

Mawdsley2004\_2.txt

Subject: Russell Lake Water Quality  
From: "Scott Mawdsley" <smawdsley@ns.sympati.co.ca>  
Date: Wed, 21 Jan 2004 21:27:57 -0400  
To: "Shalom M. Mandaville"

Thank you for your response. I've included a recent e-mail, with pictures, that I sent to HRM.

Residents in this area are quite dismayed and are forming a coalition to ensure the buffer zones and lake water quality is

incorporated into any future planning. We hope to resolve this with HRM directly, but many are contemplating getting the

media, and environmental groups, involved if HRM doesn't demonstrate the same Watershed Stewardship it suggests for

developers and residents. I'm sure that if our councillor or HRM simply looked at this particular area they would understand

that it should be protected as a fragile and important buffer zone. However if developed, I anticipate, that along the same

lines as the Access Way described below, HRM will eventually have to declare the buffer zone trail a failure, and the lake

and residents will have to deal with the consequences.

As you know, the buffer zone along the eastern shore is extremely narrow and steep in areas, and I have difficulty imagining

how a trail, with anticipated heavy useage, could even be constructed and maintained to prevent severe erosion. The trail

that exists now should be left alone for those who want to use it, but not advertised by HRM, and therefore hopefully avoid

heavy useage and erosion. A wonderful accessible trail could simply avoid these areas and rejoin the lake in wider buffer

zone areas.

<snip> <snip>

Crusher rock trails have been constructed, quite close to the waters edge, throughout the northern end of Russell Lake.

Residents are now experiencing problems with ATV use on these trails, and I worry about shoreline erosion.

<snip> <snip>

Unfortunately for our group, most residents concerned, and willing to devote the time, about this narrow strip of land happen

to live along it. However, I am encouraged by the increasing interest and involvement of residents in other areas of Portland

Estates who understand the importance of preserving lake water quality for all to enjoy, and are keen to be involved in

protecting the lakeshore and having environmentally sound accessible trails.

<snip> <snip>

<snip> <snip>

You mention, storm water runoff. I am very aware of this problem, and we have had numerous sediment rich contamination

events in recent months. I am also very concerned about E.Coli counts in Morris Lake and possible heavy rain sewage overflow

events.

I studied Lake Ecology during my undergraduate Biology courses, and am very concerned about the future of both Russell and

Morris Lake. Do you have any recommendations in regards to locally available lake water quality testing that our citizens

group can arrange? Do you have any recommendations for credentialed experts that would be able to describe the importance

of buffer zones, and the fragile nature of this area in particular, to HRM? Hopefully, the awareness that we can raise for

this issue will result in the implementation of modern watershed best practice management principles throughout HRM. Looking

forward to your reply.

----- Original Message -----

From: Scott Mawdsley

To: hetherb@region.halifax.ns.ca ; Paul Eloth

Cc: oakeys@region.halifax.ns.ca ; Bigelop@region.halifax.ns.ca ; Ben@JenkinsGroup.ca ; Peter Kelly

Sent: Wednesday, January 14, 2004 11:05 PM

Subject: Sprucewood Court - Accessway

Dear Paul Eloth and Steve Oakey,

As you have described in the attached e-mail, your trail has failed and the watershed/bufferzone protective function has been

severely compromised.

As you know, residents had significant concerns about this prior to construction, and attempted on numerous occasions to

discuss this with your departments. On one occasion, the planner for this area met with Parks and Rec, and reported back

that nothing imminent was planned and discussions with residents would occur prior to any construction. We were dismayed to

see trail construction start a few short days subsequently. The PERA trails committee was not informed, and environmental

considerations, particularly as this involves a protected buffer zone, were not considered whatsoever. As a result,

residents needs were not met, and the fragile buffer zone has been damaged

extensively. How can the city expect developers

to respect buffer zones when HRM itself, demonstrates through projects like this, that they are above any standard watershed

best management principles. HRM should be setting an example to all citizens through their watershed stewardship, and be

more responsible on their own lands.

I have a background in lake ecology and am well informed about watershed best practice management guidelines. I have

circulated these trail pictures to other Watershed Management Groups, and HRM, may in fact, have the best example this year

of what "not to do" in a watershed. This is unacceptable, and if Parks and Rec and the Regional Trails Coordinator, do not

understand current watershed guidelines, they should seek outside expert assistance or at least involve the community before

wasting valuable tax payer resources.

As mentioned in numerous reports prepared for the city ("A Watershed Management Plan for Russell Lake" and "Morris Lake

Watershed Management Plan") the area on the east side of Russell Lake is extremely steep and consists of highly erodible

Wolfville Soil. A fifty foot protective buffer zone was established whose prime function is to "protect the buffer zone".

Use of this area for secondary means, for example trails, is only acceptable if the primary function is not diminished.

That primary function of the buffer zone is to provide a habitat for wildlife and plants, prevent shoreline erosion, and

preserve water quality by "filtering" surface runoff before it enters the water. As erosion occurs, storm runoff drains the

previously protected fragile soil into the lake changing the shoreline and lake ecosystem. In a protected buffer zone, or

forest, rain soaks into the ground and any storm water contamination is filtered before it enters the lake. Impervious

surfaces (roads, parking lots, paved trails, crusher rock trails) do not allow water to soak into the ground and instead it

becomes stormwater runoff and erosion and contamination occurs. As an example, 2 inches of rain in a Parking lot produces

1.9 inches of surface runoff versus only 0.12 inches in a Forest. Watershed Management principles involve decreasing the

amount of impervious cover to reduce runoff, and ensuring that adequate buffer zones or controls are in place to filter

harmful contaminants before they enter the water.

Often conflicts arise between the water quality function of the buffer zone, and the

desire to use the buffer zone. Of

greatest concern is where a path or trail should be located so that the buffer maintains its water quality function. The

zone closest to the water (first fifty feet) is the most important and should remain untouched, particularly in areas with

steep slopes and fragile soils. There is also conflicting ideas of where the trail should be (ie close to the water or set

into the buffer), and of what a path should be and where it should go. For example, should it be a meandering mulched path or

a wide path. Careful planning must also be incorporated so that, for example, a trail for families and children doesn't end

up too narrow.

ATV and bike access must be anticipated, and although it will likely not be "allowed", the problem is lack of staff to

enforce restrictions and the violators know it! A trail system is wonderful, but the primary function of the buffer zone

must be preserved, it must meet resident needs (ie access for children and families), and the city must have the resources to

maintain the trails and correct any resulting environmental damage. Poorly built or maintained trails are less enjoyable to

travel on and can induce severe damage to the environment. Trail routes should also take into consideration expected useage,

soil condition, steep slopes, surface drainage, and other physical limitations which could impact the area from overuse. In

some circumstances the trail can be diverted around fragile buffer zone areas (steep slope and highly erodible soils) with

appropriate signage, and public lake access and viewing points created.

A rough preliminary trail plan for Russell and Morris Lake has been created. Many residents are concerned about the

environmental impact and seek greater input. A well attended meeting was held last summer with our councillor and city

staff, and more are planned for the future. As you can see from the attached pictures, the Morris Lake trail system (purple

lines) was planned during development of Portland Hills and has wider buffer zones enabling the trail to be set well into the

buffer zone thus preserving the water quality function.

The Russell Lake proposed plan (yellow) is within a very narrow fragile buffer zone as has been described, and extreme

caution advised, in both HRM requested Watershed Plans. The slope is 25% in some areas (see picture below), and the

Wolville soil is highly erodible. This combination is very prone to erosion. Given

the narrow buffer zone (fifty feet) and

potential for overuse given the new development planned for across the lake, any trail system needs to be carefully studied to

ensure that the buffer zone primary function is maintained. An effective trail system, accessible to families and children,

could easily bypass the particularly fragile areas on Emma court, Russell Lake Drive, and Sprucewood Court. Amly

opportunity exists for lake access points, particularly in front of the Apartment Buildings on Russell Lake Drive. These

areas have wider buffer zones, and could be developed as a canoe launch and Public Park. By having the trail circumvent

certain areas with proper signage, and travel on the road for a short distance, the problem of ATV useage, B&E's, and

undesirable youth activity could be eliminated.

By avoiding environmentally sensitive areas, the trail could be wider and therefore accessible to the families (ie bikes,

strollers, etc) in this community who want to use it, be safer and cleaner as a result of increased family useage, and have

less maintenance requirements, and liability, for HRM.

The Sprucewood Court access route, the subject of this e-mail, was authorized by Parks and Rec and Regional trails despite

resident objection and requests for more input. A letter was even written to the mayor about our concerns, and he promised

to have staff investigate and respond. This accessway violated all watershed best management principles, and was a

significant liability for HRM. As one can see, it consisted of a paved surface running down the hill before hitting a chain

link fence. Through a small opening, a crusher rock (environmentally unfriendly) steep, twisting trail began. The trail

ended sudenly, and many frustrated residents who tried to push a baby stroller down the hill soon discovered that they had to

turn around and carry the stroller up the hill. Many children also skateboarded or, in the winter, sled down the paved area

and risked head injury due to the steep slope and fence posts and trees. It was an environmental disaster, not to mention a

potential liability nightmare for HRM. From an environmental viewpoint, it increased storm water runoff dramatically by

actually incorporated an "impervious" surface in the buffer zone. As one can see from the attached pictures, the damage was

evident after a few rainfalls. By the time, Hurricane Juan arrived the damage and erosion had already occurred. The trail is

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unsafe and a prime example of Watershed mismanagement. HRM should set an example in the buffer zone for developers and home

owners and not be a "worst offender".

Original, environmentally unfriendly, choice of trail material.

Erosion sets in..... this is with extremely limited public useage.

As one can see from the e-mails below, the trail has failed. You recommend attempting to restore the area by spreading a

layer of bark mulch and restricting access to informal use. That is not acceptable. Your departments pushed ahead with

this against community concerns and needs, and violated almost every Watershed Best Practice Guideline. The crusher rock

will have a lasting effect on the lake ecosystem as it washes into the lake, and the increased runoff from the paved area

will substantially increase erosion and contamination of the lake. The shoreline at the base of this trail will be

irreversibly damaged. If a developer committed this offence, i would hope that HRM would ensure that it was rectified, and

not simply covered with bark mulch. HRM should set an example of Watershed stewardship. The paved area and fence needs to

be removed immediately and the area restored to a surface that allows runoff to soak into the ground and be filtered. The

crusher rock must be removed, and then, mulch could be placed to hopefully cut down on future erosion. Any future trail

planning should only occur with community involvement and proper environmental "Watershed Best Management Guidelines" being

followed. There is no excuse for this. It was done despite community requests for input, and voiced concerns about exactly

this consequence becoming a reality. Please let us know how this will be rectified.

Yours truly,

SD Mawdsley

----- Original Message -----

From: "Paul Euloth" <euloth@chebucto.ns.ca>

To: <hetherb@region.halifax.ns.ca>

Cc: <oakey@region.halifax.ns.ca>; <Biigelop@region.halifax.ns.ca>;

<hugh.milward@stmarys.ca>

Sent: Tuesday, January 13, 2004 3:54 PM

Subject: Sprucewood Court - Accessway

> Bruce:

> Please see Steve Oakey's e-mail below, regarding our site visit last week

> to the Sprucewood Court.

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> His e-mail is self-explanatory. The switch back trail system is seriously  
> restricted by the land ownership pattern. Therefore, I agree with Steve  
> that the best approach would be to attempt to restore the area by spreading  
> a layer of bark mulch and restricting access to informal use.  
> Like many other areas the real issue here is blow down from Hurricane  
> Juan, which will be addressed as time permits.

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> Paul Euloth  
> Regional Trails Coordinator

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> >X-Mailer: Novell GroupWise Internet Agent 6.5.1  
> >Date: Wed, 07 Jan 2004 10:58:22 -0400  
> >From: "Steve Oakey" <oakeys@regional.halifax.ns.ca>  
> >To: <eulothp@chebucto.ns.ca>  
> >Subject: Re:

>  
> >Paul  
> >Further to our meeting of Jan 6th, 04 I agree that the trail has failed  
> >and needs to be dealt with in some fashion. As discussed the  
> >construction of this trail was part of the Development Agreement which  
> >was agreed on in 1994. The steepness of the slopes in this area are not  
> >very workable for the construction of a trail within the confines of our  
> >property boundaries without extensive site disturbance retaining walls  
> >and handrails. The proposed trail system around the lake that PERA is  
> >planning will be of scale for local use and will have good access from  
> >Emma Court. Therefore I feel that because of the problems with the slope  
> >at Sprucewood Court further effort to construct a trail should not be  
> >pursued and we should stabilize the area and allow for informal access  
> >here only. I will contact the developer to see if they are willing to  
> >stabilize the area with bark mulch although they may not be receptive to  
> >this. I will let you know how those discussions go.

>  
> >Thanks  
> >Steve

>  
> >>>> Paul Euloth <eulothp@chebucto.ns.ca> 01/06/04 09:28am >>>  
> >Steve:

>  
> >The following is part of a letter from SD Mawdsley to Councillor  
> >Hetherington.  
> >I know this is part of the development agreement you were involved with.  
> >In our previous discussion several months ago we both agreed an on  
> >site  
> >visit was warranted.  
> >Could we set a date this week or next to visit the site?

>  
> >Paul

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>  
> >3. Last summer, HRM planned and arranged for a "public accessway" to  
> >be  
> >built into the buffer zone surrounding Russell Lake. Construction  
> >materials and techniques were not environmentally friendly nor in  
> >accordance, whatsoever, with any environmental guidelines previously  
> >requested by the city. A paved surface was used, and crusher rock on  
> >the  
> >trail. Needless to say, the paved surface actually promotes  
> >contaminated

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> >surface runoff drainage into the lake, and the crusher rock has now  
> >contaminated the buffer zone. Several "weeks" after this  
> >construction, a  
> >"normal" heavy rain washed most of the trail out. The recent hurricane  
> >has  
> >obviously finished any remaining trail, and made the trail very  
> >dangerous.  
> >There are now deep ravines leading from the paved surface into the  
> >lake.  
> >Not only is this an ecological nightmare, but a significant liability  
> >for  
> >HRM. The trail leads to nowhere, and is now dangerous and  
> >contaminating  
> >the buffer zone. As you know, the primary func!  
> >tion of this buffer zone is lake protection. The buffer zone, in this  
> >area  
> >in particular, is extremely steep and contains highly erodible soil.  
> >All  
> >previous lake reports, requested by HRM, have warned about the highly  
> >erodible nature of this area. Please visit this site at the entrance  
> >to  
> >Sprucewood Court, and let us now what the city will be doing to stop  
> >the  
> >erosion immediately, and maintain this trail.  
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