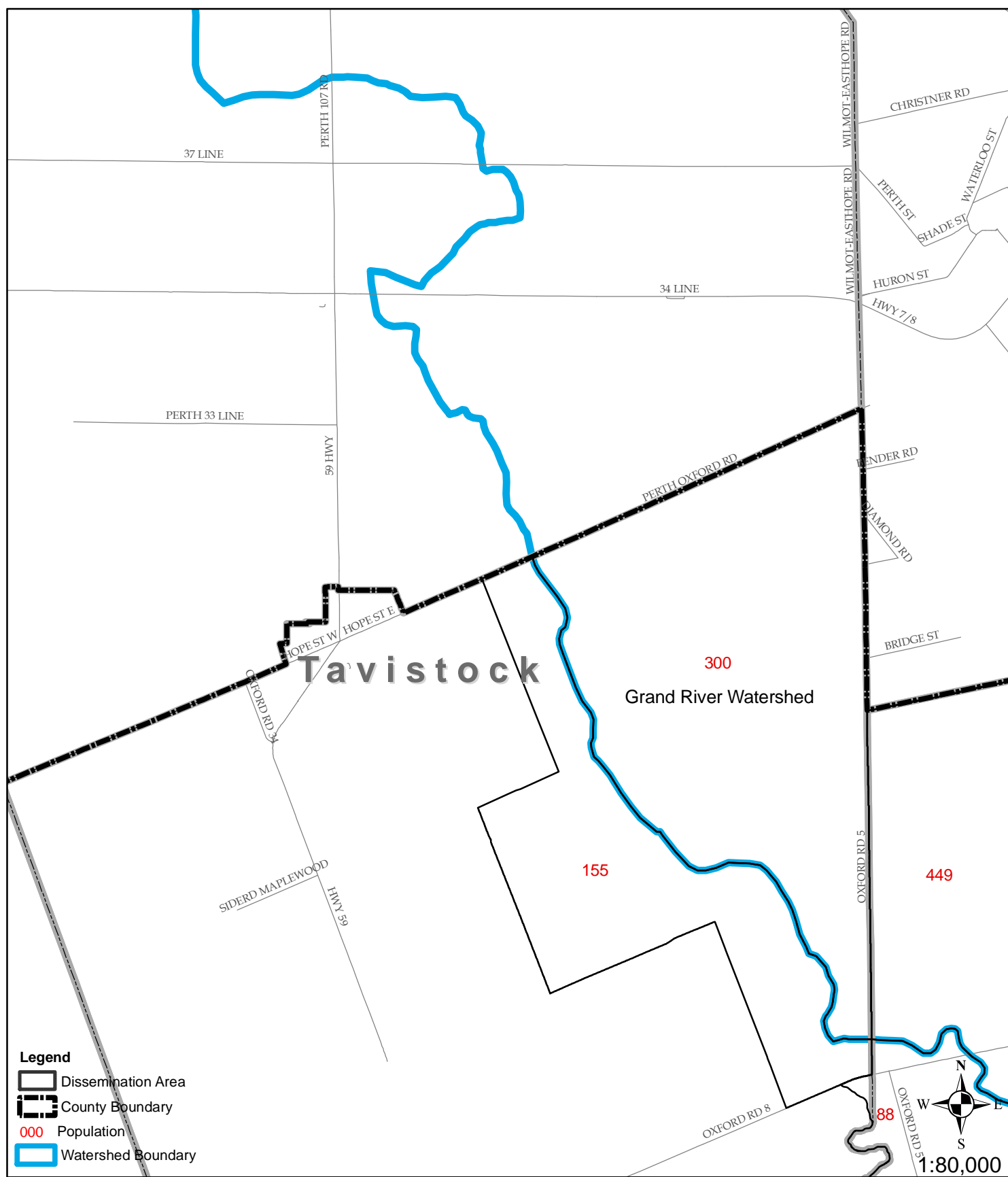
Oxford County

Plattsville



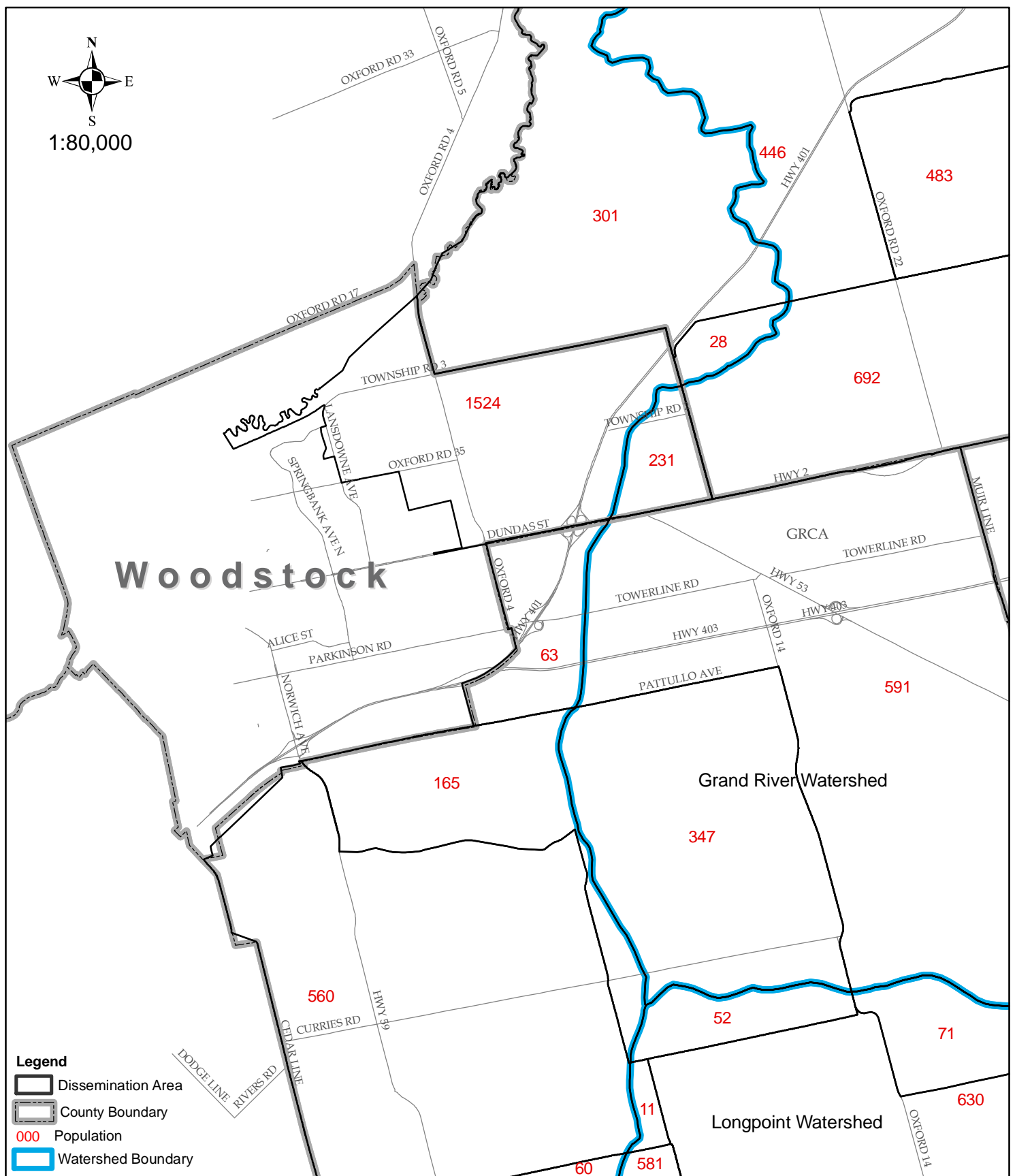
Oxford County

Springford



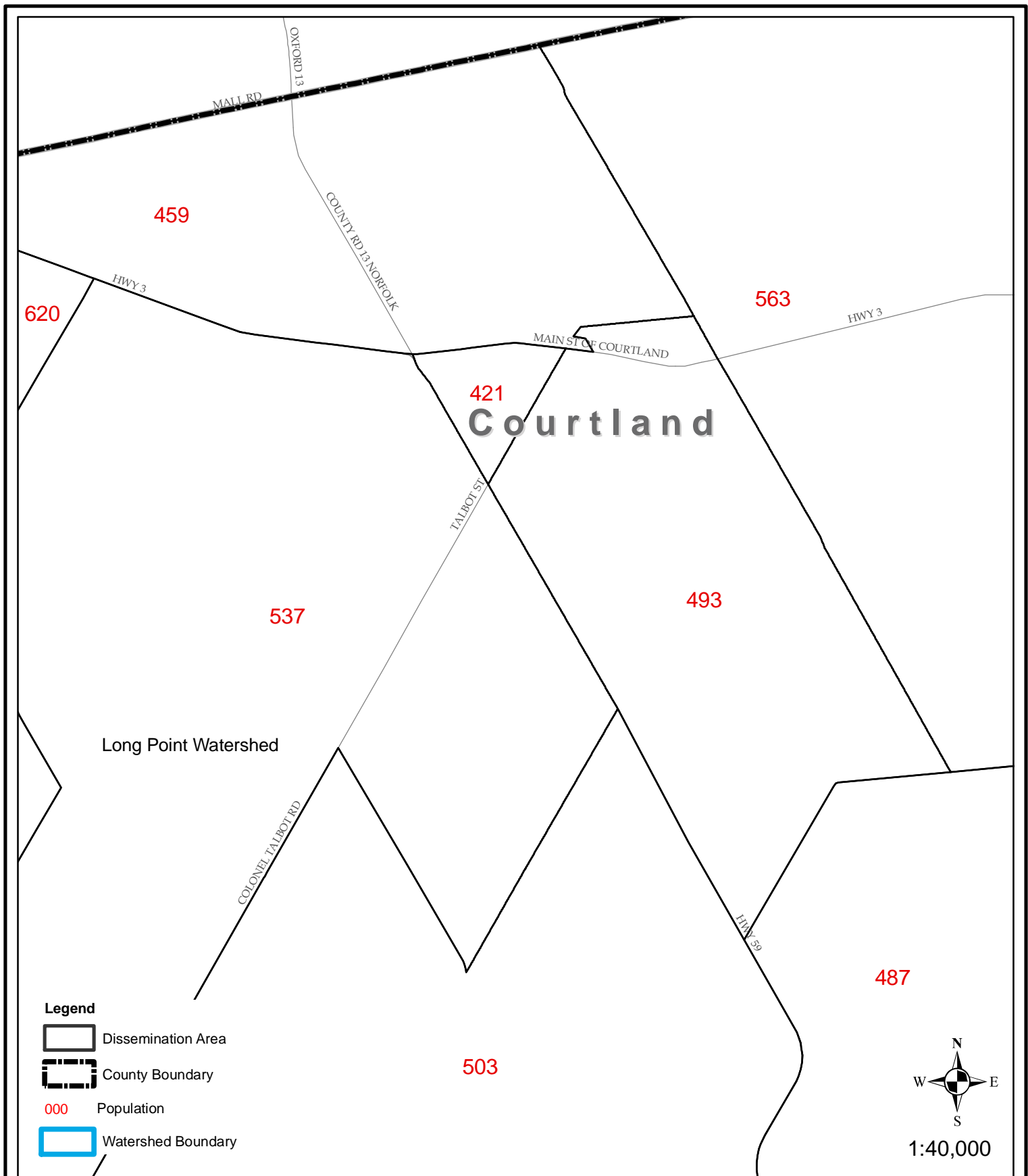
Oxford County

Tavistock



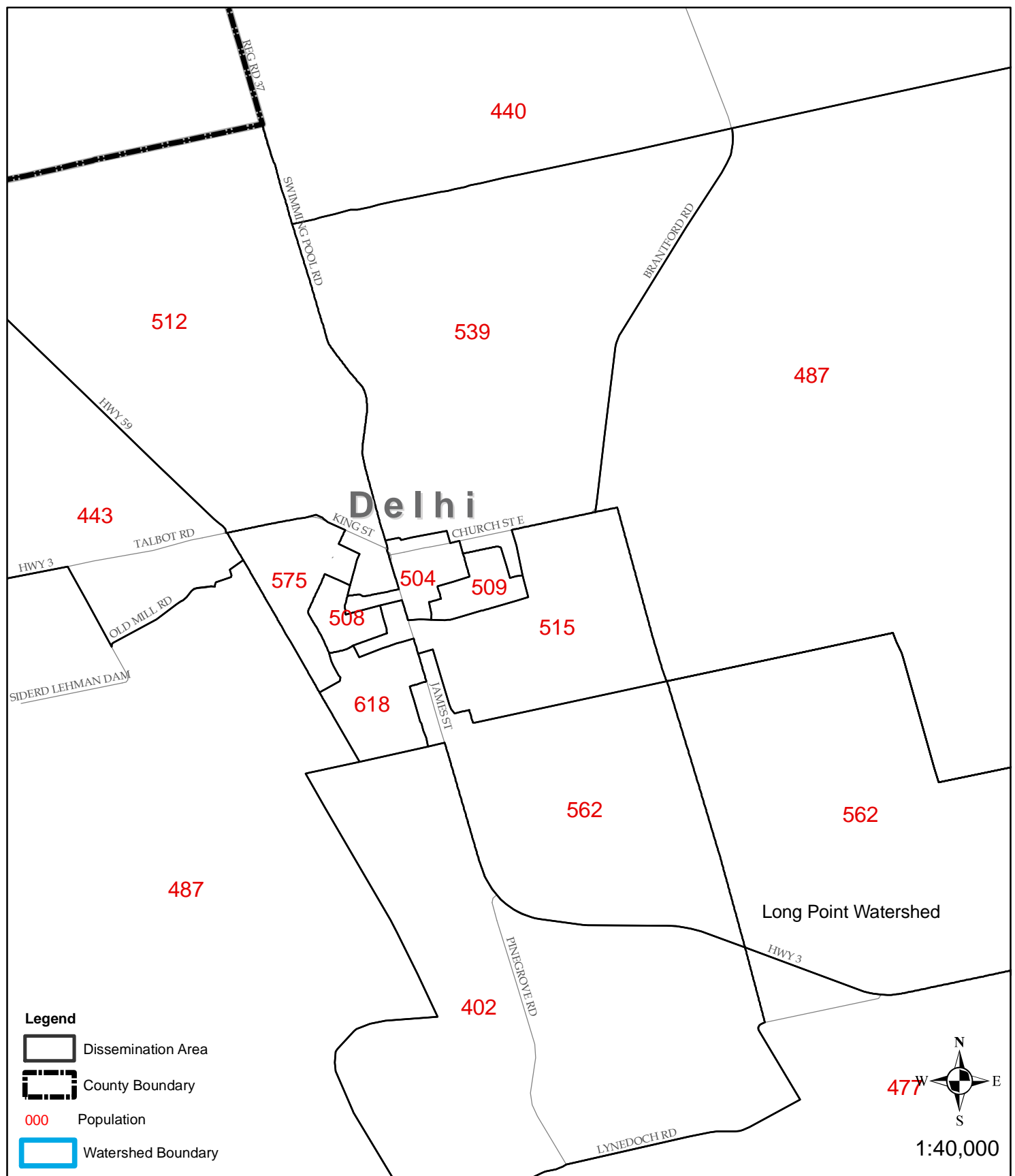
Oxford County

Woodstock



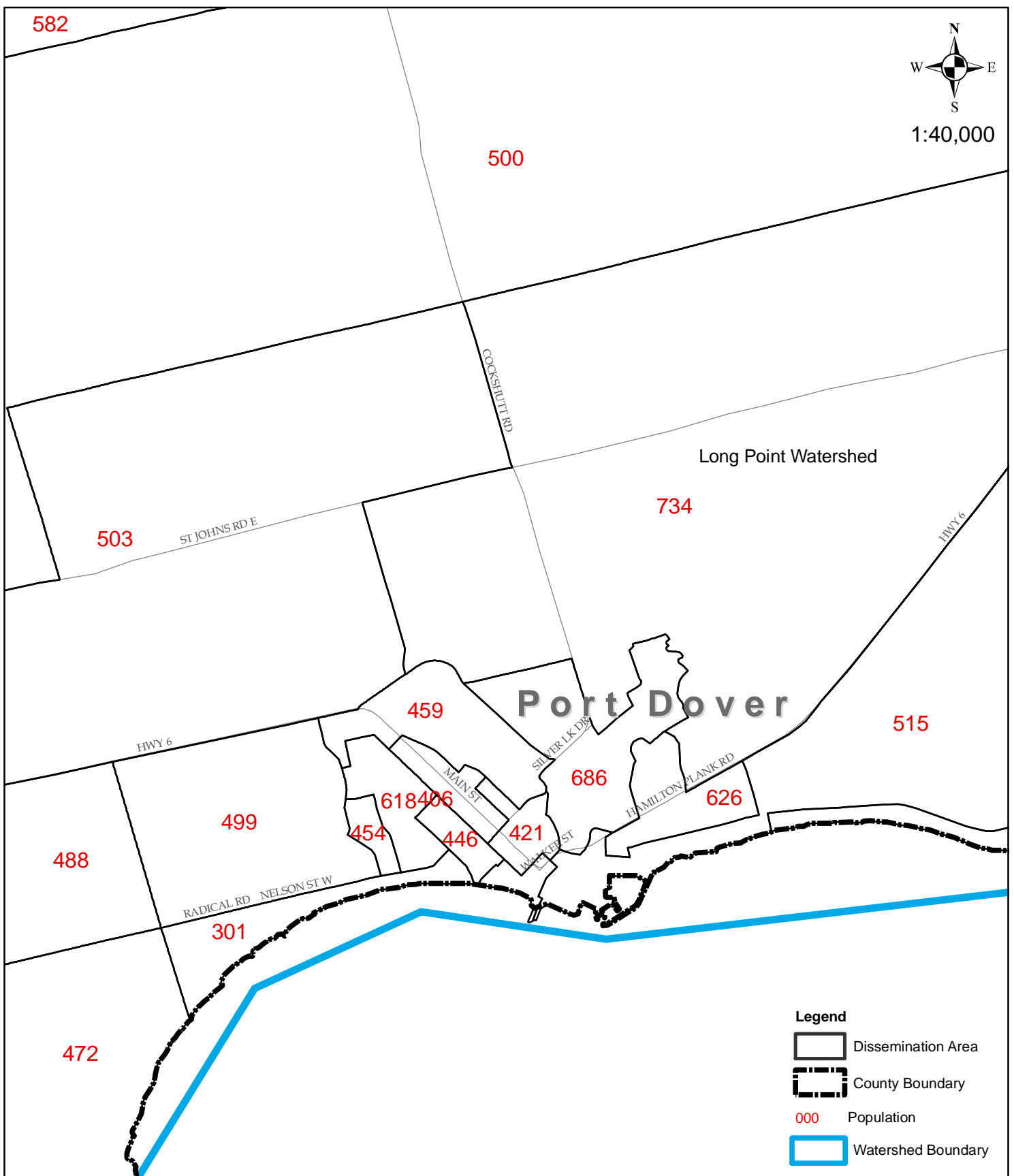
Norfolk County

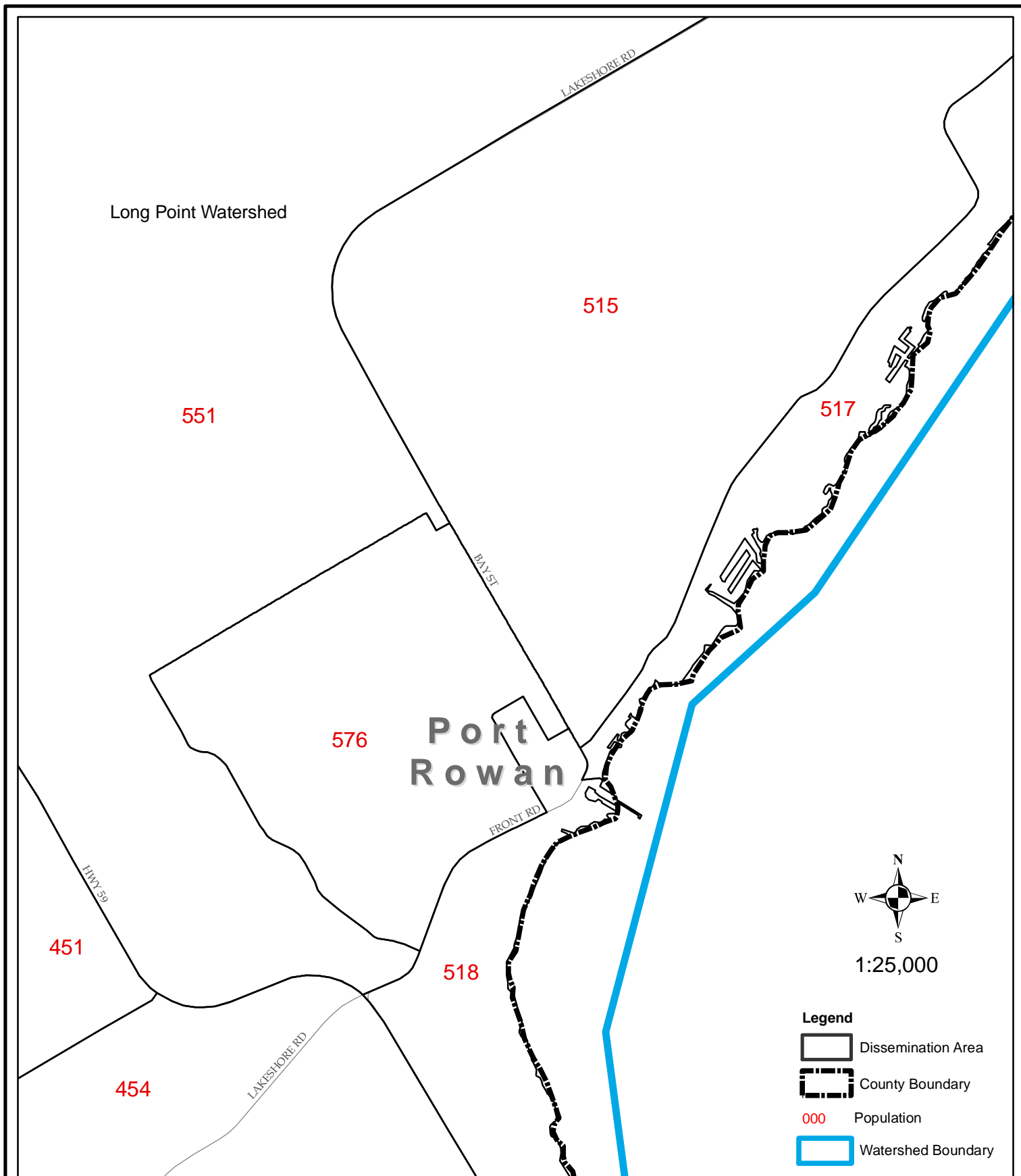
Courtland



Norfolk County

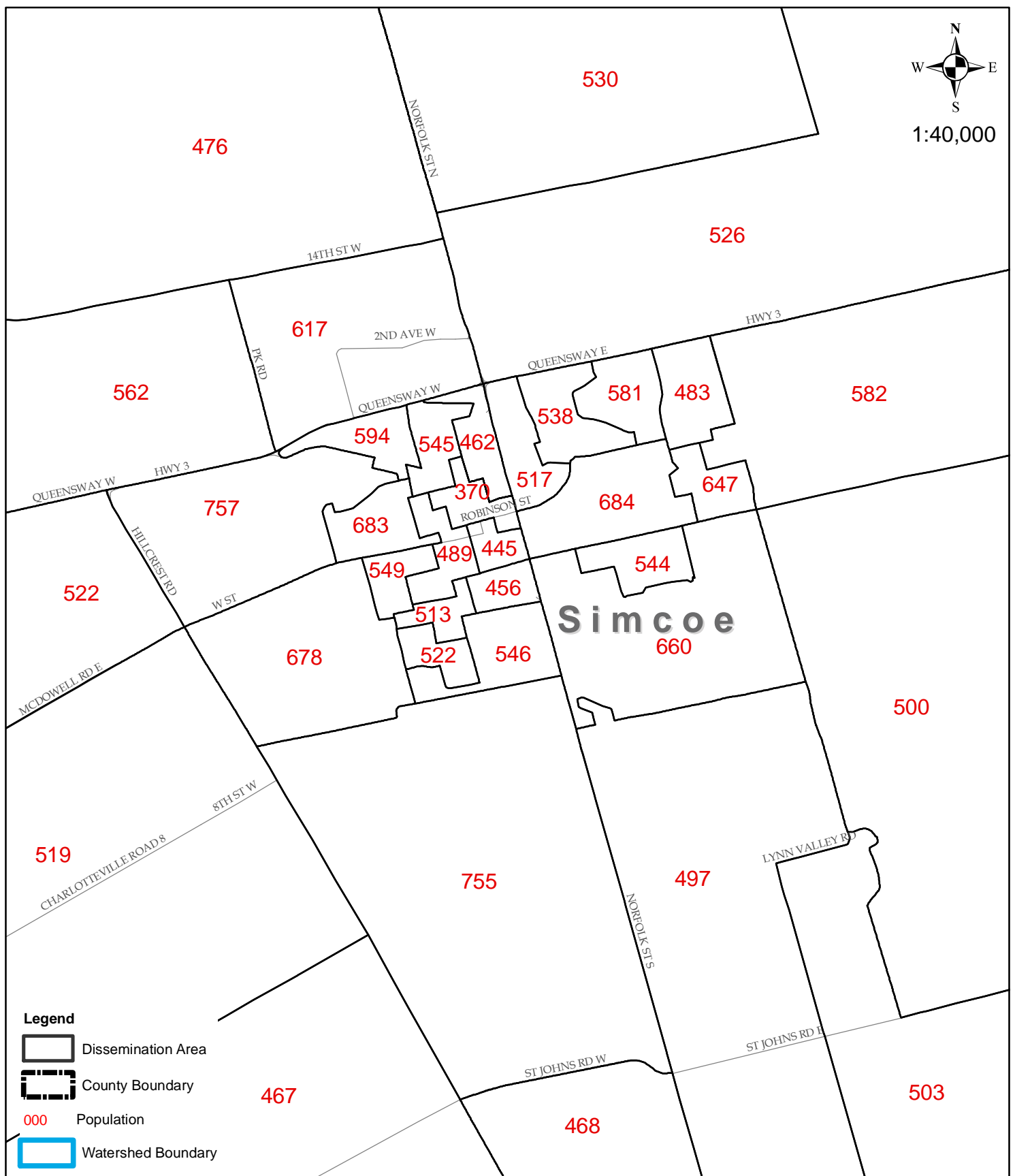
Delhi

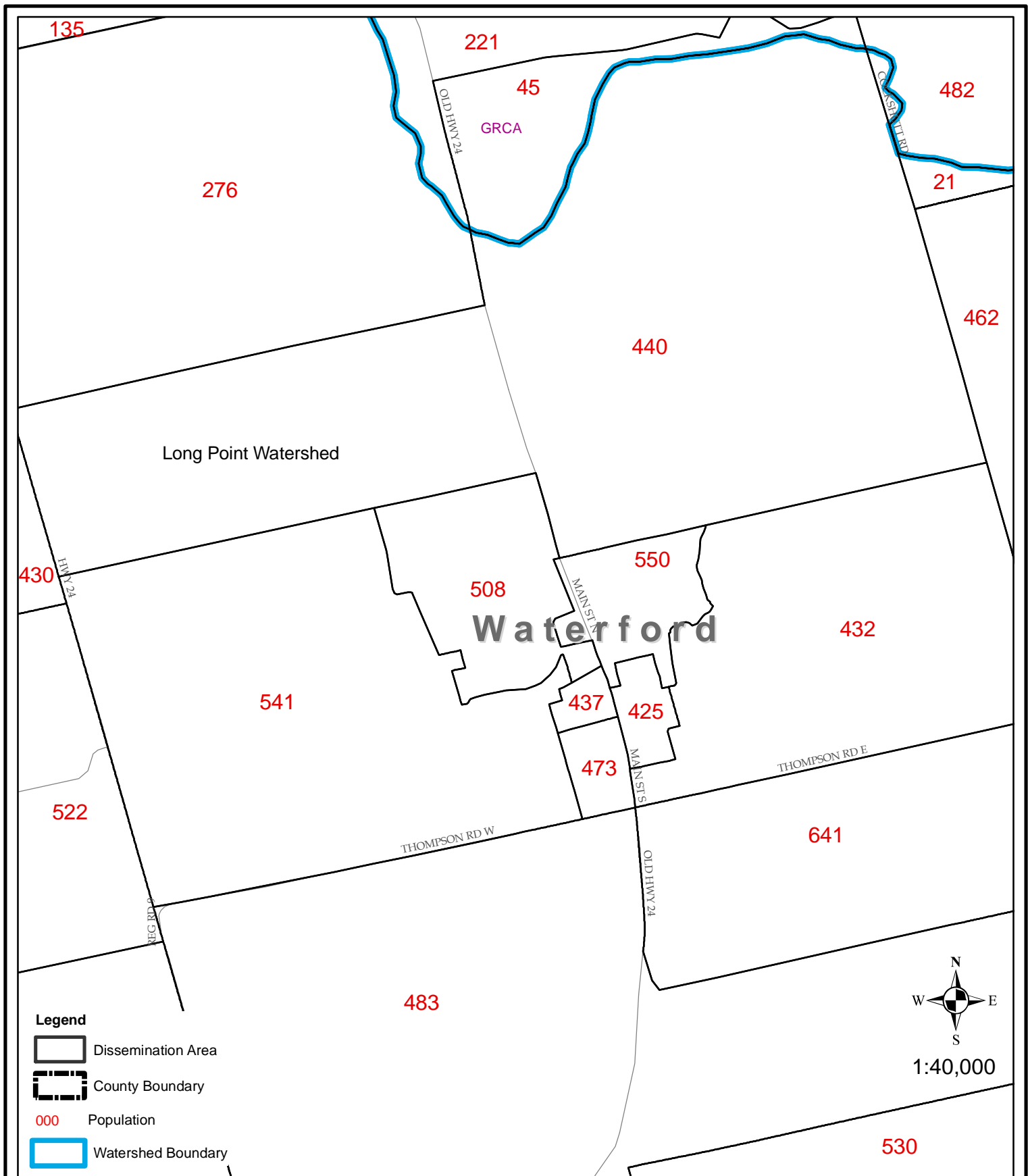




Norfolk County

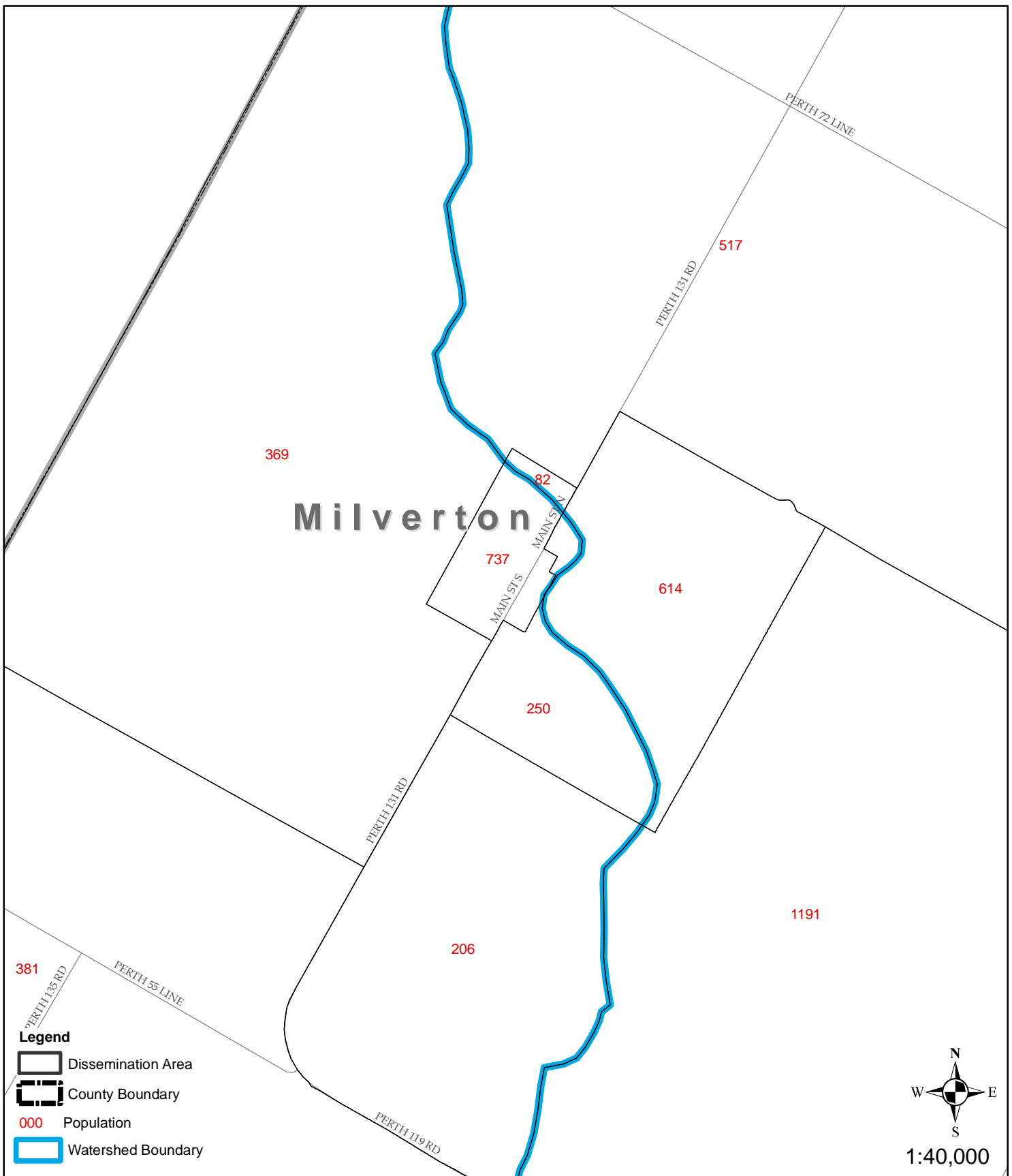
Port Rowan





Norfolk County

Waterford



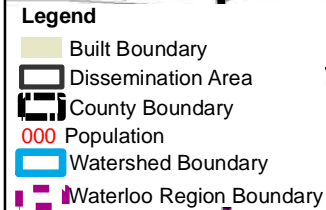
Perth County

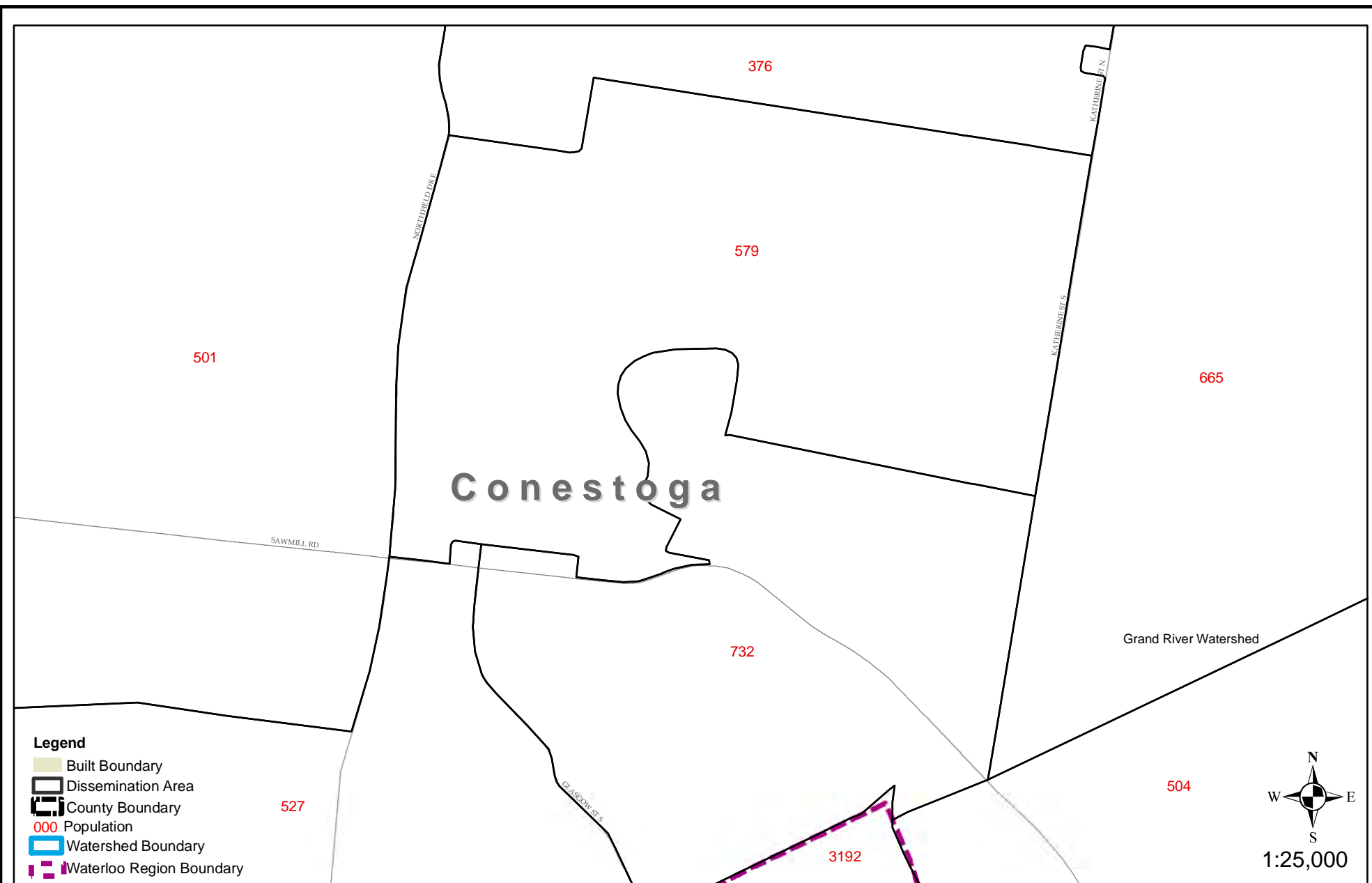
Milverton



Waterloo Region

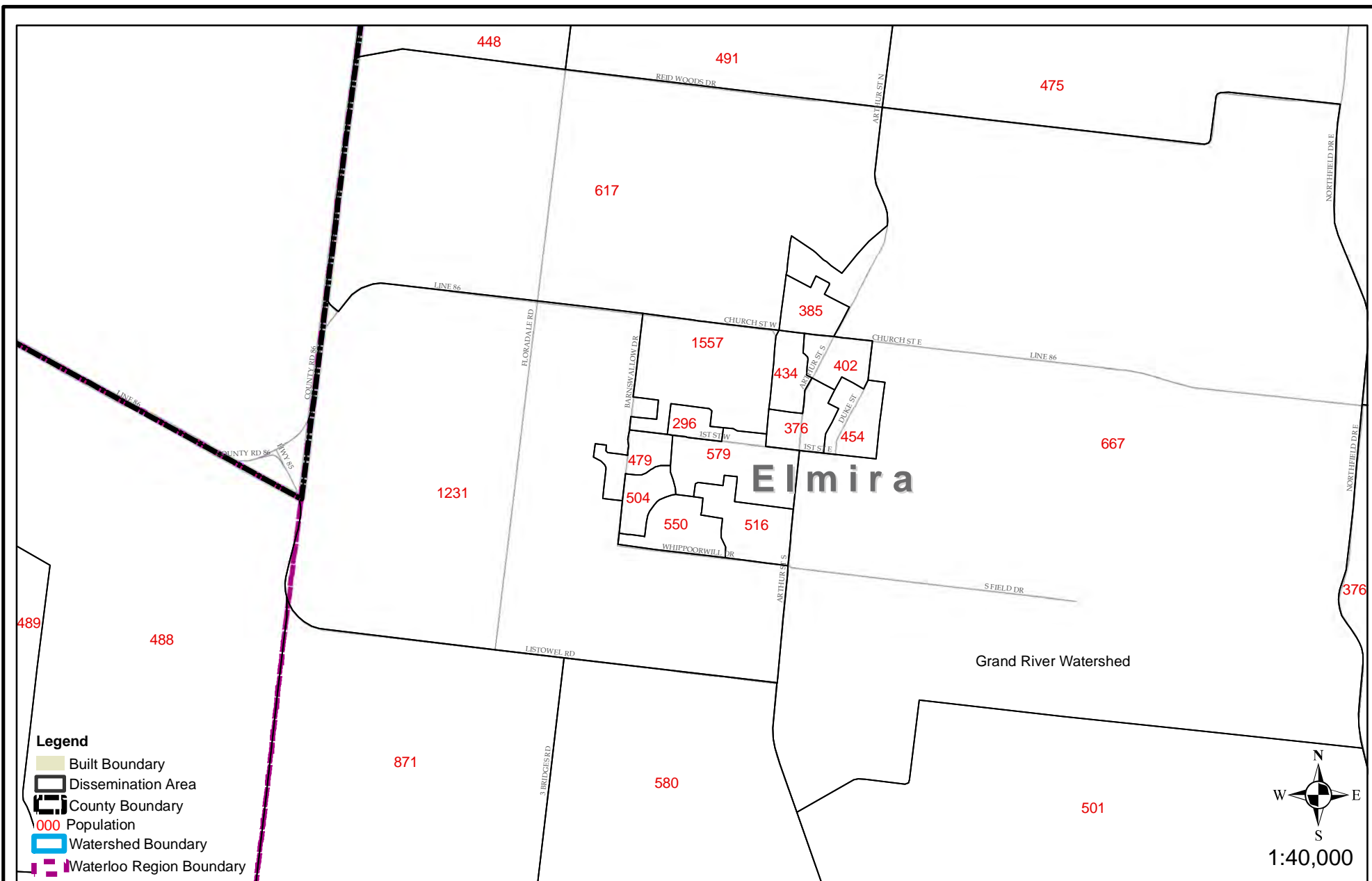
Ayr





Waterloo Region

Conestoga





1:30,000

Foxboro Green

Legend

- Built Boundary
- Dissemination Area
- County Boundary
- Population
- Watershed Boundary
- Waterloo Region Boundary

582

466

641

1098

745

700

1027

436

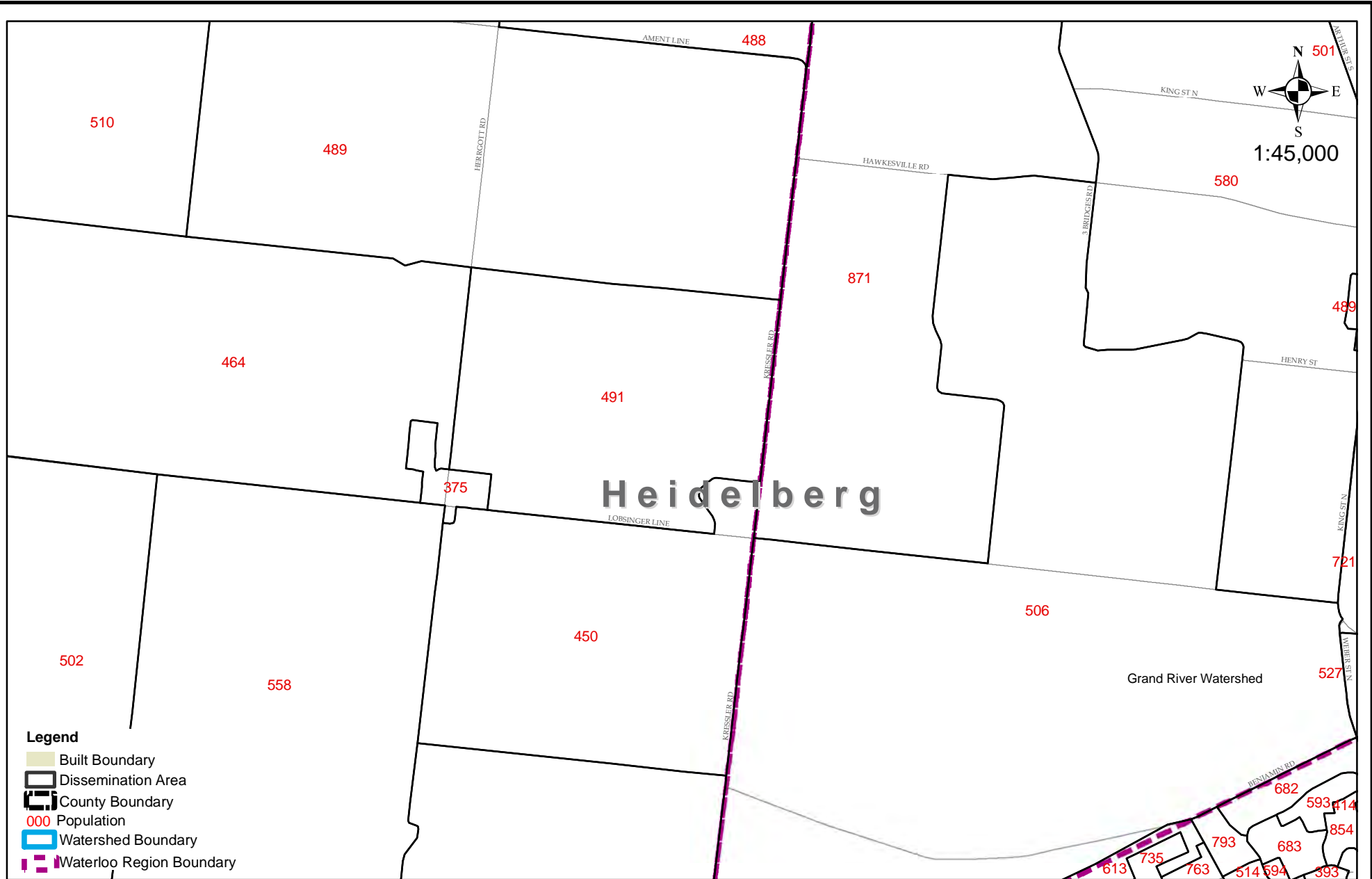
601

1087

Grand River Watershed

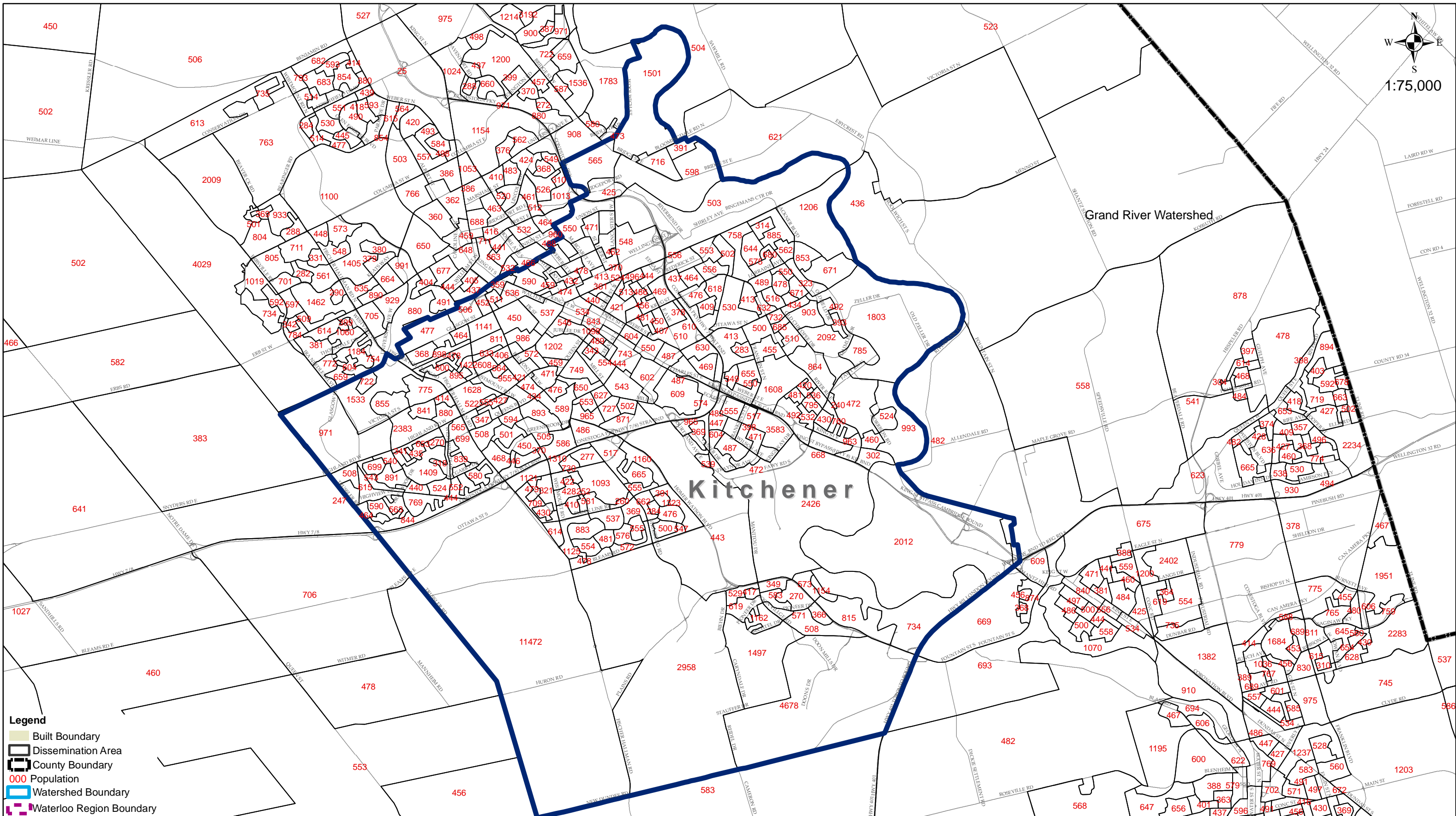


Waterloo Region Foxboro Green



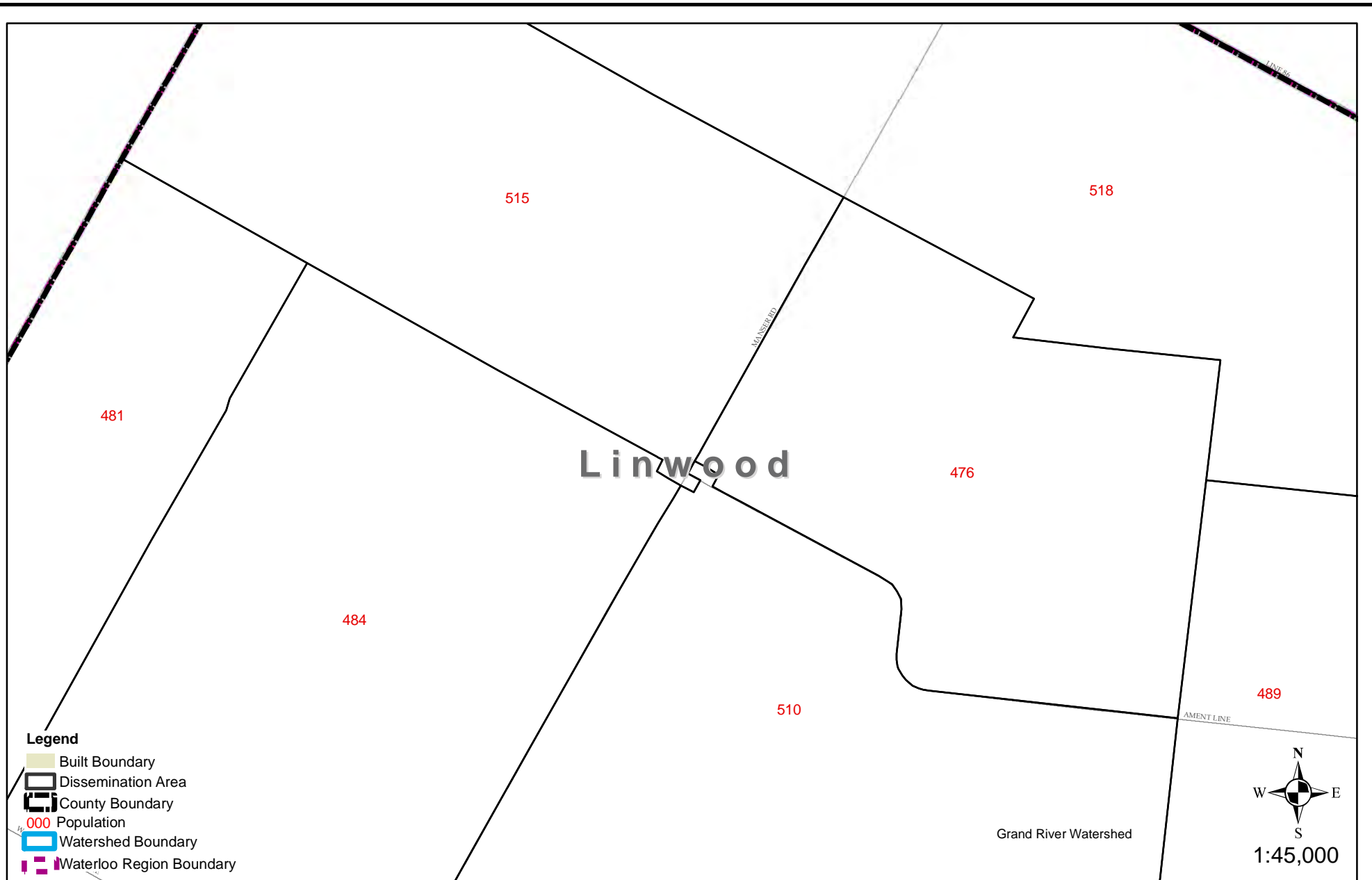
Waterloo Region

Heidelberg



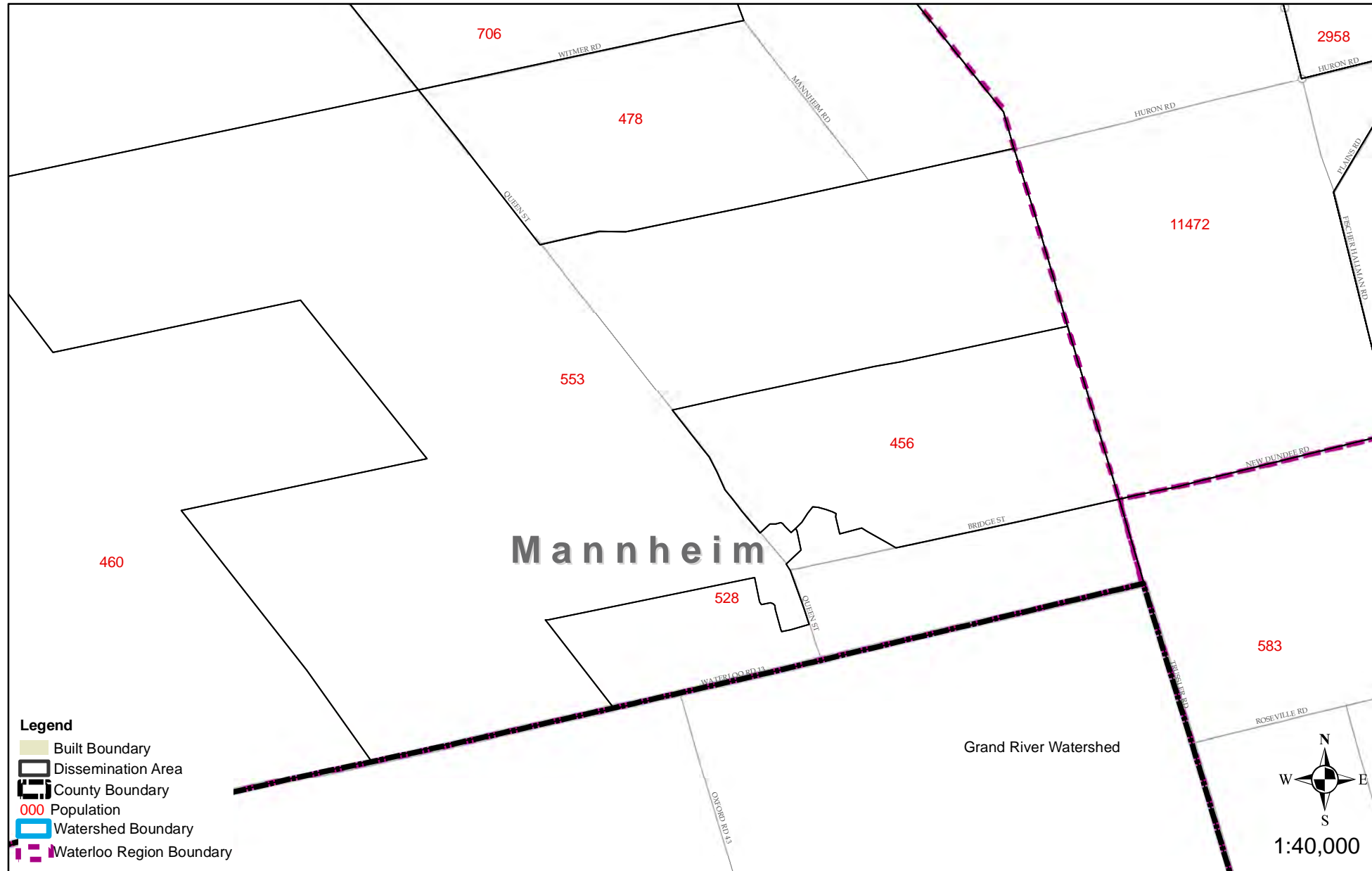
Waterloo Region Kitchener

Total Population: 171,554



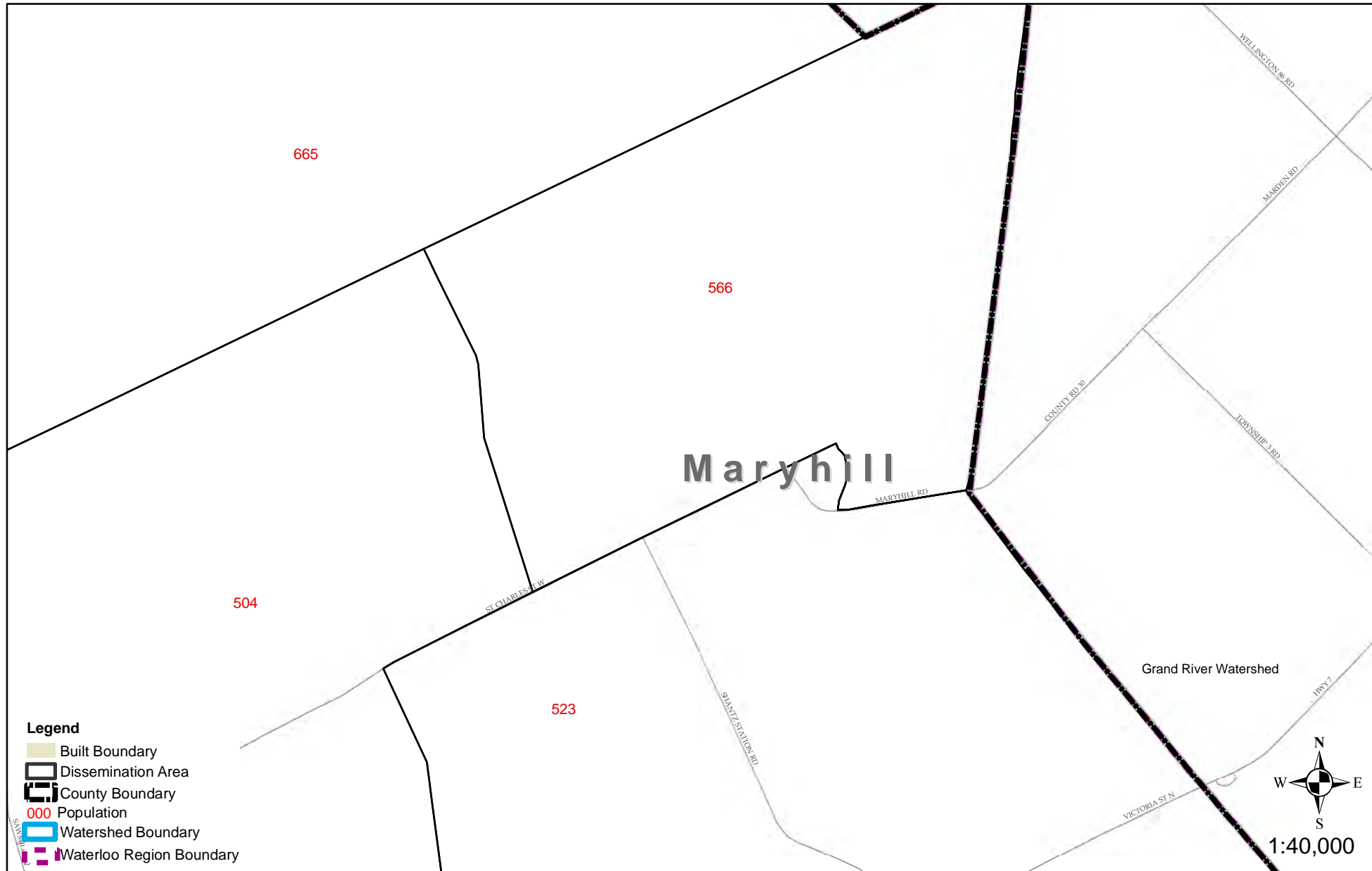
Waterloo Region

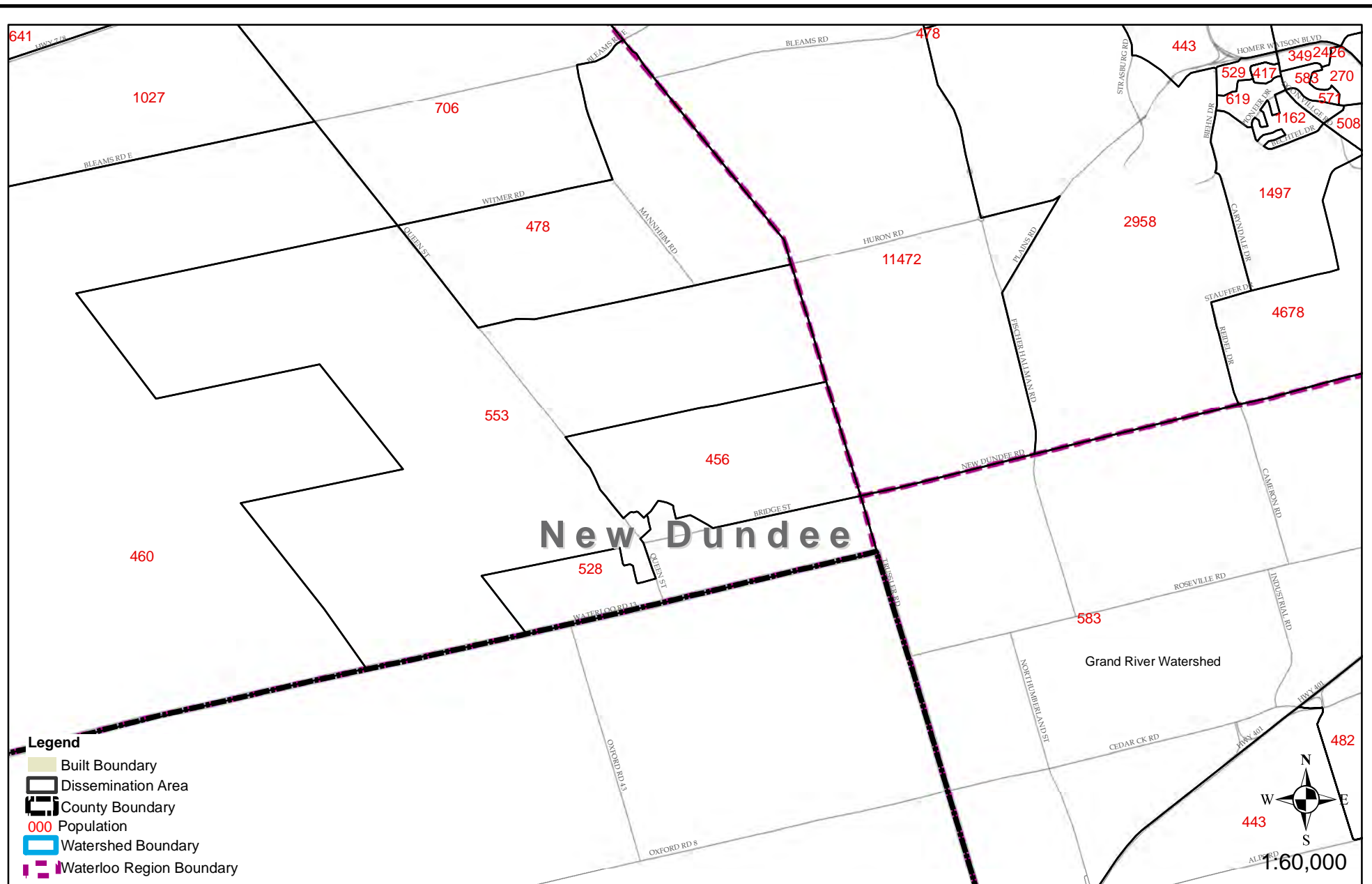
Linwood



Waterloo Region

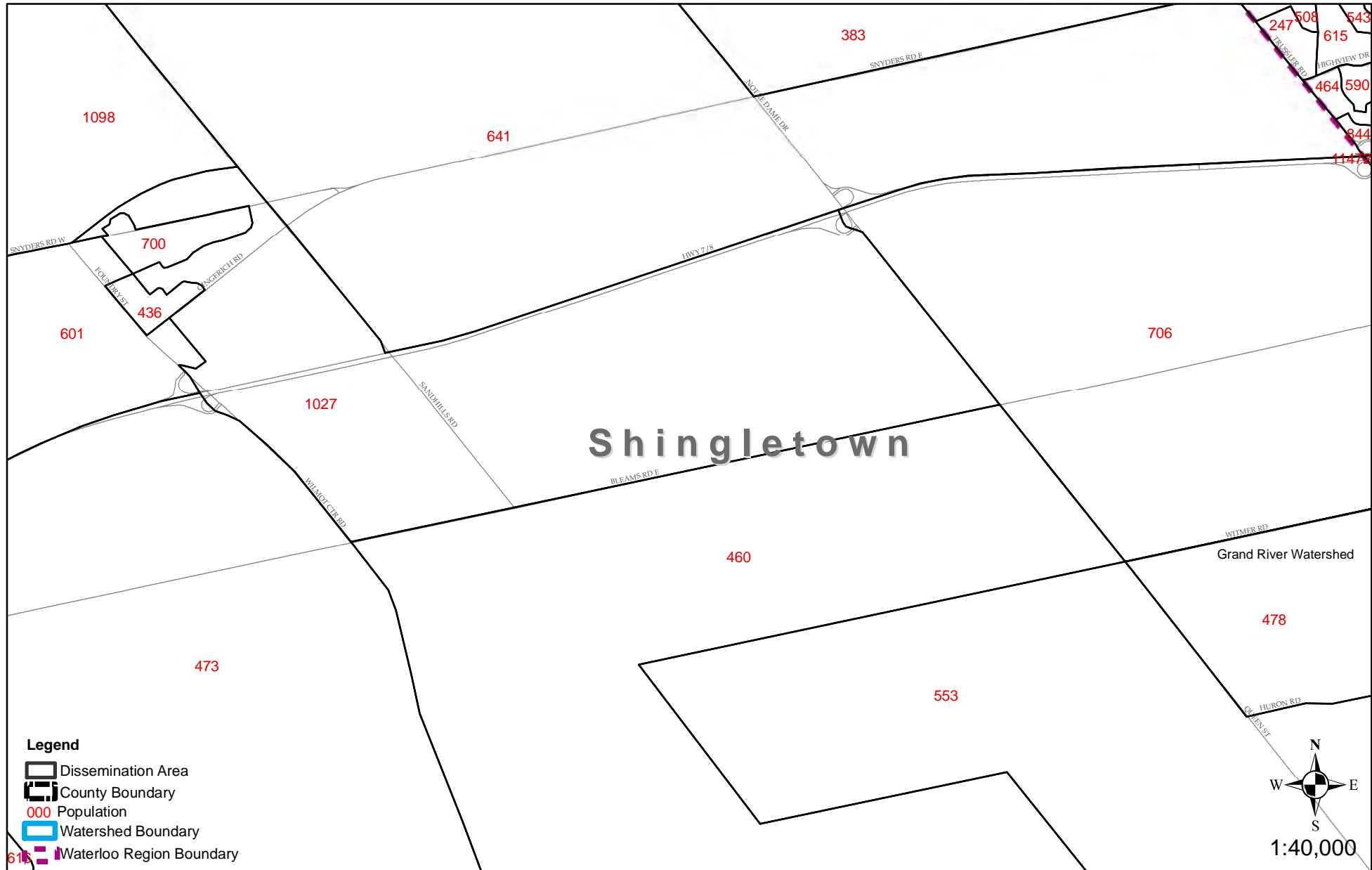
Mannheim





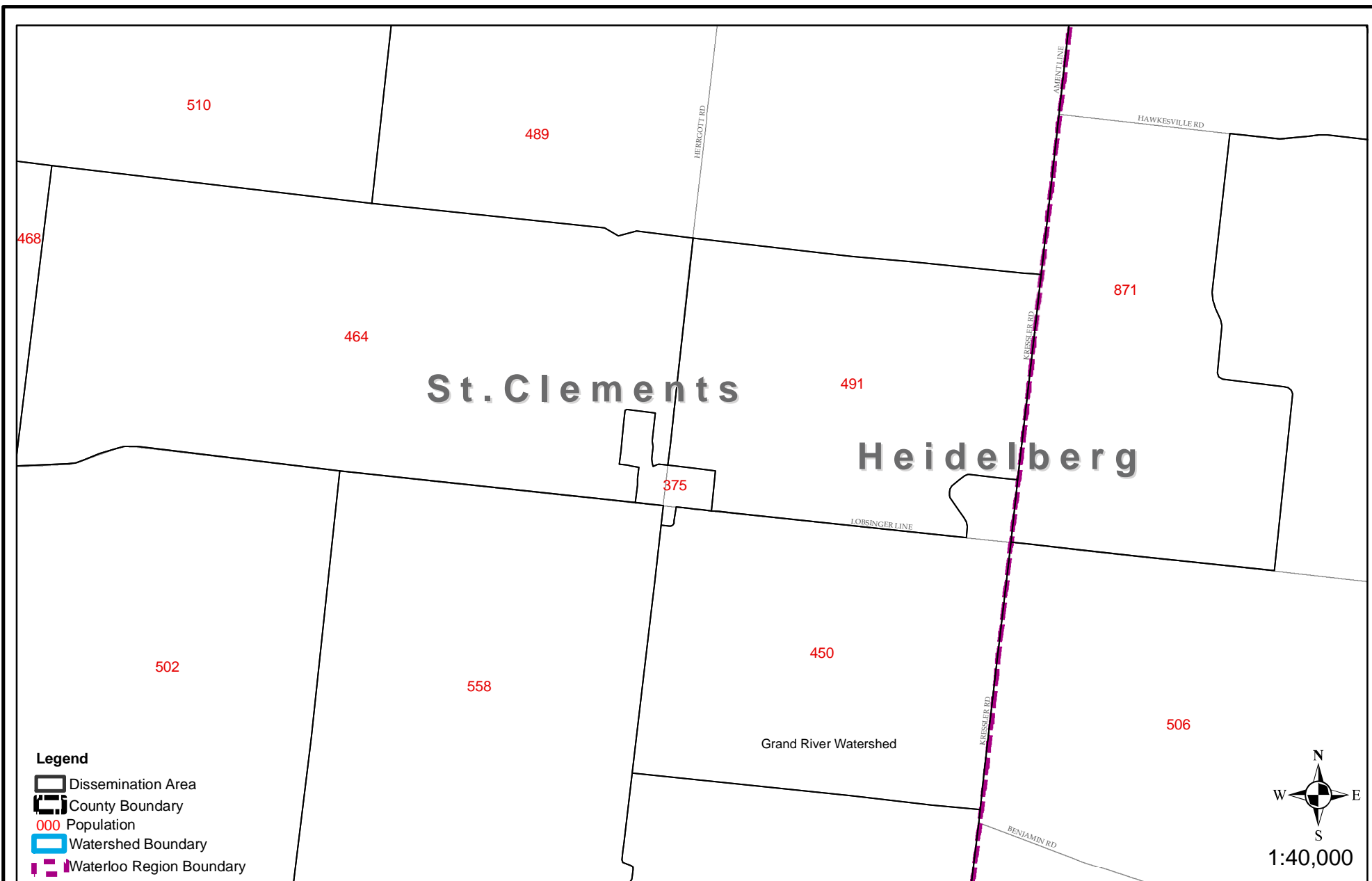
Waterloo Region

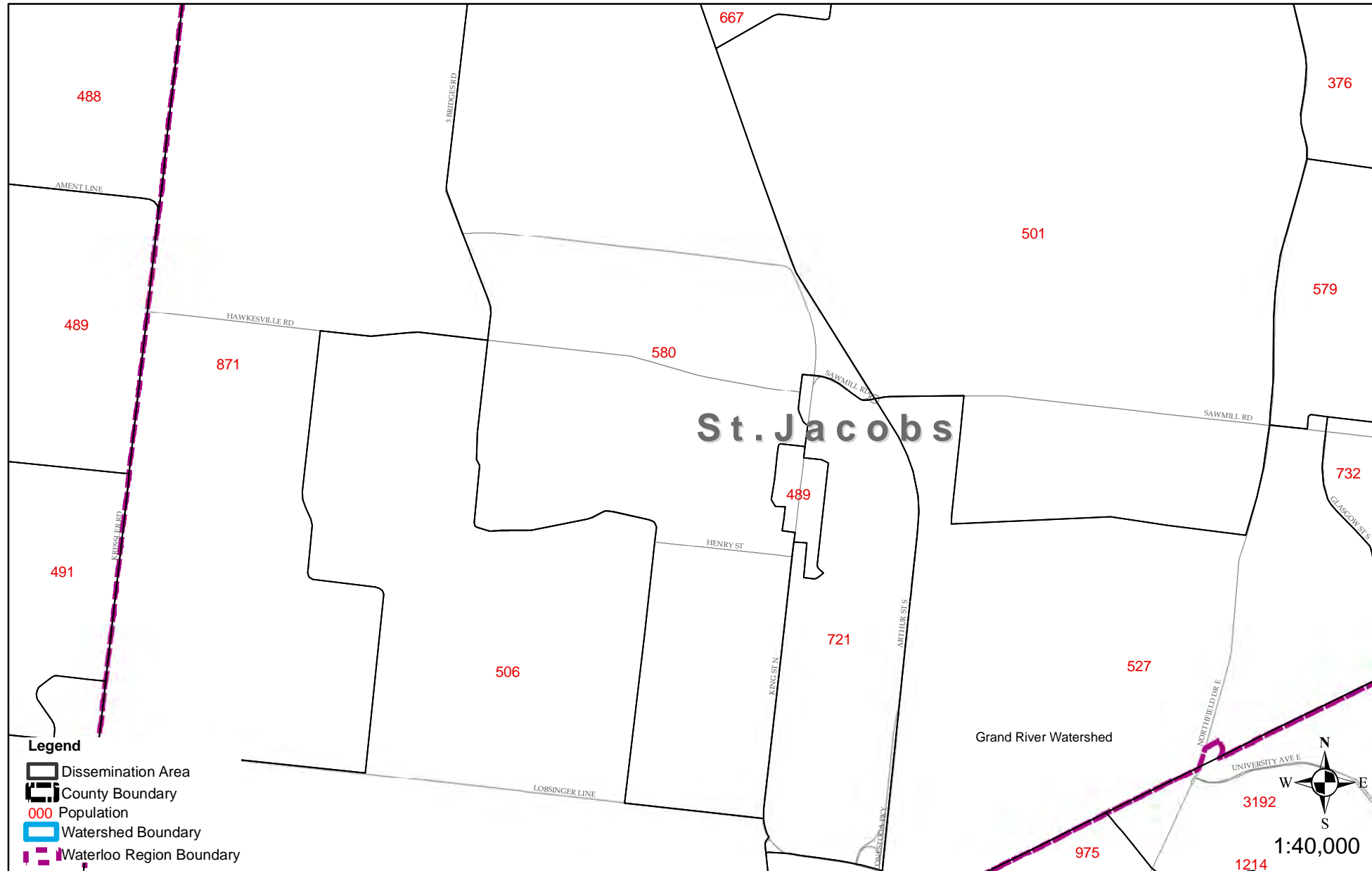
New Dundee



Waterloo Region

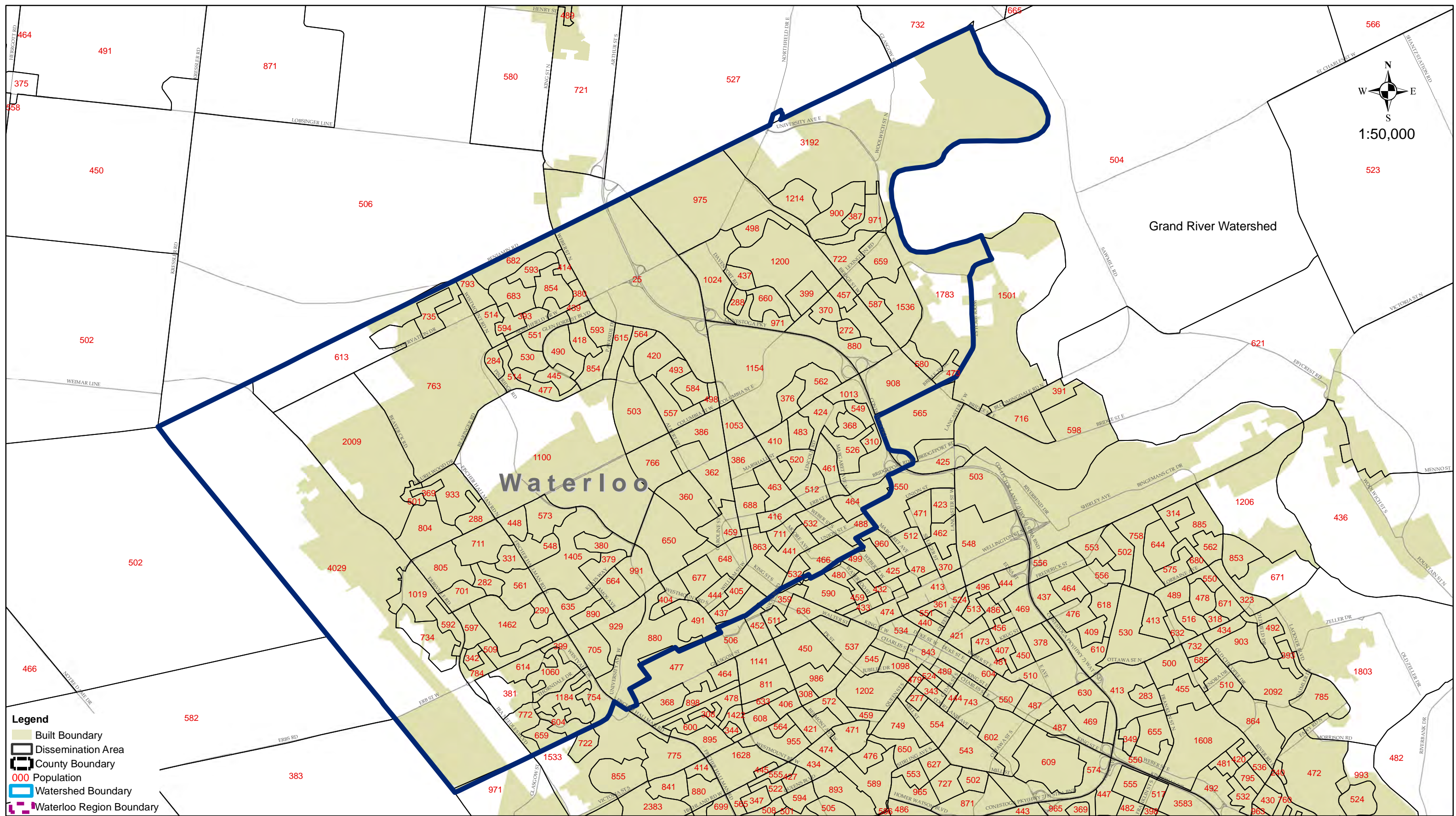
Shingletown





Waterloo Region

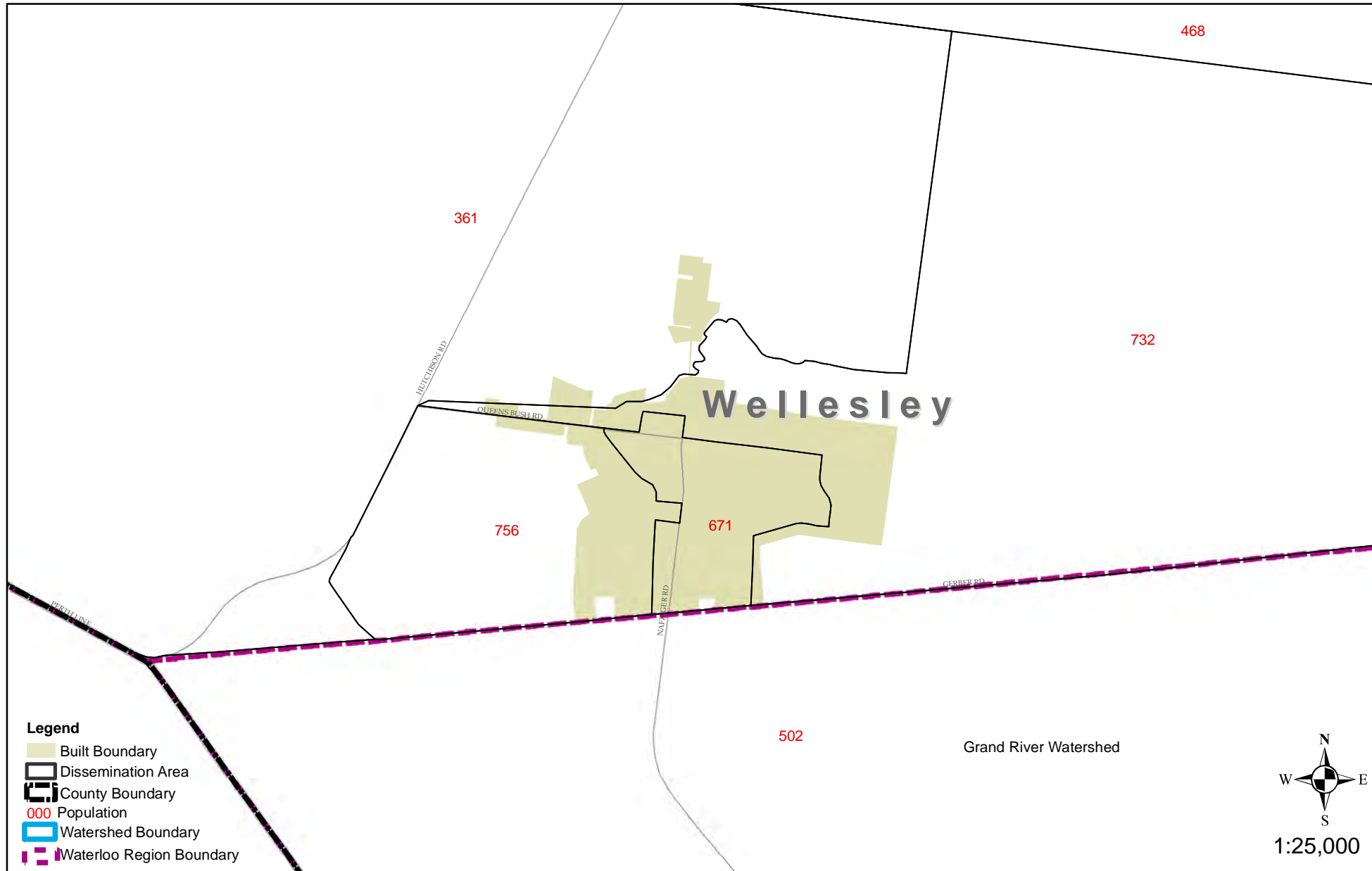
St. Jacobs



Waterloo Region

Waterloo

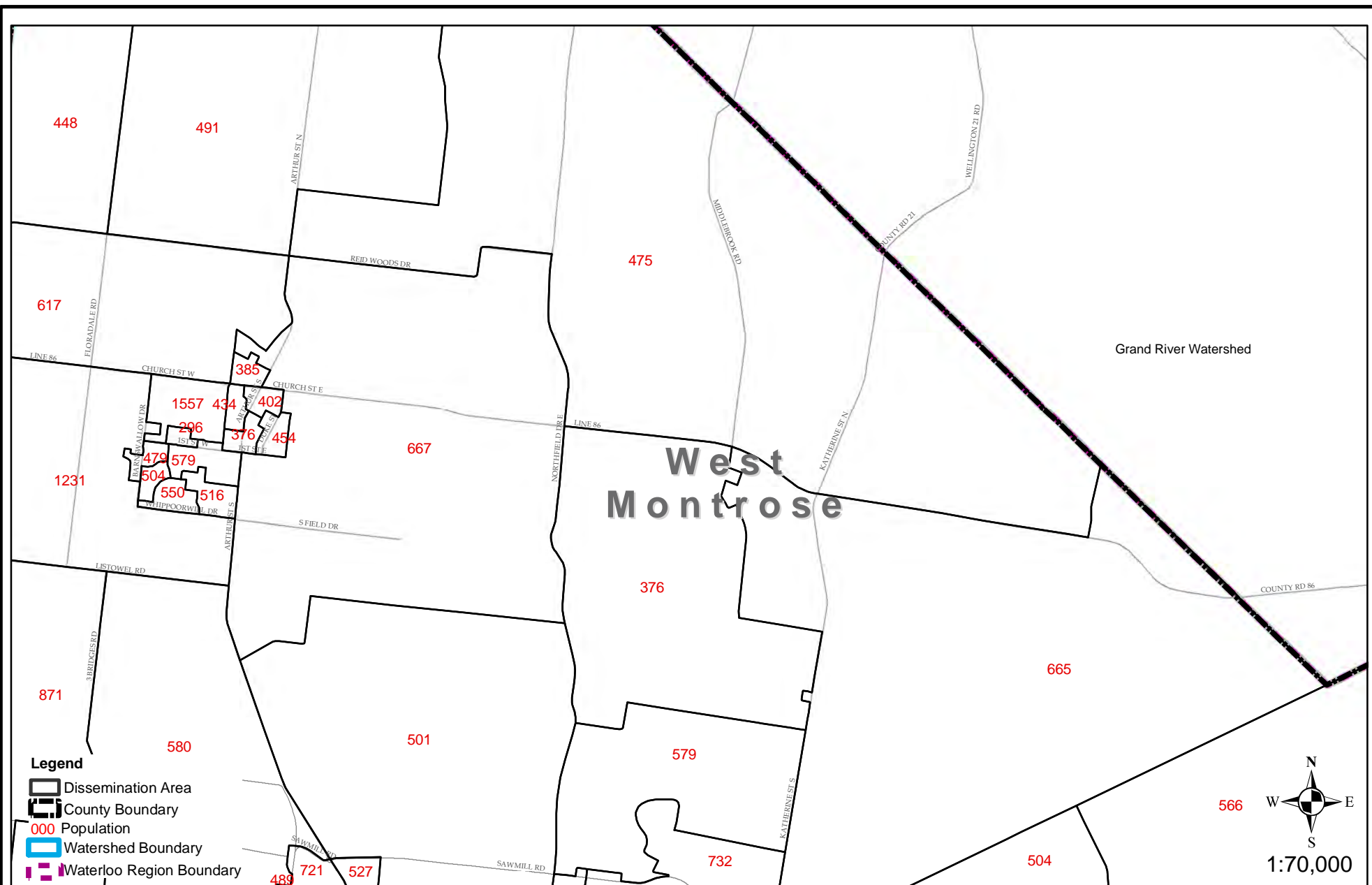
Total Population: 78,627



DRAFT

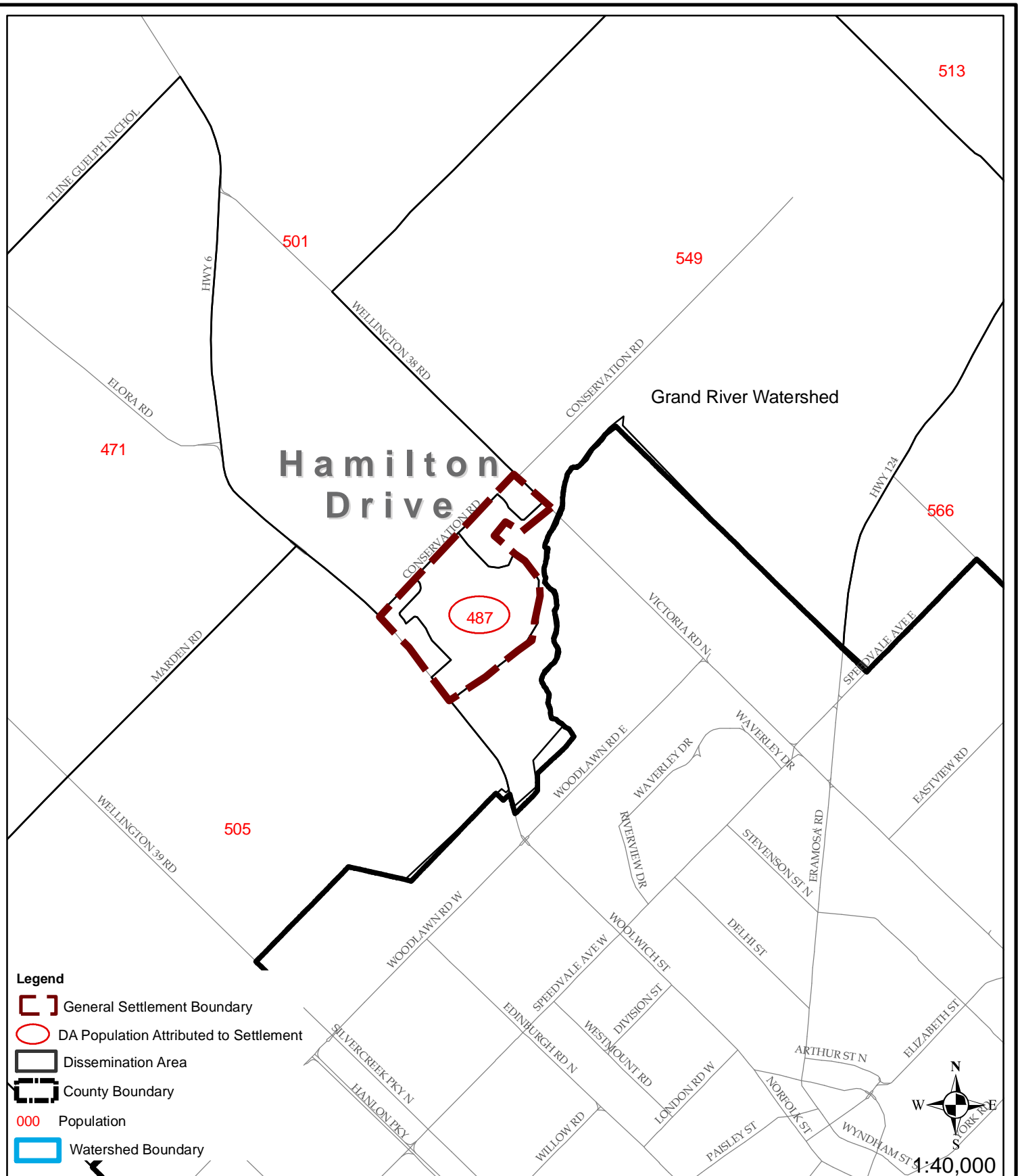
Waterloo Region

Wellesley



Waterloo Region

West Montrose



Wellington County

Hamilton Drive

APPENDIX 5

Table 2.7 from the Region of Waterloo Waste Water Treatment Master Plan

Region of Waterloo
Wastewater Treatment Master Plan
Table 2.7 Summary of Projected Loads to Regional WWTPS for 2006 to 2041

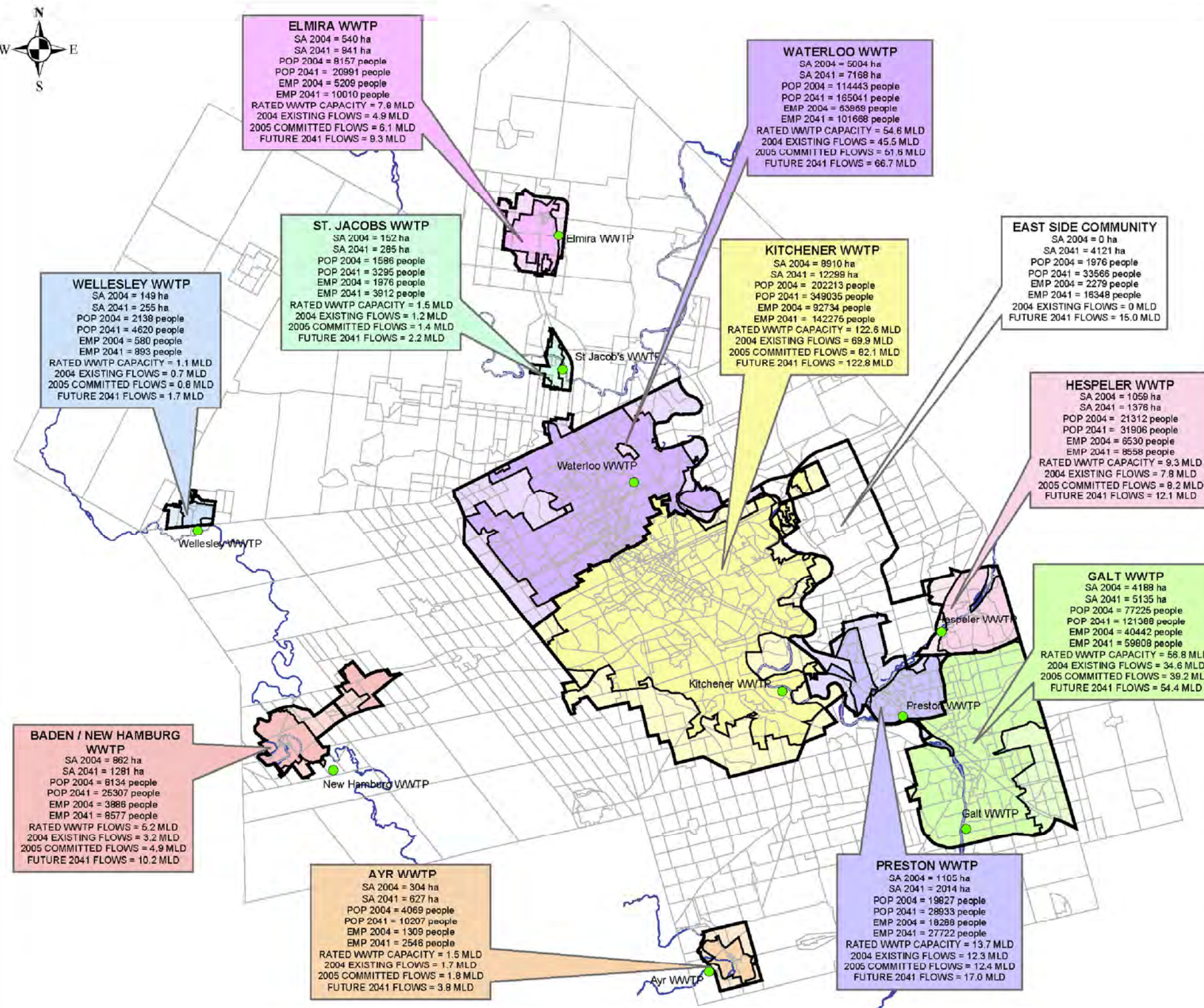
WWTP Service Area	2006					2016					2031					2041				
	Equivalent Population	cBOD5 (kg/d)	TSS (kg/d)	TKN (kg/d)	TP (kg/d)	Equivalent Population	cBOD5 (kg/d)	TSS (kg/d)	TKN (kg/d)	TP (kg/d)	Equivalent Population	cBOD5 (kg/d)	TSS (kg/d)	TKN (kg/d)	TP (kg/d)	Equivalent Population	cBOD5 (kg/d)	TSS (kg/d)	TKN (kg/d)	TP (kg/d)
AYR	5562	223	241	65	9	7815	313	338	92	13	11638	466	503	136	20	12753	511	552	149	22
ELMIRA	13783	696	817	130	21	16712	844	991	157	25	24832	1254	1473	234	37	31001	1565	1839	292	46
GALT	123600	7465	8846	1260	187	144670	8738	10354	1475	218	170401	10292	12196	1738	257	181196	10944	12968	1848	273
HESPELER	27599	1087	1369	247	34	30657	1207	1521	275	38	36050	1419	1789	323	45	40464	1593	2008	363	50
KITCHENER	306049	13257	15746	2879	395	356206	15430	18326	3351	459	437801	18964	22524	4119	565	491310	21282	25277	4622	634
NEW HAMBURG/BADEN	13870	468	508	103	18	18618	628	681	138	24	29261	987	1071	218	37	33884	1143	1240	252	43
PRESTON ⁽²⁾	41098	2075	2438	387	62	46136	2329	2736	434	69	53424	2697	3169	503	80	56655	2860	3360	533	85
IRSA ⁽³⁾	2555	3454	3556	264	28	2793	3776	3887	289	31	3189	4311	4438	330	36	3493	4722	4861	361	39
ST JACOBS	3726	240	355	38	9	4942	318	471	51	12	6432	414	613	66	16	7207	464	687	74	17
WATERLOO	186019	8660	9857	1548	273	213393	9935	11308	1776	314	248299	11560	13157	2066	365	266709	12417	14133	2219	392
WELLESLEY	2890	64	92	15	3	3730	82	119	19	4	5326	117	170	27	6	5514	121	176	28	6
EAST SIDE COMMUNITY	4636	234	275	44	7	8500	429	504	80	13	19648	992	1165	185	29	49914	2520	2960	470	75

Notes:

1. shaded areas indicate that average per capita loading rates across ROW WWTPs are utilized for projections.

2. Preston WWTP - loads based on equiv. pop x ROW ave.

3. IRSA - projected loadings identified separately to allow to allow evaluation of various splits in flows and loadings to Galt and Preston WWTPs



Region of Waterloo

WASTEWATER TREATMENT MASTER PLAN

Legend

PLUM Zones (Population Land Use Model)

WWTP

WWSA - Mature State (2041 Presumed)

WWSA - Existing

WWTP Service Areas

Existing

Ayr
Baden/New Hamburg
Elmira
Galt
Hespeler
Kitchener
Preston
St. Jacobs
Waterloo
Wellesley

Mature State

Ayr
Baden/New Hamburg
Elmira
Galt
Hespeler
Kitchener
Preston
St. Jacobs
Waterloo
Wellesley

FIGURE 2.1

EXISTING AND FUTURE (2041) WWTP SERVICE AREAS/FLOWS

SCALE: N.T.S.

DATE: JULY 2006

PN: 78148



A Tyco International Ltd. Company