Appendix D - Public Comments

Attention: Candace Hamm
Bruce County Planning and Development

Re: Bruce county official plan amendment file number BCOPA 236-18.34
and
Municipality of Brockton Zoning by-law amendment file # Z-50-18.34

We attended the information meeting on Tuesday April 23rd 2019 at 7pm in the council chambers in Walkerton regarding the development proposal.

Our understanding of this proposal is that Mr. Ballantyne owns a lot known as 496 Lake Rosalind Rd. 4 and he would like to sever this lot into 2 lots and build a residence on each lot. We have many concerns regarding this proposal and are AGAINST having this lot severed.

Our first concern is whether our community well can accept more water consumption and usage from 2 more homes, it was our understanding that we are pretty much at maximum now... and there have been past issues with the current usage. The current retained parcel that has a garage, has water and hydro hook up. . . water consumption we're sure is minimal compared to a new house build. We are not opposed to one home being built on the “open space” of the retained land as long as there is some restrictions and there is no interference with the surrounding treed area on the property. The suggested severed parcel, however, is a treed area with a creek running through it, and it’s zoned EP-10 Environmental Protection Special, it is zoned as such for a reason. . . that area has remained intact and untouched since the beginning of the Lake Rosalind community, it is home to much wildlife in the area and the trees themselves not only provide beauty to the area but also acts as a wind and snow barrier.
We object to “Any” interfere with this area and STRONGLY suggest it remain zoned environmental protected.
No disruption of any kind should be allowed to this area as it would disturb the natural environment that everyone loves.
We ask that we be notified via e-mail of the any decisions regarding this matter to a kennedy487@gmail.com

Kind Regards,
Mr & Mrs R. Kennedy
487 Lake Rosalind Rd. 4
Candace Hamm,
Applications Technician
Corporation of the County of Bruce Planning and Development

The Lake Rosalind Property Owners Association Board of Directors met on April 15th, 2019 to review the proposed Bruce County Official Plan Amendment File Number BCOPA 236-18.34 and Municipality of Brockton Zoning By-Law Amendment File Number Z-50-18.34

President Pat Mulhern noted that the purpose of the Official Plan Amendment and Zoning By-law Amendment is to facilitate the severance of a parcel of land where the owner is proposing to construct a new residence on the severed parcel and a residence on the retained lands. To implement the Official Plan Amendment, the related Zoning amendment would rezone a portion of the subject lands from Environmental Protection Special (EP-10) to Inland Lake Residential Special (LR-x) to facilitate the proposed construction of a dwelling on each parcel.

A lengthy discussion ensued noting the following concerns:

1) A recent report (Lake Rosalind Water Supply and Condition Update Report) noted that the well serving residents on Road 4 is at or near capacity and further hook ups would challenge the well capacity. In times of drought (such as 2017) water must be “delivered/hauling” to the well in order to maintain the current capacity. In cases of drought, water restrictions were/are applied. There have also been concerns over well quality. Not all current residents on Road 4 are connected to the well and would need to be able to connect as current landowners if they wished to do so in the future. It would not be acceptable to restrict current landowners from connecting to the well in order to accommodate new builds. Veolia should be required to put their approval of the additional hook up for this property in writing to confirm proper availability.

2) The French Report discusses the concern that the population density on Lake Rosalind is greatly over extended. The suggestion in the report is to minimize any further building. Also noted in this report is the need for any new lots to adhere to 1 hectare in size. The correct zone by-law which requires 1 hectare for each new building lot should serve to preserve the existing population density and possibly reduce the density issue over time. The proposed property is not in alignment with these recommendations.
3) There is deep concern with the removal of the tree canopy that currently exists on the property. Over the past years, the residents of Lake Rosalind have worked diligently to enhance the quality of the lake. The Lake Rosalind/Marl Lake Joint Water Quality Committee was created to review any situation that may have a possibility of decreasing water quality. The removal of a substantial tree canopy as well as additional residential builds will further stress an already suffering lake.

4) There is currently a creek running through the property with environmental factors that naturally prohibit flow to the lake. Any environmental disturbance to this property could detrimentally affect the delicate balance needed for lake quality.

5) It is the understanding of the Board of Directors that fill has been added to this parcel of land in the past. This is evidenced by the contours which do not appear to be natural. The Board of Directors questions whether clean fill was added or was this property an old unregistered landfill site that has been covered? The concern is the serious repercussions on the surrounding environment.

6) The Lake Rosalind Property Owners Association Board of Directors is very concerned with the precedence that approval may offer as there would now be little validity to restrict other property owners from engaging in similar requests. We are aware of at least 6 other building lots on the lake. In more simple terms….when does it end?

Following a detailed discussion, a vote was taken and accepted to offer approval to the Lake Rosalind Property Owners Board of Directors to put their concerns in writing noting that there is no support for either amendment.

The hope from the Lake Rosalind Property Owners Association Board of Directors is that the requests for both amendments will be denied.
Inland Hub, Walkerton Planning Office

Attn: Candace Hamm, Bruce County Planning and Development Department

Re:
Bruce County Official Plan Amendment File Number BCOPA 236-18.34 and
Municipality of Brockton Zoning By-Law Amendment File Number Z-50-18.34

Hello Candace, as homeowners and full time residents of Lake Rosalind residing at
#475 Rd 4, we, John and Deb Goddard, would hereby like to voice a couple of
concerns that we have regarding the proposed by-law changes to properties just down
the road from us. While we certainly do not want to hamper a home owners' rights to
alter, change or beautify their property; our concerns lie with the possible lack of
"dotted 'i's and crossed 't's" that may exist regarding these proposed changes.

Our concerns are as follows:

1. The added strain to our already taxed water well system. Is it prudent to add
another potential two residential buildings to a well system that is currently having
problems, at times, keeping up with the demands of its residents as well as its quality
that has been in question lately. These are problems or concerns that council is
already aware of and are being monitored but not rectified as of yet. It is our
understanding that drilling a new well may be the answer but not at this current time.

2. To re-designate a portion of the subject lands from Hazard Land Area to Inland
Lake Area with Exceptions. This homeowner knowingly knew the by-law when they
purchased this property and It's interesting to us that this 'Hazard' designation in the
past does not seem to mean anything currently if a by-law change can in affect be
quickly changed. This seems to be a curious and questioning thing to many of us.
Also, we have become aware recently that an old dump used to be on the property in
question and if this is indeed true, is this a 'can of worms' that we want opened' being
so close to an inland lake, where there are many home owners taking their drinking
water from? We have also heard from a couple of residents who have environmental
backgrounds and who have voiced concerns about the impact of changing the land due
to any potential new buildings and the natural water runoffs that would change
because of this. Would any one party take responsibility for repercussions that may
happen because of changed water runoffs into Lake Rosalind, a lake that is already
suffering from current environmental and residential issues?

We feel that until further studies are done and/or current problems are addressed,
these proposed by-law changes should be delayed at this time.
We sincerely thank you for this opportunity and venue for expressing our concerns.

Regards,
John and Deb Goddard
#475 Rd 4 Lake Rosalind
**Introduction**

This document was produced in an effort to preserve land zoned as Environmentally Protected or Hazardous within the Lake Rosalind watershed. The Lake Rosalind watershed consists of surface water used for recreation and domestic plumbing for residents living on and around Lake Rosalind. Additionally, there are approximately 68 residents that are connected to the municipal well system along Road 4, of which at least one non-permitted private water supply is located in the same area.

The Clean Water Act was introduced by the Province of Ontario to ensure that all residents have access to safe drinking water. The capacity of the water supply system in the Community has been recognized as a significant risk to not support the existing and future water demands for the community (Melchin et al., 2016).

1. **Rationale**

There was an application put forth on lot 496 Lake Rosalind Road 4 to reduce the Hazardous area and rezone it for residential. The developer has proposed to split the lot into two separate properties, requiring municipal water services. It was recommended by the Saugeen Valley Conservation Authority, Environmental Planning Technician to further reduce the EP zone. The reasoning was based off of zoning changes previously approved on the property with no scientific evidence to support the decision that it will not negatively impact the area. After reviewing the publically available documents and incorporating “best practice” scientific principles, there is an overwhelming amount of evidence to support that past zoning changes have negatively impacted both surface and ground water in the area.

2. **Objectives**

The purpose of this document is to demonstrate how water related negative consequences are impacted by the reduction of Environmentally Protected Hazardous zones to replace with the construction of more residents that will require municipal water supply. Specifically, how the local ground and surface water supply and quality are linked to the management of storm water and waste water and other land use practices using reports submitted to the municipality by professionals in relation to the Lake Rosalind watershed.

2.1 **Drinking Water**

**Demand**

The existing water supply has been noted that it cannot meet the current demand at all times of the year. To increase the demand of a well that struggles to supply, would jeopardize the security of clean water for the residents that currently rely on it. This point has been discussed in the Inspection Reports conducted in 2017, and 2018. “Well
#1 has been clearly impacted by drought, with shown effects of reduced well yield during seasons that lack precipitation over extended periods of time” (Shannon, 2017; Shannon 2018). Additional confirmation can be found in the Tier Three Water Budget and Local Area Risk Assessment. The impact of climate change has resulted in recent droughts that have negatively impacted the supply of the current drinking water system.

The two wells that supply water to the Community of Lake Rosalind have had historical issues with meeting the existing residential demands. As recently as the summer of 2012, the water levels in both wells fell below safe operating levels and the wells were unable to supply demand to the community (Melchin et al., 2016). Well #1 is a shallow dug well that extends less than 4 m below surface and is vulnerable from both water quality and quantity perspectives. Well #3 is a deeper well that extends 23 m below surface; however, the static water levels in Well #3 vary dramatically (up to 7 m) from one year to the next and fall to depths below the pump intake, which lies over 16 m below surface. It was interpreted that during these periods, the well could not service the demands of the community (Melchin et al. 2016).

The Tier Three Assessment establishes the risk that a community's sources of water will not be able to meet allocated water demands, taking into consideration climate and other water uses. Land use in the Study Area is primarily agricultural with natural areas such as forests and wetlands scattered throughout. Urban areas exist along the shores of Lake Rosalind and Marl Lake (Melchin et al., 2016). As Local Area B (Lake Rosalind Wells) was assigned a Significant Risk Level, all consumptive demands or areas of recharge reduction (due to land use development) within this area are classified as Significant Water Quantity Threats (Melchin et al, 2016).

Quality

The data below was sourced from the Walkerton Drinking Water System Summary Reports from 2010 to 2018, prepared by Veolia Water in accordance with Schedule 22, Ontario Regulation 170/03. These documents are publically available and reflect the quality of the drinking water over the past 8 years. The reports indicate that the municipal system, which consists of Well #1 and Well #3, provides the community with water that meets the Drinking Water Quality Standards in Ontario Regulation 169/03 with the exception of sodium, which often exceeds the value found in the regulation.

The aesthetic objective for sodium in drinking water is 200 mg/L at which it can be detected by a salty taste and is not toxic. A maximum acceptable concentration (MAC) for sodium in drinking water has not been specified. Persons suffering from hypertension or congestive heart disease may require a sodium-restricted diet, in which case, the intake of sodium from drinking water could become significant. It is therefore recommended that the measurement of sodium levels be included in routine monitoring programs of water supplies. The local Medical Officer of Health should be notified when
the sodium concentration exceeds 20 mg/L, so that this information may be passed on to local physicians. (MOECC, 2006)

The other important parameter that should cause concern noted in the public water supply reports is the increasing trend associated with the concentration of nitrates (Figure 1). The MAC of nitrates in drinking water is 10 mg/L as nitrogen (MOECC, 2006). Nitrates are present in water (particularly ground water) as a result of decay of plant or animal material, the use of agricultural fertilizers, domestic sewage or treated wastewater contamination, or geological formations containing soluble nitrogen compounds (MOECC, 2006).
As noted in the Tier 3 assessment, the area around the municipal wells is primarily agricultural with some medium density residential. Based on the counts of the fecal indicator *E. coli* measured in Well #1 primarily during the fall months compounded with the increasing trend of nitrates and precipitation, strongly suggests the source of pollution is livestock manure and/or domestic wastewater, and influencing nitrate concentrations (Figure 2). Microbial Source Tracking (MST), MECP Method E3499 could be performed to confirm the source. Walkerton quarterly precipitation data (used due to data availability and proximity radius) was plotted along the same time period and shares a similar and parallel trend with the nitrate levels, suggesting that flooding effects from climate change are correlated with nitrate levels.
### 2.2 Storm Water

Storm water is water that originates during precipitation events and during snow/ice melt. Storm water will either soak or infiltrate into the ground, be held on the surface and evaporate or runoff and end up in the watershed, ultimately Lake Rosalind. Due to the location and slope of the land of lot 496 Lake Rosalind Road 4 and adjacent properties, a stream is continuously flowing all year as reported by neighbours. Additionally, storm water is also being directed to the lake from this location due to the topography of the area. The Environmentally Protected and Hazardous zone located on the property (and others around the lake) are necessary for storm water management to not only protect residential infrastructure, but also the water quantity and quality of the lake and in the water table. Past reduction of the EP zone to construct a garage has contributed to a displacement and diversion of water and nutrients from the riparian buffer zone to directly into the lake. Results from water quality testing completed by the Lake Rosalind Water Quality Committee in that area, (location 5 and area) show elevated nutrient loading over a number of years and has been identified as a problem area.

The riparian zone is noted as the interface between land and a body of water. It is known as a terrestrial biome of the earth, where plant habitats and communities along the banks are characterized as hydrophilic. If constructed and undisturbed, this zone acts as a buffer to control, trap, and treat storm water as it travels by gravity to lower elevation. These zones are necessary to reduce the velocity of storm water, allowing it to infiltrate the ground, increase the water table, control erosion, reduce turbidity, and reduce nutrient concentrations as it travels down and enters the body of water.

Tori Waugh, Agriculture Outreach Coordinator for the Saugeen Valley Conservation Authority, presented a widely accepted scientific method to improve the health of inland lakes which follows a three step approach. Step 1 to avoid and prevent; Step 2 to control, trap, and treat water using grassed waterways, tree planting, storm water retention ponds, swales and berms; Step 3 to manage riparian zones through the construction of wetlands and natural channel designs (modified from Tomer et al. 2013)

As it relates to the municipal water system, groundwater recharge refers to the amount of water that infiltrates and seeps through the unsaturated zone and ultimately reaches the water table. The rate of groundwater recharge is dependent on a number of factors including precipitation, evapotranspiration, land use and vegetation, surficial soil type (geology), and physiography. Recharge is enhanced in areas where the ground surface is hummocky and direct runoff to nearby creeks and rivers is inhibited (Melchin et al. 2016). As Well #1 is largely influenced by the water table, inhibiting runoff in that area using the three step approach above would improve the well recharge rate and water security for the future.

### 2.3 Waste Water

A tertiary septic system that complies with the Effluent Quality Criteria as regulated by the Ontario Building Code (table 8.6.2.2.A) releases a reduced strength effluent from a normal residential waste count of 120-150 mg/L BOD5 to ~ 15 mg/L (Septic Systems Ontario, 2019). However, the average water usage of a 4 person residence is ~ 1000 L/day, and with two residences, 30 000 mg/day of BOD5 would be entering the watershed.
and consuming oxygen as it is broken down in the lake. Although this system performs
better than a traditional system, there is a waste product being generated where
persistent harmful algal blooms exist. Furthermore, prior to the previous zoning changes,
the area of the lot was wetland and is completely saturated with a continuous flow of water
passing through two locations on the property. The performance of a septic system under
saturated conditions may not meet the targets presented by the septic manufacturer.
Lastly, detergents and soaps that contain surfactants and water softener brine high in
sodium also are not treated by septic systems.
3. References


To: Bruce County Planning and Development

I am a Lake Rosalind Associate member and I am in complete support of the proposed development at

496 Lake Rosalind Road 4 as it will provide more tax dollars for the county.

Justin Lippert
403 Metzger Drive. R.R.#3 Hanover
April 24, 2019

To: Bruce County Planning and Development

From: Debra Good, 489 Lake Rosalind Road 4 (debragood@live.ca)

Re: 496 Lake Rosalind Road 4 Development

To whom it may concern,

I currently own a cottage located at 489 Lake Rosalind Road 4, directly across the road from the proposed development at 496 Lake Rosalind Road 4.

I am in full support of the proposed development and severance and have no objections. The added tax revenue can only help all residents of Brockton.

Sincerely,

[Signature]

Debra Good, CPA,MBA,CMA