

B.C. Riparian Areas Regulation: Community Pilot Projects
Thompson-Nicole Regional District -ADAMS LAKE.

16-Mar-05

The Thompson-Nicola Regional District (TNRD) encompasses 45,279 km² in south central British Columbia. Its population of nearly 120,000 is spread among eight municipalities and ten rural electoral areas. The Regional District provides a variety of services, including planning and building inspection, to the electoral areas, and professional support where requested or contracted by some of the smaller municipalities.

Background – the TNRD’s Methods for Protecting Streams

For the most part, the TNRD has relied on recommendations from regional staff in the Ministry of Water, Land and Air Protection (MWLAP) and Fisheries and Oceans Canada (DFO) to establish requirements for riparian and instream protection in development applications. However, the TNRD does have some tools for regulating development around watercourses.

The **Zoning Bylaw**, which applies throughout the Regional District, contains watercourse setbacks ranging from 7.5 m to 60 m from the natural boundary. These setbacks, however, were established for flood management purposes and were not intended to achieve riparian protection.

Developed in collaboration with MWLAP and DFO, the TNRD adopted **Lakeshore Development Guidelines** in June 2004 in response to the ever-growing residential and commercial lakeside development in the Region. The Guidelines attempt to balance recreational development opportunities with goals to protect the quality of these lake environments. The Guidelines establish 30 m setbacks for buildings and vegetation retention from natural boundary on lakes (with some allowance for lakeshore access and views), and 15 m setbacks on streams on lakeshore properties. While the Guidelines themselves have no legislated basis, the TNRD implements them through covenants negotiated at time of rezoning and subdivision, and informally by providing them to developers and residents to guide their development plans on lakeshore properties.¹



Map 1: Pilot Study Site and proposed campground area.

¹ The Guidelines can be viewed on the TNRD’s website at <http://www.tnrd.bc.ca/development/planningservices.php> - click on the link to the Guidelines on the pulldown menu “Frequently Requested Links”.



Picture 1. The shore of Adams Lake viewed from the first campsite bench.

The Pilot Site

The pilot study site is a 7.2-ha parcel within a 21.7-ha rural property located on the northwest shore of Adams Lake (**Map 1**), about 30 km east of the community of Barriere. Accessible only by logging road, the site includes over 400 m of lake shoreline as well as two small watercourses. In the past, the property was logged selectively and then used for logging camps. The property is surrounded by Crown land with mature, mixed forest growth.

The current owner purchased the land three years ago for development as a recreational vehicle (RV) campground and future marina. The owner cleared most of the 7.2 ha and created two steeply sloped benches parallel to the lakeshore for future RV sites (Picture 1). The existing access road was also extended, two sheds were built, and the hydro line was lengthened to reach the campsite area (Map 2).

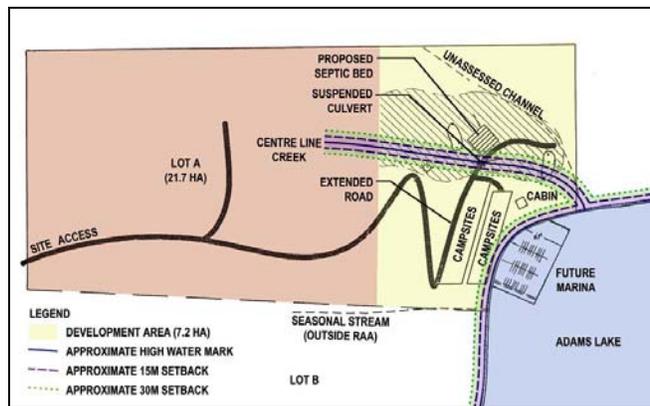
The site work was brought to the attention of the TNRD in 2004. Currently zoned RL-1 (Rural), which does not permit campgrounds, the TNRD informed the owner that a rezoning to C-4 (Recreational Commercial) was required. The owner hired an engineer to conduct an environmental assessment as a requirement of the rezoning process.

The Watercourses

Adams Lake: Adams Lake is a significant water body in the TNRD in terms of both size (129 km²) and habitat value. It supports the Adams River sockeye salmon run, one of the largest sockeye populations in the Fraser River system. The Lake and River also contain Kokanee, Rainbow trout, Chinook salmon, Dolly varden and Mountain whitefish.

Centre Line Creek:² This Creek flows through the northern portion of the site from west to east, draining into Adams Lake. The channel is one to two metres wide, the streambanks are mostly undefined and the stream type is riffle with a few pools. The riparian vegetation is predominantly shrubs with a few young trees.

The Creek has the ability to support Rainbow trout seasonally, but could be dry during the fall and winter. Creek depth is sufficient for Rainbow trout but not for Sockeye



Map 2: Proposed development scheme including 15-m and 30-m setback lines on Adams Lake and Centre Line Creek.

² Most information taken from the Draft Environmental Impact Assessment (January 2005) prepared for the applicant.

salmon passage. The recently constructed road has created a suspended culvert where it crosses the stream, acting as a barrier for fish access west of the road, but no natural barriers to fish passage exist upstream. The riparian zone is disturbed by the recent road construction.

Un-named channel: An additional 50-m of channel with a width of under half a metre was identified intersecting the north end of the property.

RAR Simple Assessment – desktop analysis: Both Adams Lake and Centre Line Creek would be considered fish bearing with existing or potential riparian vegetation of 30-m or greater. A Simple Assessment would therefore indicate SPEA (Streamside Protection and Enhancement Area) widths of 30 m from the top of bank. The un-named channel was not assessed for fish bearing capacity; under the default option, it would be considered fish bearing and also subject to a 30-m SPEA.

The Review Process (Figure 1)

When the owner submitted an application for rezoning, the TNRD compiled a fact sheet about the development and forwarded it to a variety of affected agencies with potential interests in the development, including MWLAP and DFO, as well as the BC Ministries of Health, Forests, Transportation, and Community, Aboriginal & Woman’s Service, and Land and Water BC. The TNRD received comments from interested agencies outlining areas of concerns. The TNRD compiled the comments into technical and assessment requirements and forwarded them to the applicant.

The applicant retained a qualified professional to respond to the TNRD’s requirements. The resulting report has been forwarded to relevant senior agencies for further review and recommendations. The TNRD will negotiate the terms of rezoning with the applicant based on the comments from the responding agencies and on public input through the public hearing required in the rezoning process.

Potential Changes in the TNRD’s Review Process under the RAR

Under the RAR, there would be less direct communication between the TNRD and senior environmental agencies than in current practice (Figure 2):

- A development application would no longer be referred to senior agencies prior to site evaluation. Instead, the TNRD would require a

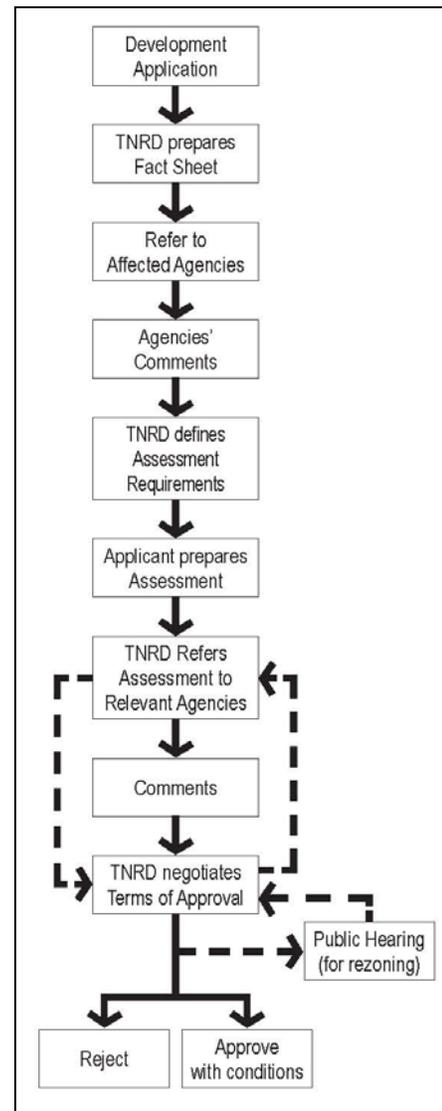


Figure 1: Current TNRD approval process used for the pilot site.

report by a Qualified Environmental Professional (QEP) if a proposed development encroaches, or potentially encroaches, within 30 m of a stream.

- A QEP would undertake the assessment according to the RAR’s Assessment Methods. The QEP would submit the report directly to MWLAP using the web-based submittal procedure. In the submission, the QEP would also confirm that the three criteria required under the RAR are fulfilled, namely: the QEP is qualified, that he/she/they adhered to the RAR’s Assessment Methods, and they have provided an opinion on the width of the SPEA and the necessary measures for maintaining its integrity.
- MWLAP would notify the TNRD and the QEP that the report has been received, and make it available to the TNRD to view and download. The TNRD could also request that the applicant or QEP provide them with a copy of the report at time of submission.
- If the QEP finds that the proposed development must encroach on the recommended SPEA (which constitutes a HADD - harmful alteration, disruption or destruction of fish habitat), the applicant and/or QEP would also submit the report to DFO with an application for authorization under the *Fisheries Act*.
- The TNRD would proceed with the application on the basis of the SPEA and measures provided in the QEP report. In its final approval of the application, the TNRD may be able to make minor adjustments to the SPEA, based on the flexibility permitted in the RAR Implementation Guidebook.

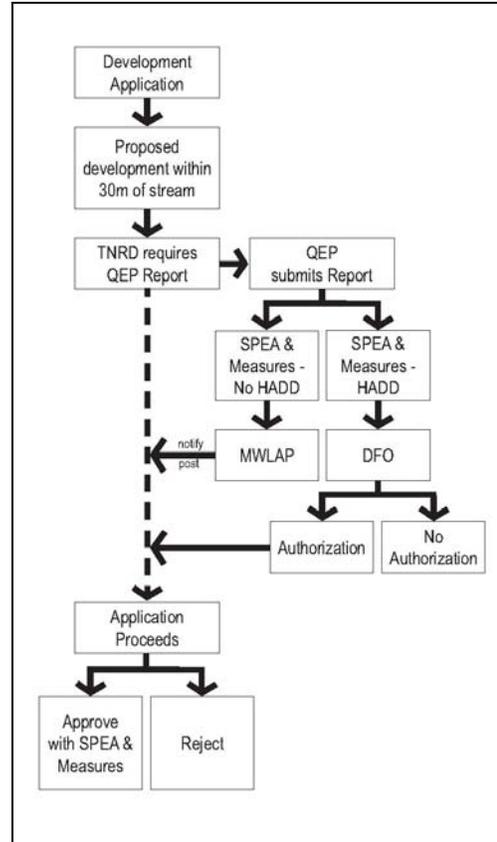


Figure 2: How the Approval Process could change under the RAR.

Implementing the RAR in the TNRD

The TNRD is investigating ways of implementing the RAR through its Zoning Bylaw and Lakeshore Development Guidelines, as well as through the Official Community Plans defined for parts of the Regional District.

Zoning Bylaw: As mentioned previously, the Zoning Bylaw contains setbacks from watercourses for flood management purposes; they are not intended to achieve riparian protection. The TNRD is currently conducting a review and revision of its Zoning Bylaw, and is intending to incorporate its Lakeshore Development Guidelines as part of that revision. This may ‘meet or beat’ the RAR when it comes to setbacks from lakes.

Official Community Plans: There are currently 10 OCPs that cover the more settled parts of the TNRD, but they do not cover all parts of the Region. The TNRD recognizes the potential for creating development permit areas (DPAs) for watercourse protection, though none are as yet defined under the existing OCPs. Nonetheless, several options are being contemplated during 2005, such as:

- Creating a watercourse DPA in each of the existing OCPs, given that these OCPs cover the more populous areas and would therefore, cover the majority of potential development around watercourses;
- Creating watercourse DPAs in each existing OCP but also expanding the boundaries of these OCPs to encompass all lands in the Regional District; or
- Developing a ‘generic’ OCP with policies and/or DPAs that address common needs such as floodplain regulation, wildfire management, the Lakeshore Development Guidelines, and RAR requirements. This generic OCP would be applied to electoral areas or parts thereof that currently do not have OCPs, and existing OCPs would be amended to incorporate these generic policies.

The TNRD is at a crossroads in the development of land use regulations to support watercourse protection in general and the RAR in particular. It is attempting to find a reasonable and efficient method for meeting the RAR requirements given the largely rural/resource nature of this vast region along with limited staff resources, watercourse mapping and data, and private sector expertise. To date, the TNRD has worked closely with MWLAP and DFO staff in the region, and this relationship will likely continue as the TNRD makes the necessary transitions.

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