



RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION

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**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

PREFACE

This report summarizes results from a Recreational Facility Use and Capacity Investigation conducted for the Niagara Power Project (FERC No. 2216). The report was developed by Kleinschmidt Associates based on recreation data collected from April 2002 through March 2003. This work was conducted in accordance with a study plan developed in March 2002 in cooperation with the Niagara Project Relicensing Team (which consists of technical and relicensing staff from the New York Power Authority; URS Corporation; Gomez and Sullivan Engineers, P.C.; and E/PRO Engineering and Environmental Consulting, LLC.), and discussions with the New York State Office of Parks, Recreation and Historic Preservation and the New York State Department of Environmental Conservation. The information presented in this report provides an estimate of recreational use at the Niagara Power Project and adjacent recreation facilities.

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EXECUTIVE SUMMARY

Twenty-nine recreation sites in the vicinity of the Niagara Power Project were investigated for information on recreational use and capacity. The investigation included sites located both within and outside the Federal Energy Regulatory Commission (FERC) Project boundary. Information collected during the investigation was used to document existing conditions.

The investigation included a combination of secondary and primary data collection techniques. Secondary data on recreational use and capacity was compiled for sites managed by the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP), as well as several municipal facilities. Primary field data were collected for sites where there was little or no existing information on recreational use. Primary data collection relied on roving instantaneous counts supplemented with occasional longer-duration user observations at 19 recreation sites. The investigation extended from April 2002 through March 2003. The investigation was closely coordinated with creel survey work being conducted by the New York Power Authority (NYPA) along the lower Niagara River.

Results from the Recreational Facility Use and Capacity Investigation indicate that, on an annual basis, the recreational facilities included in the investigation accommodate approximately 8.8 million recreation days. The majority of this use (7.6 million recreation days) is associated with Niagara Falls and the Niagara Reservation State Park. Other heavily used facilities include Earl W. Brydges Artpark State Park, Reservoir State Park, Beaver Island State Park, as well as Niawanda, and Isle View Parks. Use within the FERC project boundary accounts for a relatively small percentage (less than 1 percent) of the estimated annual study area use.

Most of the recreational activity in the study area occurs during the summer months. Approximately 80 percent of the observed activity, based on primary data collection, involved shoreline use, while the remaining 20 percent involved boating activity. Of all shoreline recreation observed during the survey, the predominant activities were angling (33 percent), sightseeing (27 percent), and trail use (20 percent). Shoreline and boating activities varied, depending on the site and the time of year.

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Overall, sites are not being used at or above capacity, with the exception of a few particularly popular sites, which were observed at or above 100 percent capacity during certain times of the year. Capacity issues (in terms of parking) were observed at three sites, one along the Upper River and two along the Lower River. Sites where use was frequently observed to be in excess of 100 percent of existing capacity were Ontario Street, Lewiston Landing, and Fort Niagara Boat Launch. All three of these sites offer boat access to the river and received heavy boating use, particularly during the summer months. Youngstown Boat Launch also exhibited high utilization as a percent of existing capacity (frequently in excess of 90 percent). This site did not necessarily receive heavy recreation pressure, but it is a small site with very limited existing parking (thus capacity is easily exceeded). Use at the remaining sites was well below capacity.

Most of the heavy-use sites are located outside the Project boundary. Sites within the Project (Upper Trail, Upper River Observation Area, Lewiston Reservoir, Robert Moses Parkway and Robert Moses Fishing Pier) generally received light recreation pressure. Average August weekend use at these sites was generally less than 5 vehicles at one time. None of the sites within the Project boundary experience use approaching or in excess of capacity.

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ABBREVIATIONS

Agencies

FERC Federal Energy Regulatory Commission

NYSOPRHP New York State Office of Parks, Recreation and Historic Preservation

NYSDEC New York State Department of Environmental Conservation.

Regulatory

ADA Americans with Disabilities Act

NYPA New York Power Authority

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1.0 INTRODUCTION

The New York Power Authority (NYPA) is engaged in the relicensing of the Niagara Power Project in Lewiston, Niagara County, New York. The present operating license for the plant expires in August 2007. As part of its preparation for the relicensing of the Niagara Project, NYPA is developing background information related to the ecological, engineering, recreational, cultural, and socioeconomic aspects of the Project. The Recreational Facility Use and Capacity Investigation described in this report was conducted to obtain data on existing conditions.

Kleinschmidt Associates (Kleinschmidt) was hired to collect data on recreation from April 2002 to March 2003. NYPA also commissioned a creel survey of anglers in the lower Niagara River and the Lewiston Reservoir, beginning in April 2002. The Recreational Facility Use and Capacity Investigation, as described herein, was conducted in close coordination with the creel survey and was specifically designed to utilize results from that survey.

1.1 Study Objectives

The objectives of the Recreational Facility Use and Capacity Investigation were to determine:

- current public usage of recreational facilities at the Niagara Power Project and in its vicinity
- use capacity of each of these facilities
- percent of capacity that is currently being used by the public at each of the selected facilities

1.2 Study Area

The study area for the Recreational Facility Use and Capacity Investigation extended from the Peace Bridge northward to the mouth of the Niagara River at Lake Ontario (See [Map 1.2-1](#)). The study area contains three relatively distinct geographical areas, each offering different recreation opportunities:

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the Upper River Area (upstream of Niagara Falls); the Niagara Falls and Niagara Gorge Area; and the Lower River Area (downstream of the Gorge Area). Recreation facilities located in the study area, and included in the Recreational Facility Use and Capacity Investigation, are listed on [Table 1.2-1](#). These facilities include state parks managed and operated by the New York State Office of Parks Recreation and Historic Preservation (NYSOPRHP), facilities operated by various local municipalities, and facilities built and operated by NYPA, as shown on [Table 1.2-1](#). Eleven of the twenty-nine recreation facilities in the study area (including the pedestrian portion of the Robert Moses Parkway) are contained, either wholly or in part, within the Federal Energy Regulatory Commission (FERC) project boundary for the Niagara Power Project (shown as “In-Project” on [Table 1.2-1](#)).

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**TABLE 1.2-1
FACILITIES INCLUDED IN THE INVESTIGATION**

Site	State Park	Municipal Park	NYPA	In-Project
<i>Upper River Area</i>				
Ontario Street Boat Launch		X		
Sheridan Drive Boat Launch		X		
Isle View Park		X		
Niawanda Park		X		
Buckhorn State Park	X			
Beaver Island State Park	X			
Big Six Mile Creek Marina	X			
Gratwick Park		X		
Griffon Park Boat Launch		X		
Upper River Trail		X		X
Upper River Observation Site			X	X
Hyde Park Golf Course		X		X
<i>Niagara Falls and Gorge Area</i>				
Niagara Reservation State Park	X			
Discovery Center Museum	X			X
Great Gorge RR Trail	X			X
Whirlpool State Park	X			
Devil's Hole State Park	X			
Robert Moses Parkway				X *
Robert Moses Fishing Pier			X	X
Niagara Project Visitor Center			X	X
Lewiston Reservoir Fishing Access			X	X
Reservoir State Park	X			X

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**TABLE 1.2-1 (CONT.)
FACILITIES INCLUDED IN THE INVESTIGATION**

Site	State Park	Municipal Park	NYPA	In-Project
<i>Lower River Area</i>				
Lewiston Landing		X		
Lewiston Branch Gorge Trail	X			X
Earl W. Brydges Artpark	X			
Joseph Davis State Park Pier	X			
Youngstown Boat Launch		X		
Constitution Park		X		
Fort Niagara Boat Launch	X			

* A portion of the Robert Moses Parkway is located within the project boundary

Non-Internet Public (NIP) information has been removed from the following page(s).

This material is contained in:

Volume 2

Section: Recreation Facility Use and Capacity Investigation

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MAP 1.2-1

STUDY AREA

[NIP – General Location Maps]

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2.0 METHODS

The Recreational Facility Use and Capacity Investigation included a combination of primary and secondary data collection techniques. Several of the recreation facilities in the study area are managed by NYSOPRHP. Several others are managed by NYPA and various municipal organizations. NYSOPRHP collects and maintains records on recreational use for all its facilities. Some of these records are based on fee receipts. Others are based on estimates developed by NYSOPRHP staff. Kleinschmidt coordinated with NYSOPRHP and various municipal agencies to identify and obtain available information regarding recreational use. For recreation facilities with little or no existing data on recreational use, a field survey was designed and conducted to develop estimates of use.

2.1 Field Data Collection

The recreation field survey utilized a roving survey technique in which field personnel visited each sample site multiple times a day on a set of pre-scheduled sample dates at 19 recreation sites. Collected data consisted of instantaneous vehicle counts as an indication of total daily use, supplemented by occasional longer-duration observations to collect data on activities, people per car, and length of stay. Sample data sheets are included in [Appendix A](#). A stratified random sampling technique that considered season, time of day, and type of day (weekday, weekend, and holiday) was used. Holidays are also referred to as “peak weekends” throughout this report and include the holiday itself, such as the Fourth of July, and the associated weekend.

Recreation facilities in the study area were sampled on a minimum of five weekdays and five weekend days per month, including major holiday weekends (Memorial Day, Fourth of July, and Labor Day) during the summer season. Several sites on the lower Niagara River were sampled more frequently in association with the creel survey. A schedule showing the dates sampled is included in [Appendix A](#). The investigation extended from April 2002 through March 2003. The investigation was closely coordinated with planned creel survey work being conducted by NYPA along the lower Niagara River. A total of 12,877 individuals were observed during the course of the sampling.

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2.2 Data Analysis

Instantaneous vehicle count data for all sampled sites was compiled and used to develop seasonal and annual use estimates for each site. Standard expansion techniques were used to extrapolate instantaneous vehicle counts into average daily use estimates by season and day type for summation and generation of monthly use estimates by site. For the purposes of this study, recreation use is measured in “recreation days” as defined by FERC. FERC defines a recreation day as each visit by a person to a development for recreational purposes during any portion of a 24-hour period. These use estimates were combined with existing use estimates for non-sampled sites to develop seasonal and annual estimates for the entire study area. For the purposes of this study, use estimates for non-sampled sites are assumed to also be represented in “recreation days.” Instantaneous vehicle count data was also used in facility capacity estimates and to derive estimates of the percentage of boating activity at sites with boat launching facilities. Data collected during longer duration monitoring was used to develop shoreline activity profiles of recreation users for each site.

2.3 Recreation Use Estimates

Recreation use estimates were developed using a combination of existing use information and on-site survey data. Instantaneous count data for all sampled sites were compiled and used to develop seasonal and annual use estimates for each site. After collecting the data, recreation days were estimated following the method outlined in *Angler Survey Methods and Their Applications in Fisheries Management* ([Pollock et al. 1994](#)). Instantaneous vehicle counts were used to obtain an estimation of recreation days each site. The average vehicle count is multiplied by the length of the recreation day, which is 13 hours from April through September, and 8.5 hours the rest of the year. This provides an estimate of recreator hours. Recreator hours are converted to recreation days by dividing by the average length of a recreation visit, estimated to be 2 hours. Recreation days were extrapolated into use estimates by month and day type and summed to generate seasonal use estimates by site. These use estimates were combined with existing use estimates obtained from state and local park managers for non-sampled sites to develop seasonal and annual estimates for the entire study area.

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2.4 Recreational Activities

Information on the types of recreational activities engaged in at each facility was developed based on a combination of instantaneous count data and periodic on-site observations. Instantaneous counts of vehicles and vehicles with boat trailers were used to estimate the percent of boating activity associated with those sites offering boat launches. Observation data were used to develop percentage estimates for various shoreline activities, such as shore angling, walking, and bird watching. Activity distributions were developed for each site as well as for the entire study area. The distribution of boating activities over the season was also evaluated.

2.5 Capacity Estimates

For the purpose of the Recreational Facility Use and Capacity Investigation, parking capacity was used as the primary indicator of site capacity, and the percentage of parking space utilized at any given time was used as the measure of capacity utilization. [Table 2.5-1](#) shows available parking at each site. While other features of a recreation site, such as restrooms or picnic tables, also have capacity limits, the actual capacity and capacity utilization of these features can be difficult to measure. Parking capacity and the availability of parking at a given point in time is relatively easy to measure and generally serves as a good indicator of overall site capacity and capacity utilization. Parking is often designed to fit the size of a given site, and information regarding capacity is either available through existing sources or easily collected. When the parking area is full or overflowing, other features of the site are generally also being used at or above their design capacity. Parking is also often one of the more difficult features of a recreation site to expand, depending on the characteristics of the site. Capacity use estimates for non-survey sites were developed based on input provided by the operators of those sites, primarily NYSOPRHP.

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**TABLE 2.5-1
AVAILABLE PARKING AT EACH SURVEYED SITE**

Site	Number of Parking Spaces
<i>Upper River Area</i>	
Ontario Street Boat Launch	30
Sheridan Drive Boat Launch	50
Isle View Park	202
Niawanda Park	191
Beaver Island State Park	Multiple Parking Lots
Gratwick Park	134
Griffon Park Boat Launch	50
Upper River Trail	10
Upper River Observation Site	40
<i>Niagara Falls and Gorge Area</i>	
Whirlpool State Park	150
Devil's Hole State Park	42
Robert Moses Fishing Pier	20
Lewiston Reservoir Fishing Access	35
<i>Lower River Area</i>	
Lewiston Landing	20
Lewiston Branch Gorge Trail	15
Joseph Davis State Park Pier	25
Youngstown Boat Launch	14
Constitution Park	2
Fort Niagara Boat Launch	43

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3.0 RESULTS

Results of the Recreational Facility Use and Capacity Investigation indicate that the recreation sites located within the study area support approximately 8.8 million recreation days annually. The majority of this use (7.6 million recreation days) is associated with Niagara Falls and the Niagara Reservation State Park. Other heavily used facilities include Beaver Island State Park, Earl W. Brydges Artpark, Reservoir State Park, Niawanda Park, and Isle View Park. Use within the FERC project boundary accounts for a relatively small percentage (less than 1 percent) of the estimated annual study area use. Overall, recreational use is within the existing facility design capacities, with the exception of a few particularly popular sites or particularly small sites, which were observed supporting use at or above 100 percent capacity on average during certain months of the year. Most of the recreational activity in the study area occurs during the summer months.

Approximately 80 percent of the recreational activity observed during the field survey consisted of shoreline uses, while the remaining 20 percent involved boating activity. The predominant shore activities observed during the survey were angling (33 percent), sightseeing (27 percent), and trail use (20 percent).

The Upper and Lower River offer somewhat different recreational settings and opportunities. Most sites along the Upper River offer highly developed facilities and support heavy levels of use. Almost all these sites offer boat access to the river and experience heavy boat traffic, particularly in the late summer. Sites in the Niagara Falls and Gorge Area are located well above the river in elevation. They are designed primarily to provide scenic vistas, and offer only foot-trail access to the water. Most of the sites along the Lower River are smaller and less highly developed compared to the Upper River sites. Only a few sites along the Lower River offer boat access and these sites are generally out of the way and relatively small in scale. With the exception of one or two sites, recreational pressure on the Lower River appears to be relatively light.

Capacity issues (in terms of parking) were observed at three sites, one along the Upper River and two along the Lower River. Sites where use was frequently observed to be in excess of 100 percent of

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existing capacity were Ontario Street Boat Launch, Lewiston Landing, and Fort Niagara Boat Launch. All three of these sites offer boat access to the river and received heavy boating use, particularly during the summer months. Youngstown Boat Launch also exhibited high utilization as a percent of existing capacity (frequently in excess of 90 percent). This site did not necessarily receive heavy recreation pressure, but it is a small site with very limited existing parking (thus capacity is easily exceeded). Constitution Park also exhibited high utilization as a percent of existing capacity, however, like Youngstown Boat Launch, the parking at this site is very limited contributing to high capacity estimates. Use at the remaining sites was well below capacity.

Most of the heavy-use sites are located outside the Project boundary. Sites surveyed within the Project (Upper River Trail, Upper River Observation Site, Lewiston Reservoir Fishing Access, Robert Moses Parkway (pedestrian section), and Robert Moses Fishing Pier) generally received light recreation pressure.

The following sections provide more detail regarding recreational use estimates, recreational activities and capacity utilization. Specific details for each of the surveyed sites are provided at the end of this section.

3.1 Recreation Use Estimates

Existing annual use estimates were obtained from NYSOPRHP and NYPA for five of the state parks in the study area (Buckhorn, Big Six Mile Creek Marina, Niagara Reservation, Reservoir State Park, and Artpark) and the NYPA Visitor Center. Existing annual-use estimates were also obtained from the City of Niagara Falls for the Hyde Park Golf Course. Use estimates for the remaining facilities in the study area were calculated based on data collected during the recreation field survey. This included six facilities located within the FERC project boundary and fourteen located outside the project boundary. Two sites within the FERC Project boundary were closed in 2002 for renovation, namely, Discovery Museum and Great Gorge Railroad Trail. Use of the pedestrian section of the Robert Moses Parkway is included within the estimates for Devil's Hole and Whirlpool State Parks, which serve as the primary staging areas for this trail. [Table 3.1-1](#) displays recreation day estimates for all the facilities included in the study, including estimates of total weekday use, weekend use, peak weekend use, and annual use

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where available. All numbers presented in [Table 3.1-1](#) are for the period April 1, 2002 to March 30, 2003, and represent estimates of total recreation days. Peak weekend use refers to holidays and their associated weekend, specifically Memorial Day, Fourth of July, and Labor Day weekends.

The estimated total number of recreation days for all the sites included in this report was 8,827,000, for the period April 2002 through March 2003, including Project and non-project sites. Project sites (those located within the FERC project boundary, either wholly or in part) accounted for 263,400 visitors, or less than 1 percent of the total annual use estimate. Non-project sites accounted for 8,563,600 recreation days, the majority of which (7,585,500) was associated with Niagara Reservation State Park. Most of the use occurs during the summer months (June-September). For sites for which use was delineated by day type, overall average weekday use was approximately 24 percent lower than overall average weekend use. Relatively high levels of recreational use were observed along the Upper River (upstream of Niagara Falls). Use was particularly heavy during the late summer season (July through September), when boating activity increased significantly at many of the sites. Average weekend counts of 40 or more vehicles at one time were common at many sites.

Levels of recreational use along the Lower River were generally less than those observed along the Upper River. Two sites, Lewiston Landing and the Fort Niagara Boat Launch, received relatively heavy use, including heavy use in April. Overall, use of the Lower River sites was highest in July and August. Several sites along the Lower River, including the Robert Moses Fishing Pier, Lewiston Reservoir, Lewiston Branch Gorge Trail, Joseph Davis Fishing Pier, and Youngstown Boat Launch, exhibited a fairly consistent level of low use throughout the survey period.

[Figure 3.1-1](#) shows the total number of recreation days at all surveyed sites throughout the year. Use was relatively even during April and May, with a significant increase in use during July, August, and September. After September, use dropped from approximately 118,900 recreation days in September to approximately 27,700 recreation days in October and less than 14,500 recreation days for the remainder of the fall and winter months. [Figure 3.1-1](#) does not include data for sites that were not surveyed, such as the Niagara Reservation, but the general pattern of use is assumed to be the same.

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3.2 Recreational Activities

The recreation facilities within the study area support a variety of shoreline activities. Several facilities also provide boat launching opportunities and thus support boating. Overall, approximately 80 percent of the observed use was shoreline use while 20 percent involved boating. The predominant shore activities observed during the survey were angling (33 percent), sightseeing (27 percent), and trail use (20 percent). Shoreline activities varied depending on the site and the time of year. Similarly, boating activity was higher at certain sites and during certain times of the year.

The distribution of shoreline activities for each of the survey sites is shown on [Table 3.2-1](#). Shoreline activities were observed during on-site monitoring and are reported in terms of total number of people observed by activity for each surveyed site and by overall percentage distribution of activities engaged in by people observed at each site during on-site monitoring efforts. Sightseeing accounted for between 10 and 30 percent of observed shoreline use at surveyed sites, with over 50 percent of use attributed to sightseeing at Whirlpool State Park and Devil’s Hole State Park. Boating activity is reported as a percentage of total estimated use, calculated as the ratio of vehicles with boat trailers to total vehicles recorded during instantaneous vehicle counts, and is shown on [Table 3.2-2](#) for those sites with boat launching facilities. For these sites, boating activity ranged from a low of 6 percent of total estimated use at Youngstown Boat Launch to 44 percent of total estimated use at Fort Niagara Boat Launch.

The predominant shoreline activities observed during on-site monitoring along the Upper River were sightseeing and trail use (walking, running, biking). Trail use was as high as approximately 60 percent of the observed use at Isle View Park. Sightseeing generally accounted for between 10 and 20 percent of observed use, depending on the site, but was as high as approximately 40 percent at the Upper River Observation Site and Gratwick Park. Boating activity for the entire season generally ranged between 20 and 30 percent of total use at sites with boat access, with lower percentages at other sites. Based on trailer counts, boat use at several sites accounted for between 50 and 80 percent of total use in May through September. It was common to see 20 or more boat trailers at a given site at any one time, with observations as high as 72 boat trailers at one time at one site.

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The predominant shoreline activities observed during on-site monitoring at Lower River sites were sightseeing and trail use (walking, running, biking). Trail use ranged from approximately 20 to 30 percent of observed use at many of the sites, including Whirlpool State Park, Devil's Hole State Park, Lewiston Reservoir, and the Lewiston Branch Gorge Trail. Trail use accounted for nearly all observed use at Robert Moses Parkway. Boating activities were high at two of the three boat launches located along the Lower River (Lewiston Landing and Fort Niagara Boat Launch). Based on trailer count ratios, boating activity at the Fort Niagara and Youngstown Boat Launches was, in certain months, as high as 100 percent of observed use. It was common to see 20 or more boat trailers at the Fort Niagara site at any one time, with observations as high as 72 at one time.

[Figures 3.2-1](#) and [3.2-2](#) display the observed seasonal distribution of use for boat launching facilities on the Upper and Lower River, respectively. In addition to showing the seasonal pattern in total estimated use for these facilities, [Figures 3.2-1](#) and [3.2-2](#) also display the relative split between boating and shoreline use at these sites along the Upper and Lower River by month, estimated through trailer to total vehicle ratios by site. The bottom portion of each bar in the figures represents boating activity and the top portion represents shoreline activity. These data indicate an increase in boating activity both on the Upper and Lower River from June through September, with the highest levels of boating (as well as total use) occurring in August for the Upper River sites and September for the Lower River sites. By contrast, these data indicate no boating activity in the Upper River during the late fall and winter, but some level of boating activity during this time in the Lower River. Similarly, in March, there appears to be boating activity in the Lower River, but almost none in the Upper River. These data indicate relatively even levels of shoreline use between June and September, with a spike in shoreline use in April. Use declines dramatically after September in all cases.

3.3 Facility Capacity and Utilization

Facility utilization was evaluated at each site. Most of the facilities are being used at levels well below their design capacity. However, at five sites (Ontario Street Boat Launch, Lewiston Landing, Youngstown Boat Launch, Constitution Park, and Fort Niagara), average monthly utilization exceeded 100 percent, particularly during the summer months. Average utilization estimates as a percentage of

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existing capacity are shown for each survey site for weekdays, weekends, and peak weekends on [Table 3.3-1](#).

Many of the Upper River sites have substantial existing recreation facility infrastructure with ample parking. As a result, capacity (in terms of parking) was not observed to be a problem at most of the Upper River sites. The one exception was Ontario Street Boat Launch, where use levels were frequently observed in excess of existing capacity.

Capacity issues were observed at four sites on the Lower River, namely, Lewiston Landing, Youngstown Boat Launch, Constitution Park, and Fort Niagara Boat Launch. All these sites are relatively small, and two of them (Lewiston Landing and Fort Niagara Boat Launch) receive considerable recreation pressure. Use in excess of 100 percent capacity was observed frequently at these sites. Use at the Lewiston Landing exceeded the site's existing parking capacity approximately a third of the time.

The maximum number of cars found at each site was generally in the summer: July, August, and September. The site with the highest number of cars was Niawanda, with a maximum reaching 287 vehicles on August 11, 2002. Constitution Park at its peak (July 24, 2002) had only 16 cars. Maximum observations for each survey site are shown in [Table 3.3-2](#).

3.4 Site Observations

The following presents site-specific information for each of the sites surveyed during the Recreational Facility Use and Capacity Investigation.

3.4.1 Ontario Street Boat Launch

- High use during spring and summer seasons
- Highest use in summer months (June-September)
- Average weekday and weekend day approximately the same use.
- Average peak weekend use nearly three times average weekday use
- Highest observed use was 85 vehicles on an August weekday.

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- Average weekday use reached a high of 34 vehicles in August.
- Average weekend day use reached a high of 40 vehicles in August.
- A total of 178 users were observed over 10 one-hour observation periods (average of approximately 18 people per hour).
- Approximately 90 percent of overall estimated use was attributable to shoreline activity, with slightly more than 10 percent attributable to boating activity. However, at times, particularly during August and September, boating activity accounted for as much as approximately 40 percent of total estimated site use (see [Table 3.4-1](#)).
- The predominant shoreline activities observed at the site during on-site monitoring were sightseeing (37 percent) and parking (31 percent).
- A significant increase in boating was observed in August and September (two to three-fold on average over the April-June period).
- Use frequently exceeds existing parking capacity (approximately 30 vehicles at one time). The site was at or above 100 percent of its capacity approximately 23 percent of the time.

3.4.2 Sheridan Drive Boat Launch

- Use dropped off significantly after September.
- Low early season use with significant increase in August and September (generally associated with boating activity).
- Average weekend use was about twice average weekday use.
- Average weekday use had a high of 25 vehicles in August.
- Average weekend day use 41 vehicles.
- Highest observed use (72 vehicles at one time) occurred on August 3, 2002. Use was also high on Labor Day (68 vehicles at one time).
- A total of 69 users were observed over nine one-hour observation periods (average of approximately 8 people per hour).
- On average, approximately 70 percent of estimated use was shoreline use, while approximately 30 percent was associated with boating activity.
- At times, particularly during the summer months (June through September), as much as 86 percent of the site use was associated with boating activity (see [Table 3.4-2](#)).

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- Of the observed shoreline uses at this site, the predominant shoreline uses observed at the site consisted of angling (46 percent), bird watching (21 percent), and sightseeing (15 percent).
- Consistent early evening use, July through September.
- Many trailers, particularly July through September (as many as 57 at one time).
- Capacity of the site typically remained under 100 percent.

3.4.3 Isle View Park

- Relatively high level of use all spring/summer season, with highest levels of use in July through September.
- Higher average peak weekend use than weekday or weekend use.
- Average weekday use was as high as 50 vehicles in August.
- Average weekend day use was as high as 104 vehicles in August.
- Highest observed use was 161 vehicles at one time on August 11, 2002.
- Highest boating use month on average was September (29 percent).
- A total of 156 users were observed over eight one-hour observation periods (average of approximately 20 people per hour).
- Shoreline activities accounted for over 90 percent of the estimated use, with boating accounting for less than 10 percent.
- Of the shoreline use observed during monitoring efforts, the predominant activities were trail use, including walking (27 percent), running (14 percent), and biking (16 percent). Sightseeing and parking activities accounted for another 12 percent and 8 percent, respectively.
- Boating activity was common from May to September, with an average of 11 to 29 percent of the vehicles having trailers (see [Table 3.4-3](#)).
- The annual average of vehicles with boat trailers was 9 percent.
- Despite high use, capacity was not an issue due to the large number of existing parking spaces (202)
- The highest use observed (August 11, 2002) was approximately 80 percent of capacity.

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3.4.4 Niawanda Park

- Very similar use patterns to Isle View Park.
- High use all spring/summer season long with significant increased use in late summer.
- The highest observed number of vehicles at one time was 287, on August 11, 2002.
- Average weekend use heavier than weekday use (generally by a factor of 2) while average peak weekend use was heavier than average weekday use by an overall factor of 4.
- Highest-use month on average was August, with average weekday use as high as 70 vehicles and average weekend day use as high as 124 vehicles.
- A total of 69 users were observed over 10 one-hour observation periods (average of approximately 7 people per hour).
- Shoreline activities accounted for 90 percent of estimated use, with boating accounting for 10 percent.
- The predominant shoreline activities observed during on-site monitoring of this site were running (31 percent), parking (25 percent), and picnicking (9 percent).
- Boating activity was relatively heavy in June through September, with 11 percent to 34 percent of observed vehicles having trailers (see [Table 3.4-4](#)).
- The annual average of vehicles with boat trailers was 10 percent.
- Despite high levels of use, parking capacity was typically not a problem due to the number of existing spaces (191). Most of the time, site use was at 50 percent of capacity or less. Several August and September observations were between 60 percent and 80 percent of capacity.

3.4.5 Gratwick Park

- Very consistent, relatively low level of use from April through July, with significant increase in use August and September (generally associated with boating activity).
- The highest observed use was 72 vehicles at one time, on September 15, 2002.
- On average, August was the highest-use month, with an average weekday use high of 21 vehicles. Average weekend day use had a high of 42 vehicles in September.

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- A total of 126 users were observed over 11 one-hour observation periods (average of approximately 11 people per hour).
- Shoreline activities accounted for approximately 80 percent of total estimated use, with boating accounting for slightly less than 20 percent.
- During on-site monitoring, the predominant shoreline activities observed were sightseeing (39 percent), trail use, with jogging and biking accounting for 8 percent and 11 percent, respectively, and parking (11 percent).
- Considerable increase in boating activity from May through September, with as many as 44 trailers observed at one time (August 31, 2002). Boating activity was much higher on weekend days than on weekdays.
- The annual average of vehicles with boat trailers was 17 percent, but boating activity accounted for as much as 49 percent of site use in September (see [Table 3.4-5](#)).
- Parking capacity was generally not a problem. The highest observed use was 54 percent of capacity, on September 15, 2002.

3.4.6 Griffon Park Boat Launch

- Relatively low level of use from April through July, with an increase in use July through September (generally associated with boating activity). Very similar level and pattern of use as that observed at Gratwick.
- The highest count observed was 62 vehicles at one time, on August 11, 2002.
- Heaviest use in August and September with an average weekday use high of 17 vehicles and an average weekend day use high of 32 vehicles in August.
- A total of 53 users were observed over 10 one-hour observation periods (average of approximately 5 people per hour).
- On average, boating activity accounted for approximately 30 percent of the total estimated use, while shoreline activity accounted for the remaining 70 percent.
- The predominant shoreline activities observed during on-site monitoring were angling (24 percent), parking (36 percent), sightseeing (21 percent), and walking (12 percent).
- Large number of trailers observed on site, particularly from July through September. Between 59 percent and 83 percent of the vehicles observed on site in June, July, August, and September had trailers (see [Table 3.4-6](#)). Approximately 20 boat trailers observed on

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average on August weekends (highest observation was 43 trailers at one time, on September 15, 2002).

- The annual average of vehicles with boat trailers was approximately 30 percent.
- Assuming, conservatively, a parking capacity of 50 vehicles, capacity was generally not an issue at the site. Observations between 50 percent and 80 percent of capacity were not uncommon in May through September.

3.4.7 Upper River Trail

- Very light use all season.
- Very consistent from month to month and day to day.
- Use ranged from 0 to a high of 21 vehicles (on Memorial Day) at any one time.
- No marked increase in summer activity over early season use.
- Average weekday and weekend day use reached high of only approximately 3 vehicles in August.
- A total of 42 people were observed over nine one-hour periods (average of 5 people per hour).
- Shoreline activities accounted for all recreation use at this site with the predominant shoreline activities observed were angling (26 percent), parking (31 percent), and biking (11 percent).
- Site capacity was not a problem.
- See [Table 3.4-7](#) for more information.

3.4.8 Upper River Observation Site

- Very low use (0-2 vehicles at one time on average). This site reached an average weekday use high of only 7 vehicles in April.
- Consistent all season and regardless of day type.
- A total of 72 people were observed over 15 one-hour periods (average of approximately 5 people per hour).
- During on-site monitoring, the predominant shoreline activities observed were sightseeing (41 percent) and running (18 percent). Shoreline activities accounted for all of the estimated use at this site.

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- Site capacity was not a problem.
- See [Table 3.4-8](#) for more information

3.4.9 Robert Moses Parkway

- Parkway use was estimated through a combination of vehicle counts at major parking lots serving the parkway (namely Whirlpool and Devil's Hole) and two days of on-site observations (August 7 and September 2, 2002). Based on on-site observations approximately 15 percent of the observed vehicles at Whirlpool and Devil's Hole (on average) were associated with parkway use.
- A total of 13 people were observed using the parkway over ten one-hour periods (average of approximately 1 person per hour).
- As there is no water access at this site, shoreline activities account for the total estimated use at this site with the predominant activities observed were biking (85 percent), parking (8 percent), and walking (8 percent).

3.4.10 Whirlpool State Park

- Steady use, but variable, depending on day type and time of day.
- Use is relatively constant throughout most of the season, with slightly higher use observed in July.
- Average weekday use reached a high of 12 vehicles in July.
- Average weekend day use reached a high of 29 vehicles in July.
- Highest observed use was on July 4, 2002 (61 vehicles at one time).
- A total of 1,422 people were observed over 55 one-hour periods (average of approximately 26 people per hour).
- The predominant shoreline activities observed during on-site monitoring were sightseeing (54 percent), picnicking (16 percent), and walking (13 percent). There are no boat launching facilities at this site. As such, all estimated use is attributable to shoreline activities.
- Assuming an existing parking capacity of 150 vehicles, site capacity was not an issue. The highest observed use was approximately 40 percent of existing capacity.
- See [Table 3.4-9](#) for more information.

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3.4.11 Devil's Hole State Park

- Use patterns were lower than Whirlpool all season long.
- Average weekday use high of 5 vehicles in August and an average weekend day high of 10 vehicles in April.
- Highest observed use was 29 vehicles at one time, on May 4, 2002.
- Highest observed summer use was 16 vehicles at one time (August 30 and 31, 2002).
- A total of 1,228 people were observed over 57 one-hour periods (average of approximately 22 people per hour).
- During on-site monitoring at this site, the predominant shoreline activities observed were sightseeing (61 percent) and walking (13 percent) and comprise total estimated use at this site.
- Capacity was not a problem. Assuming, conservatively, a capacity of 42 parking spaces (only one of two available lots) the site rarely experienced usage greater than 14 percent. The highest observed capacity was 73 percent, which occurred on May 4, 2002.
- See [Table 3.4-10](#) for more information.

3.4.12 Robert Moses Fishing Pier

- Both the upper parking lot and the tailrace pier (including lower handicapped lot) were monitored.
- Predominant shoreline activities noted during on-site monitoring at this site were angling (93 percent) and sightseeing (3 percent) and comprise the activity distribution for total estimated use at this site.
- Average weekday use had a high of 9 vehicles, while average weekend day use reached a high of 17 vehicles, both occurring in November.
- Highest observed use was on November 9, 2002 (98 vehicles at one time in both lots).
- A total of 1,358 people were observed over the course of 25 one-hour periods (average of approximately 50 people per hour).
- Parking capacity was not an issue with an average observed utilization of approximately 40 percent.
- See [Table 3.4-11](#) for additional information

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3.4.13 Lewiston Landing

- Highest use in September and October, but April use also high.
- The highest average for weekday use was 30 vehicles in October and the highest average for weekend day use was 48 vehicles in April.
- Weekend and peak weekend use frequently exceeded 100 percent capacity.
- The highest observed use was 102 vehicles at one time, recorded on March 15, 2003.
- A total of 2,554 people were observed over 65 one-hour periods (average of approximately 39 people per hour).
- Shoreline use accounted for approximately 70 percent of total estimated use, while boating accounted for the remaining 30 percent. However, depending on the month, boating activity accounted for as much as 39 percent of total estimated use (see [Table 3.4-12](#)).
- The predominant shoreline activities observed during on-site monitoring were sightseeing (27 percent), walking (17 percent), and angling (26 percent).
- The annual average was 29 percent of vehicles with boat trailers.
- Relatively heavy boat trailer use was observed all season. The greatest number of boat trailers was observed in October (40 trailers).
- Use of the site exceeded existing capacity several days per month (based on a capacity estimate of 20 vehicles), particularly in March, April, September, and October.

3.4.14 Lewiston Branch Gorge Trail

- Very low levels of use observed.
- Average weekday use reached a high of 13 vehicles in November.
- Average weekend day use reached a high of 6 vehicles in November.
- The highest observed use of 30 vehicles on November 9, 2002.
- Use was variable over the course of the year, with an average high of 58 percent capacity.
- A total of 911 people were observed over 50 one-hour periods (average of approximately 18 people per hour).
- The predominant shoreline activities observed, comprising total estimated use, were angling (58 percent), walking (19 percent), and sightseeing (7 percent).

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- Parking capacity was not an issue.
- See [Table 3.4-13](#) for additional information.

3.4.15 Joseph Davis State Park Pier Lot

- Very low use (generally 0-5 vehicles at one time), with a few days of moderate use (15-25 vehicles at one time) occurring on occasional weekend days and holidays.
- Higher-use days likely associated with organized picnic events.
- The highest observed use occurred on March 16, 2002 (a weekend), when 59 vehicles at one time were observed. Average weekend use high (11 vehicles) also occurred during March.
- A total of 423 people were observed over 29 one-hour periods (average of approximately 15 people per hour).
- Shoreline use accounted for all use estimated for this site. The predominant activities observed were angling (35 percent), picnicking (19 percent), sightseeing (16 percent), and walking (16 percent).
- Capacity was generally not an issue. Days of higher use were in the 60 percent to 100 percent capacity range, but were limited to a few days. Capacity exceeded 100 percent in only 3 instances.
- See [Table 3.4.14](#) for additional information.

3.4.16 Youngstown Boat Launch

- Low to moderate levels of use (0-10 vehicles at one time) with occasional days of higher use 15-20 vehicles at one time.
- High use observed on May weekends (including Memorial Day weekend), and weekends in July (including Fourth of July weekend) and August.
- Average weekday use reached a high of 10 vehicles in September.
- Average weekend day use reached a high of 35 vehicles in May.
- The highest observed use (52 vehicles at one time) occurred on June 19, 2002.
- A total of 861 people were observed over 37 one-hour periods (average of approximately 23 people per hour).

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- Shoreline use accounted for over 90 percent of total estimated use, with boating making up less than 10 percent.
- The predominant activities observed were sightseeing (31 percent), angling (23 percent), and walking (13 percent).
- The annual average of vehicles with boat trailers was 6 percent.
- Use was observed to be in excess of the existing parking capacity (14 vehicles) 19 out of 186 days (10 percent). Use was also observed to be in excess of 80 percent of site capacity on numerous occasions. On a monthly basis, use was below capacity.
- See [Table 3.4-15](#) for additional information.

3.4.17 Constitution Park

- Very low use (0-3 vehicles at one time) throughout the survey.
- Average weekend and weekday use very similar.
- Average peak weekend use generally twice that of regular weekend or weekday use.
- The maximum number of vehicles observed at Constitution Park at one time was 16.
- A total of 363 people were observed over 33 one-hour periods (average of approximately 11 people per hour).
- Shoreline activities accounted for all estimated use at this site. The predominant shoreline activities observed were sightseeing (29 percent) and walking (20 percent).
- For the month of July, average capacity was over 100 percent. During all other months it was below 100 percent.
- See [Table 3.4-16](#) for additional information.

3.4.18 Fort Niagara Boat Launch

- Relatively high levels of use, with heavy boating activity.
- Use was heaviest early in the season (April and May) and late in the season (August and September), hitting a peak in August.
- Average weekday use reached a high of 26 vehicles in April.
- Average weekend day use reached a high of 115 vehicles in May.
- The highest observed use (159 vehicles at one time) was on August 3, 2002.
- Use highly variable from day to day.

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- A total of 1,070 people were observed over 58 one-hour periods (average of 18 people per hour).
- Boating activities accounted for 44 percent of total estimated use use, with shoreline uses accounting for the remaining 56 percent. At times, boating use was 60 percent or higher on a monthly average basis (see [Table 3.4-17](#)).
- During on-site monitoring efforts, the predominant shoreline activities observed were walking (28 percent), angling (25 percent), and sightseeing (18 percent).
- Heavy trailer use, particularly in April through October. More trailers observed at this site on average than any other site surveyed (both Upper and Lower River).
- The annual average of vehicles with boat trailers was 44 percent.
- Observed use was frequently in excess of existing site capacity (based on a capacity estimate of 38 vehicles, including grass overflow area), especially in August. Use was commonly 2 to 3 times capacity.

3.4.19 Lewiston Reservoir

- Generally light use (0-5 vehicles at one time) with occasional days of higher use.
- Highest monthly capacity was in June (33 percent).
- Relatively even pressure regardless of day type or month.
- A total of 1,264 people were observed over 47 one-hour periods (average of 27 people per hour).
- The highest observed use was 73 vehicles at one time, on June 27, 2002.
- The predominant activities shoreline activities observed during on-site monitoring were angling (47 percent), walking (21 percent), and sightseeing (9 percent). Shoreline activities accounted for all estimated use at this site.
- No capacity issues were observed.
- See [Table 3.4-18](#) for additional information.

3.4.20 Beaver Island State Park

- Use was monitored at Beaver Island during April and May. The park is open during these months, but the entrance gate is not staffed and no fees are collected. An additional site observation was also made in August 2002.

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- High levels of use were observed, in fact higher than any other survey site (both Upper and Lower River) during April and May.
- Use was typically in excess of 20 vehicles at one time, and frequently over 30 vehicles.
- High-use observations were made on May 6 for weekdays and May 4 for weekend days, with 84 and 147 vehicles at one time, respectively.
- A total of 71 people were observed over four one-hour periods (average of approximately 18 people per hour).
- The predominant activities observed were sightseeing (35 percent), and other activities (53 percent).
- Due to the overall size of the park and its significant number of existing parking spaces, capacity was not an issue

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**TABLE 3.1-1
USE ESTIMATES FOR THE NIAGARA PROJECT, INCLUDING PROJECT AND NON-
PROJECT SITES (APRIL 2002 - MARCH 2003)**

Site	Weekend	Weekday	Peak Weekend	TOTAL
<i>Project Sites</i>				
Upper River Trail	4,000	1,400	600	6,000
Upper River Observation Site	2,700	500	200	3,400
Hyde Park Golf Course*	N/A	N/A	N/A	27,000
Discovery Center Museum	Closed	Closed	Closed	Closed
Great Gorge RR Trail	Closed	Closed	Closed	Closed
Robert Moses Fishing Pier	12,000	9,400	1,200	22,600
Niagara Project Visitor Center*	N/A	N/A	N/A	85,200
Lewiston Reservoir	9,900	1,900	400	12,200
Lewiston Branch Gorge Trail	5,500	3,300	300	9,100
Reservoir State Park*	N/A	N/A	N/A	97,900
Subtotal Project Sites				263,400

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TABLE 3.1-1 (CONT.)

USE ESTIMATES FOR THE NIAGARA PROJECT, INCLUDING PROJECT AND NON-PROJECT SITES

Site	Weekend	Weekday	Peak Weekend	TOTAL
<i>Non-Project Sites</i>				
Ontario Street Boat Launch	46,300	21,000	4,900	72,200
Sheriden Drive Boat Launch	22,700	13,300	3,400	39,400
Isle View Park	54,200	36,300	8,700	99,200
Niawanda Park	65,700	40,700	10,200	116,600
Buckhorn State Park*				16,600
Beaver Island State Park*				204,200
Big Six Mile Creek Marina*				36,900
Gratwick Park	19,300	14,600	3,700	37,600
Griffon Park Boat Launch	16,500	10,700	2,700	29,900
Niagara Reservation State Park*				7,585,500
Whirlpool State Park	25,100	16,200	4,800	46,100
Devil's Hole State Park	12,200	9,600	1,900	23,700
Earl W. Brydges ArtPark*				90,400
Lewiston Landing	41,400	25,400	3,800	70,600
Joseph Davis State Park Pier	1,800	3,100	900	5,800
Youngstown Boat Launch	11,600	7,200	1,700	20,500
Constitution Park	1,900	800	200	2,900
Fort Niagara Boat Launch	26,700	32,800	6,000	65,500
Subtotal Non-Project Sites				8,563,600
TOTAL ALL SITES				8,827,000

*Use estimates based on secondary data. Site not surveyed in 2002.

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**TABLE 3.2-1
OBSERVED SHORELINE ACTIVITIES DURING ON-SITE MONITORING ***

Site	Swimming	Angling	Running	Walking	Biking	Picnicking	Bird Watching	Sight Seeing	Parking	"Other"	Total No. of People Observed
Ontario Street Boat Launch	0	15	0	6	0	17	0	61	51	16	166
	0%	9%	0%	4%	0%	10%	0%	37%	31%	10%	
Sheridan Drive Boat Launch	0	15	0	0	4	0	7	5	0	2	33
	0%	46%	0%	0%	12%	0%	21%	15%	0%	6%	
Isle View Park	0	1	21	40	23	20	0	17	12	12	146
	0%	1%	14%	27%	16%	14%	0%	12%	8%	8%	
Niawanda Park	0	2	21	1	0	6	0	10	17	10	67
	0%	3%	31%	2%	0%	9%	0%	15%	25%	15%	
Gratwick Park	0	4	7	3	9	7	0	33	9	12	84
	0%	5%	8%	4%	11%	8%	0%	39%	11%	14%	
Griffon Park Boat Launch	0	8	0	4	0	0	0	7	12	2	33
	0%	24%	0%	12%	0%	0%	0%	21%	36%	6%	
Upper River Trail	0	9	1	0	4	3	3	3	11	1	35
	0%	26%	3%	0%	11%	9%	9%	9%	31%	3%	
Upper River Observation Site	0	0	12	3	2	8	0	27	3	11	66
	0%	0%	18%	5%	3%	12%	0%	41%	5%	17%	
Robert Moses Parkway	0	0	0	1	11	0	0	0	1	0	13
	0%	0%	0%	8%	85%	0%	0%	0%	8%	0%	
Whirlpool State Park	0	77	57	173	19	223	0	742	13	68	1372
	0%	6%	4%	13%	1%	16%	0%	54%	1%	5%	
Devil's Hole State Park	0	116	54	159	56	22	0	726	19	40	1192
	0%	10%	5%	13%	5%	2%	0%	61%	2%	3%	

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TABLE 3.2-1 (CONT.)

OBSERVED SHORELINE ACTIVITIES DURING ON-SITE MONITORING*

Site	Swimming	Angling	Running	Walking	Biking	Picnicking	Bird Watching	Sight Seeing	Parking	"Other"	Total No. of People Observed
Robert Moses Fishing Pier	0	1268	0	10	0	0	0	45	0	34	1357
	0%	93%	0%	1%	0%	0%	0%	3%	0%	3%	
Lewiston Landing	18	838	18	554	60	226	7	874	107	483	3185
	1%	26%	1%	17%	2%	7%	0.2%	27%	3%	15%	
Lewiston Branch Gorge Trail	0	524	10	173	24	53	1	66	11	36	898
	0%	58%	1%	19%	3%	6%	0.1%	7%	1%	4%	
Joseph Davis State Park Pier	0	144	4	64	19	79	2	67	17	15	411
	0%	35%	1%	16%	4%	19%	0.5%	16%	4%	4%	
Youngstown Boat Launch	11	173	11	97	46	17	0	238	36	128	757
	1%	23%	1%	13%	6%	2%	0%	31%	5%	17%	
Constitution Park	0	29	0	73	24	7	0	105	1	124	363
	0%	8%	0%	20%	7%	2%	0%	29%	0.3%	34%	
Fort Niagara Boat Launch	1	214	23	241	34	44	0	155	25	127	864
	0.1%	25%	3%	28%	4%	5%	0%	18%	3%	15%	
Lewiston Reservoir Fishing Access	2	583	65	265	25	9	0	117	28	148	1242
	0.2%	47%	5%	21%	2%	1%	0%	9%	2%	12%	
Beaver Island State Park	0	3	2	0	0	0	3	26	1	39	74
	0%	4%	3%	0%	0%	0%	4%	35%	1%	53%	
Total	32	4023	306	1770	360	741	23	3324	374	1308	12261
	0.3%	33%	3%	14%	3%	6%	0.2%	27%	3%	11%	

* The numbers in the table represent observed individuals participating in shoreline recreation activities during on-site monitoring. The primary shoreline recreation activity was recorded for each individual. Percentages may not sum to 100 due to rounding

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.2-2
PERCENTAGE OF VEHICLES OBSERVED WITH BOAT TRAILERS***

Site	Boating Activity (%)
Upper River	
Ontario Street Boat Launch	12
Sheridan Drive Boat Launch	33
Isle View Park	9
Niawanda Park	10
Gratwick Park	17
Griffon Park Boat Launch	29
Lower River	
Lewiston Landing	29
Youngstown Boat Launch	6
Fort Niagara Boat Launch	44

*Based on total number of cars at the site.

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.3-1
AVERAGE PERCENT CAPACITY USE OF EXISTING PARKING**

Site	No. Parking Spaces	Weekday %	Weekend %	Peak Weekend %
<i>Project Sites</i>				
Upper River Trail	10	12	10	52
Upper River Observation Area	40	2	1	4
Robert Moses Fishing Pier	20	14	19	25
Lewiston Branch Gorge Trail	15	13	26	16
Lewiston Reservoir	35	15	8	9
<i>Non-Project Sites</i>				
Ontario Street Boat Launch	30	45	54	123
Sheridan Drive Boat Launch	50	13	20	49
Isle View Park	202	7	13	32
Niawanda Park	191	9	16	41
Gratwick Park	134	4	9	22
Griffon Park Boat Launch	50	9	16	43
Whirlpool State Park	150	3	6	13
Devil's Hole State Park	42	6	11	19
Lewiston Landing	20	77	118	145
Joseph Davis State Park Pier	25	2	12	27
Youngstown Boat Launch	14	28	34	93
Constitution Park	2	36	32	88
Fort Niagara Boat Launch	43	18	55	111

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.3-2
MAXIMUM NUMBER OF VEHICLES OBSERVED AT ONE TIME**

Site	Date	Number of Vehicles
<i>Upper River Sites</i>		
Ontario Street Boat Launch	August 30, 2002	85
Sheridan Drive Boat Launch	August 3, 2002	72
Isle View Park	August 11, 2002	161
Niawanda Park	August 11, 2002	287
Gratwick Park	September 15, 2002	72
Griffon Park Boat Launch	August 11, 2002	62
Upper River Trail	May 27, 2002	21
Upper River Observation Site	April 17, 2002	39
<i>Niagara Falls and Gorge Area</i>		
Whirlpool State Park	July 4, 2002	61
Devil's Hole State Park	May 4, 2002	29
Robert Moses Fishing Pier	November 9, 2002	98
Lewiston Reservoir Fishing Access	June 27, 2002	73
<i>Lower River Sites</i>		
Lewiston Landing	March 15, 2003	102
Lewiston Branch Gorge Trail	November 9, 2002	30
Joseph Davis State Park Pier	March 16, 2003	59
Youngstown Boat Launch	June 19, 2002	52
Constitution Park	July 24, 2002	16
Fort Niagara Boat Launch	August 3, 2002	159

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-1
ONTARIO STREET BOAT LAUNCH – SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity* (%)
Weekday	45	
Weekend	54	
Peak Weekend	123	
April 2002	56	5
May 2002	78	16
June 2002	111	25
July 2002	94	17
August 2002	125	33
September 2002	118	38
October 2002	36	7
November 2002	7	0
December 2002	8	0
January 2003	2	0
February 2003	8	0
March 2003	13	0
Overall	54	12

*Based on observed vehicles with boat trailers relative to the total number of observed vehicles

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-2
SHERIDAN DRIVE BOAT LAUNCH- SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity* (%)
Weekday	13	
Weekend	20	
Peak Weekend	49	
April 2002	15	27
May 2002	15	48
June 2002	25	86
July 2002	32	49
August 2002	63	61
September 2002	61	79
October 2002	4	22
November 2002	1	20
December 2002	1	0
January 2003	0	0
February 2003	0	0
March 2003	0	0
Overall	18	33

* Based on observed vehicles with boat trailers relative to the total number of observed vehicles

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-3
ISLE VIEW PARK – SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity* (%)
Weekday	7	
Weekend	13	
Peak Weekend	32	
April 2002	10	5
May 2002	16	11
June 2002	18	25
July 2002	23	15
August 2002	36	15
September 2002	28	29
October 2002	4	6
November 2002	1	0
December 2002	0	0
January 2003	0	0
February 2003	0	0
March 2003	2	0
Overall	11	9

* Based on observed vehicles with boat trailers relative to the total number of observed vehicles

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-4
NIAWANDA PARK – SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity* (%)
Weekday	9	
Weekend	16	
Peak Weekend	41	
April 2002	12	5
May 2002	19	14
June 2002	20	34
July 2002	28	11
August 2002	50	22
September 2002	36	28
October 2002	4	4
November 2002	0	0
December 2002	0	0
January 2003	0	0
February 2003	0	0
March 2003	2	0
Overall	14	10

* Based on observed vehicles with boat trailers relative to the total number of observed vehicles

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-5
GRATWICK PARK – SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity* (%)
Weekday	4	
Weekend	9	
Peak Weekend	22	
April 2002	4	3
May 2002	9	28
June 2002	8	45
July 2002	11	27
August 2002	24	40
September 2002	19	49
October 2002	4	13
November 2002	1	0
December 2002	1	0
January 2003	0	0
February 2003	0	0
March 2003	2	0
Overall	7	17

* Based on observed vehicles with boat trailers relative to the total number of observed vehicles

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-6
GRIFFON PARK BOAT LAUNCH- SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity* (%)
Weekday	9	
Weekend	16	
Peak Weekend	43	
April 2002	6	19
May 2002	19	51
June 2002	23	83
July 2002	25	59
August 2002	51	62
September 2002	41	69
October 2002	3	14
November 2002	0	0
December 2002	0	0
January 2003	0	0
February 2003	0	0
March 2003	1	0
Overall	14	29

* Based on observed vehicles with boat trailers relative to the total number of observed vehicles

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-7
UPPER RIVER TRAIL – SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity* (%)
Weekday	10	N/A
Weekend	11	
Peak Weekend	52	
April 2002	23	
May 2002	36	
June 2002	23	
July 2002	26	
August 2002	29	
September 2002	12	
October 2002	11	
November 2002	1	
December 2002	2	
January 2003	3	
February 2003	3	
March 2003	9	
Overall	14	

* There are no boat launching facilities at this site. As such, all recreation use is attributable to shoreline activities.

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-8
UPPER RIVER OBSERVATION AREA – SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity* (%)
Weekday	2	N/A
Weekend	1	
Peak Weekend	4	
April 2002	11	
May 2002	3	
June 2002	1	
July 2002	2	
August 2002	3	
September 2002	1	
October 2002	0	
November 2002	1	
December 2002	1	
January 2003	0	
February 2003	1	
March 2003	1	
Overall	2	

* There are no boat launching facilities at this site. As such, all recreation use is attributable to shoreline activities.

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-9
WHIRLPOOL STATE PARK – SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity* (%)
Weekday	3	N/A
Weekend	6	
Peak Weekend	13	
April 2002	5	
May 2002	5	
June 2002	6	
July 2002	13	
August 2002	4	
September 2002	5	
October 2002	7	
November 2002	4	
December 2002	1	
January 2003	0	
February 2003	0	
March 2003	0	
Overall	5	

* There are no boat launching facilities at this site. As such, all recreation use is attributable to shoreline activities.

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-10
DEVIL'S HOLE STATE PARK – SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity* (%)
Weekday	6	N/A
Weekend	11	
Peak Weekend	19	
April 2002	14	
May 2002	12	
June 2002	8	
July 2002	12	
August 2002	14	
September 2002	10	
October 2002	12	
November 2002	6	
December 2002	5	
January 2003	2	
February 2003	3	
March 2003	6	
Overall	8	

* There are no boat launching facilities at this site. As such, all recreation use is attributable to shoreline activities.

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-11
ROBERT MOSES FISHING PIER – SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity (%)
Weekday	29	N/A
Weekend	56	
Peak Weekend	46	
April 2002	0	
May 2002	18	
June 2002	33	
July 2002	29	
August 2002	39	
September 2002	47	
October 2002	36	
November 2002	60	
December 2002	41	
January 2003	29	
February 2003	47	
March 2003	7	
Overall	38	

* There are no boat launching facilities at this site. As such, all recreation use is attributable to shoreline activities.

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-12
LEWISTON LANDING – SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity* (%)
Weekday	77	
Weekend	118	
Peak Weekend	145	
April 2002	176	22
May 2002	62	13
June 2002	58	19
July 2002	67	32
August 2002	84	25
September 2002	138	28
October 2002	160	39
November 2002	72	38
December 2002	57	26
January 2003	34	25
February 2003	98	35
March 2003	154	36
Overall	95	29

* Based on observed vehicles with boat trailers relative to the total number of observed vehicles

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-13
LEWISTON BRANCH GORGE TRAIL – SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity (%)
Weekday	13	N/A
Weekend	26	
Peak Weekend	16	
April 2002		
May 2002	19	
June 2002	9	
July 2002	11	
August 2002	13	
September 2002	10	
October 2002	22	
November 2002	58	
December 2002	5	
January 2003	7	
February 2003	7	
March 2003	28	
Overall	18	

* There are no boat launching facilities at this site. As such, all recreation use is attributable to shoreline activities.

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-14
JOSEPH DAVIS STATE PARK PIER – SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity (%)
Weekday	2	N/A
Weekend	12	
Peak Weekend	27	
April 2002	3	
May 2002	21	
June 2002	9	
July 2002	9	
August 2002	14	
September 2002	5	
October 2002	3	
November 2002	1	
December 2002	1	
January 2003	0	
February 2003	1	
March 2003	34	
Overall	7	

* There are no boat launching facilities at this site. As such, all recreation use is attributable to shoreline activities.

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-15
YOUNGSTOWN BOAT LAUNCH – SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity* (%)
Weekday	28	
Weekend	34	
Peak Weekend	93	
April 2002	28	20
May 2002	96	1
June 2002	65	10
July 2002	63	2
August 2002	62	2
September 2002	63	13
October 2002	15	14
November 2002	7	3
December 2002	2	6
January 2003	2	0
February 2003	0	0
March 2003	9	0
Overall	34	6

* Based on observed vehicles with boat trailers relative to the total number of observed vehicles

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-16
CONSTITUTION PARK – SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity (%)
Weekday	36	N/A
Weekend	32	
Peak Weekend	88	
April 2002		
May 2002	64	
June 2002	65	
July 2002	136	
August 2002	47	
September 2002	18	
October 2002	5	
November 2002	13	
December 2002	2	
January 2003	14	
February 2003	6	
March 2003	0	
Overall	37	

* There are no boat launching facilities at this site. As such, all recreation use is attributable to shoreline activities.

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**TABLE 3.4-17
FORT NIAGARA RAMPS – SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity* (%)
Weekday	18	
Weekend	55	
Peak Weekend	111	
April 2002	61	49
May 2002	57	59
June 2002	40	64
July 2002	56	72
August 2002	96	58
September 2002	81	62
October 2002	13	57
November 2002	4	35
December 2002	8	28
January 2003	2	9
February 2003	0	0
March 2003	6	24
Overall	35	44

* Based on observed vehicles with boat trailers relative to the total number of observed vehicles

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

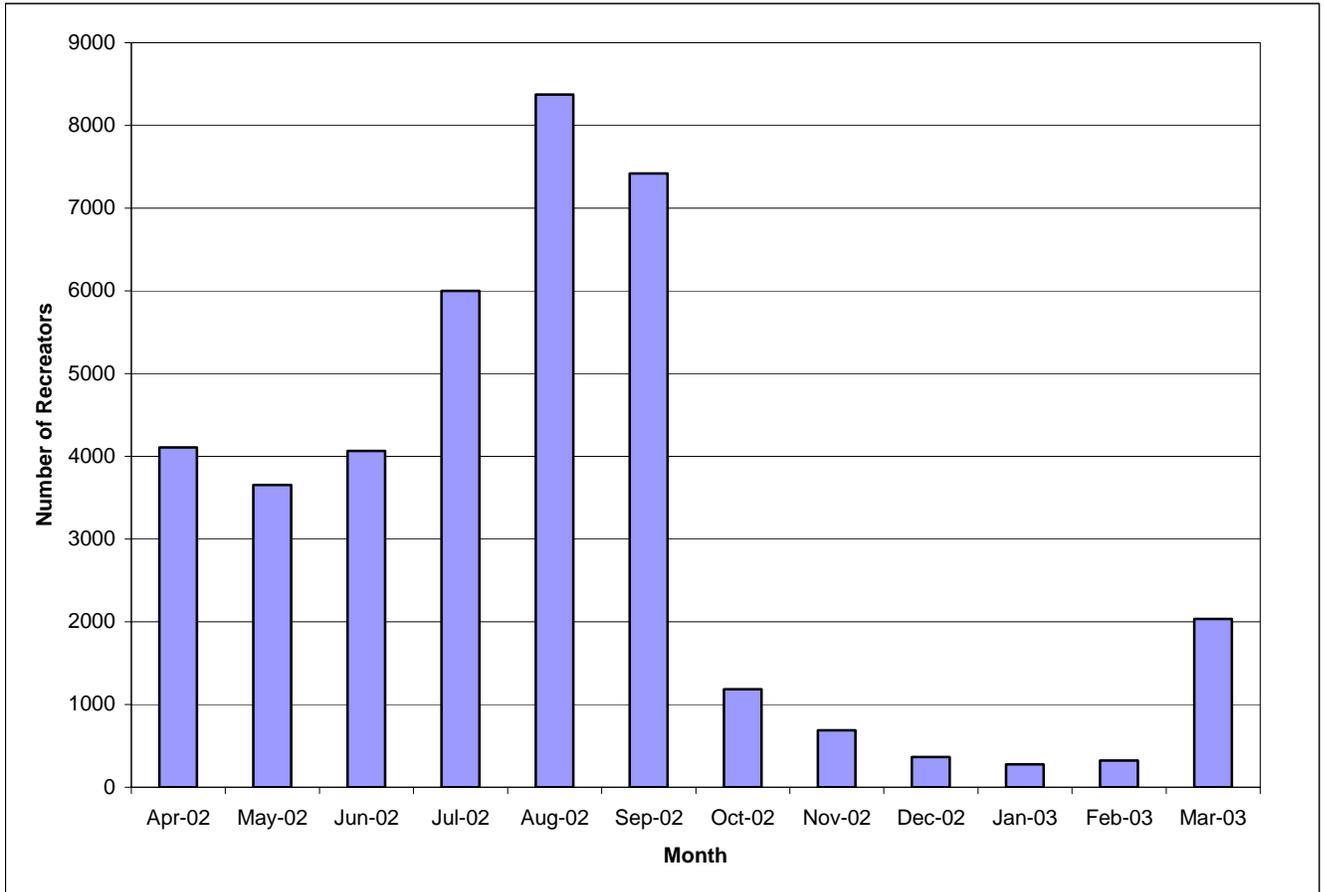
**TABLE 3.4-18
LEWISTON RESERVOIR FISHING ACCESS– SITE OBSERVATIONS**

Day/Month	Percent Capacity (%)	Boating Activity (%)
Weekday	15	N/A
Weekend	8	
Peak Weekend	9	
April 2002	11	
May 2002	8	
June 2002	33	
July 2002	14	
August 2002	7	
September 2002	10	
October 2002	7	
November 2002	2	
December 2002	N/A	
January 2003	N/A	
February 2003	N/A	
March 2003	N/A	
Overall	12	

* There are no boat launching facilities at this site. As such, all recreation use is attributable to shoreline activities.

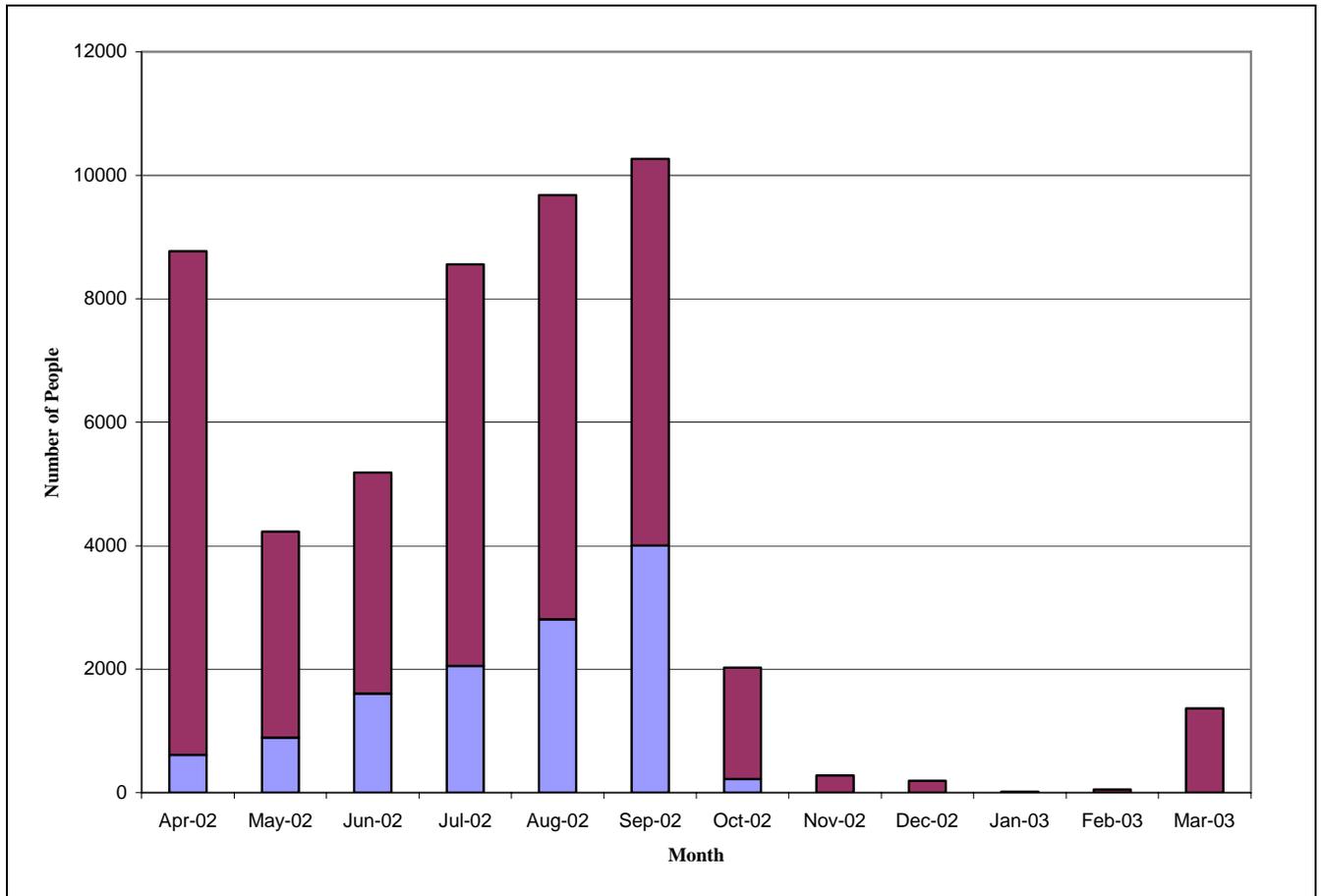
**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**FIGURE 3.1-1
TOTAL MONTHLY USE (ALL SURVEYED SITES)**



**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

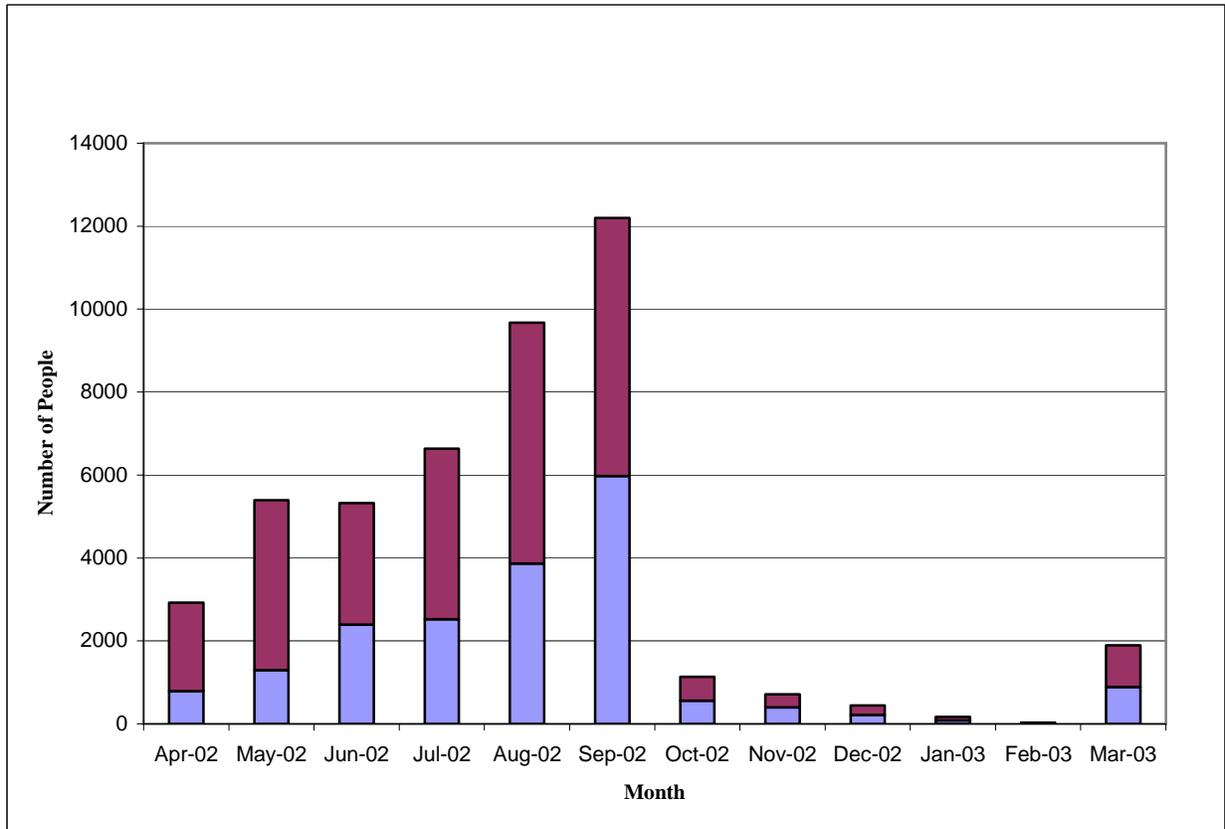
**FIGURE 3.2-1
UPPER RIVER BOAT LAUNCHING FACILITIES – BOATING VS SHORELINE USE**



- = Shoreline Activities
- = Boating Activities

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

**FIGURE 3.2-2
LOWER RIVER BOAT LAUNCHING FACILITIES – BOATING VS SHORELINE USE**



- = Shoreline Activities
- = Boating Activities

NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION

REFERENCES

Pollock, K. H., C. M. Jones, and T. L. Brown. 1994. Angler survey methods and their application in fisheries management. American Fisheries Society Special Publication 25.

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

APPENDICES

**NIAGARA POWER PROJECT (FERC NO. 2216)
RECREATIONAL FACILITY USE AND CAPACITY INVESTIGATION**

APPENDIX A – FIELD SURVEY MANUAL, SCHEDULE, AND DATA SHEETS

[Field Survey Manual with Attachments \(Schedule and Data Sheet\)](#)

APPENDIX A

FIELD SURVEY MANUAL, SCHEDULE, AND DATA SHEETS

**NIAGARA POWER PROJECT
(FERC NO. 2216)**

ON-SITE PROJECT MANUAL

Recreation Counts and Observations

STUDY SPONSORSHIP AND PURPOSE

Kleinschmidt Associates has been contracted by the New York Power Authority (NYPA) to conduct recreational use counts at the Niagara Falls Project and additional recreational facilities identified upstream of the Project. The general purpose of this study is to estimate current public usage of recreation sites associated with the Niagara Power Project, the capacity of the sites, and to approximate the percent of capacity at which sites are currently being used.

KLEINSCHMIDT ASSOCIATES

Kleinschmidt Associates (Kleinschmidt) is a nationally recognized consulting firm specializing in water and energy resources.

KLEINSCHMIDT CONTACT PEOPLE

Kleinschmidt has hired you to count individuals recreating at selected locations. You will be required to check with a Kleinschmidt Field Supervisor at the beginning of each monitoring day or the day prior to monitoring. Your Field Supervisor is Scott Jones. If you have any questions, he can be reached at (315) 463-5013. You will be provided with a prepaid calling card for calling into the office.

If Scott is unavailable and there are problems that need to be cleared up immediately, please do not hesitate to contact Bruce DiGennaro at Kleinschmidt, who is the Project Manager overseeing this study, at (401) 849-6542. Office hours are 8:00 a.m. to 5:00 p.m., Eastern Standard Time. In the event that Scott or Bruce is not available, please state your concern to the receptionist or leave a message and your call will be returned. If needed, Kleinschmidt's fax number is (315) 463-5126 and is available 24 hours a day.

COUNT INFORMATION

The study period will run from April 1, 2002 through March 30, 2003 and will involve weekends and weekdays. You will be required to work 10 days per month – 5 weekend days and 5 weekdays. You may also be required to work on holidays. Within each workday you will be required to traverse the study area twice, each time counting the number of vehicles you observe at the locations specified. Each count will take approximately 1.5 - 2 hours.

Some longer duration observations will be used where appropriate to develop calibration factors such as length of stay, people per car, and activity participation. Longer duration observations will also be used to estimate percent capacity utilization. Attachment 1 provides a list of work dates and the times at which counts are scheduled. It is important that you adhere to the schedule provided. If this is not possible, please contact your Field Supervisor immediately.

RECREATION COUNTS

The number of vehicles observed at the identified locations will be recorded two times per sample day. The schedule includes the timing of each count and the locations at which you should start counting.

You will be provided with a data sheets for recording your observations (Attachment 2). Each count should be noted in military time, also known as the 24-hour clock. Under "Notes" the general weather conditions at the beginning should be noted. This includes temperature, cloud cover (clear, partly cloudy, mostly cloudy, rain), etc. You may also include any other distinctive activity occurring (*i.e.*, special events).

The recreation count will include the total vehicles occupying the given recreation site at the identified time. Attachment 3 provides more detailed instructions for conducting the recreation counts and observations, including instructions for how to specifically complete the data forms.

You may be provided with a camera to take occasional pictures of people occupying various sites and/or site conditions.

We welcome all of your questions and comments.

EDITING

After the count, check your data sheet for thoroughness and legibility. **IF WE CAN'T READ YOUR WRITING THE FORM IS NO GOOD TO US.** Please make sure that your handwriting is clear. After reviewing your work, initial each data sheet at the bottom of each sheet.

RECREATION COUNT MATERIALS

The following will be provided to you for the duration of the study:

- Data sheets
- Pencils and pencil sharpeners
- Kleinschmidt business cards
- Kleinschmidt hat
- Names and addresses of contact people
(From Kleinschmidt or the client)
- Clipboard
- Map
- Counter
- Disposable Camera

SHIPPING COMPLETED RECREATION COUNTS TO KLEINSCHMIDT

At the end of each week, you will be required to deliver all completed data sheets to Beak Consulting who will copy and ship data sheets to Kleinschmidt.

MONITORING

Periodically, you may be monitored by your Field Supervisor, another Kleinschmidt representative, or the client. You may be observed at any time without prior knowledge. This is a standard practice to assist you in performing the counts by providing you with feedback as well as to assure our client that we monitor for quality control purposes.

PRESENTATION

How you present yourself is very important, both in terms of your demeanor and your appearance. Remember to always be respectful and courteous to the people you may come into contact with. You are a representative of Kleinschmidt, and by extension, of our client. We would like you to make a good impression.

You should appear clean and neat. Do not wear t-shirts or hats with logos on them. You will be provided with a Kleinschmidt hat, which should be worn at all times. You will be provided with a package of Kleinschmidt business cards. If someone should ask you questions that you cannot answer, or are uncomfortable answering, simply hand out a business card and the name of your Field Supervisor, and tell them they are welcome to call if they have any questions or comments regarding the survey.

UNEXPLAINED CIRCUMSTANCES

Please call your Field Supervisor in advance if it is impossible for personal reasons or because of circumstances beyond your control for you to conduct your scheduled recreation count on any given day. If Scott cannot be reached, leave a message and he will contact you as soon as possible. If necessary, Kleinschmidt will make arrangements for a substitute or will reschedule the workday.

It is expected that you will use your best judgment in all safety matters. If you are concerned for your safety, please make a note of it on the top of the count form and move on. Use your best judgment about individuals you encounter and likewise in severe or unsafe weather, we expect that you will suspend work and take cover.

As a precautionary measure, a letter stating our intentions has been sent to local and state law enforcement agencies. This letter explained the purpose of the study and asked for the cooperation of the local law enforcement agencies (Attachment 4).

LIST OF CONTACTS

AT KLEINSCHMIDT ASSOCIATES

Scott Jones (315) 463-5013
Field Supervisor

Marty Phillips (207) 487-3328
Senior Staff

Bruce DiGennaro (860) 526-2358
Project Manager

ATTACHMENT 1

SCHEDULE

NYPA Niagara Falls Form 80 Sampling Plan										
Month	Date	Count		Begin Count		Observation				
		1	2	Upstream	Downstream	April	Upstream	Downstream		
April	2002									
1	Wednesday	4/17/2002	Start Time	7:29	13:43	Upstream	Upstream			
2	Saturday	4/20/2002	Start Time	12:19	18:40	Upstream	Downstream			
3	Sunday	4/21/2002	Start Time	9:44	16:00	Downstream	Upstream			
4	Tuesday	4/23/2002	Start Time	12:58	19:20	Downstream	Downstream			
5	Wednesday	4/24/2002	Start Time	10:32	17:04	Downstream	Upstream			
6	Friday	4/26/2002	Start Time	11:12	17:30	Upstream	Upstream			

NYPA Niagara Falls Form 80 Sampling Plan														
Month	Date	Count		Begin Count		Observation								
		1	2	Upstream	Downstream	May	Date	Count	Upstream	Downstream				
May	2002													
1	Saturday	5/4/2002	Start Time	8:00	14:50	Downstream	Downstream	Saturday	05/04/2002	1	Niawanda Gratwick Sheridan Drive	1	Youngstown Lewiston Landing Whirlpool	
2	Monday	5/6/2002	Start Time	12:12	17:31	Downstream	Downstream							
3	Saturday	5/18/2002	Start Time	7:20	8:20	Downstream	Downstream	Saturday	05/18/2002	2	Intake Towers Beaver Is. SP Upper Trail			
4	Monday	5/20/2002	Start Time	7:20	8:20	Downstream	Downstream							
5	Wednesday	5/22/2002	Start Time	9:34	16:03	Downstream	Downstream							
6	Friday	5/24/2002	Start Time	11:24	15:30	Downstream	Upstream							
7	Saturday	5/25/2002	Start Time	7:20	8:20	Downstream	Downstream							
8	Sunday	5/26/2002	Start Time	10:52	15:20	Upstream	Upstream							
9	Monday	5/27/2002	Start Time	11:34	15:30	Upstream	Upstream	Monday	05/27/2002	3	Gratwick Beaver Is. SP Ontario Street			
10	Wednesday	5/29/2002	Start Time	7:20	8:20	Downstream	Downstream							

NYPA Niagara Falls Form 80 Sampling Plan														
Month	Date	Count		Begin Count		Observation								
		1	2	Upstream	Downstream	June	Date	Count	Upstream					
June	2002													
1	Thursday	6/6/2002	Start Time	7:14	13:44	Upstream	Upstream							
2	Friday	6/7/2002	Start Time	10:08	16:38	Downstream	Upstream							
3	Saturday	6/8/2002	Start Time	7:20	8:20	Downstream	Downstream	Saturday	06/08/2002	1	Sheridan Drive	Isle View	Niawanda	
4	Monday	6/10/2002	Start Time	7:20	8:20	Downstream	Downstream							
5	Saturday	6/15/2002	Start Time	9:26	15:20	Upstream	Upstream							
6	Sunday	6/16/2002	Start Time	7:14	13:44	Downstream	Upstream							
7	Monday	6/17/2002	Start Time	11:21	17:51	Upstream	Upstream							
8	Tuesday	6/18/2002	Start Time	7:30	9:30	Downstream	Downstream							
9	Saturday	6/22/2002	Start Time	7:30	8:30	Downstream	Downstream							
10	Sunday	6/23/2002	Start Time	9:42	15:30	Downstream	Upstream	Sunday	06/23/2002	2	Griffon	Ontario Street	Upper Trail	
11	Tuesday	6/25/2002	Start Time	10:39	15:30	Downstream	Downstream	Tuesday	06/25/2002	3	Upper Trail	Ontario Street	Isle View	

NYPA Niagara Falls Form 80 Sampling Plan

Month	Date	Count		Begin Count		Observation								
		1	2	Upstream	Downstream	July	Upstream							
July	2002					Date	Count							
1	Thursday	7/4/2002	Start Time	7:36	14:00	Downstream	Upstream							
2	Saturday	7/6/2002	Start Time	7:30	8:30	Downstream	Downstream							
3	Saturday	7/7/2002	Start Time	11:15	17:45	Upstream	Upstream							
4	Tuesday	7/9/2002	Start Time	9:21	15:51	Upstream	Upstream							
5	Saturday	7/13/2002	Start Time	7:30	8:30	Downstream	Downstream							
6	Sunday	7/14/2002	Start Time	14:00	15:30	Downstream	Downstream	Sunday	7/14/2002	1	Griffon	Upper Trail	Isle View	
7	Tuesday	7/16/2002	Start Time	9:03	15:33	Downstream	Downstream	Tuesday	07/16/2002	2	Ontario Street	Gratwick	Isle View	
8	Sunday	7/21/2002	Start Time	7:30	8:30	Downstream	Downstream	Sunday	07/21/2002	3	RM Parkway	Niawanda	Intake Towers	
9	Monday	7/22/2002	Start Time	7:30	8:30	Downstream	Downstream							
10	Wednesday	7/24/2002	Start Time	9:17	15:30	Downstream	Upstream							
11	Monday	7/29/2002	Start Time	7:20	8:20	Downstream	Downstream							

NYPA Niagara Falls Form 80 Sampling Plan														
Month	Date	Count		Begin Count		Observation								
		1	2	Upstream	Downstream	August	Date	Count	Upstream					
August	2002													
1	Saturday	8/3/2002	Start Time	7:15	8:30	Downstream	Downstream							
2	Sunday	8/4/2002	Start Time	7:28	8:30	Downstream	Downstream							
3	Wednesday	8/7/2002	Start Time	7:30	8:30	Downstream	Downstream	Wednesday	08/07/2002	1	Griffon	Upper Trail	RM Parkway	
4	Sunday	8/11/2002	Start Time	8:30	9:38	Downstream	Downstream	Sunday	08/11/2002	2	Gratwick	Sheridan Drive	Beaver Is. SP	
5	Saturday	8/17/2002	Start Time	10:10	11:10	Downstream	Downstream							
6	Tuesday	8/20/2002	Start Time	7:30	8:30	Downstream	Downstream							
7	Thursday	8/22/2002	Start Time	8:26	14:56	Upstream	Downstream							
8	Monday	8/26/2002	Start Time	7:20	8:20	Downstream	Downstream	Monday	08/26/2002	3	Isle View	Beaver Is. SP	Sheridan Drive	
9	Friday	8/30/2002	Start Time	8:03	14:32	Upstream	Upstream							
10	Saturday	8/31/2002	Start Time	7:20	8:20	Downstream	Downstream							

NYPA Niagara Falls Form 80 Sampling Plan															
Month	Date	Count		Begin Count		Observation									
		1	2	Upstream	Downstream	September	Date	Count	Upstream						
September	2002	1	Monday	9/2/2002	Start Time	7:15	8:15	Downstream	Downstream	Monday	09/02/2002	1	Intake Towers	Gratwick	RM Parkway
		2	Sunday	9/8/2002	Start Time	9:25	15:20	Upstream	Upstream						
		3	Tuesday	9/10/2002	Start Time	7:20	8:20	Downstream	Downstream						
		4	Thursday	9/12/2002	Start Time	7:20	8:20	Downstream	Downstream						
		5	Saturday	9/14/2002	Start Time	7:20	8:20	Downstream	Downstream						
		6	Sunday	9/15/2002	Start Time	7:15	8:15	Downstream	Downstream						
		7	Monday	9/16/2002	Start Time	7:37	14:07	Downstream	Upstream						
		8	Monday	9/23/2002	Start Time	10:39	17:09	Downstream	Downstream						
		9	Friday	9/27/2002	Start Time	8:26	14:57	Upstream	Downstream	Friday	09/27/2002	2	Intake Towers	Ontario Street	Beaver Is. SP
		10	Saturday	9/28/2002	Start Time	7:00	8:30	Downstream	Downstream	Saturday	09/28/2002	3	Gratwick	Niawanda	Ontario Street

NYPA Niagara Falls Form 80 Sampling Plan														
Month	Date	Start Time	Count		Begin Count		Observation							
			1	2	Upstream	Downstream	October	Date	Count	Upstream				
October	2002													
1	Saturday	10/5/2002	Start Time	7:30	9:30	Downstream	Downstream							
2	Friday	10/11/2002	Start Time	9:29	13:46	Upstream	Upstream							
3	Saturday	10/12/2002	Start Time	7:30	8:30	Downstream	Downstream							
4	Sunday	10/13/2002	Start Time	9:38	13:56	Upstream	Upstream	Sunday	10/13/2002	1	Niawanda	Griffon	Sheridan Drive	
5	Tuesday	10/15/2002	Start Time	8:47	13:02	Upstream	Downstream							
6	Friday	10/18/2002	Start Time	10:24	14:39	Downstream	Downstream	Friday	10/18/2002	2	RM Parkway	Intake Towers	Niawanda	
7	Sunday	10/20/2002	Start Time	7:30	8:30	Downstream	Downstream	Sunday	10/20/2002	3	Upper Trail	RM Parkway	Gratwick	
8	Wednesday	10/23/2002	Start Time	8:03	12:23	Downstream	Upstream							
9	Sunday	10/27/2002	Start Time	10:04	14:00	Upstream	Downstream							
10	Monday	10/28/2002	Start Time	7:15	8:15	Downstream	Downstream							
11	Wednesday	10/30/2002	Start Time	7:15	8:15	Downstream	Downstream							

NYPA Niagara Falls Form 80 Sampling Plan														
Month	Date		Count		Begin Count		Observation							
			1	2	Upstream	Downstream	November	Date	Count	Upstream				
November	2002													
1	Saturday	11/2/2002	Start Time	9:41	13:59	Upstream	Upstream							
2	Friday	11/8/2002	Start Time	7:30	9:30	Downstream	Downstream							
3	Saturday	11/9/2002	Start Time	7:30	8:30	Downstream	Downstream	Saturday	11/09/2002	1	Niawanda	Gratwick	Ontario Street	
4	Monday	11/11/2002	Start Time	7:15	8:15	Downstream	Downstream							
5	Sunday	11/17/2002	Start Time	7:15	9:15	Downstream	Downstream	Sunday	11/17/2002	2	Griffon	Niawanda	Griffon	
6	Wednesday	11/20/2002	Start Time	7:10	9:10	Downstream	Downstream							
7	Thursday	11/21/2002	Start Time	8:43	14:19	Upstream	Upstream							
8	Friday	11/22/2002	Start Time	7:30	8:30	Downstream	Downstream							
9	Sunday	11/24/2002	Start Time	7:24	9:15	Downstream	Downstream							
10	Wednesday	11/27/2002	Start Time	7:30	8:30	Downstream	Downstream	Wednesday	11/27/2002	3	Niawanda	Intake Towers	Sheridan Drive	
11	Friday	11/29/2002	Start Time	7:00	8:00	Downstream	Downstream							

NYPA Niagara Falls Form 80 Sampling Plan														
Month	Date			Count		Begin Count		Observation						
				1	2	Upstream	Downstream	December	Date	Count	Upstream			
December	2002													
1	Sunday	12/1/2002	Start Time	7:30	9:30	Downstream	Downstream							
2	Monday	12/2/2002	Start Time	7:30	8:30	Downstream	Downstream							
3	Wednesday	12/4/2002	Start Time	7:15	9:15	Downstream	Downstream							
4	Saturday	12/7/2002	Start Time	8:22	12:37	Downstream	Upstream	Saturday	12/7/2002	1	Griffon	RM Parkway	Ontario Street	
5	Tuesday	12/10/2002	Start Time	13:00	14:00	Downstream	Downstream							
6	Wednesday	12/11/2002	Start Time	7:30	9:30	Downstream	Downstream							
7	Thursday	12/12/2002	Start Time	10:18	14:33	Upstream	Upstream							
8	Sunday	12/15/2002	Start Time	7:30	8:30	Downstream	Downstream							
9	Tuesday	12/17/2002	Start Time	9:41	13:56	Upstream	Downstream	Tuesday	12/17/2002	2	Niawanda	Sheridan Drive	Ontario Street	
10	Wednesday	12/18/2002	Start Time	7:15	8:15	Downstream	Downstream							
11	Saturday	12/21/2002	Start Time	7:15	9:15	Downstream	Downstream							
12	Sunday	12/22/2002	Start Time	9:53	14:08	Upstream	Downstream							
13	Saturday	12/28/2002	Start Time	7:30	8:30	Downstream	Downstream	Saturday	12/28/2002	3	Gratwick	Upper Trail	Sheridan Drive	

NYPA Niagara Falls Form 80 Sampling Plan

Month	Date			Count		Begin Count		Observation						
				1	2	Upstream	Downstream	January	2003	Upstream				
January	2003													
1	Saturday	1/4/2003	Start Time	9:53	14:08	Downstream	Downstream							
2	Sunday	1/5/2003	Start Time	10:23	14:00	Upstream	Downstream	Sunday	01/05/2003	1	Intake Towers	Ontario Street	Beaver Is. SP	
3	Wednesday	1/8/2002	Start Time	8:25	12:43	Downstream	Downstream	Wednesday	01/08/2003	2	Isle View	Beaver Is. SP	RM Parkway	
4	Monday	1/13/2003	Start Time	10:07	14:22	Upstream	Downstream							
5	Tuesday	1/14/2003	Start Time	13:00	14:00	Downstream	Downstream							
6	Monday	1/20/2003	Start Time	9:43	13:59	Upstream	Upstream							
7	Tuesday	1/21/2003	Start Time	10:17	14:32	Downstream	Downstream							
8	Wednesday	1/22/2003	Start Time	8:37	12:52	Downstream	Upstream							
9	Saturday	1/25/2003	Start Time	12:45	14:00	Downstream	Downstream	Saturday	01/25/2003	3	RM Parkway	Intake Towers	Sheridan Drive	
10	Sunday	1/26/2003	Start Time	7:30	8:30	Downstream	Downstream							
11	Wednesday	1/29/2003	Start Time	10:09	14:24	Downstream	Upstream							

NYPA Niagara Falls Form 80 Sampling Plan													
Month	Date			Count		Begin Count		Observation					
				1	2	Upstream	Downstream	February	2003	Upstream			
February	2003							Date	Count				
1	Saturday	2/1/2003	Start Time	7:30	8:30	Downstream	Downstream						
2	Thursday	2/6/2003	Start Time	8:06	12:21	Downstream	Downstream						
3	Friday	2/7/2003	Start Time	7:30	8:30	Downstream	Downstream						
4	Saturday	2/8/2003	Start Time	7:30	8:30	Downstream	Downstream						
5	Sunday	2/9/2003	Start Time	8:10	12:25	Downstream	Downstream						
6	Friday	2/14/2003	Start Time	9:37	13:10	Downstream	Upstream						
7	Sunday	2/16/2003	Start Time	8:44	12:59	Upstream	Upstream	Sunday	02/16/2003	1	RM Parkway	Griffon	Beaver Is. SP
8	Monday	2/17/2003	Start Time	7:30	7:45	Downstream	Downstream						
9	Tuesday	2/18/2003	Start Time	7:30	8:30	Downstream	Downstream						
10	Friday	2/21/2003	Start Time	7:45	8:45	Downstream	Downstream	Friday	02/21/2003	2	Upper Trail	Intake Towers	Gratwick
11	Thursday	2/27/2003	Start Time	9:57	13:45	Upstream	Downstream	Thursday	02/27/2003	3	Beaver Is. SP	Sheridan Drive	Isle View

April Angling Data Collection

Date of Count	Time start	Time End
4/5/2002	15:00	15:02
4/6/2002	7:30	13:17
4/7/2002	9:40	
4/8/2002	7:39	
4/11/2002	16:00	16:02
4/12/2002	7:39	15:00
4/13/2002	14:45	20:15
4/14/2002	16:15	20:15
4/15/2002	14:40	20:45
4/17/2002	14:34	20:35
4/18/2002	14:34	20:35
4/20/2002	14:30	20:45
4/21/2002	7:45	14:30
4/22/2002	14:30	20:05
4/24/2002	14:45	20:45
4/25/2002	7:39	14:40
4/27/2002	14:40	20:15
4/28/2002	7:30	14:30
4/29/2002	14:30	20:30

May Angling Data Collection

Date of Count	Time start	Time End
5/1/2002	14:40	20:30
5/2/2002	8:00	14:50
5/4/2002	8:00	15:50
5/5/2002	14:30	20:45
5/7/2002	7:30	8:30
5/10/2002	14:00	15:00
5/11/2002	7:20	8:20
5/12/2002	7:20	8:20
5/13/2002	7:20	8:20
5/14/2002	7:20	8:20
5/15/2002	7:20	8:20
5/18/2002	7:20	8:20
5/19/2002	7:20	8:20
5/20/2002	7:20	8:20
5/21/2002	14:25	15:25
5/23/2002	7:30	9:30
5/24/2002	14:30	15:30
5/25/2002	7:20	8:20
5/26/2002	14:20	15:19
5/27/2002	14:30	15:30
5/28/2002	14:20	15:19
5/29/2002	7:20	8:20
5/31/2002	14:15	15:15

June Angling Data Collection

Date of Count	Time start	Time End
6/1/2002	14:30	15:25
6/2/2002	14:15	15:15
6/3/2002	14:25	15:25
6/5/2002	7:20	8:20
6/6/2002	14:20	15:19
6/8/2002	7:20	8:20
6/9/2002	7:20	8:20
6/10/2002	7:30	8:30
6/13/2002	14:20	15:19
6/14/2002	7:30	8:30
6/15/2002	14:20	15:19
6/16/2002	14:30	15:30
6/18/2002	7:30	9:30
6/19/2002	14:30	15:30
6/20/2002	7:30	8:30
6/22/2002	7:30	8:30
6/23/2002	14:30	15:30
6/25/2002	14:30	15:30
6/26/2002	7:30	8:30
6/27/2002	14:30	15:30
6/29/2002	7:15	8:30
6/30/2002	7:30	8:30

July Angling Data Collection

Date of Count	Time start	Time End
7/1/2002	14:30	15:30
7/2/2002	7:30	8:30
7/3/2002	14:30	15:30
7/4/2002	14:30	15:30
7/5/2002	14:30	15:30
7/6/2002	7:30	8:30
7/7/2002	7:30	8:30
7/10/2002	7:30	8:30
7/11/2002	14:30	15:32
7/12/2002	7:30	8:30
7/13/2002	7:30	8:30
7/14/2002	14:00	15:30
7/15/2002	14:30	15:30
7/18/2002	7:10	8:10
7/19/2002	7:30	8:30
7/20/2002	7:15	8:15
7/21/2002	7:30	8:30
7/22/2002	7:30	8:30
7/23/2002	7:30	8:30
7/24/2002	14:30	15:30
7/27/2002	7:15	8:30
7/28/2002	14:30	15:30
7/29/2002	7:20	8:20
7/30/2002	14:20	15:19

August Angling Data Collection

Date of Count	Time start	Time End
8/2/2002	7:30	8:30
8/3/2002	7:15	8:15
8/4/2002	7:28	8:30
8/5/2002	7:30	8:30
8/7/2002	7:30	8:30
8/8/2002	7:30	8:30
8/10/2002	7:30	8:30
8/11/2002	7:30	8:30
8/12/2002	14:30	15:30
8/14/2002	7:30	8:30
8/15/2002	7:30	8:30
8/17/2002	8:00	9:00
8/18/2002	7:20	8:20
8/20/2002	7:30	8:30
8/21/2002	7:30	8:30
8/23/2002	7:20	8:20
8/24/2002	7:20	8:20
8/25/2002	7:10	8:10
8/26/2002	7:20	8:20
8/28/2002	7:20	8:20
8/30/2002	14:15	15:15
8/31/2002	7:20	8:20

September Angling Data Collection

Date of Count	Time start	Time End
9/1/2002	7:15	8:15
9/2/2002	7:15	8:15
9/4/2002	7:20	8:20
9/5/2002	7:15	8:15
9/6/2002	14:20	15:19
9/7/2002	7:20	8:20
9/8/2002	14:20	15:19
9/10/2002	7:20	8:20
9/12/2002	7:30	8:30
9/13/2002	7:30	8:43
9/14/2002	7:20	8:20
9/15/2002	7:15	8:15
9/16/2002	14:30	15:30
9/19/2002	14:15	15:15
9/20/2002	14:15	15:15
9/21/2002	7:15	8:15
9/22/2002	7:30	8:30
9/24/2002	7:20	8:20
9/25/2002	14:15	15:15
9/27/2002	14:00	15:30
9/28/2002	7:00	8:30
9/29/2002	14:00	15:00

October Angling Data Collection

Date of Count	Time start	Time End
10/1/2002	14:15	15:15
10/3/2002	7:15	8:15
10/4/2002	14:15	15:15
10/5/2002	7:30	9:30
10/6/2002	7:30	8:30
10/7/2002	14:15	15:15
10/8/2002	7:15	8:15
10/9/2002	7:15	8:15
10/12/2002	7:30	8:30
10/13/2002	14:10	15:10
10/14/2002	7:15	8:15
10/16/2002	7:15	8:15
10/17/2002	14:10	15:10
10/18/2002	14:30	15:30
10/19/2002	14:15	15:00
10/20/2002	7:30	8:30
10/21/2002	7:15	8:15
10/23/2002	14:15	15:15
10/25/2002	7:15	8:15
10/26/2002	7:30	8:30
10/27/2002	13:00	14:00
10/28/2002	7:15	8:15
10/30/2002	7:15	8:15

November Angling Data Collection

Date of Count	Time start	Time End
11/1/2002	12:45	13:45
11/2/2002	13:00	14:00
11/3/2002	12:45	13:45
11/4/2002	7:30	9:30
11/5/2002	7:15	8:15
11/6/2002	7:15	8:15
11/8/2002	7:15	8:15
11/9/2002	7:30	8:30
11/10/2002	13:00	14:00
11/11/2002	7:15	8:15
11/12/2002	12:45	13:45
11/14/2002	7:15	8:15
11/15/2002	7:10	8:10
11/16/2002	7:30	8:30
11/17/2002	7:15	8:15
11/18/2002	7:30	8:30
11/20/2002	7:10	8:10
11/22/2002	7:15	8:15
11/23/2002	7:00	8:00
11/24/2002	7:24	8:30
11/25/2002	12:45	13:45
11/26/2002	7:30	8:30
11/27/2002	7:30	8:30
11/28/2002	7:30	8:30
11/29/2002	7:00	8:00
11/30/2002	7:30	8:30

December Angling Data Collection

Date of Count	Time start	Time End
12/1/2002	7:30	8:30
12/2/2002	7:30	8:30
12/4/2002	7:15	8:30
12/6/2002	12:45	14:00
12/7/2002	12:45	14:00
12/8/2002	13:00	14:00
12/9/2002	7:30	8:30
12/10/2002	12:45	13:45
12/11/2002	7:15	8:30
12/14/2002	7:30	8:30
12/15/2002	7:30	8:30
12/16/2002	7:30	8:30
12/18/2002	7:15	8:15
12/20/2002	7:15	8:30
12/21/2002	7:15	8:30
12/22/2002	7:30	8:30
12/23/2002	12:45	13:45
12/24/2002	7:15	8:15
12/26/2002	7:30	8:30
12/28/2002	7:30	8:30
12/29/2002	13:00	14:00
12/30/2002	7:30	8:30
12/31/2002	7:15	8:15

January Angling Data Collection

Date of Count	Time start	Time End
1/1/2003	13:00	14:00
1/3/2003	7:30	8:30
1/4/2003	12:00	14:00
1/5/2003	13:00	14:00
1/6/2003	13:00	14:00
1/8/2003	13:00	14:00
1/9/2003	7:15	8:15
1/11/2003	7:30	8:30
1/12/2003	7:30	8:30
1/14/2003	13:00	14:00
1/16/2003	12:45	13:45
1/17/2003	13:00	14:00
1/18/2003	13:00	14:00
1/19/2003	13:00	13:10
1/20/2003	13:00	14:00
1/21/2003	12:30	13:30
1/23/2003	7:30	8:30
1/24/2003	7:30	8:30
1/25/2003	12:45	14:00
1/26/2003	7:30	8:30
1/27/2003	13:00	14:00
1/28/2003	7:30	8:30
1/30/2003	13:00	14:00

February Angling Data Collection

Date of Count	Time start	Time End
2/1/2003	7:30	8:30
2/2/2003	13:00	14:00
2/3/2003	13:00	14:00
2/4/2003	7:30	8:30
2/7/2003	7:30	8:30
2/8/2003	7:30	8:30
2/9/2003	13:00	14:00
2/12/2003	12:45	13:10
2/13/2003	12:45	13:15
2/14/2003	12:30	13:10
2/15/2003	7:30	8:30
2/16/2003	7:30	7:47
2/17/2003	7:30	7:35
2/18/2003	7:30	7:35
2/19/2003	7:30	7:35
2/21/2003	7:30	8:30
2/22/2003	7:30	7:39
2/23/2003	7:30	8:30
2/24/2003	13:00	14:00
2/25/2003	13:00	14:00
2/27/2003	13:00	13:10

March Angling Data Collection

Date of Count	Time start	Time End
3/1/2003	13:00	14:00
3/2/2003	13:00	13:35
3/4/2003	13:00	14:00
3/6/2003	7:30	8:30
3/7/2003	7:30	8:30
3/8/2003	13:00	13:10
3/9/2003	7:30	7:35
3/11/2003	7:30	8:30

ATTACHMENT 2

DATA FORMS

**NEW YORK POWER AUTHORITY
 NIAGARA POWER PROJECT (FERC No. 2466)
 Instantaneous Count Form**

Monitor's Initials: _____

Date: ____/____/____
 (Month/Day/Year)

Count #1 Start Time ____:____
 (military)

End Time ____:____
 (military)

Type of Day (Circle One): Weekday Weekend Holiday

Count #2 Start Time ____:____

End Time ____:____

Site	Count #1			Count #2		
	Time (military)	No. Vehicles	No. Trailers	Time (military)	No. Vehicles	No. Trailers
ONTARIO STREET						
Sheridan Drive						
Isle View						
Niawanda						
Gratwick						
Griffon						
Upper Trail						
Intake Towers						
Robert Moses Parkway						

Notes:

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**NEW YORK POWER AUTHORITY
 NIAGARA POWER PROJECT (FERC No. 2466)
 Recreation Observation Form**

PAGE _____ OF _____

Site: _____ Monitor's Initials: _____ Date: ____/____/____
 1.1.1. Start Time ____:____ End Time ____:____ Type of Day (Circle One): Weekday Weekend Holiday
 (military) (military)

Color	Make	Model	Description of Group	Arrival Time (military)	Departure Time (military)	No. People Per Vehicle	Observed Recreation Activities											Notes	
							Pleasure Boating	Shoreline Fishing	Boat Fishing	Swimming	Run/Jogging	Walking	Bicycling	Picnicking	Bird Watching	Sight Seeing	Parking		Other (Specify)

Notes: If a group is participating in multiple activities, identify the **primary activity** by placing a “p” in the appropriate box. To identify the **secondary activity**, place an “s” in the appropriate box. Use your best personal judgement in determining between primary and secondary activities.

ATTACHMENT 3

FIELD SURVEY FORM DESCRIPTIONS AND SURVEY INSTRUCTIONS

Field Survey

The field survey consists of collecting two primary pieces of information: (1) vehicle counts; (2) and observations of recreation activity. Vehicle counts are made using a roving survey technique that involves driving to each sample site, recording the vehicles parked at the site and moving on to the next sample site. A complete “loop” (visiting all sample sites) will be done twice a day, per the sample schedule. Vehicle counts will be recorded on the Instantaneous Count Form. Observations of recreation activity will be made prior to or in between the roving counts. Observations will be made at select sites for one-hour periods of time. Observed activity will be recorded using the Recreation Observation Form.

Schedule

The sample schedule indicates the dates to be sampled, the start times for the two roving counts, and where the counts should begin “upstream or downstream”. Sample dates, start times, and start locations are generated randomly to ensure an unbiased sample.

Forms

Instructions for the two sample forms are provided below:

Instantaneous Count Form

One form will be needed per day for the vehicle counts. The form has pre printed site names, listed in the order they should be sampled, and provides a section for “Count 1” and “Count 2”, which will happen at two different times of the day.

Time – record the time you arrive at the sample site

No. of Vehicles – record the total number of vehicles parked in the parking lot

No. of Vehicles with Trailers - record the total number of vehicles with trailers parked in the parking lot (this will be a subset of the total number of vehicles).

Recreation Observation Form

One observation form will be needed for each site that is surveyed in a given day. The purpose of this form is to record representative recreation activity. Not all activity needs to be recorded, just a sample. Each row of the data form is designed to represent a group.

ID Number – this field is for tracking groups. It is for the surveyor’s benefit only and has no other data value.

Description of Group – Like the ID number, this field is for the benefit of tracking groups. Use whatever descriptors help (ex. License plates, color of car, etc).

Arrival Time – Record the time the group arrived at the site, if known. If the group was already there when you arrived, put a dash in this column.

Departure Time - Record the time the group departed the site, if known. If the group is still there when you leave, put a dash in this column.

No. People – Record the total number of people in the group. If you know how many vehicles are associated with the group, please note this in the Notes field.

Observed Recreation Activities – Check all boxes that apply to the group. If any one group member is engaged in an activity check the box (even if others in the group are not participating in that activity).

Notes – Record any relevant notes regarding the group or activity observed.

Survey Route Instructions

Begin the instantaneous count survey at the designated start time and start site indicated on the survey schedule. Record the number of vehicles parked at the site and proceed to the next sample site listed on the Instantaneous Count Form. Continue from site to site recording parked vehicles until you reach the last listed site. This completes the first count. Start a second count at the time and location indicated on the schedule. The following is an example of a site routing for the lower river:

Schedule says:

Month & Sample No.		Date		Count		Begin Count	
				1	2	Upstream	Downstream
April							
1	Saturday	6-Apr-02	Start Time	12:58	19:28	Downstream	Upstream

Start first count at 12:58 on Saturday April 6 at the downstream end of the study area (NYPA Intake Towers)

From the Intake Towers proceed to other sites in accordance with the count form

At 19:28, start the second count at the upstream end of the study area (Ontario Street). From Ontario Street, proceed to other sample sites.

ATTACHMENT 4
LETTERS SENT TO LOCAL LAW ENFORCEMENT AGENCIES

VIA FEDERAL EXPRESS

April 4, 2002

City of Niagara Falls Police Department
520 Hyde Park Boulevard
Niagara Falls, NY 14302

New York Power Authority Niagara River Recreation Counts

To Whom It May Concern:

Kleinschmidt Associates will be conducting recreational use counts on the Niagara River in the City of Niagara Falls, New York for the New York Power Authority as part of a scientific study associated with the Niagara Power Project. We wanted to let you know as a courtesy that we will be counting at recreation areas on the river between April 2002 through March 2003.

We will be counting both people and cars at the following recreation sites within your community:

- **Upper Niagara River Observation Site**
- **Upper Niagara River Trail**
- **Griffon Park Boat Launch**

On ten days each month, a member of our staff will visit observation points to count the number of people and vehicles at each recreation site. Staff conducting counts may be at single sites for extended periods (6 to 8 hours). Counts will occur on weekdays, weekend days, and some holidays, and may also occur at various times during the day, sometimes early in the morning or late in the evening. Our staff will carry identification at all times.

If you have any questions or comments about the counts, please feel free to contact either Bruce DiGennaro at (401) 849-6542 or Joanne Willmott at (716) 286-6651. Thank you very much for your cooperation.

Sincerely,

KLEINSCHMIDT ASSOCIATES

Bruce A. DiGennaro
Project Manager

BAD:ems

cc: Mr. Keith Silliman, New York Power Authority
Ms. Joanne Willmott, New York Power Authority

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VIA FEDERAL EXPRESS

April 4, 2002

Town of Tonawanda Police Department
1835 Sheridan Dr.
Kenmore, NY 14223

New York Power Authority Niagara River Recreation Counts

To Whom It May Concern:

Kleinschmidt Associates will be conducting recreational use counts on the Niagara River in the Town of Tonawanda, New York for the New York Power Authority as part of a scientific study associated with the Niagara Power Project. We wanted to let you know as a courtesy that we will be conducting counts at recreation areas on the river between April 2002 through March 2003.

We will be counting both people and cars at the following recreation sites within your community:

- Niawanda Park
- Isle View Park

On ten days each month, a member of our staff will visit observation points to count the number of people and vehicles at each recreation site. Staff conducting counts may be at single sites for extended periods (6 to 8 hours). Counts will occur on weekdays, weekend days, and some holidays, and may also occur at various times during the day, sometimes early in the morning or late in the evening. Our staff will carry identification at all times.

If you have any questions or comments about the counts, please feel free to contact either Bruce DiGennaro at (401) 849-6542 or Joanne Willmott at (716) 286-6651. Thank you very much for your cooperation.

Sincerely,

KLEINSCHMIDT ASSOCIATES

Bruce A. DiGennaro
Project Manager

BAD:ems

cc: Mr. Keith Silliman, New York Power Authority
Ms. Joanne Willmott, New York Power Authority

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VIA FEDERAL EXPRESS

April 4, 2002

Town of North Tonawanda Police Department
216 Payne Avenue
North Tonawanda, NY 14120

New York Power Authority Niagara River Recreation Counts

To Whom It May Concern:

Kleinschmidt Associates will be conducting recreational use counts on the Niagara River in the Town of North Tonawanda, New York for the New York Power Authority as part of a scientific study associated with the Niagara Power Project. We wanted to let you know as a courtesy that we will be counting at recreation areas on the river between April 2002 through March 2003.

We will be counting both people and cars at Gratwick Park within your community. On ten days each month, a member of our staff will visit observation points to count the number of people and vehicles at each recreation site. Staff conducting counts may be at single sites for extended periods (6 to 8 hours). Counts will occur on weekdays, weekend days, and some holidays, and may also occur at various times during the day, sometimes early in the morning or late in the evening. Our staff will carry identification at all times.

If you have any questions or comments about the counts, please feel free to contact either Bruce DiGennaro at (401) 849-6542 or Joanne Willmott at (716) 286-6651. Thank you very much for your cooperation.

Sincerely,

KLEINSCHMIDT ASSOCIATES

Bruce A. DiGennaro
Project Manager

BAD:ems

cc: Mr. Keith Silliman, New York Power Authority
Ms. Joanne Willmott, New York Power Authority

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VIA FEDERAL EXPRESS

April 4, 2002

City of Buffalo Police Department
D District
669 Hertel Avenue
Buffalo, NY 14207

New York Power Authority Niagara River Recreation Counts

To Whom It May Concern:

Kleinschmidt Associates will be conducting recreational use counts on the Niagara River in the City of Buffalo, New York for the New York Power Authority as part of a scientific study associated with the Niagara Power Project. We wanted to let you know as a courtesy that we will be counting at recreation areas on the river between April 2002 through March 2003.

We will be counting both people and cars at the Foot of Ontario Boat Launch within your community. On ten days each month, a member of our staff will visit observation points to count the number of people and vehicles at each recreation site. Staff conducting counts may be at single sites for extended periods (6 to 8 hours). Counts will occur on weekdays, weekend days, and some holidays, and may also occur at various times during the day, sometimes early in the morning or late in the evening. Our staff will carry identification at all times.

If you have any questions or comments about the counts, please feel free to contact either Bruce DiGennaro at (401) 849-6542 or Joanne Willmott at (716) 286-6651. Thank you very much for your cooperation.

Sincerely,

KLEINSCHMIDT ASSOCIATES

Bruce A. DiGennaro
Project Manager

BAD:ems

cc: Mr. Keith Silliman, New York Power Authority
Ms. Joanne Willmott, New York Power Authority

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VIA FEDERAL EXPRESS

April 4, 2002

Village of Youngstown Police Department
240 Lockport Street
Youngstown, NY 14174

New York Power Authority Niagara River Recreation Counts And Creel Survey

To Whom It May Concern:

Kleinschmidt Associates and Beak Consultants, Inc. will be conducting recreational use counts and a creel survey on the Niagara River in the Village of Youngstown, New York for the New York Power Authority as part of two scientific studies associated with the Niagara Power Project. We wanted to let you know as a courtesy that we will be counting and surveying at recreation areas on the river between April 2002 through March 2003.

We will be counting people and cars and surveying fishermen at Constitution Park and Youngstown Boat Launch within your community. On ten to twenty days each month, members of our staff will visit observation points to count the number of people and vehicles at each recreation site. Staff surveying anglers and occasional recreational counters may be at single sites for extended periods (6 to 8 hours). Counts will occur on weekdays, weekend days, and some holidays, and may also occur at various times during the day, sometimes early in the morning or late in the evening. Our staff will carry identification at all times.

If you have any questions or comments about the counts, please feel free to contact Bruce DiGennaro at (401) 849-6542, Garry Smythe at (716) 759-1200, or Joanne Willmott at (716) 286-6651. Thank you very much for your cooperation.

Sincerely,

BEAK CONSULTING, INC.

Garry Smythe
Project Manager

Sincerely,

KLEINSCHMIDT ASSOCIATES

Bruce A. DiGennaro
Project Manager

BAD:ems

cc: Mr. Keith Silliman, New York Power Authority
Ms. Joanne Willmott, New York Power Authority

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VIA FEDERAL EXPRESS

April 4, 2002

Village of Lewiston Police Department
145 North 4th Street
Lewiston, NY 14092

New York Power Authority Niagara River Recreation Counts and Creel Survey

To Whom It May Concern:

Kleinschmidt Associates and Beak Consultants, Inc. will be conducting recreational use counts and a creel survey on the Niagara River in the Village of Lewiston, New York for the New York Power Authority as part of two scientific studies associated with the Niagara Power Project. We wanted to let you know as a courtesy that we will be counting and surveying at recreation areas on the river between April 2002 through March 2003.

We will be counting people and cars and surveying fishermen at Lewiston Landing and Earl W. Brydges Artpark within your community. On ten to twenty days each month, a member of our staff will visit observation points to count the number of people and vehicles at each recreation site. Staff surveying anglers and occasional recreational counters may be at single sites for extended periods (6 to 8 hours). Counts will occur on weekdays, weekend days, and some holidays, and may also occur at various times during the day, sometimes early in the morning or late in the evening. Our staff will carry identification at all times.

If you have any questions or comments about the counts, please feel free to contact Bruce DiGennaro at (401) 849-6542, Garry Smythe at (716) 759-1200, or Joanne Willmott at (716) 286-6651. Thank you very much for your cooperation.

Sincerely,

BEAK CONSULTING, INC.

Garry Smythe
Project Manager

Sincerely,

KLEINSCHMIDT ASSOCIATES

Bruce A. DiGennaro
Project Manager

BAD:ems

cc: Mr. Keith Silliman, New York Power Authority
Ms. Joanne Willmott, New York Power Authority

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