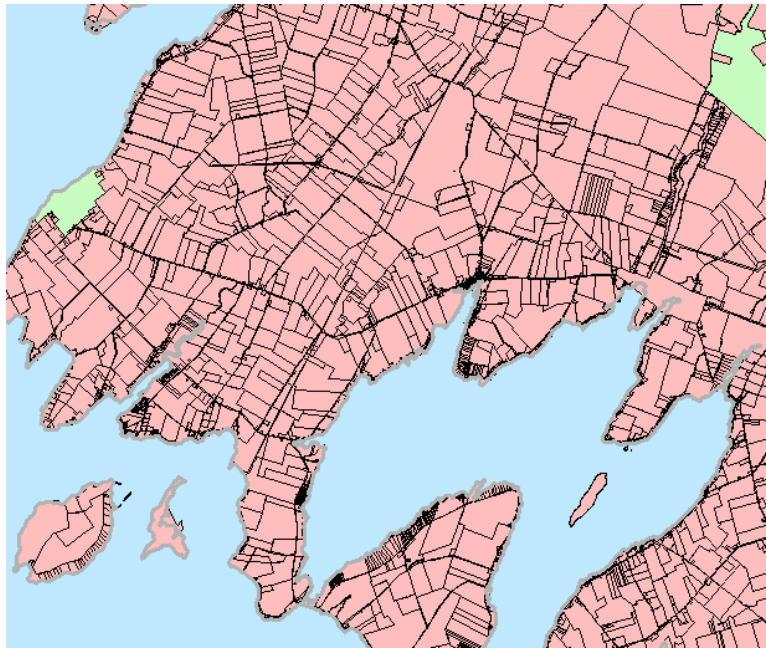


Task Summary Report
(Baird Phase II Task 1.10)
**Scoping Level Assessment of Availability of
Digital Land Parcel and
Property Assessment Data
Lake Ontario and St. Lawrence River**



**Coastal Task Working Group
International Joint Commission
Lake Ontario – St. Lawrence River Regulation Study**

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Prepared By



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Scoping Level Assessment of Availability of Digital Land Parcel and Property Assessment Data - Lake Ontario and St. Lawrence River

1.0 Introduction

This task forms part of a series of tasks being conducted for the Coastal Task Working Group (CWG) of the IJC Lake Ontario – St. Lawrence River Study by Christian J. Stewart Consulting (CJS) and W.F. Baird and Associates (Baird). Specifically this task comprises “Task 1.10 – Assemble Property Parcel and Assessment Data” in the June 14, 2002 Phase II proposal submitted to the CWG by Baird and CJS.

2.0 Purpose

Many municipalities and townships around Lake Ontario and the St. Lawrence River are developing digital land/tax parcel mapping, as well as digital property assessment data. Collection of this information will be required to assist in determining property value, ownership and other key data required for the economic analyses within the Flood and Erosion Prediction System (FEPS) that is being developed for the CWG.

The purpose of this task was to conduct a scoping level assessment of the current availability of digital parcel mapping and related assessment data and to provide additional details on costs and logistics of assembling this data for the entire lake and river study area (it should be noted that this task did not examine availability of this data for the Province of Quebec. This is being addressed under a separate activity within the Study).

3.0 Methods

The methodology for this task was quite simple and involved in-person and telephone interviews (and e-mail follow-up) with various agency personnel between June and September of 2002. These included:

- ◆ Conservation Authority Staff (Ontario)
- ◆ County Planning and Real Property Services Staff (New York)
- ◆ Ontario Ministry of Natural Resources Staff
- ◆ TeraNet (Ontario Provincial-Private Partnership Agency for development of digital parcel data)



Personnel were asked to provide details on the type and extent of parcel mapping and related assessment data that they might have available. Information was asked on the data format (e.g., Arc Shape files, CAD, paper, etc.), the projection and datum used, cost, availability of assessment data, format of assessment data, and any other related information or products that might be available.

All information obtained from these agencies was summarized in spreadsheet format (Table 1).

Where parcel data was available it was requested. Once received, it was incorporated into the existing GIS project format and projection being utilized by CJS and Baird. Summary maps showing the current extent of available parcel data were then prepared.

4.0 Results

Table 1 and Figures 1-5 present the status of available digital parcel mapping and related assessment data as of September 30, 2002. This is summarized by geographical area below.

4.1 Province of Ontario

Digital parcels and related assessment data have not yet been acquired for any portion of the Ontario shoreline. Parcel data is available from TeraNet for the section of shoreline extending from the Municipalities of Niagara to Durham and for the Municipality of Frontenac (green areas in Figure 1). This data is parcel mapping only and comes at a premium cost. Initial estimates from TeraNet for use of this data are on the order of \$48,000 CDN. While it may be cheaper to acquire the data for these areas directly from the municipalities, this is not an option, as these municipalities have a licensing agreement with TeraNet that does not allow them to share this data with us.

For municipalities not covered by a TeraNet licensing agreement, it may be possible to obtain the necessary parcel data. Initial inquiries have been made with these agencies. There has been no response to date, other than the City of Kingston who are looking into what they can provide to us.

As to assessment data, it is not tied directly to the parcel information and would have to be obtained separately from the Municipal Property Assessment Corporation (MPAC). Initial inquiries have been made with MPAC by Ralph Moulton of Environment Canada, but to date, no information has been obtained from them regarding data availability or costs.



Digital, GIS Ready, Property Parcel Summary
As of September 30, 2002

County	Shore Unit	Reaches	Digital Parcels?	Format	Projection	Datum	Date	Assessment Data?	Format?	Cost	Comments	Contact	Phone	E-Mail
St. Lawrence	R1-4	16-278	Yes	ArcView Shape	NY State Plane	NAD27	Current	Yes, Tied to Parcels but Possible Extra Cost	NY RPS** Database	\$500 CD	CD Contains Tax Maps for entire county (1700). Ms. Powers is checking on cost for stripping out river counties and assessment data.	Jane Powers	315-379-2252	
Jefferson	R1, US7-8	279-669	Full SLEOC digital parcel data for Sacketts Harbor, Cape Vincent, Lyme, Brownville and Ellisburg. "Large" parcel data only for Alexandria, Orleans, Clayton, Hounsfield and Henderson.	ArcView Shape	NY State Plane - NAD27 Central		1990-1995	Limited assessment data is tied to these parcels and it varies by Township. Additional data can be obtained from RPS and tied to centroids of existing parcels. This would likely be at extra cost.	NY RPS** Database	Proce per parcel approximately \$0.15 to do.	County has just initiated project to digitize all parcels...will be a year long process...some older digital parcels may be available from SLEOC...Kelley will inquire. Older SLEOC data is available for entire coast...some full, some large parcels only. Have requested this digital data via e-mail August 29, 2002. SLEOC digital parel data was received September 26th and incorporated into the IJC project successfully. Limited assessment data tied to this. See summary memorandum for details.	Kelly Reinhart	315-785-3144	plan1@co.jefferson.ny.us
Oswego	US5-7	670-780	Yes	ArcView Shape	NY State Plane (assumed)	NAD27 (assumed)	Current	Yes, Tied to shape Files	Arc View .dbf file	Likely free	They have ArcView shape files of all parcels for the shoreline townships. Likely free but he will check on cost. Have e-mailed requesting data. Will need to confirm....Spoke again with Charles on August 29, 2002...they have received request and are running it by Dept. Head...they will need to know specific assessment data required. Will confirm with Pete and then forward e-mail to them.	Jack Meyers Charles Fadden	315-349-8315	jmeyers@co.oswego.ny.us cfadden@co.oswego.ny.us
Cayuga	US4	781-818	Yes (Any Day!)	ArcView Also Raster.TIFF Images	NY State Plane	NAD27	Current	Yes, but not yet tied directly to parcels as mapping is just being completed. Is available on a CD database that contains raster TIFF image of Sterling Township. Database contains comprehensive assessment data as well as photos of property.	Image-Mate Software	\$18 U.S. for shipping	Digital Arc View mapping of Sterling Twp and Fairhaven is just being completed in ArcView format. He will forward to us once complete. He is also forwarding the Assessment and Tax map CD which currently has a RASTER.TIFF image of Sterling parcels. Database contains detailed assessment data and photos. Received CD and have incorporated available Arc files into GIS for example purposes.	Bernard Corcoran	315-253-1518	
Wayne	US3-4	819-933	Yes (for Ontario and Williamson Twp. And Village of Sodus Pt)...Remaining Lake Twps. Available Feb'03	ArcView	NY State Plane (assumed)	NAD27 (assumed)	Current	No...they have not integrated the RPS data into the GIS yet as they are awaiting Version 4 of RPS software. We might be able to get data directly from RPS. May be more readily available in early 2003.		Free	E-Mail to Neil has gone out to confirm. We should receive Ontario, Willimson and Sodus Pt. files next week. Have also requested additional counties once available as well as assessment data. Ontario, Williamson and Sodus Point files have been received and incorporated into IJC project file. Shape files also included other data such as parcel centers, utilities, roads, etc. Data for Sidus Point forwarded to Baird for use in Study area.	Neil Gates	315-946-5916	ngates@co.wayne.ny.us
Monroe	US2-3	934-1072	Yes	ArcView Shape	Lambert Conformal Conic	NAD83	Current	Yes, Tied to ArcView shape files. Assessment data current as of August 2002.	ArcView .dbf	Free	He is sending CD of shape files and assessment data. He will convert to lambert Conformal Conic for us. I have sent our projection info to him. Have confirmed via e-mail. Monroe county data received September 25th and incorporated into IJC project file. Data is perfect...detailed assessment data tied to the parcel mapping. Have forwarded to Baird for use in FEPS.	Mike Ross	585-760-7610	mross@monroecounty.gov Ext. 7040
Orleans	US1-2	1073-1133	No	Paper	na	na		Yes, Available in RPS System	NY RPS** Database	\$4 per paper map, ~\$250 for all shoreline townships	They are in the process of developing digital maps but they will be a year or two away.	Robert Harrold	585-589-5400	
Niagara	US1	1134-1213	Yes	ArcView Shape	NY State Plane...Have been converted to LCC	NAD27...Converted to NAD83	Current	Unknown...awaiting a call back from Jackie Reynolds their IT person who can provide more details...likely after Labour Day.		Free	ArcView shape files have been re-projected into Lambert Conformal Conic. Parcels incorporated into project. Delivered to Baird August 29, 2002. No Assessment Data Yet	Mark Passuite Jackie Reynolds	716-439-7269 716-439-7077	
Province of Ontario	CDN1-12; R1-1214-End		TeraNet has available for Niagara through ~Coburg...other parcels available from municipalities?	Shape Files (TeraNet)	TeraNet can likley provide in UTM or Unprojected	NAD83 (TeraNet)	Current	Likely available from Province (MPAC)...not directly tied to parcels	?	\$50,000 plus!	Ontario parcel data for many municipalities is being developed through TeraNet - a private sector company working with the Province to be the repository for all parcel data. Currently TeraNet coverage extends from Niagara through to the vicinity of Coburg. Initial proposal from TeraNet for the receipt of parcel data only for these areas was \$48,000. This did not include assessment data which needs to be acquired separately. Additional parcel data where TeraNet coverage does not exist may be available directly from the municipalities. Initial contact with some of these agencies has been made with little response to date. Additional follow up will be required in Phase III of the IJC Study.	Greg O'Brien Ralph Moulton (Environment Canada)		

Table 1 - Parcel and Assessment Data Availability Summary Table - As of September 30, 2002

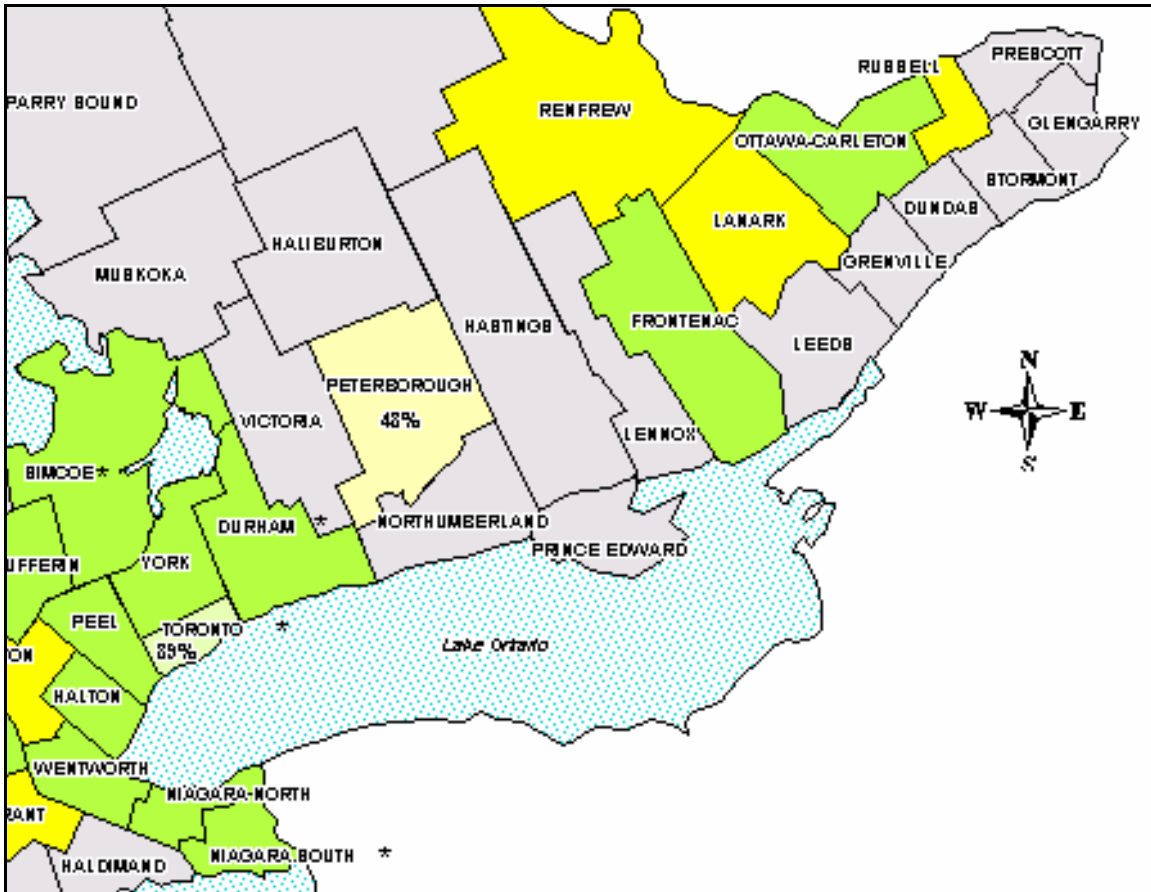


Figure 1 - Extent of Currently Available TeraNet Parcel Mapping (Green Shaded Areas), Province of Ontario

4.2 New York State

4.2.1 St. Lawrence County

Digital parcel mapping for St. Lawrence County is available but has not yet been obtained. County officials indicated that a CD with the entire county can be obtained at a cost of \$500 US. Assessment data can be tied to the parcel mapping but at a possible extra cost. County staff were checking into possible extra costs for the assessment data as well as the possibility of only providing the riverfront Townships and Villages to us, hence the delay in obtaining the parcel data. Additional follow-up will take place in Phase III of the IJC Study.



4.2.2 Jefferson County

Digital parcel mapping has been received for portions of Jefferson County (Figure 2). This mapping was produced by the St. Lawrence Eastern Ontario Commission (SLEOC) in the early 1990's. Detailed parcels exist for Sackett's Harbor, Cape Vincent, Lyme, Brownville and Ellisburg. "Large" parcels only have been created for Alexandria, Orleans, Clayton, Hounsfield and Henderson Townships. The County of Jefferson is initiated a project to digitize all current parcels and bring this mapping up to date. These new digital parcels will not be available for at least a year.

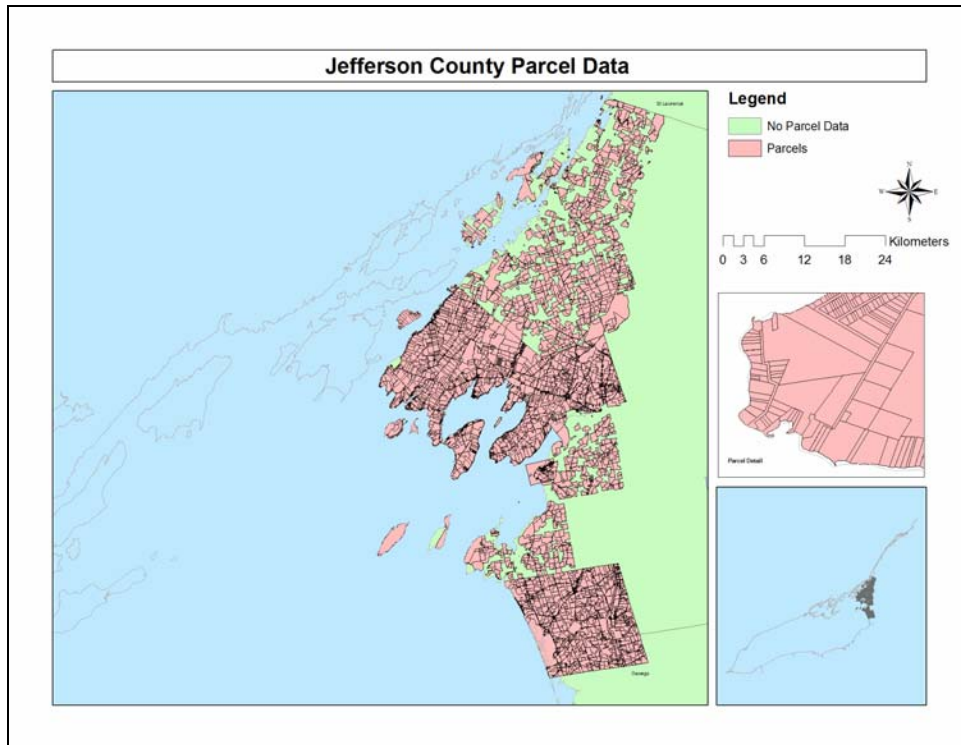


Figure 2 - Jefferson County, New York Parcel Data

Minimal assessment data is associated with the SLEOC parcel mapping and it varies by Township. Updated assessment data could be tied to these parcels at a cost of approximately \$0.15 US per parcel. A full evaluation of assessment data included with the SLEOC parcels as well as the availability of current assessment data will be conducted as part of follow-up activities in Phase III of the IJC Study.



4.2.3 Oswego County

Digital parcel data is available for Oswego County but has not yet been obtained. This data is available in ArcView shape file format and includes assessment data tied to the parcel mapping. This data will likely be provided for free, but personnel at Oswego County were checking on this. Additional follow-up and the acquisition of the parcel and assessment data will be carried out in Phase III of the IJC Study.

4.2.4 Cayuga County

Digital parcel mapping of Sterling Township and the Village of Fairhaven (the only waterfront Townships) are in progress and will be forwarded to us once they are complete, likely late in 2002 or early 2003. Based on digital parcels provided to us for other areas in the county, this data will include detailed assessment data tied to the parcels.

As an interim, Cayuga County has forwarded a CD containing raster.TIFF images of the Sterling and Fairhaven parcel data. This CD also contains all current assessment data for the entire county. The TIFF images are scans of the parcel tax maps and can be used as an interim basis for reference purposes where required. Additional follow-up activities will take place in Phase III to ensure collection of the Sterling and Fairhaven parcel and assessment data.

4.2.5 Wayne County

Digital parcel mapping has been received for Ontario and Williamson Townships as well as the Village of Sodus Point (Figure 3). The remaining lakefront Townships are being completed and will be available in February of 2003.

Assessment data is not included with this parcel data. The County will be upgrading the software they use to access the New York Real Property System in early 2003 at which time they may be able to more easily provide us with what we need. Additional follow-up will take place in Phase III to acquire the remaining parcel mapping as well as look into the availability of detailed assessment data.

4.2.6 Monroe County

Detailed parcel mapping as well as comprehensive assessment data tied to these parcels has been received for Monroe County (Figure 4). The assessment data is current as of August 2002.



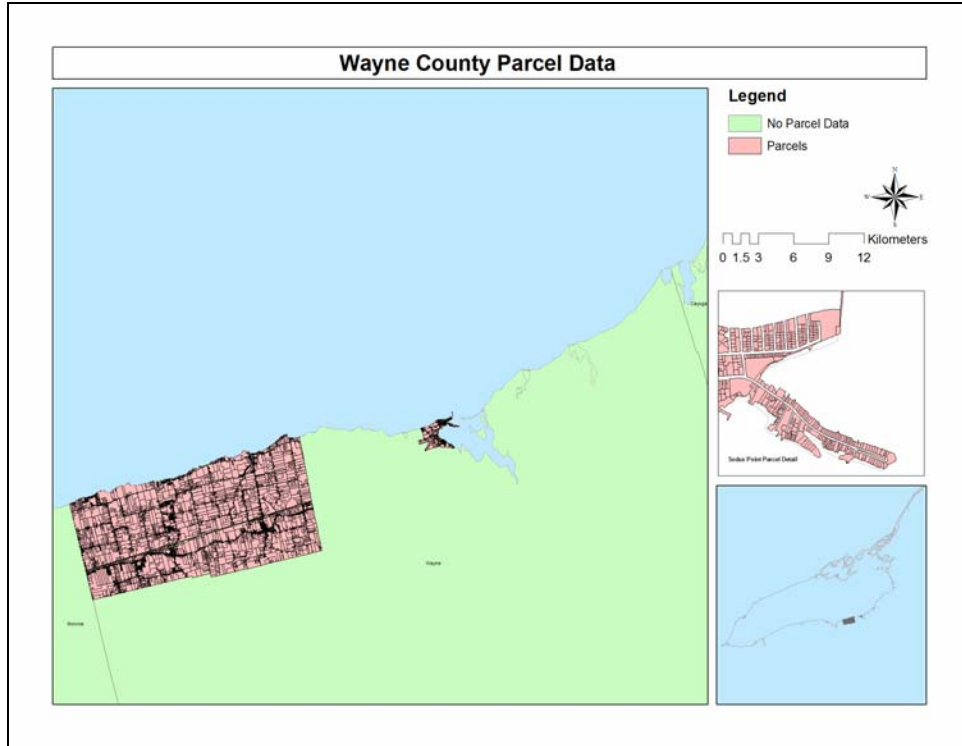


Figure 3 - Wayne County, New York Parcel Data

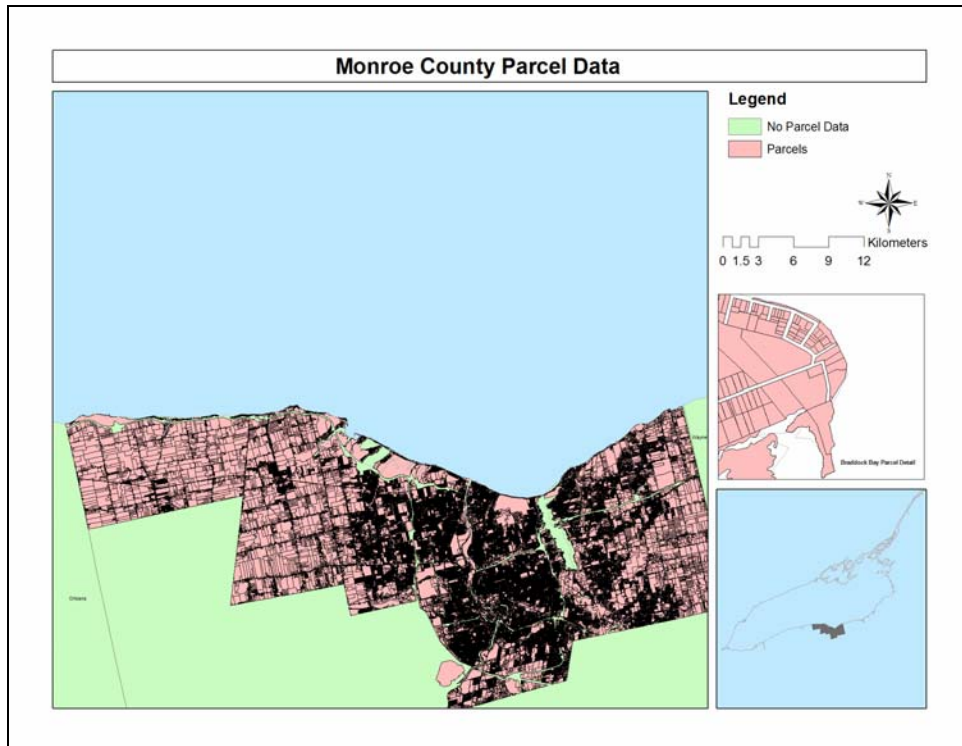


Figure 4 - Monroe County, New York Parcel Data



4.2.7 Orleans County

Digital parcel data is not yet available for Orleans County. They have just initiated a project to produce digital maps, but these will not be available for at least a year. Paper copies of tax parcel maps are available at a cost of \$4.00 US per map, with a total cost of approximately \$250 US for the Lake Ontario Townships.

Assessment data is currently available through the NY State Real Property Services Department. It is not clear if this data will be incorporated with the new digital mapping.

Activities in Phase III will focus on a solution for obtaining or producing parcel data in this County where required.

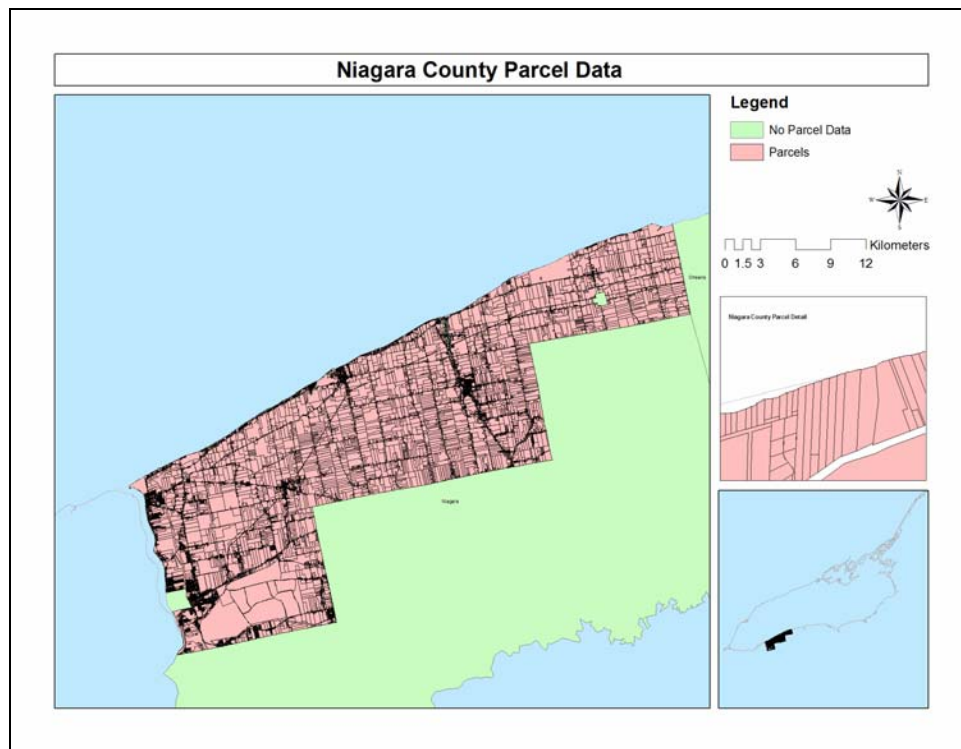


Figure 5 - Niagara County, New York Parcel Data

4.2.8 Niagara County

Digital parcel mapping has been obtained for all lakefront Townships and Villages in Niagara County (Figure 5). Minimal assessment data is associated with the parcel mapping. County staff have been contacted to inquire about the



availability of more comprehensive data, but with no response to date. A full evaluation of assessment data included with the parcels as well as the availability of current assessment data will be conducted as part of follow-up activities in Phase III of the IJC Study.

5.0 Summary and Proposed Activities for Phase III

This scoping assessment has yielded a wide range of both parcel and assessment data for the Lake Ontario and St. Lawrence River Shoreline. Much of this has already been incorporated into the GIS format and projection required for the study and subsequently forwarded to Baird for incorporation on the Coastal Data Server and use within FEPS.

Additional work is required to complete the parcel and assessment database and this will take place in Phase III. This will include follow-up with New York Counties who have yet to forward data, as well as working closely with TeraNet and other personnel and Ontario agencies to obtain useable data for the Province. In areas where parcel data can not be obtained, alternative methods will need to be examined for determining property values for incorporation in the FEPS.

