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January 24, 1997

Mr. Greg Campbell, Chairman Adirondack Park Agency PO Box 99 Ray Brook, NY 12977

Dear Chairman Campbell:

I am pleased to submit a draft Unit Management Plan for the Great Sacandaga Lake boat launch facility for review by the Agency. A total of 24 copies are included for your use. Thank you.

Sincerely,

Stuart A. Buchanan Regional Director

SAB/LES/jb

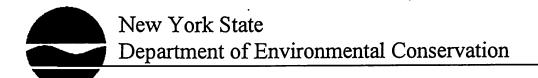
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## DRAFT UNIT MANAGEMENT PLAN

Great Sacandaga Lake Boat Launch Facility
Town of Broadalbin, Fulton County

January 1997

GEORGE E. PATAKI, Governor JOHN P. CAHILL, Acting Commissioner

# DRAFT Unit Management Plan

Great Sacandaga Lake
Boat Launch Facility
Town of Broadalbin, Fulton County

New York State Department of Environmental Conservation Region 5 Headquarters Ray Brook, N.Y. 12977

FOR FURTHER INFORMATION, CONTACT: Lawrence E. Strait Regional Fisheries Manager (518) 897-1333

ACCEPTANCE DATE:

#### **SUMMARY**

This Unit Management Plan discusses the development of a boat launch on State Land in the Town of Broadalbin, Fulton County, the compatibility of the project with the Adirondack Park State Land Master Plan, and an operational plan for management of the facility.

- 1. Significant beneficial and adverse impacts:
  - a. Provide adequate, safe and convenient public boat access to the southern basin of Great Sacandaga Lake.
  - b. Vegetative clearing of 3.5 acres for development of parking area, access and interior roadways and boat launch ramp.
  - c. Displacement of limited numbers of fish and wildlife from areas to be disturbed.
- 2. Mitigation measures incorporated:
  - a. Buffer strips of uncut vegetation will be maintained surrounding the boat launch, roadways and site boundaries to mitigate visual and noise impacts, and help maintain a natural character to the site.

- b. Employment of gates and/or barriers to control unauthorized use of the facility.
- c. Use of standard navigational aids to delineate the boat navigation channel for entering and exiting the bay, posting the navigation channel with a 5-mile-perhour speed limit, and use of additional navigational aids to mark the perimeter of the Town swimming beach.
- d. Provision of trash cans, sanitary facilities, and appropriate signs providing information about DEC access site rules and regulations and other pertinent site use information.
- e. Landscaping and revegetation of disturbed areas coupled with ditches and culverts to prevent erosion, sedimentation and runoff from paved surfaces from entering the reservoir. During construction, best available technology will be employed to minimize erosion and runoff into Great Sacandaga Lake.

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II.

Introduction

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#### I. INTRODUCTION

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#### A. Overview

This Unit Management Plan (UMP) discusses the development of a 3.5 acre boat launch facility on 6.5 acres of State land along the southeastern shore of Great Sacandaga Lake in the Town of Broadalbin, Fulton County, N.Y. The site is within the Adirondack Park. This plan is prepared under the requirements of the Adirondack Park State Land Master Plan (SLMP) and the State Environmental Quality Review Act (SEQR).

The parcel of land on which the proposed project is to be located first became State land in the 1920s through condemnation by the Hudson River-Black River Regulating District (the District) in its preparations for creation of the Great Sacandaga Lake. The District currently holds fee title to all lands beneath the high water elevation of the Great Sacandaga Lake and additional peripheral uplands to a "take line" elevation of 778.0 feet above Mean Sea Level (MSL).

Over its years of control, the District has granted annually renewable permits to private parties, commercial enterprises and others for select parcels of waterfront lands for a broad variety of purposes. The District has also transferred jurisdiction of select parcels to State agencies for a variety of purposes, including three such transfers to the Department of Environmental Conservation (or its predecessor the "Conservation Department," hereinafter referred to as the Department) to facilitate the development of two public boat launching facilities and one multi-purpose campground. Jurisdiction for the part of the parcel of land currently

proposed for development was transferred to the Department by the District on April 13, 1987. Formerly, the subject parcel had been annually permitted-out by the District to the Town of Broadalbin, who used part of the land for operation of a Town swimming area. Following the initial transfer, the Department requested transfer of a portion of an adjacent parcel to enlarge its holding and to minimize impacting an identified wetland area. Approval of the second transfer request was granted by the District on April 26, 1988 and execution of the second transfer occurred on May 8, 1989. The transfers of jurisdiction were made at no cost.

The Department has a legal mandate under Section 11-0303 of Article 11 of the

Environmental Conservation Law to both "maintain and improve the fish and wildlife resources of
the state" and to "develop and administer measures to make them accessible to the people of the
state" [emphasis added]. The transfers of jurisdiction of District lands by the District to the
Department were requested by the Department in its efforts to fulfill this legal mandate. The
transfers were fully supported by the Town of Broadalbin, former permittee of the parcel.

Additional support for the transfer came from fishermen and boaters who felt that existing access
points were insufficient and unsafe, especially with respect to the main "southern basin" of the
26,656 acre reservoir. In the 1985/86 State fiscal year, \$30,000 was made available to the
Department by the Legislature for design of boat-launching facilities in the Town of Broadalbin.

Subsequently, the Department assigned \$300,000 in capital funds provided to it in the 1987/88

State fiscal year for boat access facility development statewide. The Department's mandate to
provide access must also be balanced with the requirements of SEQR which mandate careful
consideration of potential environmental impacts, alternatives to the proposed action and the

requirements of the SLMP.

The proposed site is a small, isolated parcel of state land, which pursuant to the SLMP was classified "Moderate Intensity Use" when it was under the control of the District. Under Department jurisdiction, the land will be managed as Forest Preserve land. Specific provisions in the SLMP allow for development of a boat launch on this reservoir, provided a Draft Environmental Impact Statement/Unit Management Plan (DEIS/UMP) demonstrates that such development is consistent with the guidelines for boat launch sites as outlined in the SLMP and the site is reclassified to "Intensive Use" by the Adirondack Park Agency.

The definition of a boat launching site under the SLMP is "a site providing for the launching of trailered boats, with ramp and attendant parking facilities." These sites are allowable in "Intensive Use" areas and must be located only on large lakes regularly used by motorboats. A large lake is defined in the SLMP as "a lake of approximately 1,000 acres or more in area." The SLMP further sets forth a list of lakes meeting the "large lake" criterion and includes Great Sacandaga Lake.

#### B. AREA DESCRIPTION

The proposed boat launching site will be located along the southeastern shoreline of the main "southern basin" of Great Sacandaga Lake. This site was chosen for a number of reasons, including:

- history of prior development for public use purposes;

- accessibility from paved, public highway;
- geographical location on main southern basin of reservoir, served by no other public boat access facility;
- developable terrain with good drainage;
- good protection from wind exposure.

The land is already "developed" to the extent that it is approximately 1/3 cleared of trees; has an interior gravel roadway from the adjacent public highway to the interior shoreline extremity of the property; has a crude parking area, fencing, entry gate, seasonally installed sanitary facility and other minor man-made improvements, all owing to its immediate past administration and operation by the Town of Broadalbin as a town bathing beach. The operation of this swimming facility will continue by virtue of a use and occupancy permit issued by DEC to the Town of Broadalbin. The Department has agreed to upgrade the parking area for beach users as shown in the design layout. (Section V. Map and Charts, Exhibit 1.)

A general species list and inventory of woody vegetation existing on the property, and an inventory of those trees that must be cut to accommodate the proposed boat launch project, was prepared by Thomas V. Kapelewski, a DEC forester, on November 30, 1988 and is provided in Appendix A of the (DEIS/UMP) for the project dated September 20, 1989.

There is a small area of wetland located on the site, on the first of the two parcels of land transferred to the Department by the District. The presence of this wetland prompted the

Department's request for transfer of the second parcel of land from the District in order to avoid any major wetland impact. With the additional parcel of land the entire project was redesigned to minimize impact with only a minor encroachment on the periphery of the wetland.

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No significant habitats or nesting sites of threatened or endangered species have been identified on the proposed site or adjacent waters of Great Sacandaga Lake. Significant habitats is a term used by the Department for habitats that provide some of the key factors for survival, variety or abundance of wildlife, are usually limited in size, and generally have a definite influence on wildlife or people beyond their immediate borders. There are no special circumstances with respect to the upland area or immediately adjacent waters of the site that offer significantly different or unique conditions for terrestrial or aquatic species, from any other like area around the periphery of the Great Sacandaga Lake. A wildlife inventory of species that can be found within several miles of the proposed site is presented in Appendix B of the DEIS/UMP.

An inquiry concerning the possible historic and/or cultural significance of the property was made of the New York State Office of Parks, Recreation and Historic Preservation. The initial determination provided indicated that the project will have "no impact on registered, eligible, or inventoried [historic] structures," but that the project does lie in an "archaeologically sensitive area." Further research into the archaeological significance of the property by the Fulton County Planning Office uncovered some limited information concerning past uses of the property, which was inconclusive in resolving the question. Subsequently, the Department conducted a formal archaeological survey of the site which concluded that "... no archaeological resources are present

in the proposed project impact area" and that there will be "... no effect to potentially significant resources by implementation of this project." The full report is provided in DEIS/UMP Appendix C.

Information on soil types on the property was requested of the United States Department of Agriculture, Soil Conservation Service offices in Johnstown, N.Y. Three different soil-types exist on the parcel, as follows:

- (72B) Boadalbin Loam, 2-8% slopes; deep, gently sloping, well to moderately well drained, medium lime, loamy soil formed in till that has a firm fragipan at a depth of 18 to 34 inches. Available water capacity is moderate to high. Permeability is moderate to slow.
- (137A) Madalin silty clay loam; deep, nearly level, poorly drained, high lime, clayey soil
  formed in lake-laid deposits. Available water capacity is moderate. Permeability is slow
  to very slow.
- (170B) Windsor loamy fine sand, 2-8% slopes; deep, gently sloping, well drained, low lime, sandy soil formed in outwash. The available water capacity is low. Permeability is rapid.

Detailed information on these soil types, as provided by SCS District Conservationist Mr. Cliff Hand, is attached as DEIS/UMP Appendix D.

The offshore area in front of the proposed boat launch ramp is gently sloping and is composed of boulders, cobbles, sand and fine silt. The natural slope is less than optimal for boat-launching ramp installation, but can be improved to optimal pitch with minor reshaping. Because Great Sacandaga Lake fluctuates significantly, a longer ramp is necessary than would be the case under a stable water level situation. Historical water level elevation data for the reservoir is presented in Appendix E. Ramp pitch and length as currently designed will allow the ramp to function over a range of water levels from 771 to 757.5 feet MSL. If water levels rise significantly above or fall significantly below these elevations, the ramp will not be usable for the launching of trailered boats. These circumstances are not different from those prevailing currently at the Department's three other boat-launching facilities on the reservoir; Northampton Beach Campground, Northville and Saratoga.

A review of 15 years (1972-1986) of seasonal water level fluctuation patterns, indicates that the proposed ramp, which has a functional low-level elevation of 757.5 feet (leaving a 2 ½ foot launch depth), would have been rendered unusable due to low water, during specific periods, as follows:

#### April 1 - May 29

Water level elevations less than 757.5 feet occur, on average, for the first 8 days of this

period. In 7 of the 15 years examined, elevations of less than 757.5 feet have never occurred. Over the 15 year record analyzed, the launch ramp as designed, would be unusable 14% of the time, on average, during this period of each year.

May 30 - September 5 (Memorial Day to Labor Day; the prime boating season)

Water level elevations less than 757.5 feet occur, on average, for the last 2 days of this period. In 9 of the 15 years examined, elevations of less than 757.5 feet never occurred.

Over the 15 year record analyzed, the launch ramp as designed, would be unusable 2% of the time, on average, during this period of each year.

#### September 6 - November 30

Typically, most of the days in this period the reservoir is at elevations less than 757.5 feet. Water level elevations less than 757.5 feet occur, on average, for 53 days of this period. In only one year of the 15 years examined did water level elevations remain above 757.5 feet for the duration of the period (1981). Over the 15 year record analyzed, the launch ramp as designed, would be unusable 66% of the time, on average, during this period of each year.

In order to create safe boat launching and maneuvering depths off the ramp end at the lowest functional elevation of the ramp, 2200 cubic yards of dredging will be necessary. Dredge spoils will be utilized as fill where necessary on-site. No dredged material will leave the site. Without dredging, the "usable season" for the site would be significantly reduced.

#### II. INVENTORY OF RESOURCES

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#### A. Physical Characteristics of Great Sacandaga Lake

The Great Sacandaga Lake is a man-made impoundment on the Sacandaga River approximately four miles upstream from its confluence with the Hudson River. The reservoir was formed by an earth and concrete dam completed in 1930. At spillway crest elevation of 771.0 ft. Above MSL, the reservoir impounds 37.720 billion cubic feet of water, and encompasses 26,656 surface acres. The drainage area for the reservoir encompasses 1044 square miles. At full pool elevation the reservoir has approximately 125 miles of shoreline, mean depth is 32 feet, and maximum depth is 70 feet, as illustrated in DEIS/UMP Appendix N. The reservoir's water quality classification is B. Best usage of class B waters is for "Primary contact recreation and any other uses except as a source of water supply for drinking, culinary or food processing purposes."

[NYC RR; Title 6, parts 700-705].

The purpose of the reservoir is to provide flood control and low-water stream regulation for sanitary improvement, navigation, and power, as required by the public welfare, including public health and safety. In the process of developing the reservoir, the District acquired title to 42 square miles of land, including all land beneath the reservoir's surface and a varying-width belt of upland around the entire 125 miles of shoreline to a "take line" elevation of 778.0 feet above MSL.

While the reservoir is operated for specific purposes (flood control and stream flow regulation) these operations are not pre-emptive of a broad spectrum of recreational uses, both

public and private. Traditional recreational uses of the reservoir have included fishing, boating and swimming.

Regulation of the reservoir's water level and storage/release regime is the singular domain of the District. Reservoir elevation and downstream release flow is controlled by release valves in the dam. Discharge over the spillway has only occurred once in the reservoir's operational history, May 1-10, 1983. Extreme elevations for the period of record are; maximum elevation 773.29 feet on May 4, 1983 and minimum elevation 729.55 feet on March 30, 1940.

#### B. Fishery Resources of Great Sacandaga Lake

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Great Sacandaga Lake is one of only six waters in interior New York State larger than 25,000 acres. It supports a warmwater/coolwater gamefish association dominated by smallmouth bass, walleye and northern pike. The North American record northern pike (46 lbs. 2 oz.) was taken from the reservoir in 1940.

A variety of fishery monitoring and management efforts have been undertaken by

Department fisheries biologists since the reservoir was completed. While abundance of desirable gamefish and panfish species has never been a problem, the reservoir's fundamental fertility has declined from the peak fertility levels experienced during the 1940s and 50s. The growth rates of the most sought after gamefish species (bass, walleye and northern pike) are slow. This is especially the case for the walleye. Walleye fry were annually stocked in the reservoir by the

Department through 1973 in an effort to bolster that species population level. The stocking policy was terminated because reproductive success was not a limiting factor.

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In 1979, a variety of grass seed was planted on several mudflats during reservoir drawdown in an effort to add nutrients and increase fertility when the reservoir reflooded the seeded areas. Consideration was also given to fertilizing the grassed areas, but was never implemented. Results of the seeding program were poor due to poor seed germination and growth resulting from low nutrient levels in the mudflat soils. Repeated efforts to establish a smelt population through transfer of fertilized smelt eggs and adults by Department fishery biologists were unsuccessful and the effort was abandoned in 1980. Continuing efforts to establish smelt have been carried forward by the Great Sacandaga Lake Fisheries Federation under permit from the Department. Trap and transfer of mature adult smelt under this program to date has failed to establish a population.

The Department has monitored angler success periodically and results indicate that gamefish stocks are abundant and not overexploited. Catch rates remain high although harvest, especially for walleye, remains low due to limited numbers of legal-size fish. This situation is expected to prevail into the future unless/until lake level fluctuations can be ameliorated. A complete list of the fish species that have been identified in Great Sacandaga Lake from the biological survey records of the Department is presented in DEIS/UMP Appendix F.

#### III. ISSUES AND CONSTRAINTS

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#### A. Recreational Use and Demand

A wide variety of recreational uses are made of the reservoir, including fishing, waterfowl hunting, trapping, pleasure boating, sailing, waterskiing and swimming. Peak use occurs during the summer from Memorial Day through Labor Day. In the winter, ice-fishing and snowmobiling are popular recreational activities. Recreationalists on the reservoir come from private camps and homes around the reservoir itself (the majority of which are for seasonal use), as well as the substantial campground populations. Local villages and towns, and the more distant cities of Gloversville-Johnstown (12 miles away), Amsterdam (12 miles), Albany-Schenectady-Troy (35 miles), Saratoga (20 miles) and Glens Falls (32 miles), supply additional recreational users.

There are three public boat launches on Great Sacandaga Lake operated by the Department, through which the general public may gain access. The capacity of these facilities is limited, ultimately, by the upland parking space available for car-trailer units. The capacities of these sites are as follows: Northampton Beach Campground - 100 units, Northville boat launch - 60 units, and Saratoga County boat launch - 44 units.

In addition to these Department facilities, there are 29 commercial establishments that afford some measure of "public" access to the reservoir, through seasonal rental of marina slips and/or providing day-use boat launching facilities. A breakdown of the capacity of these facilities follows:

- Private, commercial marinas 11 permits, affording accommodations for 910 boats collectively.
- Private, commercial campgrounds 18 permits, affording accommodations for 316 boats collecitively.

Among these 29 facilities, 14 have boat-launching ramps for use by facility patrons. One of these ramps is available for general public day-use boat-launching for a \$5.00 fee (Edinburgh Marina). The remaining ramps are only for use of patrons of the facilities themselves, and not the general public.

Over the years the Department has received a steady flow of communications from recreationalists complaining about the inadequacy of boat access facilities to the reservoir as a whole and to the main "southern basin" in particular. The Town of Broadalbin initially approached the Department over 13 years ago requesting the development of a boat launch in the Town, on the property involved in the present proposal. As discussions concerning the prospects of a project went on at the local level, support for the project grew substantially to include Senator Hugh Farley, Assemblyman Glenn Harris, the Fulton County Planning Department, the Fulton County Chamber of Commerce, the Fulton County Federation of Sportsmen's Clubs, Great Sacandaga Lake Association, Great Sacandaga Lake Fisheries Federation and the Hudson River-Black River Regulating District. Opposition to the project has been voiced by a number of residents whose property fronts on the bay in which the site will be developed. The Department has worked, and will continue to work with these individuals to resolve their concerns wherever

practicable.

The "Final Programmatic Impact Statement on Public Use Development Activities of the DEC" projected a large increase in fishing demand between 1975 and 1995, and identified the need for an increase in public access to fishery resources, statewide. The growth projected in this study is actually taking place, as reflected in the following fishing license sales statistics:

N.Y. Fishing License Sales: 1978/79 vs. 1985/86 (Source, Hollister 1987)

	<u>1978/79</u>	<u>1985/86</u>	Change %
Resident	814,826	933,708	+ 15
Non-resident	68,779	201,029	+192
Total	883,605	1,134,737	+ 28

Similarly, an increase in boating demand was projected by the NYS Office of Parks,

Recreation and Historic Preservation in its 1983 "New York Statewide Comprehensive

Recreation Plan". The plan forecasts a growth in boating participation of 35%, and in boating

demand of 30%, for the Adirondack Park region between 1980 and 2000. Steady growth in boat

registrations lends support to this forecast, as illustrated by the following boat registration

statistics:

N.Y. Boat Registrations: 1977 vs. 1986 (Source, Sea Grant - 1/88)

Number of boats registered	<u>1977</u>	<u>1986</u>	Change %
	335,288	358,400	+ 7

#### B. Carrying Capacities

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Great Sacandaga Lake is a large and very scenic expanse of water offering excellent water-based recreational opportunities. From most of its surface sweeping vistas of the Adirondack Mountains greet the eye from the north, east and west. The shorefront is primarily forested and dotted with private camps and boat docks. During fall drawdowns, large expanses of littoral zone are dewatered and become visible. It is against this general backdrop that the Department assessed the potential impacts of the Broadalbin boat launch.

The new boat launch site will result in an increased potential for boating use. That increase, however, will be so small when spread out over the reservoir's surface as to be virtually imperceptible. The 70 car and trailer parking capacity limits the number of "new" boats having access to the reservoir to 70 units or one unit for each 381 acres of water surface. The new site would add 25% to the current total public boating capacity afforded by the Department's other three boat launches. (279 currently, 349 with the addition of the new site). With all public facilities occupied to capacity, the maximum boat density on the reservoirs' surface attributable to these facilities amounts to 1 boat for each 76 acres of the reservoir's surface.

In 1988, the boating contribution from private commercial facilities, operating under District commercial permits, totaled 1,226 units. The boating contribution from special permits by the District totaled an additional 442 units. The remaining, and single largest source of boating activity on the reservoir comes from the private sector - 4,224 private party permits were issued by the District in 1988. Each non-commercial permit issued authorizes the use of "not more than two boats." [NYCRR 606.33]. The maximum boating potential represented by the 4,224 non-commercial permits is therefore 8,448 boats. A reasonable estimate of the actual numbers of

private permittee boats is one boat for each permit, or 4,224 boats. (Mike Herdman, HR-BR Reg. Dist. - personal communication).

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Utilizing maximum boating potentials from the three categories of sources; public facilities (279), private commercial and special permittees (1,668) and private individual permittees (8,448), the addition of 70 boats to the existing maximum potential represents an increase of 0.7% (0.0067). Utilizing reasonable estimates of actual numbers of boats from the three categories of sources; public facilities (204), private commercial and special permittees (1,668) and private individual permittees (4,224), the addition of 70 boats to the existing (estimated) actual numbers of boats still represents an increase of only 1.15% (0.0115).

The foregoing boating statistics compare very favorably with public boating capacities existing on other large waters in New York State and with other States and National studies and statistics of waters carrying capacities for boating. The public boating capacity installed on a subsample of the Departments's facilities on large waters (over 1000 acres) around the State ranges from 37 to 170 acres of water per boat, as illustrated in the following:

		Public	Acres of	
	Size	Boating	Water	
Water	(Acres)	Capacity	per boat	
Conesus Lake	3,168	85	37	
Canandaigua Lake	10,536	190	56	
Indian Lake	4,348	75	58	

		Public	Acres of	
	Size	Boating	Water	
Water	(Acres)	Capacity	per boat	
Long Lake	4,073	60	68	
Upper Saranac Lake	5,036	. 68	74	
Schroon Lake	4,112	50	82	
Chautaqua Lake	13,375	160	84	
Raquette Lake	5,253	50	105	
Great Sacandaga Lake	26,656	204	131	
Cayuga Lake	42,648	250	170	

Various State and National studies of carrying capacity relate boat capacity to the likely density of boats in instantaneous use on a water's surface. While these methods are highly subjective and require several assumptions concerning proportional boat usage from various sources, a broad range of such studies suggest that instantaneous carrying capacity for most waters falls within the range of one boat in use on the water's surface for each 7½ to 20 acres. Applying this methodology to Gt. Sacandaga Lake, produces the following:

- Contribution from current public (DEC) facilities 60 (Northville) + 44 (Saratoga) + 100
   (Northampton) = 204 boats
- 2. Contribution from private commercial and special permit facilities:

 $1,668 \text{ boats } \times .15^1 = 250 \text{ boats}$ 

3. Contribution from private residents: 4,224 boats x  $.15^1 = 634$  boats

<sup>&</sup>lt;sup>1</sup>This number derives from aerial overflights which reveal that on average only 15% of boats present will be in use at peak hours of the day.

4. Total contribution to instantaneous carrying capacity:

$$204 + 250 + 634 = 1088$$
 boats

5. Instantaneous boat-use potential

26,656 acres/1088 boats = 24.5 acres per boat

On the basis of this analysis it is clear that the potential boat density on Gt. Sacandaga Lake falls well within the range of acceptable levels. From the somewhat subjective "physical" and "social" carrying capacity perspectives, it is apparent that the construction of a new boat-launch on Great Sacandaga Lake of 70 unit capacity will not stress the physical or social structure of the complex of water-based recreational uses now in existence.

Effects of construction of physical works of the site and the resulting addition of 70 "new" units of boating activity to the existing matrix on biological carrying capacity may be both direct (harvest of fish, waterfowl, etc.) and indirect (disturbance of fish spawning areas, displacement of wildlife, etc.).

Periodic fisheries studies of Great Sacandaga Lake by Department fisheries biologists have never revealed over-exploitation of fish stocks to be a problem. Neither have any indirect effects of boating or boating facilities on the fishery resource been noted. The projected increase in boating activity of 1.03% attributable to the proposed new facility at Broadalbin is not expected to threaten either direct, or indirect, thresholds of impact on fishery resources of the reservoir. There should be no perceptible impacts to fishery resources as a result of the new facility.

The boat launch will generate additional recreational use of the waterfowl resource during fall hunting seasons by improving the access to the resource. Although some waterfowl populations are declining in the Atlantic Flyway, the increase in hunting activity is not anticipated to be significant. Likewise, the impact on declining waterfowl species will not be significant.

#### C. Adjacent Lands

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The entire 125 miles of shorefront along Great Sacandaga Lake is State owned. Rules and Regulations governing the use of this property under the statutory authority of Environmental Conservation Law 15-2109 were promulgated in NYCRR Title 6, part 606, attached as Appendix G. Being within the Adirondack Park, the lands have been classified by APA in the private lands category. The majority of the shorefront lands are classified as "Moderate Intensity Use".

Remaining shorefront lands are classified "Hamlet", "Low Intensity Use", "Rural Use", "Resource Management" or are pending classification. Three parcels (Northampton Campground, Northville boat launch, and Saratoga boat launch) are all classified "Intensive Use" under the State lands category, as will be the lands proposed for this project. Islands within the reservoir are all classified "Wild Forest" under the State lands category. The predominant land use classification of "Moderate Intensity Use" allows for one principal building for every 1.3 acres. The Department believes that a boat launch is compatible with this land use classification.

The District administers a system of annually renewable permits for various uses of parcels of shorefront lands to private parties, commercial enterprises, and other non-profit clubs and associations, churches, schools, local governments, etc. In 1988, 4407 permits were in existence. Sixty-six of these were commercial permits, 117 were special permits and the remainder were

private party permits. A breakdown of the permits issued was requested of the District and is attached to the DEIS/UMP as Appendix H.

Recent measurements indicate that, by road from the proposed entrance to the boat launch site, the nearest residences are: (1) to the north along Lakeview Road - 600 feet, (2) to the south along Lakeview Road - 370 feet and, (3) immediately across Lakeview Road - 200 feet. Adjacent property permit parcels are illustrated in DEIS/UMP Appendix M. The launch ramp and dock may be visible from 8-10 private residences across the bay to the west, a distance of 1,000 feet. The three public boat launch facilities on Great Sacandaga Lake operated by the Department are; the Northampton Beach Campground - 6 miles distant, the Northville boat launch - 9 miles distant, and the Saratoga boat launch - 13 miles distant, by water, from the proposed new facility at Broadalbin. The proposed site is located within a protected cove proximate to the large expanse of the reservoir's main "southern basin", while the three existing boat launches are all located in the narrow, protected northward and northeastward-projecting "arms" of the reservoir, as illustrated in DEIS/UMP Appendix N.

#### D. General Operation

The Department has issued the Town of Broadalbin an annually renewable use and occupancy permit enabling the town to independently control and operate the former Town beach area (Appendix I).

As an adjunct to construction of the Broadalbin Boat Launch, DEC will contract for certain improvements to the Broadalbin beach to include improvements to the entry/exit, installation of an entry gate (to be controlled by the Town), formalization of parking at 65 single

car capacity, and installation of a handicapped accessible Port-a-John slab and enclosure. Port-a-John unit installation and servicing will be a responsibility of the Town.

The Town of Broadalbin will establish the season of operation of the beach, control opening and closing of the entry gate to it, set the daily hours of beach operation, and control use levels in a manner not to exceed the installed parking capacity for the site, i.e., 65 single cars. The Department's annual review of the "Joint Use and Occupancy Permit" for the beach will be contingent on the above.

The Town of Broadalbin will be solely responsible for compliance with all the regulations pertaining to the operation of public beaches.

The boat launch facilities will be available for use by the general public 24 hours/day, 7 days/week - weather permitting. The Town may, at its discretion, assign an on-site superintendent to oversee all activities on the site.

Recurring annual maintenance for the boat launch will be performed by DEC and will include general spring cleanup, mowing grass areas, trash removal, seasonal installation and removal of the boarding dock at the launch ramp, contracting for port-o-let service and other necessary minor maintenance.

#### IV. OBJECTIVES AND 5 - YEAR PLAN

#### A. Unit Objectives

BANK M

The main management objectives for the State land unit involved in the boat launch site are the following:

- 1. To provide improved recreational opportunity on Great Sacandaga Lake by making it easier and safer to launch and retrieve boats in the main "southern basin" of the reservoir where no such opportunity currently exists.
- 2. To improve the quality of services available to Recreationalists on Great Sacandaga Lake by providing formalized, well supervised and maintained public boating facilities.
- To protect, enhance and encourage the use and enjoyment of the natural resources of Great Sacandaga Lake.
- 4. To develop the site in such a way as to minimize negative environmental impacts and in a manner compatible with the surrounding area.
- 5. To increase public awareness and appreciation of fish and wildlife resources and foster increased public interest in, and concern for, habitat protection.

B. Implementation Schedule

The Broadalbin boat launch facility will incorporate the following elements in year 1:

Construction Element(s)

1. A new site entry road, relocated approximately 240 feet eastward along Lakeview Road, from the present point of entry. The entry road will be widened to 25 feet to allow two-way vehicle passage and will be surfaced with compacted gravel.

\$ 2,500.

- 2. A compacted gravel car and trailer parking area to accommodate 70 units. \$ 55,000.
- 3. A two-lane, concrete boat launching ramp of 14.28% (1 on 7) pitch,
  105 feet long and 40 feet wide, fitted with a centerline boarding dock.
  Associated with the ramp will be a 120 foot long, macadam paved
  turnaround apron necessary to facilitate vehicle/trailer turnaround and
  maneuvering required to enter, or exit, the launch ramp.

\$105,000.

4. A gated interior access road between the boat launch parking area and the Town of Broadalbin's swimming beach parking area, atop the existing interior roadway, but widened from 14 to 18 feet, and of compacted gravel surface.

\$ 10,000.

5. Minor grading and gravel surfacing of the existing beach parking area to establish organized, formal parking for 65 single-car units.

\$ 30,000.

6. Other amenities to include two sanitary facilities (port-o-let slab and enclosures), drainage improvements, revegetation of disturbed areas and landscaping, signage, etc.

\$ 65,000.

7. Installation of navigation aids to delineate a channel for entering and exiting the bay and installation of additional navigational aids to warn boaters away from the town operated swimming beach.

\$ 8,000.

8. All site clearing and grubbing, earthwork, dredging and contract supervision and contingencies.

\$ 49,500.

Total

\$325,000.

#### C. Dredging and Fill

The total land area on which the project will be built encompasses 6.5 acres. Of this area, the completed project will occupy 3.5 acres. Maximum use of existing cleared areas will be made; however, the removal of 1.7 acres of the existing 3.0 acres of trees on the property will be required to facilitate construction. Some re-shaping of the upland/water interface where the ramp is to be installed will be necessary in order to achieve the proper 14.28% slope for the ramp. Dredging of 2200 cubic yards of material from the reservoir bottom off the ramp-end will be necessary to achieve adequate depths for navigation at the functional low-level elevation for the ramp - 757.5 feet. All dredged material will be utilized on-site as fill. Limits of construction will come no closer than 25 feet of property boundaries at any point, and over most of the project area no closer than 100 feet. The only intrusion on the shoreline will be for the ramp. Ramp installation will necessitate the clearing of all shoreline vegetation over a distance of

approximately 150 feet. This represents 9% of the 1650 feet of shorefront encompassed by the property. Other than this intrusion, shoreline vegetation will remain undisturbed.

The boat launch will not encroach upon any of APA designated wetland. A letter of nonjurisdiction from APA is attached as Appendix II.

A complete layout plan of the project is provided in Section V, maps and charts, as Exhibit 1.

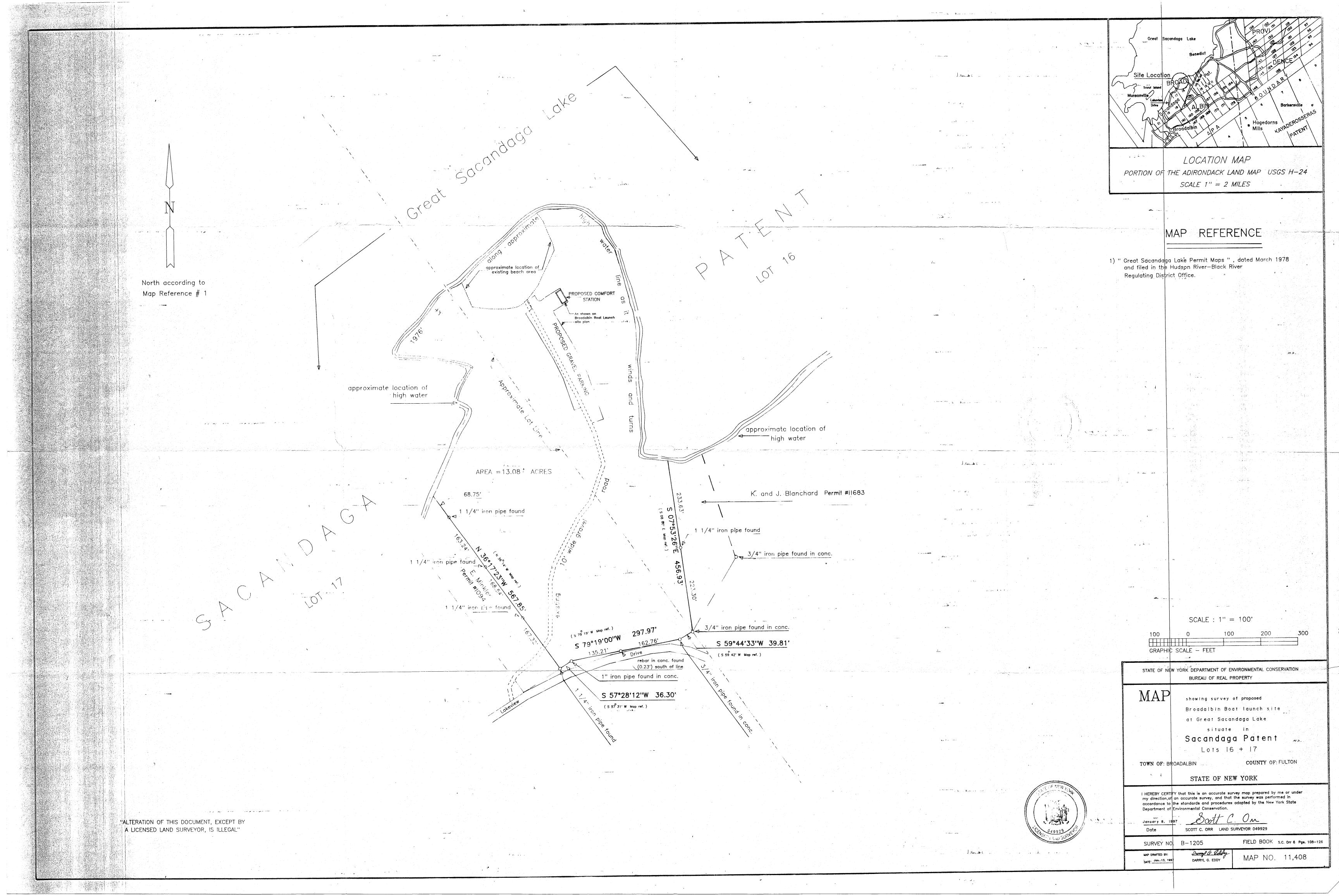
### V. MAPS AND CHARTS

Exhibit 1 Facility Map

Exhibit 2 Location Map

# Exhibit 1- Facility maps

See back pocket



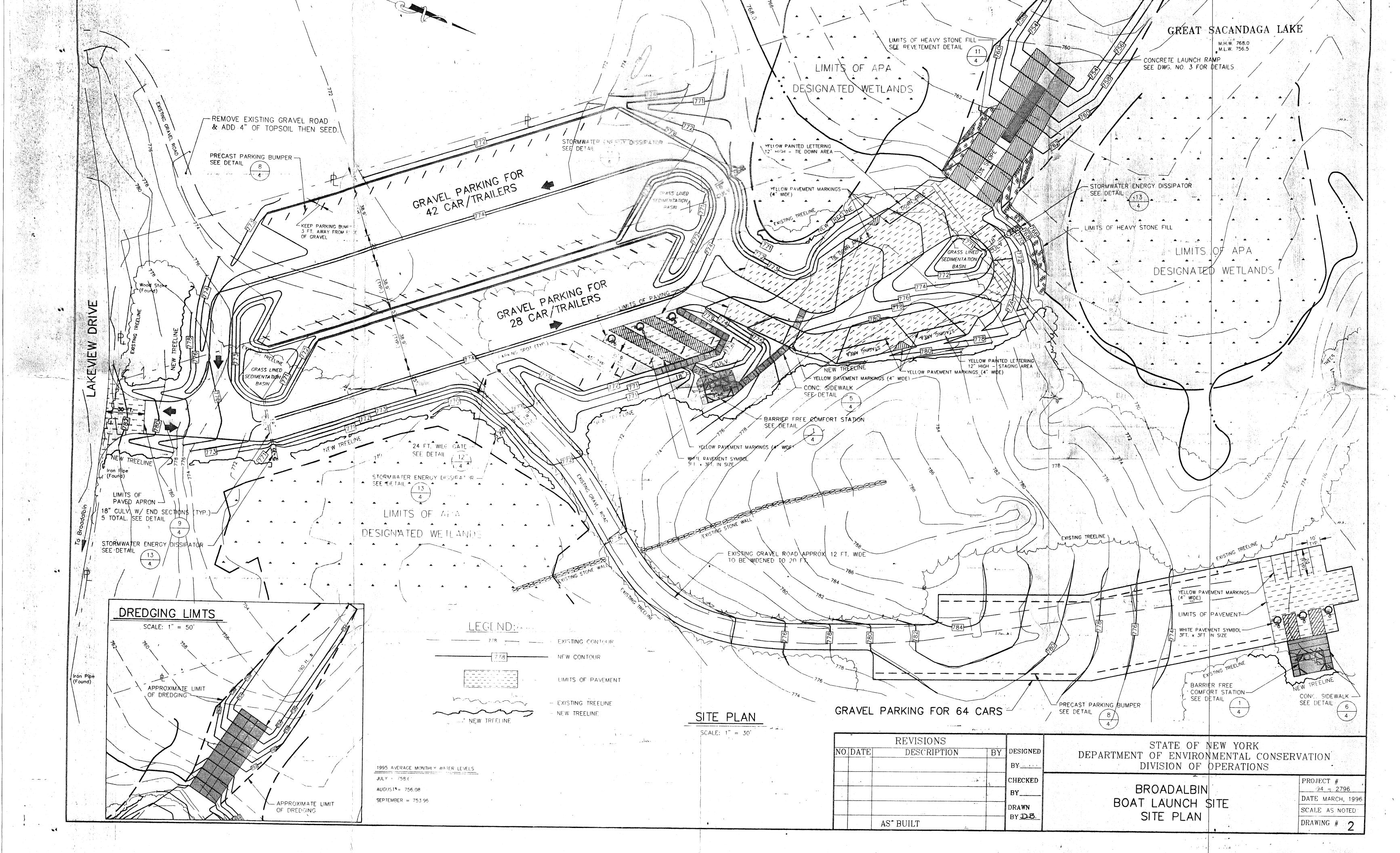
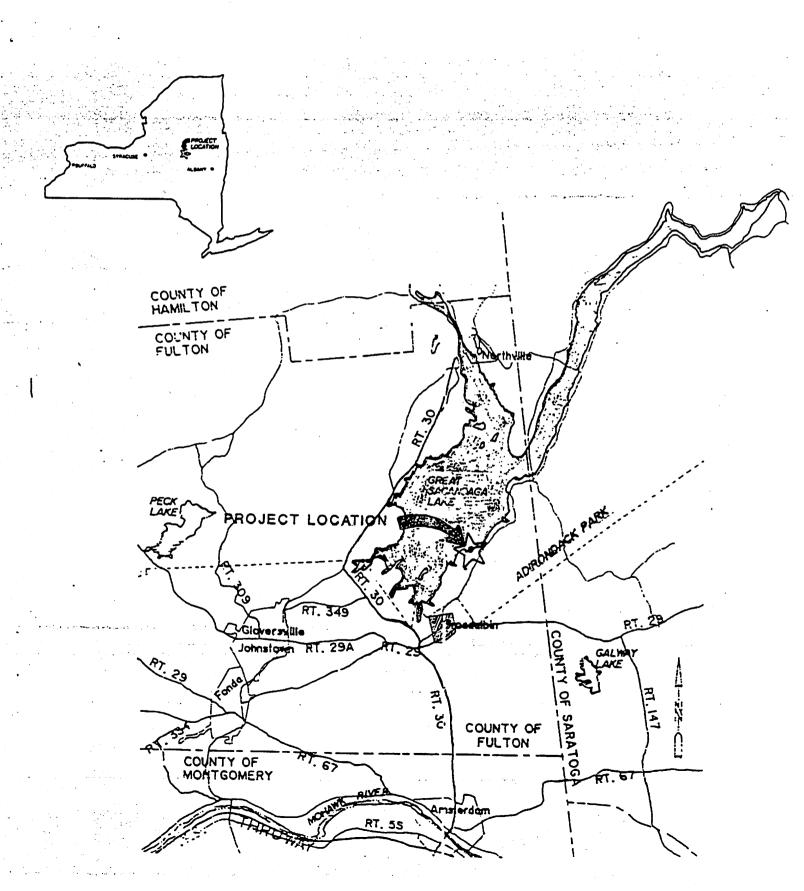


EXHIBIT 2

## PROJECT LOCATION

Broadalbin Boat Launching Site - Town of Broadalbin - Fulton County, New York



#### VI. PUBLIC REVIEW

On Friday, October 13, 1989, at 7:30 p.m., the Department held a public hearing at the Broadalbin-Perth High School to receive public comments on the Department's proposal to develop a boat launch facility on Department owned lands in the Town of Broadalbin. This followed the earlier release of Draft Environmental Input Statement/Unit Management Plan on September 20, 1989. The hearing was held pursuant to regulations of the State Environmental Quality Review Act, and the hearing record remained open until November 13, 1989 for the receipt of additional written comments.

During the course of the hearing and subsequent comment period, support for the proposal was expressed by the Empire State Marine Trades Association, the Great Sacandaga Chamber of Commerce, the Fulton County Planning Department, the Fulton County Regional Chamber of Commerce, the 1,800 member Saratoga Council of Fish and Game Clubs, as well as numerous local businessmen and residents of the Town of Broadalbin. However, other local residents expressed concern over the proposed facility and raised a variety of issues. Additionally, the Adirondack Park Agency raised a series of more complex issues which were considered and addressed separately from those raised by the general public.

In order to facilitate response to the issues raised at the public hearing, the Department compiled all issues raised into a comprehensive list and incorporated them into a final environmental impact statement/unit management plan (FEIS/UMP) dated December 16, 1991.

Following release of FEIS/UMP for the boat launching facility, public hearings were scheduled and held by the Adirondack Park Agency, as follows:

April 7, 1992:

Fulton County Office Bldg., Johnstown, NY

April 8, 1992:

Lake George Town Center, Lake George, NY

These hearings were scheduled and held in compliance with the provisions of the State Land Master Plan. In accordance with the requirements of the SLMP, the Department of Environmental Conservation requested that the Agency reclassify the 6.5 acre parcel of land on which the proposed project would be built from its present Moderate Intensity Use classification to Intensive Use.

The hearings were well attended and expressions of both support and opposition to the proposed project were voiced. While no new substantive issues were voiced at these hearings, comments regarding the depth, or detail, of the Department's treatment of a number of longstanding concerns, were.

Subsequently the Agency requested the Department prepare additional information addressing the following issues:

- 1. Boating densities (with and without the project) at varying reservoir elevations throughout the functional operating range of the Broadalbin ramp as designed.
- Traffic flow to and from the site, and mitigation of anticipated traffic effects on Lakeview Road.
- 3. Effects of wind directions on the usability of the site.

Appendix 1 Use and Occupancy Permit

Appendix 2 Adirondack Park Agency Letter of Nonjurisdiction

Appendix 3 Responsiveness Summary

New York State Department of Environmental Conservation Natural Resources P.O. Box 296, Route 86 Ray Brook, NY 12977-0296 Office: (518) 897-1276 - Fax: (518) 897-1370



Michael D. Zagatz

#### **USE AND OCCUPANCY AGREEMENT**

#### TOWN OF BROADALBIN

Appendix 1

Extension of Use and Occupancy Permit dated I June 1992 between Thomas C. Jorling as Commissioner of Environmental Conservation and the TOWN OF BROADALBIN.

WHEREAS, the parties previously entered in a Use and Occupancy Permit dated June 1, 1992 for the period ending December 31, 1992 and,

WHEREAS, the parties subsequently entered agreements to continue that Use and Occupancy Permit through December 31, 1993 and, December 31, 1994, and December 31, 1995, and

WHEREAS, the parties desire to continue that Use and Occupancy Permit through December 31, 1996;

NOW, THEREFORE the parties agree that the Use and Occupancy Permit dated June 1, 1992 is hereby extended and in full force and effect until December 31, 1995 and, that all obligations of each party set forth in such agreement continue in full force and effect through December 31, 1996.

THE TOWN OF BROADALBIN

Bv:

Its: Supervisor

THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION of the State of New York

ou Kredeters

Ву:

Regional Director - Region 5

COUNTY OF Level
On this do day of Qune, 1996 before me personally came    Stratt   Ducton   Who being duly swom did depose and said he
STATE OF NEW YORK
COUNTY OF FULTON

STATE OF NEW YORK

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NOTARY PUBLIC STATE OF NEW YORK

ELAINE M. GIAQUINTO
Notary Public for New York
Fution County Reg. #01G15020638
Comm expires Nov. 22, 19 9 7.

A	CORD. CERTIF	ICATE OF INSU	RANCE		6/13/96						
Ŕ	obert J. Hoy Agen	cy, Inc.	ONLY AND	THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.							
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	own of Broadalbin										
	29 Union Mills Rd roadalbin, NY 120										
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<b>6</b>	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (DEMOCRY)	POLICY EXPIRATION DATE (MINIODAY)							
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R	O Box 296, Rt 86 ay Brook, New Yorl corp 25-5 (3/85)	k 12977	AUTHORIZED R	AUTHORIZED REPRESENTATIVE							

EXECUTIVE DEPARTMENT

#### ADIRONDACK PARK AGENCY

P.O. Box 99, Roue 86

RAY BROOK, NEW YORK 12977

(518) 891-4050

FAX: (518) 891-3938

February 23, 1996

APPENDIX 2

Mr. Dale Huyck
Regional Supervisor
of Natural Resources
NYS DEC - Region 5
Route 86
Ray Brook, NY 12977

Re: Project 92-73; J93-724
Fulton: Broadalbin: Great Sacandaga Lake

Dear Dale:

On March 11, 1992, the Department submitted an application for a permit for a proposed launch pursuant to the New York State Freshwater Wetlands Act. The boat launch will be constructed on lands owned by the State of New York in the Town of Broadalbin, Fulton County. On December 14, 1992, Agency staff member Gary Duprey received a memorandum and revised site plan from Terry E. Healey, Regional Supervisor of Natural Resources, for the abovereferenced project. Mr. Healey also submitted a copy of DEC contract specifications for the use of soil erosion control and pollution control devices and stated that DEC will require the designated contractor to implement the controls during construction. The plan for the project is entitled State of New York, Department of Environmental Conservation, Division of Operations - Broadalbin Boat Launch Site - Site Plan, Project No. 79-2796, and is dated September 1992. The plan received on December 14, 1992 constitutes an amendment to the plans. Subsequent to the receipt of the revised plans on December 14, 1992, the Agency received a request from you to suspend any further action on this project until otherwise notified. January 31, 1996, Agency staff member Charles W. Scrafford received a letter from Mike Gann, Sr. Aquatic Biologist, requesting that the Agency reactivate the project.

The revised plan shows the location of the proposed boat launch ramp, two parking areas, two comfort stations, an access road from Lakeview Drive, limits of grading and the location of areas designated as wetlands<sup>1</sup>.

¹Wetlands are lands annually subject to periodic or continual inundation by water and commonly referred tages bogs, swamps or marshes, or lands which contain sufficiently waterlogged soils to support and give a competitive advantage to aquatic or semi-aquatic vegetation described in Part 578 of Agency regulations. Please note that our wetland determinations

- 61 6 16

Based upon a review of the revised plan and the additional information submitted on December 14, 1992, I can state that the amended project will not result in a disturbance to the adjacent wetland areas and will not require a permit from the Agency pursuant to the New York State Freshwater Wetlands Act and 9 NYCRR Part 578 provided adequate measures are taken during construction to protect the wetland areas from siltation and erosion. In order to show that the construction will not impact the adjacent wetland areas, the plans must be revised to show the location of and a construction drawing for a stone-lined apron, sediment basin and erosion control barriers to be constructed as follows:

- 1. Construction of a stone-lined apron to act as a stormwater energy dissipator at the outlet of the culverts which drain to the wetlands located in the southeast corner and the northeast corner of the project site;
- Construction of a sediment basin at the inlet of the culverts which are located in the southeast and north central portion of the proposed 28 car/trailer parking area at such time as the parking area is paved; and
- Construction of an erosion/sediment control barrier; constructed of geotextile filter fabric such as Mirafi 100X, Geofab, Envirofence or the equivalent, along the perimeters of the areas to be disturbed that are located within 25 feet of a wetland area as shown on the above-referenced plans. For all work to be undertaken below the statutory mean high water mark of the Great Sacandaga Lake (771 feet m.s.l.), use a turbidity curtain in place of the geotextile filter fabric unless the work is done during low water.

At least 30 days prior to commencing construction, a copy of the final construction plans for the project showing the above required revisions must be submitted to the Agency for review and approval. The plans must show the location of and a construction drawing for the above described stone-lined aprons and the erosion control barriers.

Please be advised that an Order pursuant to \$814 of the Adirondack Park Agency Act and 9 NYCRR 4.150 will be required if the project is to be undertaken prior to the approval of a Unit Management Plan for the site by the Agency.

are based upon aerial photography, which may not reveal wetlands less than one acre in size adjacent to and having surface interchange of water with lakes, ponds, rivers or streams. Permits are required for activities in, or adversely affecting such wetlands no matter what the size. If you believe wetlands are present on any shoreline on the property or in the water, please contact the Agency to arrange for a site inspection by a staff member.

#### Conditions

The restrictions noted immediately below apply to any new land use or development on the property.

- 1. The following shoreline vegetative cutting restrictions also apply to the shoreline of any navigable river or stream and any lake or pond:
  - a. Within 35 feet of the mean high-water mark not more than 30 percent of the <u>trees</u> in excess of six inches diameter at breast height (4 1/2 feet above ground) existing at any time may be cut over any ten-year period.
  - b. Within six feet of the mean high-water mark, no existing vegetation of any kind may be removed, except that up to a maximum of 30 percent of the shorefront may be clear of vegetation on any individual lot. This requirement applies in addition to (a) above.
  - Diseased vegetation, rotten or damaged trees, or other vegetation that presents safety or health hazards may be removed.

All distances specified in the shoreline restrictions are measured horizontally. Shoreline lot widths are measured along the shoreline as it winds and turns at mean highwater. Building setback restrictions are measured along the shortest line between any point of the structure and any point on the mean high-water mark. Porches, decks and other structures physically attached to single family dwellings or to other structures subject to the building setback restrictions are part of the structure for purposes of applying the building setback restriction.

Finally, for a structure to qualify as a "boathouse," it must have direct access to a navigable body of water, be used for the storage of boats and associated equipment and must not contain bathroom or kitchen facilities or be designed or used for lodging or residency. A dock must not be wider than eight feet.

2. The project must be undertaken in accord with Agency regulations implementing the Freshwater Wetlands Act, which prohibits subdividing, polluting, filling, dredging and draining or construction in a wetland unless a permit is issued. From your description of the project (and the map supplied by you), it appears that your project will not involve or affect the wetland. Enclosed for your information is a flyer which briefly outlines the types of activities which require wetland permits.

Any new on-site sewage disposal system shall not be located closer than 100 feet from any body of water, including intermittent or seasonal stream or wetland. Sewage disposal system setbacks are measured horizontally along the shortest line between any point of the seepage pit, drainage field or other leaching facility and the mean high-water mark (the average annual high-water level, in essence, the high water mark).

Any new on-site sewage disposal system should comply with the standards promulgated by the New York State Department of Health:

- a. shall not be located on slope in excess of 15%;
- b. shall not be closer than 100 feet from the source of any water supply system.

Finally, your proposal may require permits or approvals from other governmental entities. It is therefore recommended that you check with the authorities of the Town of Broadalbin and with other State agencies, particularly the Department and Health, to obtain all necessary approvals prior to commencing your project.

If you have any questions, please do not hesitate to contact me or Gary J. Duprey.

William J. Curran

Director of Regulatory Programs

WJC:GJD:BAR:tal

CC: Stuart Buchanan
Michael C. Gann, DEC
Daniel T. Fitts
Charles W. Scrafford
Gary J. Duprey
Colleen C. Parker

#### Deep Veter Mersh

Areas of open water filled with plants that float freely or are rooted are called deep water marshes. The leaves of the rooted plants are either submerged or floating.

Such plants as pondweeds, duckweeds, and wild catery are important food for waterfoul. The shallow waters of a deep water merah and the protecting vegetation make them important areas for fish speuning and nurseries.

#### Peciduous Swapp

These are wetlands where the covertype contains mostly live deciduous trees, twenty fact or more in height. The trees grow on humocks or in seasonally or permanently flooded areas. Swamp maples and willows are evident in lowland deciduous swamps.

These swamps are spotted with dead trees which are used by flying squirrels and chickedess. The swamps provide a habitat for meeting waterfoot and a greet variety of birds and wildlife. Their soils are usually vary fertile, promoting rapid plant growth and a wide diversity of plants and animals.

Secouse these swamps filter great quantities of water, they play a very important role in purifying water and maintaining high water quality.

#### **Vet Meadoire**

Net meedous are wetlands where most of the cover is composed of sedges, rushes, and coerse grasses, most of which tend to grow in clumps. Groundwater is at or near the surface for such of the year, including significant parts of the growing season, creating saturated soils. These meadows are often found in the flood plains of takes and rivers and in the areas once flooded by beaver dams or other impoundments. Their soils are mostly mineral in structure.

#### 101

A bog is a closed wetland from which drainage is either extremely alow or absent and where the vegetation grows on a saturated met of peat. The met sometimes covers all of the surface of a shallow pond; sometimes it covers only a portion, leaving open meter. The peat is formed by species of sphagnum moss which die, but do not decay because of the scidity and low oxygen levels of the bog. All processes in a bog, including nutrient recycling, are slowed down by the stagment, acid water. This is why bogs are so sensitive: it takes centuries to recover from disturbance.

#### Emergent Marsh

Emergent morshes are shellow metlands that are flooded with standing or runnin water much of the year. Their cover consists of such plants as cattails bulrushes, pickerel meed, loosestrifes, and arrowheeds. Emergent marshes have th most valuable covertype and one of the highest levels of productivity and habits diversity. Not only does the vegetation in these metlands provide meetin habitet, food, and cover for many materions and other middlife, but it adds larg quantities of nutrients to food chains.

These emrshes are attractive to muskrat, ducks and geese, herom, and agrees, min-

#### Shrub Sweet

A shrub swamp is a wetland where woody shrubs, less than twenty feet in height make up most of the covertype. Shrub swamps are often found in floodplains, i frost pockets and other depressions, on the edges of ponds, lakes and bogs, alon meandering streams, and in hitlaide drainages. These areas have two things I common: fresh water flowing through them and a high layer of productivity.

Alders, hollies and viburnums typify these swamps and have berries which are este by a wide variety of birds. The shrubs are the nesting habitet of such divers species as the rose-breested grosbesk and kingbirds, and game birds, includin woodcock, pheasant and grouse. It is also the habitet of beaver and otter, an waters adjacent to shrub swamps are essential to speaning northern pike.

#### Conferous tuesto

A coniferous examp is a wetland where most of the plant cover consists of thy  $\pm$  coniferous trees over twenty feet in height. The trees often grow on humbooks  $\pm$  0 deep organic deposits with pockets of water or sphagnum mosa between them,

Conferous sweeps are most important because they give off large quantities of the sear. In summer, this process helps keep surrounding solar temperatures low. This, combined with the cooling effects of the sweeps density shade, helps meintain tow mater temperatures critical to the survival of columnter fish in acress running through these sweeps.

The shelter offered by conferous summer creates clear wintering fields a limportant to the survival of deer and other animals and birds.

# REGULATION OF ACTIVITY IN OR NEAR WETLANDS

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The New York State Freshwater Wetlands Act requires that an Agency permit be obtained for the following whether or not they occur within the wetland:

- any form of pollution directly in, or which drains into, the wetland, including application of pesticides or the wetland, including application of pesticides or discharge of sewage effluent or other liquid waste into, or so as to drain into, the wetland;
- installation of any on-site sewage drainage field or seepage pit or any sewer outfall in, or within 100 feet of a wetland;
- any other activity which harms the wetland, including diversion of surface or subsurface drainage or natural water flows, or which substantially increases erosion of, or siltation or sedimentation into the wetland.

The Act also requires that permits be obtained for the following if they take place within the wetland itself:

- 1. subdivision (including conveying a lot which has all or part of a wetland on it);
- draining, dredging, filling, or depositing soil, stones, sand, gravel, mud, rubbish or fill of any kind, either directly or indirectly;
- erecting structures, building roads, driving pilings, or placing any other obstructions, whether or not they change the pattern of flow or elevation of the water;
- 4. clearcutting more than three acres.

The Agency will determine the exact location of wetland boundaries on your property if you wish. Please call 518-891-4050.

# **RESPONSIVENESS SUMMARY**

To Comments and Issues Raised at
Public Hearings Conducted by the Adirondack
Park Agency April 7 and April 8, 1992
Concerning the Department of Environmental Conservation's

# FINAL ENVIRONMENTAL IMPACT STATEMENT AND UNIT MANAGEMENT PLAN

for

Proposed Great Sacandaga Lake
Boat Launch Facility Development
in the
Town of Broadalbin, Fulton County



New York State Department of Environmental Conservation GEORGE PATAKI, Governor MICHAEL D. ZAGATA, Commissioner

## **Background**

Following release of the FEIS/UMP for the proposed boat launching facility on December 16, 1991 public hearings were scheduled and held by the Adirondack Park Agency, as follows:

April 7, 1992:

Fulton County Office Bldg., Johnstown, NY

April 8, 1992:

Lake George Town Center, Lake George, NY

These hearings were scheduled and held in compliance with the provisions of the State Land Master Plan. In accordance with the requirements of the SLMP, the Department of Environmental Conservation has requested that the Agency reclassify the 6.5 acre parcel of land on which the proposed project would be built from its present Moderate Intensity Use classification to Intensive Use.

The hearings were well attended and expressions of both support and opposition to the proposed project were voiced. While no new substantive issues were voiced at these hearings, comments regarding the depth, or detail, of the Department's treatment of a number of longstanding concerns, were.

Subsequently the Agency requested the Department prepare additional information addressing the following issues:

- 1. Boating densities (with and without the project) at varying reservoir elevations throughout the functional operating range of the Broadalbin ramp as designed.
- 2. Traffic flow to and from the site, and mitigation of anticipated traffic effects on Lakeview Road.
- 3. Effects of wind directions on the usability of the site.
- 4. Impacts to Sand Island.
- 5. An expanded discussion of "Alternatives" to the Broadalbin project, including especially the expansion/modernization potentials at the Department's existing boat launches on Great Sacandaga Lake.
- 6. The Department/Town relationship in regard to the use and operation of the Town of Broadalbin swimming beach.

This Supplement has been prepared in order to provide additional detailed information on these specific issues.

# **Boating Density**

The Department's initial efforts to describe existing boating activity on Great Sacandaga Lake centered on inquires of the Hudson River-Black River Regulating District. We obtained information from the District which enabled us to estimate both current, and future maximum numbers of boats having access to Great Sacandaga Lake [DEIS/UMP pp 13-20 and Appendix H]. From these data we were able to predict current and future maximum boating densities from published studies of these phenomena from other States and the Federal Government. We also calculated and assessed the impact of the proposed Broadalbin boat launch on the overall boating picture at Great Sacandaga Lake from these data.

These data, calculations, estimates and conclusions were the subject of substantial comment during the course of a public hearing held on the Draft on October 13, 1989 in the Town of Broadalbin. Consequently much of the content of the FEIS/UMP was more narrowly and intensely focused on addressing the boating use issues. In the interim period between the issuance of the DEIS/UMP (on September 20, 1989) and the issuance of the FEIS/UMP (on December 16, 1991), the Department undertook the following actions to further refine its discussion of the issue:

- All Department operated boat launching facilities on Great Sacandaga Lake were closely re-examined, in the field to verify their capacities. This reexamination revealed that the capacity given for the Northhampton Campground was grossly overrated [at 700 units] and that in fact its actual capacity was 100 units.
- During the Summer of 1990 the Department, in cooperation with OPRHP, conducted an extensive Statewide survey of the use of over 100 boat access facilities [including the Northhampton Campground on Great Sacandaga Lake] in order to obtain relevant and refined data pertinent to New York State on; site use and occupancy patterns, boating densities, usage frequencies, contributions of public facilities to whole-lake use patterns, and users' stated preferences and needs. The survey included aerial overflights of 21 waters, Statewide [Great Sacandaga Lake was <u>not</u> one of them] in order to obtain data on total numbers of boats present, origin, and proportions of use.

These additional data were summarized and reported in "1990 Statewide Survey of Boating Use at Public Waterway Access Sites in New York State", Major, et-al, February 1992. Armed with this new data the Department recalculated all the analyses presented in the DEIS on boating densities and impacts of the Broadalbin Boat Launch on Great Sacandaga Lake. The conclusion of this effort, [as reported in the FEIS, pp 2-9] was, "The

effect of this new information is to document substantially greater need for developing additional public access while demonstrating that boating densities both currently and with the development of the new site at Broadalbin are much <u>lower</u> than previously calculated in the DEIS/UMP" (Emphasis added).

Both concerned citizens and Adirondack Park Agency staff continued to express misgivings about the accuracy of DEC's calculations and their applicability to the situation at Great Sacandaga Reservoir specifically. Specific concerns have included:

- the fact that DEC had not conducted aerial overflights of Great Sacandaga

  Reservoir itself, but rather relied on data generated from overflights of other

  waters around the State, and applying that data to Great Sacandaga.
- the use of the entire reservoir surface area, at full pool elevation in making all boat density calculations, rather than subdividing the reservoir surface into distinct sub-areas and considering surface areas at other than full pool elevation.

In response to these criticisms, DEC conducted aerial overflights of Great Sacandaga Lake on three weekend days during the summer of 1992. Counts of boats docked or ashore, and boats in use were made separately for three distinct sub-areas; the main basin, NE arm and NW arm. Flights were made between the hours of 11 AM and 4 PM to

coincide with the known peak use period of the day. Analysis and results of these overflights are presented in "Boat Counts and Boating Densities on Seven Adirondack Lakes during mid-day summer weekends, 1992", Major, 1992. [Exhibit #1].

Not unexpectedly, we found boating densities were highest in the Northwest Arm of Great Sacandaga Lake (17-22 acres/boat). This finding is consistent with its relatively small area (3838 acres) and well developed access facilities, including both the Northville Boat Launch and the Northhampton Beach Campground. In contrast, boating densities were lowest in the Main Basin of Great Sacandaga Lake (30-36 acres/boat). No public access facilities currently exist in this largest (14,607 acre) portion of the Lake.

As a part of evaluating the effect of water level fluctuations on boating density, we obtained a table from the Hudson River-Black River Regulating District relating water elevation to surface area [Exhibit #2]. We then calculated boating densities, from known numbers of boats present at Great Sacandaga Lake, for two water levels; elevation 768 feet (29,940 acres) and elevation 757 feet (22,800 acres) - the low operational level for the proposed Broadalbin boat launching ramp. We did not consider the effect of reservoir drawdown on the ability of private boats to be placed in service, although the effect would be to reduce those numbers. Rather, we assumed that all boats present and able to use the water surface at elevation 768, could also use the water surface at elevation 757. Coupling this assumption, with the use of prime weekend boat counts for making density calculations, represents a "worst-worst case scenario" not likely ever to occur in actuality.

From our investigations and studies of Great Sacandaga Lake itself we now know the following as facts:

- (1) The surface acreages at varying water levels.
- (2) The numbers of boats present.
- (3) The numbers of boats likely to be in actual use during peak use periods.
- (4) The relative proportions of boat use by type of use (ie fishing, sailboating, cruising, waterskiing).

We then applied the known data obtained from our studies of Great Sacandaga Lake to published figures for New York State on how consumptive of water surface each type of boating activity is (SCORP, 1983). We then determined the extent to which Great Sacandaga Lake's surface area is consumed by present levels of activity, with and without the Broadalbin Boat Launch. Results of this analysis are presented in [Exhibit #3]. This analysis leads us to conclude that:

is necessary to support <u>peak</u> numbers of boats in use at the functional <u>low</u> level for the proposed Broadalbin boat launching ramp.

- (2) Public sources account for one fifth of existing boating activity at Great Sacandaga Lake.
- (3) Development of the proposed Broadalbin Boat Launch will have no perceptible impact on either (1) or (2) above.

# Broadalbin Beach Agreement

The Adirondack Park Agency, and others have sought a clarification of the Department's role, in cooperation with the Town of Broadalbin, in the administration of the Town Beach. The Town Beach occupies a portion of the parcels of land transferred to the Department by the Hudson River - Black River Regulating District on April 13, 1987 and May 8, 1989.

The Town of Broadalbin has operated a swimming beach, under Permit from the Hudson River - Black River Regulating District, for many years, and long before discussions between the Department and the Town began on building a boat launch on part of the parcel. As discussions between the Town and the Department over the prospects of constructing a boat launch advanced, it was mutually agreed that the best approach was to have the parcels of land involved transferred to the Department's jurisdiction. The Department agreed that following such a transfer it would permit back to the Town those portions of the parcels necessary for the Town to continue to operate its beach. These

arrangements were agreed upon at a Town Board meeting on October 24, 1985, and subsequently recognized in the DEIS/UMP for the boat launch project [DEIS/UMP, pp 5 and 25]. The previously agreed upon approach was finally formalized with the signing by the Town and the Department of a joint "Use and Occupancy Permit" allowing the Town continued operation of its beach [Exhibit #4].

Should the boat launch project be approved, the Department will make minor improvements to the Town Beach to include the entry road and parking area. Other than this action, the Department will have no other involvement in the operation of the Town Beach other than to annually reissue the joint Use and Occupancy Permit.

# Wind Effects on Boat Launch Usability and Safety

Concern has been raised by the Adirondack Park Agency and others over the effects of prevailing wind directions on the usability and safety of the proposed Broadalbin boat launch. The Department's initial examination of this question was rather superficial, given that the facility is located within the confines of a well sheltered bay, and afforded further protection from a small island (locally known as Stanton Island) in the mouth of the bay. The ramp location is afforded nearly 360° protection by virtue of the shape of the bay and land features surrounding it. The DEIS/UMP merely stated that the site offers "good protection from wind exposure" [pg 5] as a matter of opinion. The FEIS/UMP did not

address the issue at all, however concerns were voiced at hearings on the FEIS/UMP held by the Adirondack Park Agency on April 7 and 8, 1992 and afterward.

In order to more completely and accurately assess wind effects at the site, the Department obtained a "wind rose" for Albany, NY, the closest weather recording station to the site [Exhibit #5]. Wind directions occurring 10% of the time or more include due North, due South, SSE and WNW. From the due South and SSE wind directions the site is totally shielded by land. The site is shielded by winds from the due North direction by the westerly projection of land at the mouth of the bay adjacent to the Town Beach. Winds from the WNW are shielded from the site by Stanton Island. Only when the wind is blowing from the NNW to NW sector of the compass is the site directly exposed to a long fetch of open water. Winds from these directions only occur 6% and 8% of the time respectively, and then only rarely at speeds in excess of 10 knots. It is the Department's conclusion from this data that wind effects on the site's usability and safety will be minimal. To the contrary, the site offers excellent protection from prevailing winds.

### Alternatives

The matter of "alternatives" to the Broadalbin Boat Launch proposal have been discussed at length in both the DEIS/UMP [pp 32-35] and the FEIS/UMP [pp 39-46]. Despite this extensive discussion of the issue, it has continued to be raised by the

Adirondack Park Agency and others during the hearings held on the FEIS/UMP on April 7 and 8, 1992 and afterward.

Alternatives considered in the DEIS/UMP included "No Action", "Reducing or Increasing the Scope of Development (of the Broadalbin Site)", and "Identifying and Building a Facility on Another Site." These alternatives were identified and discussed on the assumption that a need for additional boating facilities to serve the main basin of Great Sacandaga Lake had been amply demonstrated. Consequently, the Department's consideration of alternatives was limited to those involving the main basin, where no public boating access facilities currently exist. If one considers the need in terms of the entire Great Sacandaga Lake, then other "alternatives" to the Broadalbin project enter the picture.

Principal among additional "alternatives" to Broadalbin, if one views the boating access needs in terms of the entire Great Sacandaga Lake, are the potentials to expand one or more of the Department's three existing boating access facilities. The Department operates boating access facilities on Great Sacandaga Lake at; (1) Northville, (2) in the Town of Day (Saratoga County), and (3) in the Northhampton Beach Campground. The expansion potentials of these facilities, and their suitability to serve the main basin of Great Sacandaga Lake are as follows:

Northville Boat Launching Site: Located on Route 30 in the Village of Northville. This site has a two-lane hard surface launching ramp and a parking capacity of 60 cars and

trailers. As developed, the facility fully occupies the State's landholding and any expansion of the facility would require additional land acquisition as a first step. The immediately adjacent properties are already developed and/or undevelopable wetlands. The capacity of the site thus, cannot be increased. The one-way distance from the Northville Boat Launch to the central portion of the main basin of Great Sacandaga Lake is 8.3 miles. (The distance from the Broadalbin facility to the same point is 1.7 miles).

Northhampton Beach Campground Boat Launch: Located off Route 30, 1½ miles south of the Village of Northville. The site has a hard surface launch ramp and a parking capacity of 100 cars and trailers. A plot-plan of the Campground is presented in [Exhibit #6]. As presently developed, there is sufficient land available for a significan: expansion of boat launch parking capacity. While the expansion potential has not been accurately calculated, it is clearly equivalent to the capacity of the Broadalbin facility (70 cars and trailers), or more. The launch ramp area is also potentially expandable, however its location on a narrow creek arm of the main lake is such that improvement to reach water depths equivalent to the Broadalbin site (elevation 755 feet) would require massive dredging. The fact that a stream course enters the lake at this point also suggests that any dredged area might rapidly fill back in. The one-way distance from the Northhampton Beach Campground Boat Launch to the central portion of the main basin of Great Sacandaga Lake is 6.3 miles. (The distance from the Broadalbin facility to the same point is 1.7 miles).

Town of Day (Saratoga County) Boat Launch: Located on the Edinburgh-Conklingville Road, 5 miles north of the Hamlet of Edinburgh. The site has a hard surface launch ramp and a parking capacity of 44 cars and trailers. As presently developed, the facility fully occupies the State's landholding and any expansion of the facility would require additional land acquisition as a first step. The immediately adjacent properties are already fully developed and/or undevelopable steep slopes. The capacity of the site thus, cannot be increased. The one-way distance from this site to the central portion of the main basin of Great Sacandaga Lake is 12. 9 miles. (The distance from the Broadalbin facility to the same point is 1.7 miles).

From the foregoing, the Department concludes that the "alternative" of expanding one or more of its existing boat launching facilities on Great Sacandaga Lake is either; (1) impossible, or (2) impractical (cost, environmental damages) or both, and furthermore that none of these facilities offers the safety and convenience of access features to the main basin that are offered by the proposed Broadalbin facility. Furthermore, expansion of boating facilities at these existing locations would put more boats into the two "arms" of Great Sacandaga Lake, where current levels of boating activity are densest. This "alternative" is therefore rejected.

#### Traffic Patterns To/From Proposed Facility

The matter of traffic patterns to and from the proposed Broadalbin boat launch was not addressed in the DEIS/UMP. At the public meeting on the DEIS/UMP on October 13,

1989 concerns were raised as to the ability of Lakeview Road to carry an anticipated increase in car/boat-trailer traffic attributable to the boat launch.

The Department first addressed the traffic pattern issue in the FEIS/UMP [pp 15-16]. During the hearings held by the Adirondack Park Agency on the FEIS/UMP on April 7 and 8, 1992 additional concerns were again voiced over traffic patterns to and from the site and the ability of Lakeview Road to carry an anticipated increase in car/boat trailer traffic attributable to the boat launch.

It is important to recognize that the focus of concern in this regard has been the presumption that Lakeview Road, from the Village of Broadalbin to the site, a distance of 2.7 miles, would be the principal traffic route to/from the site. This is not the case. While some very small increase in traffic along this section of Lakeview Road may occur as a result of the development of the Broadalbin boat launch, the major approaches to and from the site will more likely be via County Route 110. As a County highway, Route 110 is wider than Lakeview Road, and paint-striped along its entire length. It is also shown on most road maps as a higher caliber roadway than Lakeview Road and will be the more likely choice of motorists in accessing the Broadalbin boat launch. From the intersection of County Route 110 with Lakeview Road, the site is reached in less than 0.4 miles.

The Department has already recommended that the Town install "No Parking" signs along Lakeview Road in the vicinity of the site entry to discourage overflow parking along

the road shoulders. Only on a few peak use summer weekends should the site fill to its capacity and create the temptation to park on the road shoulder. Law enforcement can be readily focused on these known periods.

The Department, in cooperation with NYSDOT and County and Local Highway Departments, will seek to install directional signs to/from the site which will direct users to gain access via County Route 110, (and hence away from Lakeview Road) as illustrated in Exhibit #7.

# Impacts to Sand Island

Sand Island is located approximately one mile to the northeast of the proposed Broadalbin Boat Launch Site. It is roughly 15 acres in size and has approximately 4,000 feet of shoreline when Great Sacandaga Lake is at a full pool elevation of 768 feet. The island has no improvements nor are any contemplated by the Hudson River-Black River Regulating District who administer the island.

The island is currently a popular day-use stopover for boaters utilizing Great Sacandaga Lake. Representatives from the Hudson River-Black River Regulating District who were consulted feel a substantial amount of activity on the island comes from repeat users who like the island and make it a part of their normal excursion onto the lake. This

was also indicated in informal discussions with some of the using public on August 11, 1992 during a DEC field visit.

The island is posted against overnight camping and refuse disposal by the Hudson River-Black River Regulating District. Patrols are conducted by the District maintenance crew approximately every ten days during the summer months to ensure compliance with the regulations and pick up garbage if necessary. Discussions with District representatives indicate the garbage problem has decreased over the years so it is about one-third of what it used to be. This was attributed to people being more aware of their environment today and repeat users policing the area themselves when they find garbage left behind by others.

Although it is impossible to predict how many users of the proposed Broadalbin Boat Launch Site might visit Sand Island, the maximum use is somewhat naturally controlled by the limitation of available shoreline. Boaters tend not to crowd a water access-only beach like a land access beach, due to limited mooring space and the fact they have their own floating sunbathing spot. Once a beach is well-occupied, boaters tend to find another lessured area or stay in the water, frequently at anchor. Heavy use of such areas usually only occurs on warm summer weekends.

Finally, Sand Island is not unlike other popular unimproved boat access day use areas throughout the Adirondacks. Bodies of water such as Lower, Middle and Upper Saranac Lake, Indian Lake, Seventh Lake, Fourth Lake, Lake George, Raquette Lake and

Lake Champlain receive unsupervised public use in a similar fashion. Although some thoughtless abuse does occur, it is usually minimal if there is an occasional presence by administrative personnel.

Boat counts on seven during mid-day: Exhibit
#1

nsities kes nds, 1992

Prepared by John Major Public Use Section Bureau of Fisheries

#### Introduction

Providing public access to fish and wildlife resources is one of the primary mandates of the Department of Environmental Conservation. To help meet the needs for access to water-based resources, the Department has developed and maintains a network of approximately 225 waterway access sites accommodating cartop or trailered boats. A variety of planning studies and public input clearly indicate the magnitude of unmet need currently existing for additional and improved facilities (Statewide Comprehensive Outdoor Recreation Plan - OPRHP 1989, Conserving Open Space in New York State - DEC and OPRHP 1992, New York Statewide Angler Survey 1988 - Connelly et al 1990, Recommendations for Improving Public Recreational Access to the Hudson River - NYSDEC 1984, Strategic Plan for Economic Development through Expansion of Waterway Access to the Great Lakes - NYSDEC and OPRHP 1982, Fishing Access Site Program Plan: Supplement I, An Inventory of Fishing Access Needs - Jackson 1975). Yet, the Department is frequently challenged in its efforts to develop or modernize access facilities by those concerned about the impacts of improved public access on these waters. Consequently, the Department (in cooperation with the Office of Parks, Recreation, and Historic Preservation) conducted a major study of boating use at public access sites during the 1990 boating season (Major et al 1992), which meets many of the needs for this type of information. However, a need remains for site and lake specific information to evaluate current and projected patterns of boating use on many waters under consideration for enhanced public access.

# Goals and Objectives

The goal of the present study was to obtain information on boating densities and sources of boats (public versus private sources) during peak periods on seven Adirondack lakes eligible for consideration of boat launch development under the State Land Master Plan (Adirondack Park Agency, 1985). This information can then be cited in development plans and environmental assessments and interpreted in the context of proposed access developments, taking into account a variety of environmental, sociological, economic, and resource management factors beyond the scope of this study. Objectives included determining the number of trailers present at public access

sites as an indicator of the number of boats originating there, with simultaneous counts of the number of boats in active use on the entire lake surface and the number of inactive boats visible moored or docked along the shoreline. These data, combined with the acreage of each lake, provided the basis for calculating boating densities.

#### Methods

The present study focused on the mid-day, summer weekend (and holiday) period, which is the period of most intense boating use on New York waters (Major et al 1992, Major and Gann in press). Pilots were instructed to confine counts to between the hours of 11 a.m. and 4 p.m. during July and August on days with weather conducive to boating (seasonably warm, sunny or partly sunny, relatively calm). Counts of vehicles at public launch sites focused on vehicles with trailers, since vehicles without trailers likely contributed very little to boating activity and could not be discerned from non-boaters from the air. Otherwise, aircraft used and procedures followed were as described in the 1990 study.

Lakes selected for this study were all within the boundaries of the Adirondack Park, and contained at least 1,000 acres or constituted a chain of lakes with a combined area of at least 1,000 acres (Adirondack Park Agency, 1985). Some lakes meeting these criteria were included in the 1990 survey and were not re-flown. Those included were of interest for active or potential development consideration and included: Piseco Lake, Hinckley Reservoir, Meacham Lake, Chazy Lake, Lake Kushaqua/Rainbow Lake chain, and Great Sacandaga Reservoir. Because of the large size of Great Sacandaga Reservoir, and interest in documenting boating densities on the main basin separately from the "arms" of the reservoir to better evaluate potential impacts of a new site proposed for the main basin, counts were recorded separately for these areas.

# Results and Discussion

Flights were conducted on July 12 (Saturday), July 25 (Sunday), and August 22 (Saturday), 1992. Boat counts and calculated boating densities are presented in Table 1. Deviations from standard procedures are noted where applicable in the table. Discrepancies in the shore counts taken on July 25 as compared with either of the other dates are due to the use of a less experienced observer on that flight (Green, pers. comm.).

While the three portions of Great Sacandaga Reservoir are presented separately, it must be recognized that boats originating in one area could easily travel to either of the other areas. This would lead to overestimates of the public contribution for the arms with state access sites, and underestimates for the main basin, which had no public access. However, instantaneous boating densities would not be affected.

Boating densities were highest on the NW Arm of Great Sacandaga (17-22 acres/boat), which is consistent with its relatively small area and well developed public and private boating facilities, including both the Northville Boat Launch and the Northhampton Beach Campground. These densities are within the range recognized by the SCORP as maximum for waterskiing, the boating activity requiring the largest amount of area per boat. In contrast, the Main Basin had densities of 30-36 acres per boat, the lowest boating density of the 3 portions of the reservoir.

The lowest boating densities were observed at Meacham Lake (67-300 acres/boat), a lake with a relatively undeveloped shoreline and a state campground at the northern end.

An assessment of boating activity and boating densities relative to "carrying capacity" should incorporate information on the distribution of boating activity by type (e.g. fishing, water skiing, sailing, etc.) since some activities require more area than others. The 1990 Survey presents questionnaire data that may be useful in characterizing this mix of activities for lakes with similar use patterns.

The present study found higher proportions of boats in use than was documented in the 1990 study. Part of this variation may be attributable to the sampling frame of the present study, which relied on data from the 1990 study to more narrowly focus on the period of highest boating activity. Other sources of variation are the varying characteristics of the lakes themselves, in terms of seasonal and permanent residential development, marinas, fisheries, access, water regimes, etc. Sample size is also certainly important, with several replications necessary to accurately portray use patterns. The relative contribution of public sites compared with all other sources reflected the degree of riparian development on each lake. While the proportion of riparian boats in use in many cases exceeded those observed in the 1990 study, the relative potential for non-public sources contributing significant additional boating traffic was consistent with results from the 1990 study.

# Recommendations

Data presented in this report provide a basis for evaluating the likely impacts of public access development or enhancement on the lakes included in this study. Aerial counts provide a reliable and efficient means for documenting the relative numbers and sources of boats on lakes. Since must concerns regarding boating activity and boating density focus on the "worst case" situation, flights should be scheduled in accordance with the findings of the 1990 study to target mid-day scheduled in accordance with an allowance of one hour to either side) to coincide with (ideally, noon - 3 p.m., with an allowance of one hour to either side) to coincide with peak non-fishing boating use. Due to the difficulties of obtaining accurate counts in high density situations, such as counts of boats ashore on highly developed lakes, only experienced observers should be used to ensure reliability and comparability of results.

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Table 1. Boat counts and boating densities on selected Adirondack Lakes on mid-day summer weekends, 1992.

			Time	Public Site Trailers	n mid-day summer weekends, 1992.  Boats Present				% of all Fro	n Use n Public Bo	Acres/ at in use	Acres/ Boats Present	
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<sup>1</sup> Counts recorded on 7/25 flights are unreliable, especially for high density shore counts, due to inexperienced observer.

<sup>&</sup>lt;sup>2</sup> Includes boats ashore at campground

<sup>&</sup>lt;sup>2</sup> Wrong launch counted (dirt launch to north of PASNY launch) - 7 trailers. Pilot reported that paved launch had 3-4 times as many vehicles with trailers as dirt launch.

CAPACITY & AREA CURVE ACC. 2827

.E-46.E-47. D.R. Coopers REPORT & ACC .583

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	759	1021-3	23.450	1.03	24.58	1	16.78	13.14	1
	760	1034.8	23.760	1.04	25,61	1	17.81	12.11	į
	761	1047.0	24.040	1.05	-26.65	1	18.85	11.67	1
	762	1059.5	24,320		27.70	1	19.90	10.02	}
	763	1071-5	24,600	1.07	28.77	1	2097	8.95	1
•	1	1083.5	24,870	1.08	29.85		22.05	7.87	1
	764		25,140	1.09	30.94	-	23.14	6.78	i
	765	1107-5		1.10	32.04		24.24	5.48	
	766	1119.5	25,700	141	33.15	1	25.35	4.57	
	767	1130.0	25,940	1.12	34-27	1	26.47	3.45	Ì
	. 768	1 .	26,220	1114	35-41	1	27.61	. 2.31	
	769	1142.0		1.15	36.56	-	28.76	1.16	1
	770	1152.4		1.16	27-72	1	29.92	0.00	
	771	(11 64.0)	26,720	1.17	38.87		31.09		₹ .
	772	(175.0)		1-18	40.07		32.27 ·	NOTE :- A	
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	774	(1197.5)	4	1.20	42.46		34.66	TAKEN FR	PM
	775	(1209-5)	I	1.22	43.68	1	35.38	D.R.CHOFE	rs kep
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	778	. (UZAGO)			47.40		39.60	d -wen Fi	F. P.
	. 779	(1255.0)	28,810	1,25		1	·- c·	PE /	•• • • •

# "CARRYING CAPACITY"

and

# CURRENT USE

at

GT. SACANDAGA LAKE

How big is Gt. Sacandaga Lake? \*

At Full Pool 768 ft

25,940 ACRES

At Elevn. 757 ft (Low Operational level for Broadalbin Launch Ramp)

22,800 ACRES

\* Source: HR-BR-RD records.

2. What are the MAXIMUM numbers of boats in use on GSL (typical Summer weekend)? \*

·7/12/92 (Sunday)

1104

8/22/92 (Saturday)

952

# Approximately 1000 boats

\* Source: 1992 Aerial overflights

3. What is the breakdown of types of boating use at GSL?

Fishing

11%

Sailboating

17%

Waterskiing

25%

Cruising

47%

\* Source:

1990 Statewide Survey of Boating Use at Public Boat Launching Facilities.

4. How consumptive of water-surface is each type of boating activity?\*

Fishing

1 acre/boat

Sailing

8 acres/boat

Waterskiing

20 acres/boat

Cruising

8 acres/boat

\* <u>Source</u>: 1990 Statewide Outdoor Recreation Plan (SCORP)

## 5. Given;

- (1) The KNOWN area of GSL and,
- (2) The <u>KNOWN</u> peak numbers of boats now using GSL, and
- (3) The <u>KNOWN</u> breakdown of types of boat use at GSL, and
- (4) The <u>KNOWN</u> surface acreage requirements for each type of use, then

What proportion of GSL's area is currently required to support present levels and types of boating occurring there?

## 6. of 1000 boats in use on GSL;

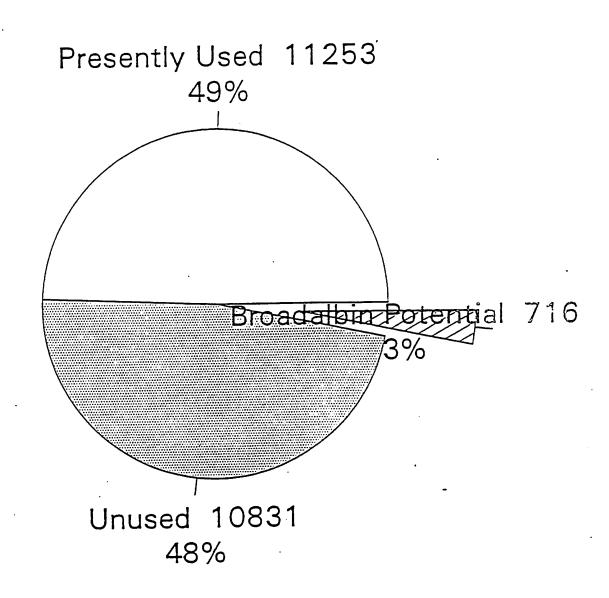
110 are fishing x = 110 acres
170 are sailboating x = 1360 acres
250 are waterskiing x = 20 = 5000 acres
470 are cruising x = 3760 acres
TOTAL 10,230 acres

Approximately <u>one-half</u> of the reservoir's surface area is necessary to support the existing types and numbers of boats in use.

Or, illustrated graphically ......

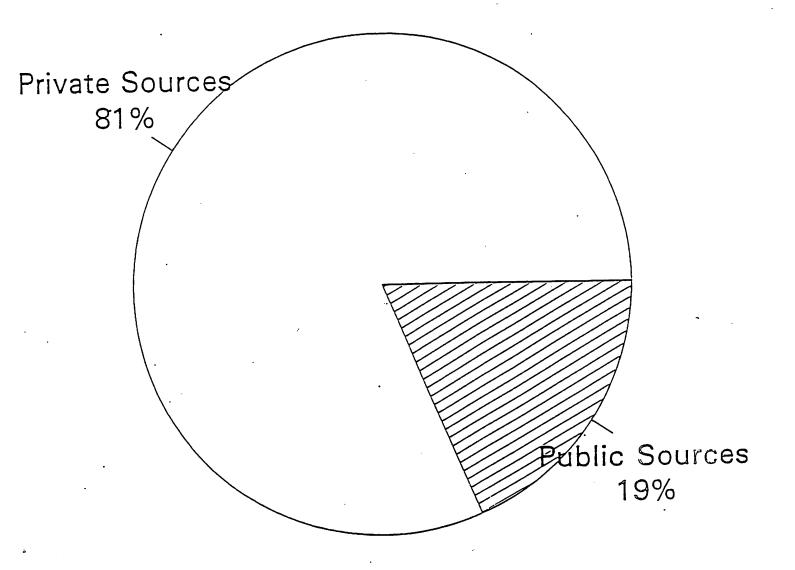
# Consumption of Great Sacandaga Reservoir's Surface Acreage by Boating Activity

(at 757 Elevation, 22,800 Surface Acres)



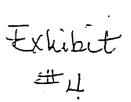
Sources: HRBRRD, SCORP, 1990 Boating Facilities Survey 1992 DEC aerial overflights, Broadalbin DEIS & FEIS/UMP

# Derivation of Existing Boating Activity



1992 DEC aerial overflights, Broadalbin DEIS & FEIS/UMP

# New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233



June 2, 1992

Ms. Christine Brooker, Supervisor Town of Broadalbin 229 Union Mills Road PO Box 548 Broadalbin, NY 12025

Dear Ms. Brooker:

Enclosed for your records is a copy of the Use and Occupancy Permit for the Town's bathing beach, executed by the Department. Thank you for your cooperation and prompt attention to this matter.

Sincerely,

Michael C. Gann

Principal Aquatic Biologist

Public Use Section

#### MCG/dm/d:G

#### Enclosure

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cc:

Ms. Donna Stewart, Town Clerk (w/cc permit)

Mr. Roger Devel, Town Councilman

Mr. Stephen Hoshlyk, Town Councilman

Mr. James Chambers, Town Councilman

Ms. Mary Benware, Town Councilwoman

Mr. David Blatt, Town Attorney (w/cc permit)

Mr. Terry Healy (w/cc permit)

Mr. Burt Morehouse (w/cc permit)

Mr. Michael Herdman (w/cc permit)

file (w/cc permit)

## USE AND OCCUPANCY PERMIT

This Agreement, made this 1st day of June, 1992 between THOMAS C. JORLING as Commissioner of Environmental Conservation of the state of New York, whose principal office is at 50 Wolf Road, Albany, New York 12233, hereinafter referred to as Commissioner, and

The TOWN OF BROADALBIN, a municipal corporation organized and existing under the laws of the State of New York, whose principal office is at Broadalbin, New York 12025, hereinafter referred to as Permittee.

#### WITNESSETE:

WHEREAS, the People of the State of New York acting through the Commissioner have previously acquired jurisdiction over certain real property situate in the Town of Broadalbin, County of Fulton and containing frontage upon the shoreline of Great Sacandaga Lake; and

WHEREAS, the Permittee desires to use and occupy a portion of such lands more particularly shown and described on Schedule "A" attached hereto and made a part hereof as if herein set forth at length; and

WHEREAS, the Commissioner, pursuant to subdivision 11 of Section 3-0305 of the Environmental Conservation Law deems it beneficial to the State to enter into this Use and Occupancy Agreement for the premises described in Schedule "A";

NOW, THEREFORE, it is agreed by and between the Commissioner and Permittee as follows:

- 1. The Permittee shall have joint use and occupancy with the Commissioner of the premises described in Schedule "A", hereafter the premises, commencing on June 1, 1992, and continuing until December 31, 1992, unless sooner terminated pursuant to the provisions of Paragraph 6 hereof:
  - 2. The Permittee, as consideration for this permit, shall:
  - a. operate, maintain and make ordinary repairs as necessary to the improved areas of the premises as evidenced by a Report of Physical Inspection attached hereto as Schedule "B", and made a part hereof as if herein set forth at length;
    - b. pay the cost of all utilities during the term thereof;
  - c. hold and save harmiess the People of the State of New York, the Commissioner and the Department of Environmental Conservation, their officers and employees from liability for injuries to persons or property arising out of the Permittee's negligence or other actionable conduct in the use and occupancy of the premises. (The duty to indemnify is not limited by the provision of insurance);
  - d. insure the premises against property damages in the amount of \$50,000, and with an insurer licensed in New York State, such insurance to be kept in full force and effect during the term hereof and proof thereof to be furnished the Commissioner; any policy obtained to meet this condition will run to the benefit of the People of the State of New York and the Department of Environmental Conservation as their interests may appear.
  - e. obtain and keep in force during the term of this permit a liability policy in the amount of at least \$100,000 per person, \$300,000 per occurrence, and with an insurer licensed in New York State, proof thereof to be furnished to the Commissioner; any policy obtained to meet this condition will run to the benefit of

the People of the State of New York and the Department of Environmental Conservation as their interests may appear.

- f. furnish proof of insurance as required in 2d and 2e above upon initial execution of this instrument, and subsequently upon each occasion of annual renewal of this instrument.
- 3. The premises described in Schedule "A" shall be used by the Permittee as a swimming beach for residents of the Town of Broadalbin. Permittee shall be responsible for compliance with all legal requirements associated with the operation of a public swimming beach, including but not limited to the provision of lifeguards during all hours of operation and the installation of buoys completely surrounding the swimming area. Said premises may not be used for any other purpose without the prior express written consent of the Commissioner. Under no circumstances shall the adjacent parcel, under exclusive jurisdiction of the Department of Environmental Conservation, be utilized for overflow parking for beach users, either in its present state or subsequent to its development as public boat launching facility.
- 4. The premises are permitted and accepted in their condition on the date of commencement hereof as evidenced by Schedule "B" hereof.
- 5. The Permittee agrees that the Commissioner, during the term hereof, has no duty or obligation to make ordinary repairs, all of such repairs being a responsibility of the Permittee pursuant to paragraph two hereof.
- 6. Prior to the termination date herein recited, this Agreement may be terminated:
  - a. by the Commissioner on giving thirty (30) days notice of any breach of the terms and conditions of this Agreement provided that the Permittee may remain in

possession for the full term of this Agreement if, within said thirty (30) days, the Permittee shall cure the breach to the satisfaction of the Commissioner;

7. Any notices permitted or required under this Agreement and addressed to the Permittee may be sent to the Permittee by first class mail at its address as recited herein or any subsequent address provided by the Permittee.

Any notices permitted or required under this Agreement and addressed to the Commissioner may be sent to the Commissioner at the following address:

Regional Director

New York State Department of
Environmental Conservation
Ray Brook, New York 12977

8. The term "Permittee" as used herein includes the directors, officers, employees, agents and invitees of the Permittee.

The term "Commissioner" as used herein includes the officers and employees of the Department of Environmental Conservation and any other duly authorized representative or agent of the Commissioner.

- 9. This Agreement merges the negotiations between the parties hereto. There are no promises, representations, warranties, guarantees or agreements except those recited herein. This Agreement may be modified only by a written agreement subscribed by the parties hereto.
- 10. This Agreement may not be assigned by the Permittee without the prior express written consent of the Commissioner.
- 11. This Agreement enures to the benefit of and binds the parties hereto and their respective successors.

IN WITNESS WHEREOF this Agreement has been executed by the parties hereto on the day and date first above written.

THE TOWN OF BROADALBIN

by Christine M. Erosker

its. Mires victor

THOMAS C. JORLING as Commissioner of the DEPARTMENT OF ENVIRONMENTAL CONSERVATION of the State of New York

STATE OF NEW YORK )
COUNTY OF ALBANY )SS

On this / day of 1992, before me personally came Langdon Marsh, to me known, who being duly sworn did depose and say that he resides at and is the Executive Deputy Commissioner of Environmental Conservation of the State of New York and that he executed the foregoing instrument pursuant to authority of law.

NOTARY PUBLIC STATE OF NEW YORK

KAREN M. MOHAN
Notary Public. State of New York
No. 4849687
Qualified in Albany County
Commission Expires April 14, 19

STATE OF NEW YORK )
COUNTY OF TULTON

On this 21 day of May, 1992, before me personally came Christian Bridge in me known, who being duly sworn did depose and say that he/she resides at Broadalbin, his and is the Supervisor of the Town of Broadalbin, the corporation which executed the foregoing instrument and that he/she subscribed his/her name thereto pursuant to a resolution of the Town Board of said corporation.

NOTARY PUBLIC STATE OF NEW YORK

LAVID 1. JUNKOWSKI
Fichally evaluated New York
Futton County - MITTEL
Wy Comm. Experies Co. 17.

#### SCHEDULE A

## Description of Premises

All that certain tract or parcel of land situate lying and being in Lots, 16 and 17, Sacandaga Patent, Town of Broadalbin, County of Fulton and State of New York more particularly bounded and described as follows:

Beginning at a point at the waters edge of Great Sacandaga Lake, said point being in the east line of those lands transferred by the Hudson River-Black River Regulating District to the New York State Department of Environmental Conservation on May 8, 1989 as described in Schedule A - Supplemental, attached hereto, and said point being at the southeast corner of a small peninsula of land used by the Town of Broadaibin as a public southeast corner of a small peninsula of land used by the Town of Broadaibin as a public bathing beach; thence S 8°00' E a distance of 412.5 feet to a point marked by an iron pipe in concrete in the northerly shoulder of Lakeview Road; thence S 59° 42' W along the northerly shoulder of Lakeview Road a distance of 39.77 feet to a point marked by an iron pipe in concrete; thence S 79° 19' W along the northerly shoulder of Lakeview Road a distance of 162.82 feet to a point marked by an iron pipe in concrete; thence northerly a distance of 780 feet to a point; thence northwesterly a distance of 120 feet to the waters edge of Great Sacandaga Lake; thence northerly and easterly along the shore of Great Sacandaga Lake sathe same winds and turns to the point or place of beginning.

All bearings are with reference to True North and are based on the Hudson River-Black River Regulating Districts' "Great Sacandaga Lake Permit Maps," Sheet 50, on file at the Hudson River-Black River Regulating Districts' Northville Office.

It being the intent of this description to describe the easterly portion of the lands transferred to the New York State Department of Environmental Conservation by the Hudson River-Black River Regulating District, which lands include the area heretofore used by the Town of Broadalbin as a public bathing beach. The boundary line between the easterly portion, described herein, and the westerly portion, retained by the New York State Department of Environmental Conservation, is the line leaving an iron pipe in concrete at the northerly shoulder of Lakeview Road thence northerly 780 feet and thence northwesterly 120 feet to the waters edge of Great Sacandaga Lake.

Together with the right of access, over a certain gravel road, from Lakeview Road across the lands retained by the New York State Department of Environmental Conservation to the parcel herein described.

## SCHEDULE A - SUPPLEMENTAL

All that piece or parcel of land lying and being in Lots 16 and 17, Sacandaga Patent, Town of Broadaibin, County of Fulton, State of New York and being more particularly described as follows:

Beginning at a point at the waters edge of the Great Sacandaga Lake and running thence on a course of S 36° 14' E to a point on the northerly shoulder of the Town Road known as Lakeview Road; thence N 57° 31' W along the northerly shoulder of Lakeview Road, a distance of 36.29 feet to a point marked by an iron pipe in concrete; thence N 79° 19' E along the northerly shoulder of Lakeview Road a distance of 135.22 feet to a point marked by an iron pipe in concrete; thence continuing N 79° 19' E along the northerly shoulder of Lakeview Road a distance of 162.82 feet to a point marked by an iron pipe in concrete; thence N 59° 42' E along the northerly shoulder of Lakeview Road a distance of 39.77 feet to a point marked by an iron pipe in concrete; thence N 8° 00' W to a point at the waters edge of the Great Sacandaga Lake; thence along said waters edge as it winds and turns to the point and place of beginning.

Excepting that portion used for highway purposes.

It is the intention of this description to follow the lines of the Hudson River-Black river Regulating District permit #8575-S and a portion of permit #1094 and to describe all lands above present and future low water mark in the Great Sacandaga Lake lying within the said permit #8575-S and a portion of permit #1094 and being portions of tracts #810, 811, 812 and 813, all as shown on sheet #50 of the said Regulating District's "Great Sacandaga Lake Permit Maps" dated March 1978 and on file in the offices of the said Regulating District. All bearings are with reference to True North.

#### SCHEDULE B

### Report of Physical Inspection

### Starting at Lakeview Road;

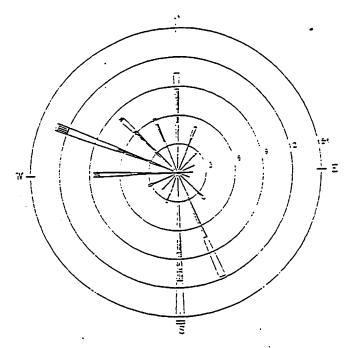
- Two (2) wood posts for the gates.
- Two (2) metal panel gates 1 4'H x 10'L 1 4'H x 91/2'L
- One (1) panel gate mounted to left post permanently to prevent driving around gate 4'H x 9½L
- · Road from gate to metal posts at Beach. Part of road covered with thin layer of crushed stone. Average width of road 12' x 1169'L.
- Telephone system by gate allows calls to Sheriffs Department or Local Calls No Long Distance Calls.
- 17 Metal posts between beach and parking areas.
- Two (2) Lifeguard Chairs.
- Swimming Area 179' long by 115' width to waters edge on 4/29/92. Measurement for width taken from second post south of tree.
- Additional sand area North of buoyed beach 143' long.
- · Additi nal sand area South of buoyed beach 38' long.
- Parking area by posts approximately 69' x 100'.
- Parking areas on each side of Road-Right 26' x 198' to nearest tree from road. Left parking area approx. 38' x 198'.
- All cars park behind steel posts.
- Beach is buoyed according to Health Department. A permit is obtained from Health Department
- A paddle board will be available to lifeguards this year.
- An old raft consisting of 2 fuel tanks and wood frame will be removed this year.
- The beach is always manned with 2 lifeguards and a gatekeeper by the phone.
- Two portaiohns are placed at the site each summer.
- A No Parking Sign and chain is hung between the two widely spaced posts to allow emergency vehicles entrance to the beach.

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# Exhibit #5



1-3 4-6 7-10 11-16 - >21

WIND SPEED CLASSES (XMOTS)

NOTES:
DIAGRAM OF THE FRECUENCY OF
OCCURRENCE FOR EACH WIND DIRECTION.
WIND DIRECTION IS THE DIRECTION
FROM WHICH THE WIND IS ELECTION.
EXAMPLE — WIND IS BLOTTING FROM THE
NORTH 10.4 PERCENT OF THE TIME.

WINDROSE

albamy. my PERIOD: 1984

Endineauud

