

MEMORANDUM

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TO: Ms. Christine Lefloch, Columbia Shuswap Regional District **DATE:** 13, May 2018
FR: Trina Koch, B.Sc., R.P.Bio., WWAL **REFERENCE:** 18-030-02

RE: Riparian Area Regulation Exemption Letter for the Zappone Property at Lot 1, Sec 22, Twp 21, R10, W6M, KDYD, Plan 38427, near Tappen, B.C.

Background

Western Water Associates Ltd. (WWAL) has been retained by Mike and Rhonda Zappone to complete a Riparian Area Regulation (RAR) Assessment for proposed subdivision development at a gravel pit located along Ford Road at Lot 1, Sec 22, Twp 21, R10, W6M, KDYD, Plan 38427, near Tappen, B.C. (subject property) (Figure 1).

Online mapping (iMap 2018) of the subject property shows a water channel flowing from the east into the gravel pit (Figure 2). Because proposed subdivision development is within 30 m of the mapped water body, the CSRD requires a RAR Assessment Report be included with the development permit application.

RAR Assessment methodology includes completing a field investigation to determine if fish habitat exists in the water body and if the water body is connected to a fish bearing water body. Although a channel may not contain water in it, seasonal connectivity to a fish bearing water body can be determined if there is evidence of flowing water and no barriers to fish access (BC Government 2005). Evidence of flowing water consist of rounded substrate, defined channel banks, rafted debris, rilling (rivulets in the substrate) and aquatic vegetation.

Field Assessment

WWAL's Senior Biologist, Trina Koch R.P.Bio., who is trained in RAR Assessment methodology, completed a field investigation to support a RAR Assessment at the project site on April 25, 2018. Ms. Koch arrived on site at 2:30 pm. Weather conditions were dry and seasonally warm (~ 16°C).

Ms. Koch explored the mapped channel location. Three separate draws were located along the hillside within about 40 m of the mapped channel location (Photograph 1-3). Each of the three draws were dry and there was no evidence of historical water flow. There were no creek beds, defined channels, rilling, aquatic vegetation or rafted debris in the draws. The gravel pit below was dry in the location of the mapped channel (Photograph 4). No water was observed flowing through the culvert at Ford Road.



Photograph 1. Draw 1



Photograph 2. Draw 2



Photograph 3. Draw 3



Photograph 4. Dry gravel pit



Photograph 5. Draw 1 tire tracks



Photograph 6. Dry angular gravel

Draws 2 and 3 appeared to be used as footpaths and Draw 1 as a roadway (Photograph 5). There was no evidence of flow in the draws, rafted debris, defined channel banks, fish habitat, rounded substrate (Photograph 6) or connection to a fish bearing water body.

Conclusions

The water channel mapped on iMap BC located within the subject property is not a flowing water channel. Onsite observations show that three draws within 40 m of the mapped channel are used as footpaths or roadways. Because there is no evidence of flow in the draws and no connection to a fish bearing water body, the Riparian Area Regulation does not apply to this subdivision development.

Attachments:

Figure 1

Figure 2

REFERENCES

BC Government. 2005. Riparian Areas regulation Assessment Methods.

https://www2.gov.bc.ca/assets/gov/environment/plants-animals-and-ecosystems/fish-fish-habitat/riparian-areas-regulations/rar_assessment_methods.pdf

iMap BC. 2018. Accessed May 10, 2018. <https://maps.gov.bc.ca/ess/hm/imap4m/>



Figure 1 - General Location of Project Site

Date: April 2018				Image Source: Google Earth		WWAL Project: 18-030-02	
Drawn by: RR		Checked by: DG		Client: Zaponne		Client Project:	



Figure 2 - Detailed Site Orthophoto with Field Investigation Features

Date: May 10, 2018	Image Source: iMap BC	WWAL Project: 18-030-02
Drawn by: TK	Checked by: DG	Client: Zaponne
		Client Project:

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