

HALIFAX-DARTMOUTH REGIONAL PARKS REPORT

A REPORT PREPARED FOR THE METROPOLITAN AREA PLANNING COMMISSION
(MAPC) THROUGH THE PARKS ADVISORY GROUP

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JULY, 1979

Full Report

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SACKVILLE RIVER REGIONAL PARK

The Sackville River Regional Park is a portion of a larger land parcel of approximately 6000 acres located in the Bedford-Sackville area of Halifax County. This larger parcel is defined by the Bicentennial Highway, Highway 101 and the Lucasville and Hammonds Plains Roads. As the name implies, the Park is strongly related to the Sackville River, following its course through the area described, from Webber Lake to the Bicentennial, a distance of about five miles. Two other bodies of water are proposed for inclusion in the Park: Sandy Lake, a fresh water lake with moderate potential for swimming and boating, and Marsh Lake, a smaller shallow lake with a considerable variety of aquatic vegetation and extensive areas of associated marsh.

Located in and adjacent to one of the fastest growing areas of Metro, this Park has the potential to serve as a key resource in the recreational life of the Region if properly developed.

SITE CHARACTERISTICS

The Sackville River Complex encompasses the river valley and the upland lake system of Sandy and Marsh Lakes. The watersheds of these systems extend far beyond the boundaries of the park itself. Sandy Lake is a fresh water lake with a surface area of 165 acres, mean depth of 25 feet, and a rocky shoreline and bottom. The waters of Sandy Lake flow through a shallow marsh area, then through a fast-flowing rock bottom brook into Marsh Lake. Marsh Lake is a shallow lake almost entirely surrounded by bog and containing extensive floating and aquatic vegetation. Marsh Lake waters empty into a fast flowing rock bottom stream and continue downstream to the Sackville River. The River floodplain is vegetated primarily with alder, birch and maple. Many ponds have formed on the sites of former gravel pits.

Bedrock outcroppings are found primarily in the uplands and around Sandy Lake. The quartzite bedrock is parent material to a sandy loam till soil which has good internal drainage and is moderately stony. The floodplain of the River and the north valley slopes are composed of a tighter soil of sandy clay-loam till derived from underlying shale and sandstone. The River flows on a cobble bed which is braided at several points.

The vegetation varies significantly over the area, depending upon environmental conditions. Generally hardwoods such as beech, birch, sugar maple and red oak predominate on slopes, hilltops, and around the lakes. Balsam fir, black spruce and tamarack grow on the low poorly drained soils. White pine, red spruce and hemlock predominate on the north-facing and river valley slopes.

The water quality in Sandy Lake has been monitored by the Department of Environment since 1975 and no effects detrimental to the use of the lake for water contact sports have been found, nor are any anticipated. The Department of Environment is presently studying the siltation aspects of the Sackville River systems.

Natural Experience

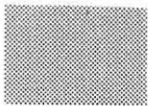
The power transmission corridors of the Sackville River System provide access routes to almost all areas of the park, reducing the perceived size of this large natural area. With the exception of the terrain within the power corridors, the topography and vegetation tends to impede the pedestrian. Canoes appear to be the only craft capable of navigating the Sackville River and the connecting streams in order to gain access to the Park by water, and even this approach is restricted to periods of peak flow.

The principal disturbances of the natural systems are the power corridors, which are straight, wide clearings littered with logging debris. The entrapped water, boulders, machinery, and car bodies found in the unused quarries along the Sackville River are typical of discontinued gravel extraction operations. The easterly pit has naturally regenerated to some extent, whereas the westerly pit is relatively raw.

The power poles, lines and transformer station are significant cultural intrusions upon the natural experience of the Park. The effect is principally visual, although some worker activity and noise is associated with the transformer station. The other intrusions are that of the dairy, residential and cottage development, and traffic noise. The dairy and cottage development represent visual intrusions affecting the experience within the south bay of Sandy Lake. The road noise of Hammonds Plains Road travels across the lake and from its higher elevation penetrates well into the Sandy Lake area. Traffic noise from Highway 101 influences the park at its east and west extremities along the Sackville River, however the river to the north of Marsh Lake is protected from road noise by steep valley slopes and dense coniferous vegetation.

site
characteristics

water



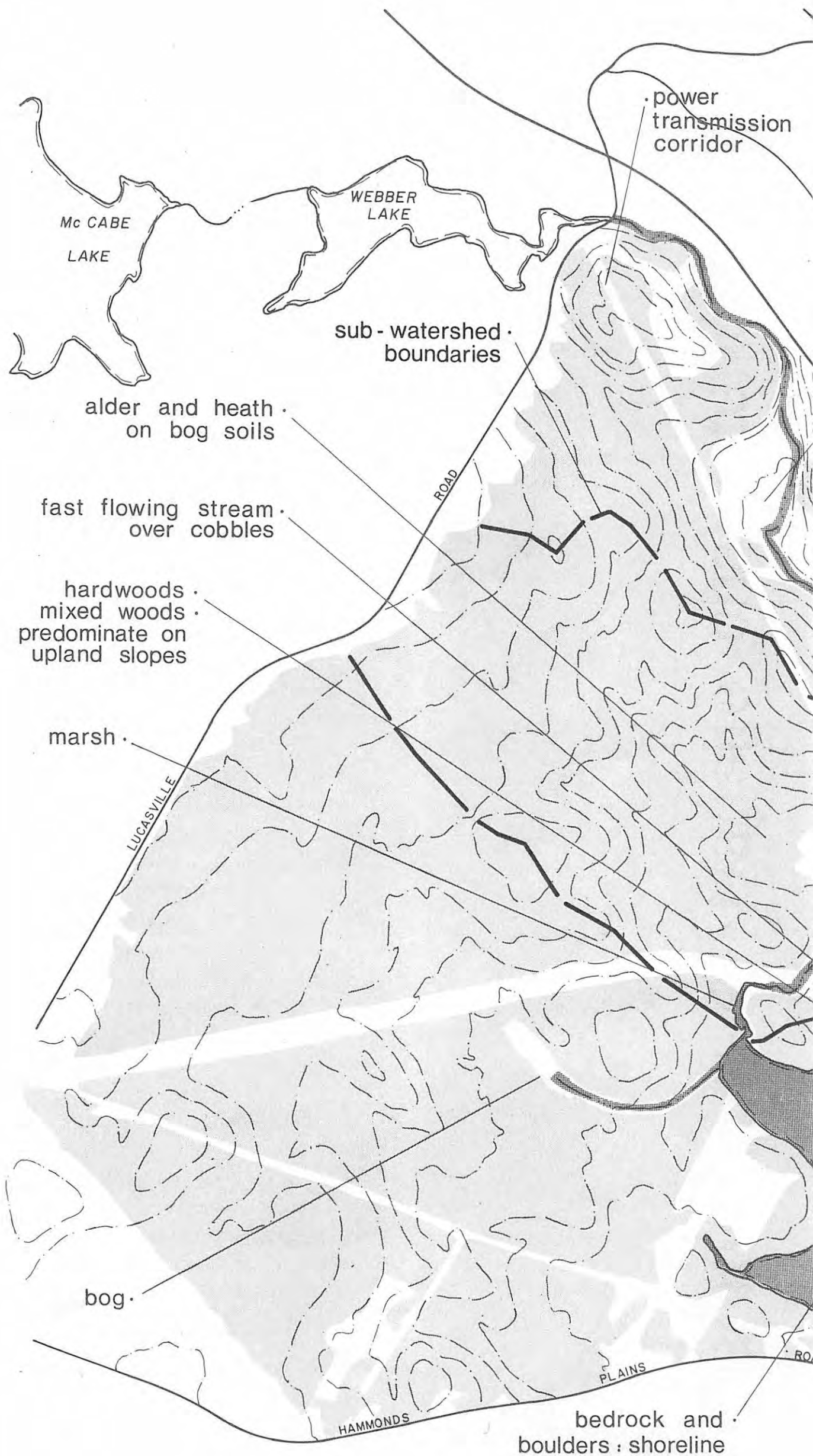
sub-watershed
boundary

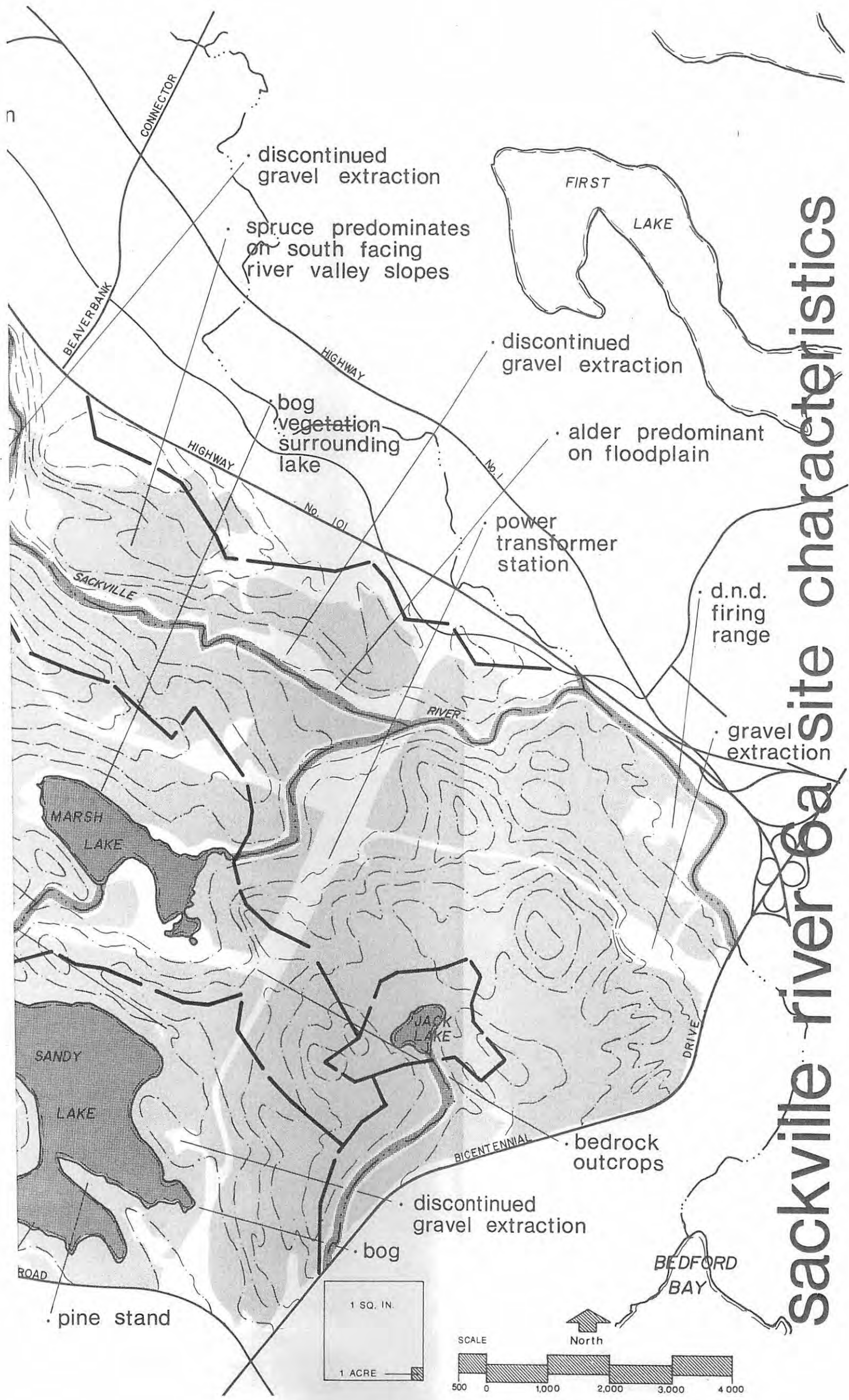


contours



vegetation





sackville river 6a site characteristics

CONCEPTUAL DEVELOPMENT

Two concepts form the basis upon which the recreational development of the Sackville River Regional Park has been formulated. The first is the opportunity to preserve a fresh water system composed of a variety of water resources. This system offers a multitude of interpretive and educational possibilities, highlighted by the flow of the Sackville River. The proposed Park protects a fresh water lake, a large bog, several streams, and a portion of the only river within the Regional Park System. The annual fresh water cycle can be explored by means of the variety inherent in the river, which varies from rapids to back-water stills, and the seasonal changes in the contributing water system.

The second development concept relates to the significance of the area surrounding the Park as a site of residential growth in the Region. The proximity of this sector to existing transportation routes, coupled with its relative ease of servicing, makes the area between the Lucasville Road and the Bicentennial highly attractive to new development. So far this development has been confined to the fringe areas and with a few exceptions, has had little impact. The opportunity thus exists for the incorporation of the Regional Park into a larger land use pattern planned to meet a compatible set of objectives in environmental, recreational and developmental terms. For the most part the proposed Park is composed of lowland and wetland flanked by upland areas on which development will take place. Sensitive design will allow adjacent development to blend with the fringes of the Park, increasing the apparent size of the Park and enhancing the visual quality of the landscape seen from within. Conversely, the Park will add considerably to the recreational resources as well as the visual amenities enjoyed by residents of new development areas. Furthermore, coordination of efforts in the development of this substantial piece of real estate should promote orderly growth in the area and reduce, if not eliminate, the creation of undesirable impacts on the environment.

The concern for a comprehensive planning approach has led this study to recommend the inclusion of a buffer development zone in Sackville River Regional Park. This buffer zone is the area considered to have immediate influence on the Park, in the sense that lands included are in the immediate watersheds

of the water resources and have a direct visual relationship to at least some of the Park area. These lands nonetheless have considerable development potential for residential purposes and this can be exploited to the advantage of both Park user and resident. Two aspects of particular concern in these buffer zones are the retention of a substantial portion of the existing vegetation and the related problem of modification of surface drainage patterns.

The nature of development in areas beyond the buffer zones is of less importance in retaining a desirable visual backdrop for the Park, but cooperation in the planning of these areas could also prove beneficial. For example, neighbourhood parks could be connected to the Sackville River trail network through environmentally protected corridors in the buffer zone. Other considerations such as the routing of roadways have considerable influence on both park and residential development and should be coordinated with a master planning concept.

Several factors make a cooperative planning approach particularly feasible within this Regional Park. Land use designations in the Regional Development Plan divide the areas into an "urban mix" of first and second priority, effectively postponing development in the sector west of Sandy Lake. Since limited development has taken place in the area to the present time, it is still possible to design to meet a coordinated set of planning objectives.

With minor exceptions all of the land east of Sandy Lake is owned by CMHC and the Nova Scotia Housing Commission, or by DND as the Bedford Rifle Range. With increased urbanization of the area use of the Rifle Range will become incompatible with surrounding residential development, and it is therefore assumed that it will eventually be phased out and land added to the Jack Lake Land Assembly. The extensive planning required for development of this scale can accommodate the cooperative planning aspects referred to above in a much more efficient manner than would be possible with a number of separate interests. It is therefore recommended that MAPC and the agency responsible for Regional Parks work with the Nova Scotia Housing Commission in planning the residential areas surrounding the Park so that development is visually and environmentally compatible with Park uses.

In summary, compatible development of adjacent land would minimize fiscal impact by reducing the area to be acquired outright for park purposes, while maximizing benefits to residents of the Region by providing high quality outdoor recreation opportunities and increased assurance of a balanced ecosystem.

PHYSICAL IMPROVEMENTS

The initial stages of physical improvements in the Park will provide the basis for continued recreational development in response to the needs of the growing population of the Region. Timing of this initial development should be adjusted to the simultaneous development of adjacent communities as described above.

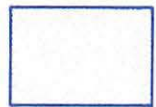
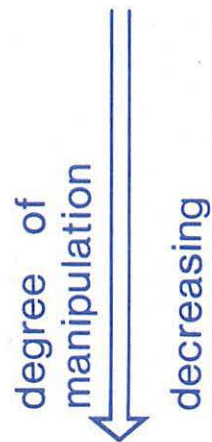
The physical improvements proposed for Sackville River are, as in most of the other Parks, primarily designed to facilitate access to the natural features of the area. A trail system comprised of hiking and walking elements is proposed, providing linkages between activity nodes within the Park and access routes from adjoining communities (see Map 6-B). The hiking trails are intended to provide access to some of the more interesting natural features of the Park and to offer potential for more individualistic and rigorous forms of recreation. The walking trails will be designed so as to allow easy upgrading to bicycle path standards.

The Park has been broken down into Recreation Development Units to indicate resource capability and to recommend directions for future recreational development. In this classification the Marsh Lake area and a bog area to the west of Sandy Lake have been designated "Class 4" to be left undisturbed as natural interpretation areas. Trails through these areas would be primitive in design, following existing paths where possible.

The south-facing slope of the Sandy Lake shoreline and two large sectors of the Sackville River floodplain have been designated for "Class 1" development of more intensive recreational facilities. These facilities are primarily designed to exploit the recreational potential of Sandy Lake for swimming, light boating and winter sports; and in the Sackville River floodplain, the begin reclamation efforts on two gravel extraction sites. Proposed regrading and seeding operations could stabilize these sites and create meadows for informal sports activities such as kite flying, frisbee-throwing and softball. With careful design these meadows could absorb the impact of high water levels during the spring freshet, and thus provide flood protection downstream. The fields would also provide the foundation on which more highly developed recreational facilities might be built in the future.

conceptual development

activity zones



conservation or
buffer zone

proposed
park boundary



activity nodes



pedestrian trail



hiking trail



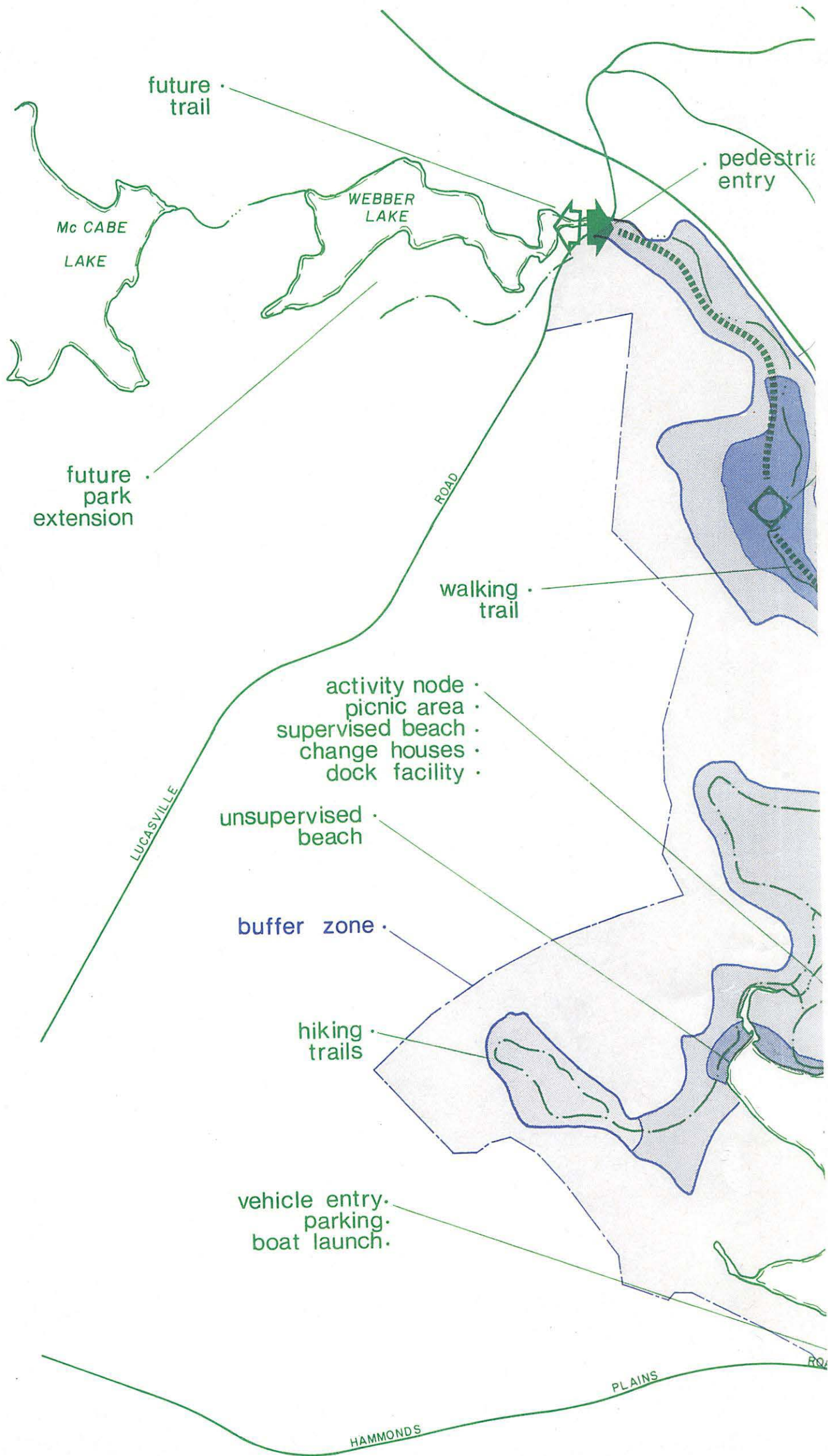
access

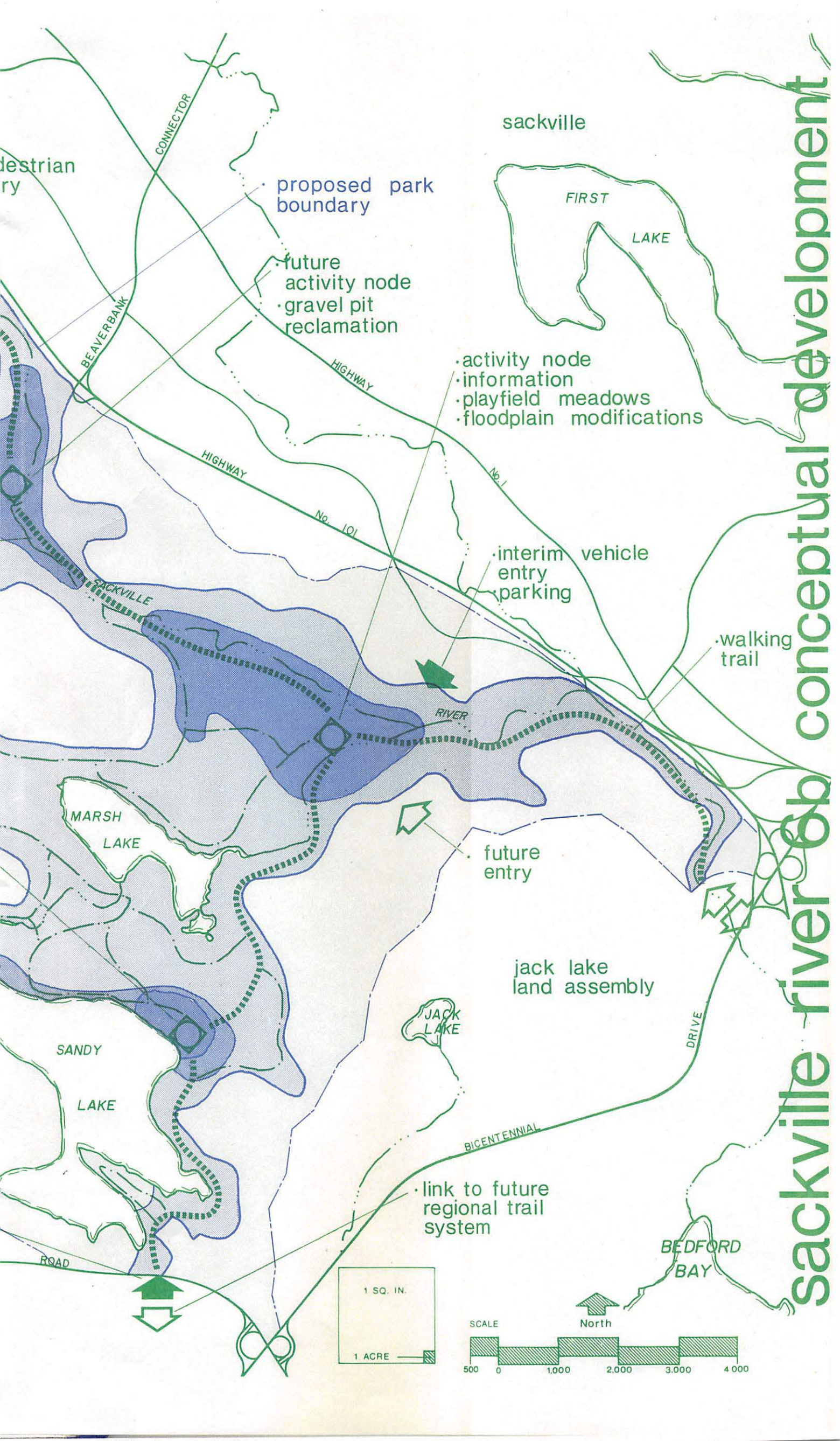


proposed screening



bicycle path





sackville river conceptual development 6b

In the short term, access to the Sackville River Regional Park poses some difficulties. The proposed walking trail system will make pedestrian access possible from the Lucasville Road, the Hammonds Plains Road and Bedford. However the principal vehicle access to the Park must await the construction of roads in the Jack Lake Land Assembly. This will allow the development of a main access point at the confluence of the River and the outlet from Marsh Lake, the intersection of the three main branches of the walking trail system, and the site of one of the reclamation projects referred to previously. In the interim a small parking area off the Hammonds Plains Road would provide an opportunity to launch small boats and to enter the trail system. A second vehicle parking lot reached by upgrading the service road in the NSPC right of way off the Old Windsor Highway would be the principal access point in the short term.

COST

The total development cost of the initial development stage is estimated to be approximately \$574,000.

OWNERSHIP

The land in the proposed Sackville River Regional Park is composed of a large number of ownership parcels, the majority held by private interests. The long axis of many of the properties runs perpendicular to the River, requiring portions to be severed for inclusion in the Park. A preliminary indication suggests that about 40 landowners may be involved in the entire Park.

The largest landowners in the Park, in terms of acreage, are public or quasi-public, with the Department of National Defence holding about 330 acres, CMHC and NSHC jointly owning approximately 185 acres (including Marsh Lake), and the Nova Scotia Power Commission owning about 90 acres in power line rights-of-way. These holdings comprise about 47% of the land area within the proposed boundaries of the Regional Park.

Most of the land proposed for inclusion in the Park is in an undeveloped state at the present time, however a small trailer court near Highway 101 at the Little Sackville River is proposed for acquisition, as are several cottages in various states of repair on the eastern side of Sandy Lake.

BOUNDARY

The boundaries used to define the Sackville River Regional Park are related primarily to physical features on the site. Topographical ridge lines, waterlines, road and powerline rights-of-way define what is thought to be the perceptible river valley of the Sackville River, and as such, constitute the Park boundary. The buffer zone boundary is determined by topographical high points surrounding the Park.

ACQUISITION

The value of the land to be acquired for the Sackville River Regional Park has been estimated at about 2.1 million dollars. This figure includes allowances for miscellaneous physical improvements to raw land and "injurious affection" suffered through severance of larger parcels. The land owned by DND and CMHC and NSHC is valued at over \$800,000, with the bulk of the value attached to the DND holdings.

It should be noted that acreage owned by the Power Commission within the boundary is entirely in powerline rights-of-way. These rights-of-way are not intended for acquisition but rather are to be revegetated in some areas to reduce their impact on the environment of the Park. The Power Commission has agreed to a revegetation program utilizing selected plant materials, and a subsequent maintenance program which would involve pruning instead of spraying with herbicides to control growth. Such a policy will ensure that environmental quality and public safety standards are maintained. Future plans call for widening the powerline right-of-way north of Marsh Lake by 75 feet and while this is certainly not desirable in terms of retaining vegetation, it might be expected to reduce land acquisition costs by roughly \$20,000.

boundaries

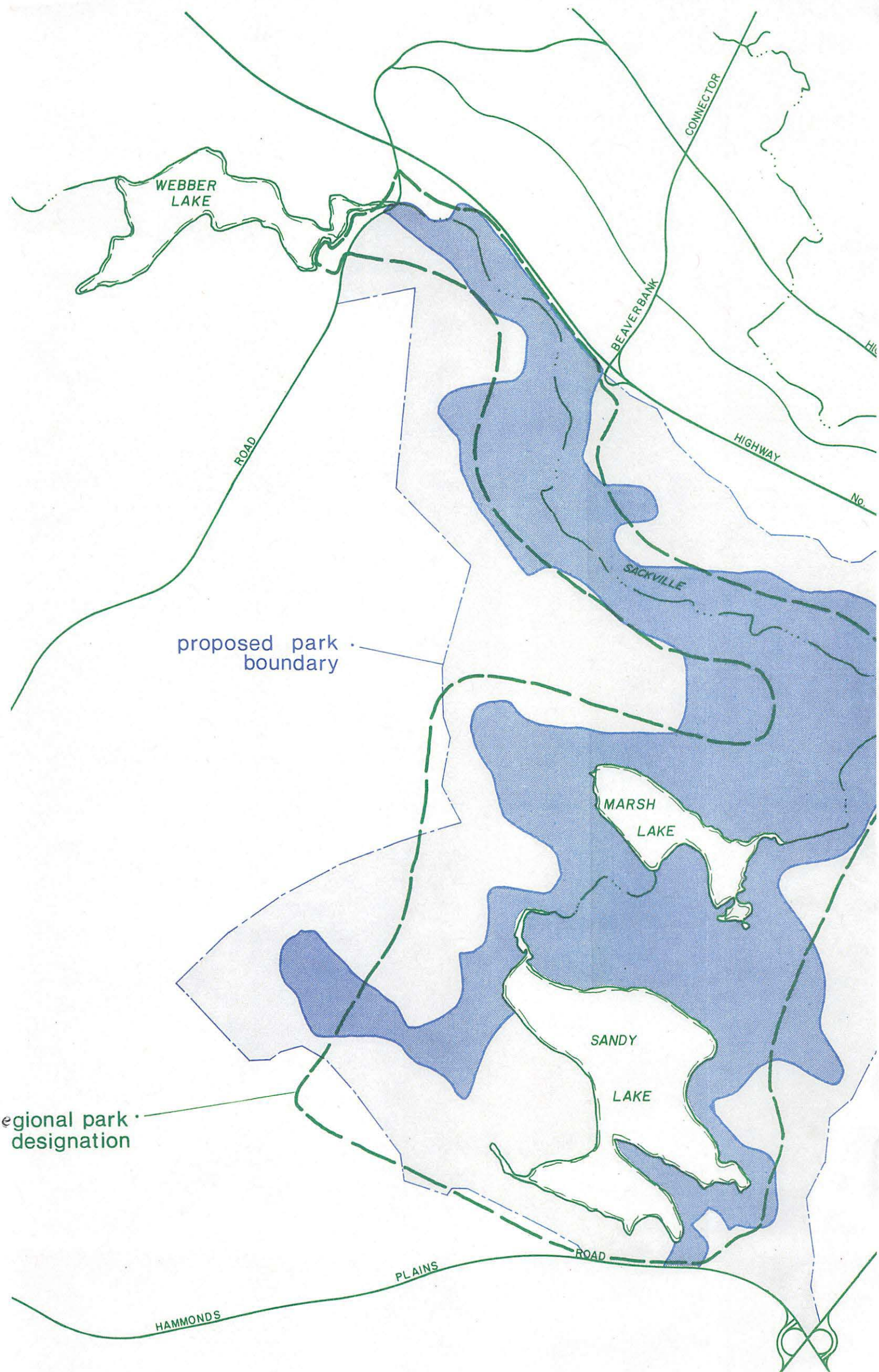
proposed park

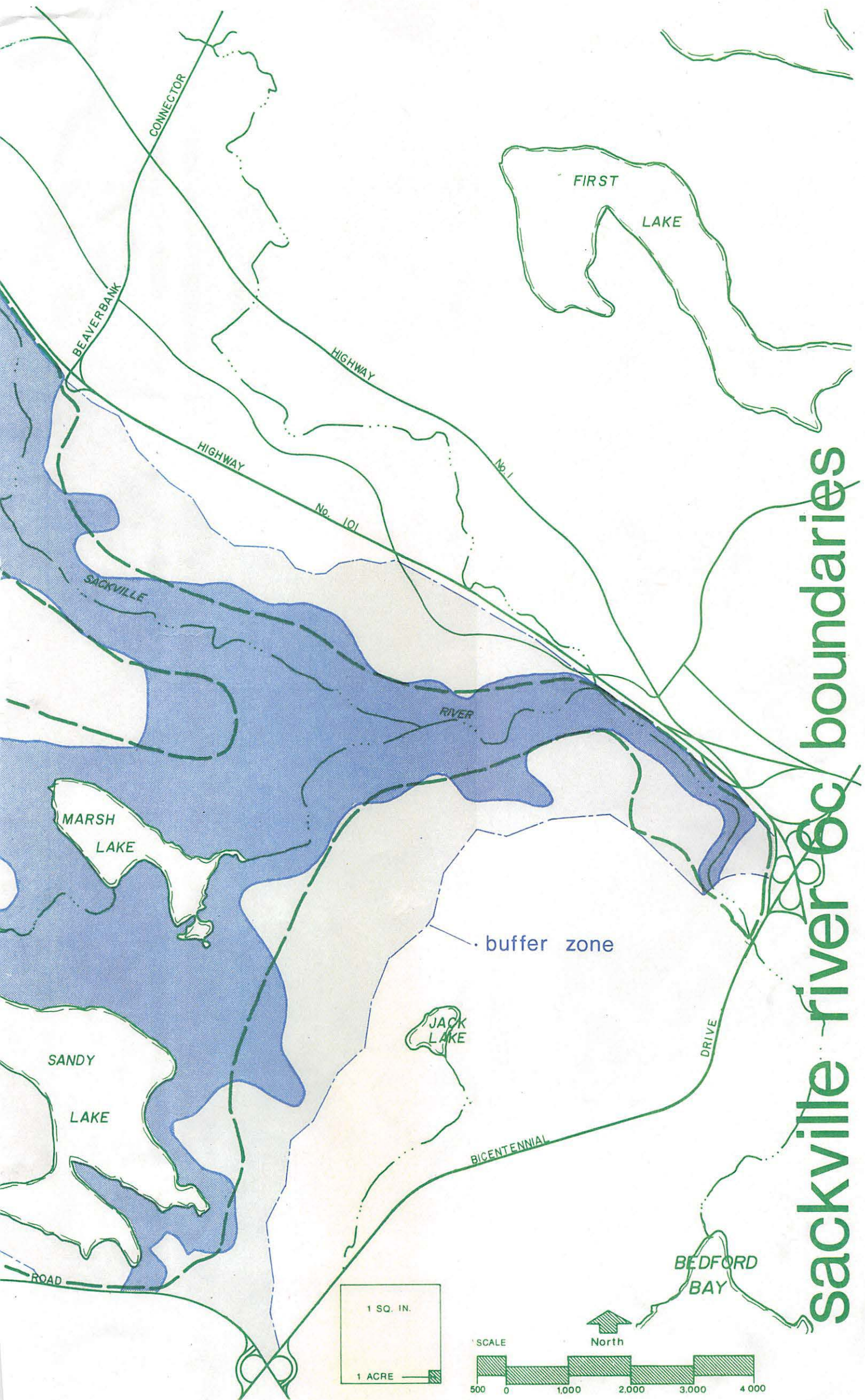


proposed conservation
or buffer zone

existing regional park
land use designation



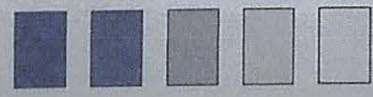




sackville river &c boundaries

conceptual development

activity zones



degree of manipulation
 decreasing

conservation or buffer zone

proposed park boundary

activity nodes

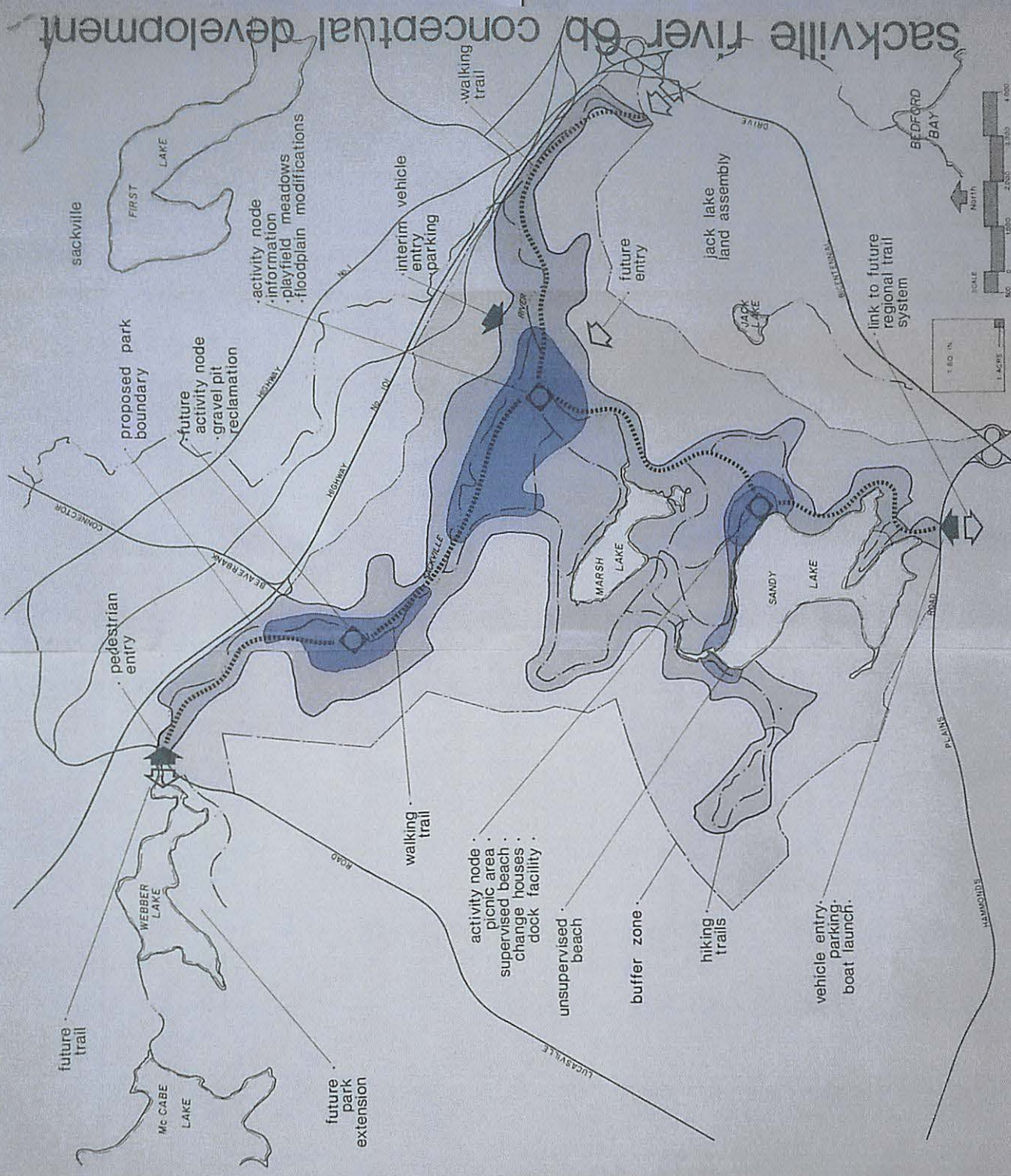
pedestrian trail

hiking trail

access

proposed screening

bicycle path



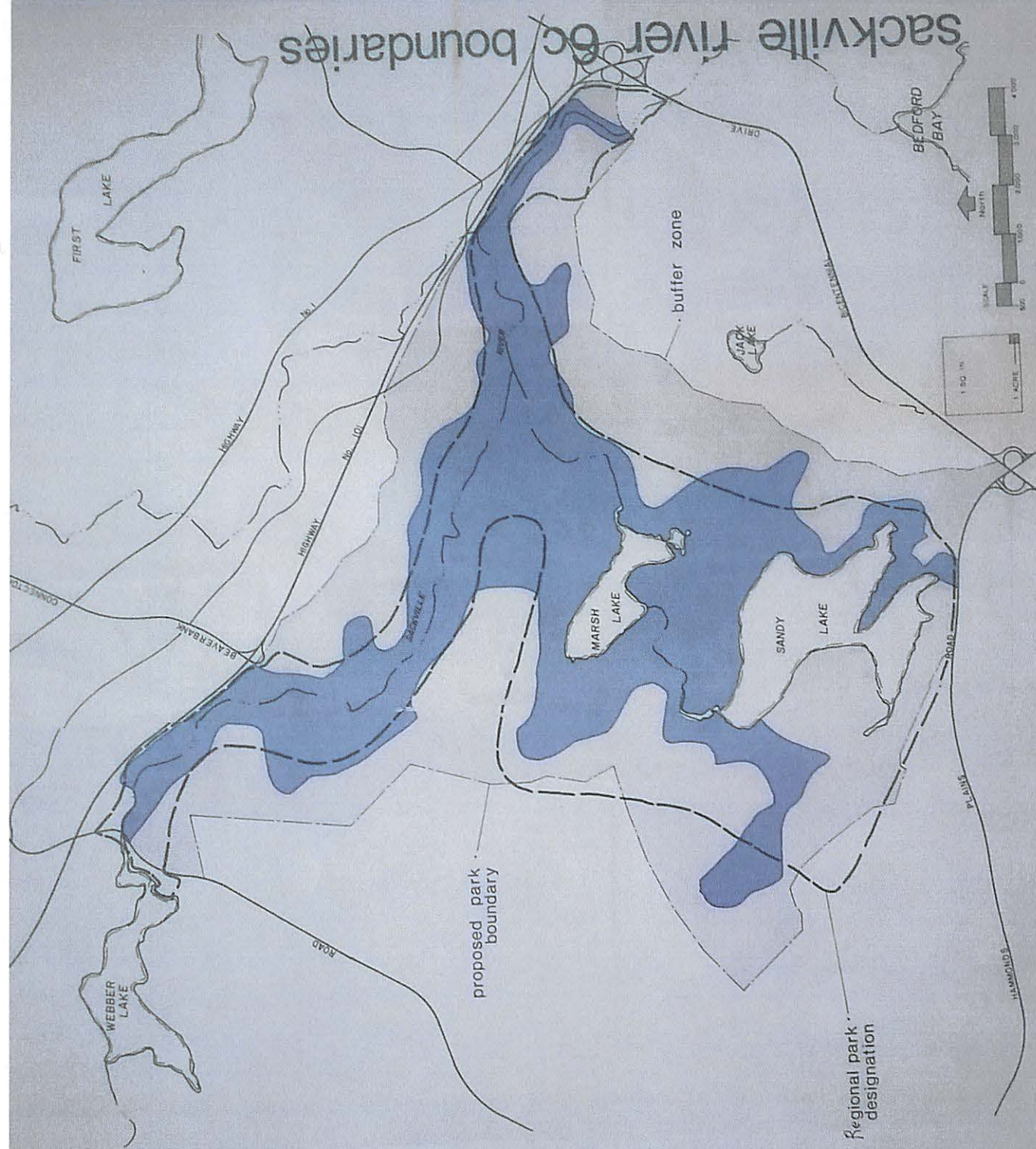
Sackville river bb conceptual development

boundaries

proposed park

proposed conservation
or buffer zone

existing regional park
land use designation



Sackville River OC boundaries