APPENDIX EE

Talks with Scientists and Planners about Sandy Lake - Sackville River

The entire proposed park has ecological value. Sandy lake is an essential part of this system that protects the rest of the entire park/watershed through to the Sackville River and basin. If Sandy Lake is not protected, the entire system suffers. The entire area needs a special analysis to determine the proper boundary of the park.

In a proper assessment, topography is the start, then vegetation and so on. Protection needs to be based on a rational scientific approach. Look to protect wetlands and also wildlife connectivity.

Property lines are not considered. It has to be an ecological approach. That's where the watershed comes in, both the Sandy Lake sub watershed and the main Sackville River watershed.

The city is taking steps that show it is serious about this regional park - documents from as far back as 1970 identify it as a valuable place for a regional park. The city has acquired property recently and has plans to acquire more. They must not ignore the west of Sandy and Marsh lakes just because someone failed to see the consequences of what they were doing and allowed the area to be rezoned for development.

What are the key assets? Sandy Lake is one. Sackville River another. Marsh Lake, the streams, the rich drumlins, old forests, diverse species, endangered plants and fauna.... To repeat, the entire proposed park has ecological value. Sandy Lake is an essential part of this system that protects the rest of the entire park/watershed through to the Sackville River and basin. If Sandy Lake is not protected, the entire system suffers.

In conducting the special analysis to determine the proper boundary of the park, understanding there are several layers to a park boundary.

- 1. Sandy Lake and the other major assets are within the body (all vegetation, Sackville River, Lakes, brooks, and so on). Some interaction is permitted to a carefully determined degree, depending on topography, land quality, etc.
- 2. A buffer which allows more interaction with the public. Ideally it is also within the park boundary (If we don't protect the buffer, it is a matter of time before it disappears and harm to the essential assets happens.)
- 3. Then there is the impact area boundary which may go into residential or even commercial areas. Use the authority of city to impose regulations on the existing development or industrial area on the way the run off is treated before it reaches the park.

Including the watershed in the park plan will allow for real protection of the richest assets in the centre.

In the Regional Plan review this time round there is a change from the past. Regional Parks used to be all about people not connection. Sandy Lake will be first, one of these first, to be viewed with connectivity as part of it, how the park will be utilized and how it ties in with the Green Network Plan connectivity.

You've already used up the rivers capacity to absorb run off, so wetlands need to be taken out of development to protect the watershed. Protect wetlands first. There is already compromise on the lake with existing development.

The feeder streams into Sandy Lake get relieved on their way if they are protected. Those three feeder streams come through already developed areas, and are already needing relief when they reach the lake. It becomes even more important to clean them before the lake as they cross the buffer.

Sandy Lake is at the edge of quality already from the industrial area and housing and the highways. The entire watershed must be part of the plan for park because outside the park boundary DOES interact with the park.

Conduct research with university students on how to mitigate the run off from Kingswood North now, and other areas such as Bluewater Road, to clean the water to enhance Sandy Lake water quality. There are projects for several departments with each contributing components.

The protection of developers lands west of the lakes, where the feeder streams and drumlins are, and control of what can happen on this land, is critical. Ownership is the best way. Developers' assertions that they can protect water quality in lakes they build around hardly deserves comment. Lake quality always go down. Habitat is altered and lost. Systems are destroyed. Some argue that birds will not be harmed because they can fly away. This is not true. Most birds are territorial and anywhere they go is already inhabited.

The Green Network Plan is based on environment/ecology first not people first, but the GNP is high level and existing ecological maps in NS are very poor. So, you need to show the old and new documentation and all the ground-truthing that's been done at Sandy Lake to show why this place is worth protecting. Map 13, the Conceptual boundary is subject to ground truthing, and that applies to regional parks too. It says so in the document.

The GNP has a watershed approach. The entire Sackville River Watershed is very important, with Sandy Lake as part of that greater system. View it regionally. It is a regional park for a reason. Sandy Lake is part of a regional network of protection concept. Blue Mountain Birch Cove Lakes and Sandy Lake are part of those big systems to be preserved. This is the kind of place to put effort to protect. It is Worthy.

Protection should happen all along this system. Need to understand it differently to see how its place in the system is important. This is an Important Natural Corridor and the city has created commitments in the green Network plan. Sackville River is the spine of this watershed network.

Sandy Lake is also in the GNP because of connectivity to the Sackville River and the Chebucto Peninsula. Stepping stone corridors are even more important to enhance now, because in the GNP the visible link on the Google Map is already being eclipsed by development. That makes the stepping stones even more important to Blue Mountain Birch Cove Lakes and the Chebucto Peninsula. And protecting essential and important corridors that remain.

Developers will tell you they can control what goes into the streams. They will tell you they can use sediment ponds and retention and other controls, but it is a natural process and way too expensive to really control. Preventing flow toward the Sackville River is important. Direct downslope discharge can't be controlled.

Anything on the slope of the Sackville River should not be developed. As soon you put it in a storm water pipe it is direct flow into the Sackville River. This is a priority. Protect the Sackville River. The watershed slope around Webber Lake needs protection. Priority 2 is water quality of feeder bodies including Sandy Lake. You can only control what happens if it is publicly owned.

The key is the Sackville River, everything that contributes to the Sackville River. To protect the Sackville River, acquire the necessary components - direct components and up water attributes. If you don't, these problems get larger. For example, Paper Mill Lake is already compromised. Building above what's already there will compromise the feeder reservoirs. That means you have to treat the water between the layers. It will cost more, and you will not be able to satisfy the requirements of your constituents because it will be unreachable to the municipal and provincial coffers.

Sandy lake is not entirely developable land. Challenges on the site are many. A need for housing would be a factor of course, and the city has already told smaller developers up the road they can't develop, so how can they say yes here?

The Sobeys piece is very attractive land for the park. Development of that piece will be extremely difficult because Smiths road makes it extremely difficult to access. Smith's road can't be upgraded and development would require two exits. But developers might make a play for Jack Lake lands behind it. Still, access is difficult because roads must be a hundred and fifty meters from the highway exit.

They are planning homes for 16,000 people at Sandy Lake. 16000 people is 8,000 cars. 5000 cars at peak times. Hammonds Plains Road is not configured to carry so much volume. The exit upgrade has helped the current overuse but not solved it. Same for the upgraded part from the BMO to the highway. And there are limitations too where Hammonds Plains Road hits the Bedford Highway, which is totally overcrowded.

Also there are developments existing in the watershed where we need to change our stormwater management because they are having a negative role on the overall system, and Uplands Park sewer system needs to be replaced.

More development upstream equals more flooding Downstream. Already properties are of lower value in the Bedford floodplain and little Sackville River. The recent CBCL floodplain report was the first time ever that climate change was figured into their assessment. It calculated a 70% increase in runoff for 100 Year storms. So Bedford Place Mall and Superstore would be under three feet of water, almost all of Union Street. The report was accepted. We don't need three feet to be unviable. only one foot.

The report did not include an evaluation of the effects of future development of Sandy Lake. That is a huge oversight. At least make flooding no worse.

Do no additional harm. That equals no further development on the Sackville River, plus allow natural processes that exist to take care of it. And augment it by vegetating clear cuts. Try to change 70% run off to 25% just by vegetating.

At Sandy Lake the 200-acre clear-cut has plants that are young and aren't functioning completely yet. So, foster them and let them grow. It needs to be in your modeling plan to let them grow. It protects runoff into the lake. protect it within the park plan. Then do legislation to ensure it doesn't happen again.

So far Sandy Lake has turtles. One of 3 lakes out of 22 that used to in the region. Turtles are an indicator species. Bad decisions equals no turtles. But we must see the entire system, not just turtles. Sandy Lake is uniquely rich. It is the beginning of the rich interior - the biome of fertile soils, river valleys that reach the interior. Sandy Lake has that richness and diversity as it has been fed by the Sackville River, and it goes both ways. From a gravity perspective the water flows down but from the biodiversity perspective it flows the other way, back up the river from the reservoirs. It runs back and forth. If it is degraded up here it affects downstream, and vice versa.

Drumlins are rich. West of Sandy Lake has big ones. They usually have bogs at the bottom and good stands of trees and are a refuge for animals and plants if you just leave them alone. Those drumlins west of Sandy Lake could help with connectivity to BMBCL just because of their richness. Even with some stepping stone corridors below.

With respect for the GNP and for all of this, the city will be compelled to require a thorough analysis before there is any discussion about development.

The document with the 160-acre acquisition is about protection of the Sackville River. Council voted for that to protect the Sackville river. Council took one step. Now let's take the next step.

The city has already been acquiring park land based on this approach- for example the 160 Acres. Some councillors likely don't know they have that approach, but that overall 160-acre plan gave them the solution for gaining 160 Acres and it helped also to achieve the city's Green Network goals. It made people happy. Read the 160-acre report. This is why we should acquire those lands. Those principles still hold true.

The city has done things consistently to enable things to happen such as preventing the dairy from dumping effluent in the '70s, acquiring 160 Acres, and others, all to protect the lake. You have to ask them, "Do you want all that to be for nothing?" You've made decisions based on protecting water quality. Here's why you were protecting water quality. whether they know it or not this is why. It was not for the residents. it was for the ecological system.

Residents work hard to protect an area because they're the ones who noticed the potential harm. That's where politicians get confused. They think residents are fighting for their backyard. It will be a task to find land to trade for Sandy Lake, but it can be done. It is right to ask for staff to look for options.

Educate councillors and the people. Tell the developer we don't want to fight with you. Offer them the elements they need. Tell them we want them to be successful because it is true. If we work together this plan will help the municipality deliver something it can't deliver otherwise.

People kill lakes. The City has a responsibility not only to protect, but to enhance, all elements of the quality of the park. With a proper assessment the city can then say to the public "Yes we did everything possible to protect Sandy Lake park, the Sandy Lake system including Sackville River and all the critical components of the park".