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**Item No.**  
**Community Planning and Economic  
Development Standing Committee**  
**June 18, 2015**

**TO:** Members of Community Planning and Economic Development  
Standing Committee

**SUBMITTED BY:** Original Signed by  

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Bob Bjerke, Chief Planner and Director, Planning & Development

**DATE:** May 11, 2015

**SUBJECT:** Amendment to the River-lakes Secondary Plan to allow the use of a wider range  
of development techniques to control and treat phosphorus to carry out the no-  
net-phosphorus Policy RL-22

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**ORIGIN**

Department of Planning and Development

**LEGISLATIVE AUTHORITY**

Halifax Regional Municipality Charter, Part VIII, Planning and Development enables Halifax Regional Council to adopt and amend Municipal Planning Strategies.

**RECOMMENDATION**

It is recommended that Halifax Regional Council

1. Initiate a process to consider amending the Shubenacadie Lakes (Planning District 14/17) Municipal Planning Strategy with a focus on Policy RL-22 to enable the use of all types of stormwater management systems for the reduction of phosphorus emissions in large scale residential and commercial developments that may be considered by development agreement within the River-lakes Secondary Plan Area; and
2. Request staff to follow the public participation program as approved by Council in February 1997.

## **BACKGROUND**

Council adopted a no-net phosphorus loading policy under the River-lakes Secondary Planning Strategy of the Municipal Planning Strategy for Planning Districts 14 and 17, in 2012. The intent of the policy is to protect the Shubenacadie Lakes from further deterioration by controlling the amount of phosphorus emitted into the receiving waters from large scale development.

Phosphorus is a chemical constituent that naturally occurs in the environment and from human activities such as the application of fertilizers and human waste. Phosphorus can become bound up in soils, vegetation and rocks if it does not exceed the natural capacity of the environment to absorb it. An abundance of phosphorus can be released from land development activity which can cause a lake to become eutrophic long before its natural time.<sup>1</sup>

To stem the decline of the Shubenacadie Lakes, Policy RL-22 requires a study to verify that there will be no net increase in phosphorus emissions from a large scale housing development or a commercial development after a proposed development takes place (Attachment A- Policy RL-22). If the study shows that there will be a net increase in phosphorus in the post development situation, the proponent can either reduce the phosphorus by retaining the stormwater on the site to remove phosphorus naturally and/or reduce the proposed density of proposed development.

The stipulation that phosphorus has to be treated naturally is predicted to pose a problem for future commercial and residential development regulated through Policy RL-22. The Sobeys Site for example, located at 3286 Highway 2, is primarily covered with asphalt which will make it difficult, if not impossible, to remove phosphorus naturally. A stormceptor, or similar engineering device designed to remove phosphorus, oils, and debris from stormwater will be needed to treat phosphorus on this site and this type of device is not considered to be a natural method of stormwater treatment pursuant to Policy RL-22. Amending the existing policy would allow development in situations like this to proceed, while still retaining the existing high standards for ensuring no net increase in phosphorus emissions.

The requirement to treat stormwater naturally was developed in response to concerns by Halifax Water that it would require the utility to have to treat stormwater in the system of public ditches. Halifax Water has no current requirement to treat stormwater and such a requirement would have imposed an additional cost to its operations which it cannot authorize without approvals from the Utility and Review Board. Policy RL-22 was therefore, drafted to require that the stormwater be retained and treated naturally on-site as a means of avoiding impact on the Halifax Water stormwater management operations.

Since the adoption of the policy, HRM Staff have been advised by consultants that the only way a no-net phosphorus post development condition can be achieved is through the use of advanced stormwater treatment systems in addition to other design controls such as lakeshore setbacks and density reductions. An amendment to Policy RL-22 is therefore, needed to allow a wider range of measures to maintain phosphorus at pre-development levels.

## **DISCUSSION**

Developments that require studies to verify a no-net phosphorus increase include any proposed development agreement for commercial development in the Village Core Comprehensive Development District or the Canal Court (Attachment B). A study is also required for any residential subdivision developments that may be considered through the provisions of a development agreement as a Conservation Design Development within the River-lakes Secondary Plan pursuant to Policy RL-22.

Amending Policy RL-22 to allow a wider range of measures is needed to achieve the goals for

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<sup>1</sup> The process of eutrophication is naturally occurring and typically takes thousands of years to complete. In a developed watershed, a lake can become eutrophic in a few decades. One of the key contributors to an accelerated rate of eutrophication, known as cultural eutrophication, is the abundant release of phosphorus to receiving waterbodies at an unsustainable rate.

phosphorus abatement under the River-lakes Secondary Plan. This would include measures such as the use of advanced stormwater management controls on privately owned property, setbacks of development and wastewater management systems from lakeshores, density controls and any other phosphorus reduction measures that may be developed over time.

Halifax Water has advised that it has no objection to the placement of stormwater management devices on private property to achieve the goals of the River-lakes Secondary Plan. It does not, however, have a regulatory requirement to manage the quality of stormwater and is not able to allocate operational or capital funds to this initiative.

It is recommended that Council initiate the process to consider the proposed amendments to the Municipal Planning Strategy as outlined within this report. The Public Participation Program adopted by Council in 1997 will require Staff to hold a public information meeting in the Community to obtain feedback.

### **FINANCIAL IMPLICATIONS**

There are no financial implications arising from the proposed amendments. The proposed amendment would require the placement of all stormwater treatment systems on private properties which will alleviate any potential cost implications for stormwater treatment operations in the public stormwater management system.

### **COMMUNITY ENGAGEMENT**

A public information meeting will have to be held in the Fall River Area to obtain public feedback on the proposed amendments.

Amendments to the River Lakes SPS and LUB involve community engagement and the engagement process will be consistent with the intent of the HRM Community Engagement Strategy, the *Halifax Regional Municipality Charter*, and the Public Participation Program approved by Council on February 25, 1997.

The proposed level of community engagement is consultation, achieved through a public meeting and/or public workshop early in the review process, as well as a public hearing before Regional Council can consider approval of any amendments.

Amendments to the municipal plan and land use by-law will potentially impact the following stakeholders: local residents, property owners, community or neighbourhood organizations, other HRM business units, and other levels of government.

### **ENVIRONMENTAL IMPLICATIONS**

Amending Policy RL-22 to allow the use of advanced stormwater management systems to abate phosphorus will prevent adverse environmental impacts on the Shubenacadie Lakes. All of the lakes along this system are near the limits of their present trophic status and reducing the amount of phosphorus emissions will help reduce the risk of turnover of the lakes from the effects of cultural eutrophication.

### **ALTERNATIVES**

1. Regional Council may choose to refuse to initiate the process to amend the River-lakes Secondary Plan. This is not recommended since advanced stormwater management systems are needed to operationalize the no-net phosphorus loading policy and the current policy will prevent developers from using these systems to abate phosphorus. A decision of Council not to initiate the MPS process is not appealable to the NS Utility and Review board as per Section 262 of the HRM Charter.

**ATTACHMENTS**

Attachment A – Excerpt of Policy RL - 22 from the River-lakes Secondary Plan

Attachment B – Map RL - 2 Village Centre Areas under the River-lakes Secondary Plan

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A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.php> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

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Report Approved by: Original signed by  
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## Attachment A

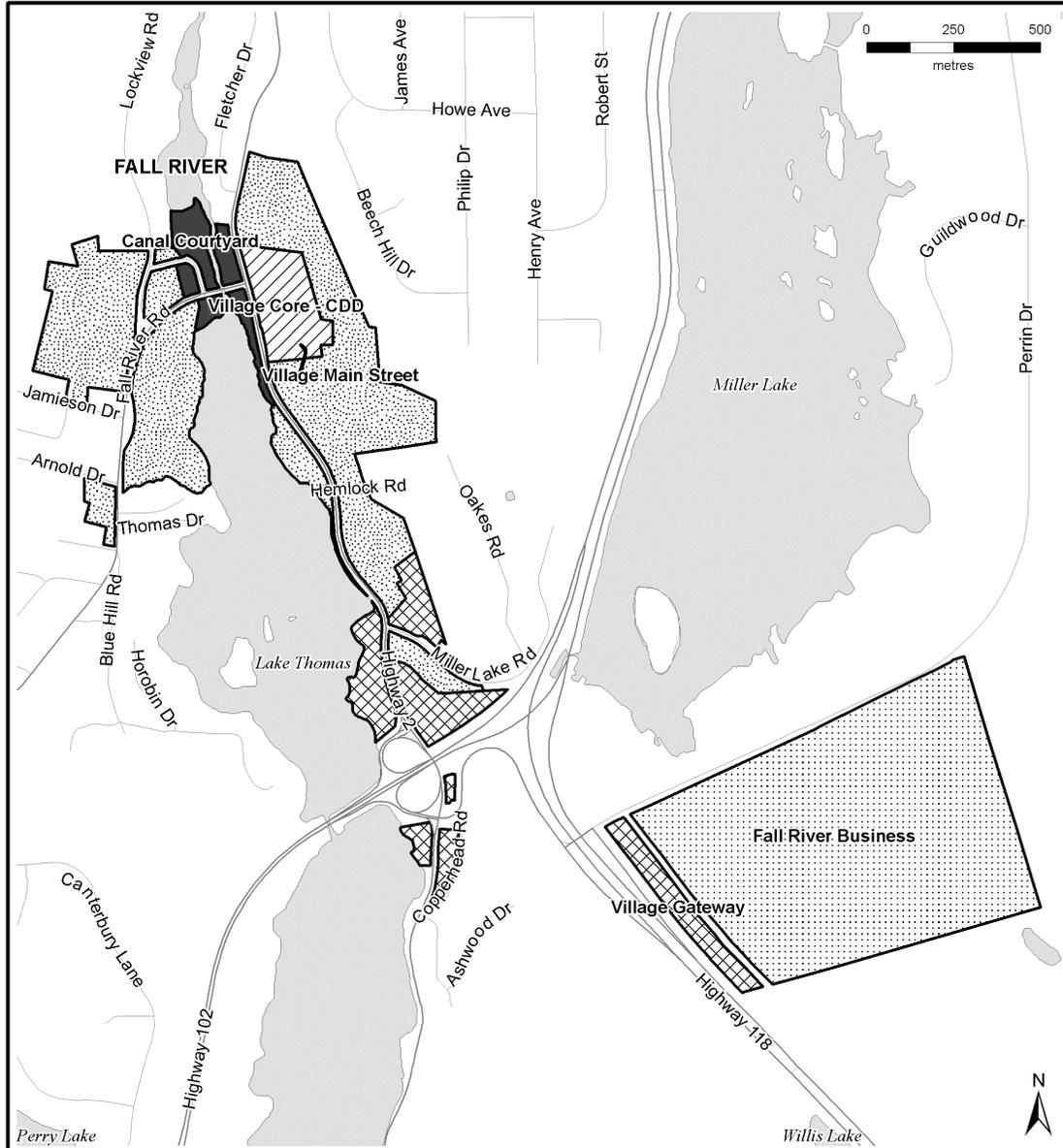
### Excerpt from the River-lakes Secondary Planning Strategy contained under the Municipal Planning Strategy for Planning Districts 14 and 17

In order to maintain the health and resilience of these receiving waters, this Secondary Planning Strategy will establish a no net increase phosphorus export policy for any future residential developments exceeding 8 units/lots within the River Lakes Secondary Planning Strategy Area. Pursuant to the Regional Plan, any development requiring a new road for the development of more than 8 lots is only allowed to proceed under the provisions of a development agreement. As part of the assessment process for a development agreement, applicants shall be required to submit a study by a qualified person demonstrating that the proposed development will not export any more phosphorus from the site than what may be exported from the site prior to the development taking place. The total amount of phosphorus that is expected to be exported from the site prior to the undertaking of a development shall in effect become the phosphorus budget or limit for the amount of phosphorus that may be allowed to be exported from the site under the proposed development for that area. If the amount of phosphorus for a proposed development exceeds the phosphorus budget for the site, then the density of development will have to be adjusted to reduce the phosphorus impacts on the receiving environment. The feasibility of continuing development in the northern portion of the Secondary Planning Strategy Area should be reviewed during the Phase II planning process.

In order to achieve an appropriate balance of development throughout the Shubenacadie Lakes System and to maintain an oligotrophic level for Grand Lake, water quality objectives should be established for each contributing sub-watershed after HRM adopts a water quality monitoring functional plan. HRM is currently undertaking a watershed study of the Shubenacadie Lakes Watershed to assess the impacts of potential future development in the Port Wallis area within the Lake Charles Sub-watershed. It would be appropriate to review the River-lakes Secondary Planning Strategy when setting targets for future growth in the Lake Charles or Lake William sub-watersheds that are upstream from Fall River. At this time, threshold values should be set for the Shubenacadie Lakes System against which to regulate the density of all future development.

RL-22 The River-lakes Secondary Planning Strategy shall establish a no net increase in phosphorus as the performance standard for all large scale developments considered through the provisions of a development agreement pursuant to policies RL-4, RL-5, RL-11, RL-12, RL-13, RL-14 and RL-15 of this Secondary Plan. This Policy shall also apply to proposed developments pursuant to policies S-15 and S-16 of the Regional Municipal Planning Strategy. A study prepared by a qualified person shall be required for any proposed development pursuant to these policies to determine if the proposed development will export any greater amount of phosphorus from the subject land area during or after the construction of the proposed development than the amount of phosphorus determined to be leaving the site prior to the development taking place. If the study reveals that the phosphorus levels predicted to be exported from the proposed development exceed the phosphorus levels currently exported from the site, then the proposed development will not be permitted to take place unless there are reductions in density or treatment of stormwater through natural systems to reduce phosphorus export levels to those current before the proposed development. The cost of the study shall be borne by the applicant. The study may rely on phosphorus export coefficients derived from existing studies if they can be justified for application to local environmental conditions. All existing and proposed development within the affected area shall be taken into account and the consultant shall undertake Wet Areas Mapping to help define the ecological boundaries associated with the flow channels, accumulation points, and riparian zones to restrict any high impact development in those areas.

ATTACHMENT B



Map RL-2 - Village Centre Areas

- Canal Courtyard
- Village Gateway
- Fall River Business
- Village Main Street
- Village Core - CDD



This map is provided for illustrative purposes only. Please refer to Land Use By-Law for Planning Districts 14 & 17 Schedules for official reference to zoning.