Subject: Nanaimo Riparian Area Protection Bylaw and Development Permit Area 1
Review

Intention: To improve protection of watercourse Riparian Areas for the full range of environmental and community health benefits they provide.

Notice of Motion:

That the city's regulatory framework for watercourses be revised as part of the reimagine Nanaimo process in order to improve the protection of city watercourse riparian areas for the full range of the important environmental and community benefits they provide.

Background:

The City of Nanaimo currently protects its watercourse riparian areas through two regulatory mechanisms. Zoning Bylaw No. 4500 prohibits development or the alteration of a leave strip of predetermined width depending on the size and type of the watercourse. The leave strip is the protected riparian area land adjacent to the sea or on each side of a watercourse. Development Permit Area 1 (DPA 1) within the Official Community Plan (OCP) regulates development within a leave strip area in cases where encroachment into the riparian area is deemed unavoidable.

The current objectives of DPA 1 reads:

"Protect watercourses with connectivity to freshwater fish habitat, their adjacent riparian areas, and upland areas that exert an influence on the watercourse from development.

Direct the restoration and enhancement of our watercourses and riparian areas *so they can* provide biologically diverse corridors for wildlife movement and for the protection of natural features, functions and conditions that support fish and wildlife processes."

Discussion:

There is a need to revise the current regulatory framework for protecting Nanaimo's watercourse riparian areas. First, protection objectives as outlined in DPA1 do not capture the full value of the community benefits that watercourse riparian areas provide to the public. Second, as currently applied, the guidelines of DPA 1 can undermine this regulatory tool's ability to meet its protection objectives. Third, a development permit area as a regulatory tool may not be the most effective means to protect watercourse riparian areas and shield the municipality from legal risk that may result from lot sterilization. Each of the above challenges within the current city of Nanaimo regulatory framework is related to the others and not easily isolated as a separately addressable instance. Therefore, despite addressing them each individually below, any revisions need to be carried out through a holistic review that examines how protection and enhancement objectives are best realized through bylaw and development regulations.

Protection objectives as outlined in DPA 1 do not capture the full value of the community benefits that watercourse riparian areas provide to the public.

The justification section within DPA1 in the OCP describes the full range of benefits that watercourse riparian areas provide to environmental, community and economic health. Along with the important role in maintaining biodiversity through fish and wildlife habitat, the justification section for the DPA lists the important contributions riparian areas provide to essential hydrological services such as water purification, storage and drainage and community health benefits through access to nature in urban settings. In the objectives section of DPA 1, however, the focus is narrowed to solely protecting these areas for their value as fish and wildlife habitat. This is problematic as the DPA guidelines that follow do not contain the necessary components to realize the protection of the complete host of community benefits that riparian areas provide.

Guidelines of DPA 1 can undermine this regulatory tool's ability to meet its protection objectives

The omission of key riparian benefits in the values the DPA seeks to protect is further exacerbated through how the guidelines of the DPA are applied in practice. In cases, such as with pre-existing lots within the prescribed Zoning Bylaw No. 4500

watercourse leave strip, riparian area setbacks are determined through the recommendation of a Qualified Environmental Professional (QEP) hired by the proponent.

The determination of the leave strip area, established by the QEP and called a Stream Protection and Enhancement Area (SPEA), takes a narrow view of environmental considerations. Essentially, the SPEA methodology is only concerned with establishing a minimum setback to maintain suitable fish habitat, thus omitting any consideration for wildlife habitat, hydrological services or community health benefits.

Another aspect of the DPA1 guidelines that can further undermine the regulatory tool's ability to protect watercourse riparian areas is the current application of the "no net loss" principle. The "no net loss" principle is a principle to ensure that "the existing condition of watercourse and riparian ecological form and function should not deteriorate due to permitted development." The principle is often applied by requiring the proponent to make up for riparian area lost to development by improving the condition of the remaining riparian area. This is often in the form or removing invasive plants in the remaining riparian area and planting more native species with a management plan.

The use of the "no not loss" principle in this way does not protect the full range of riparian values for the community but in fact further exacerbates habitat loss through land conversion. It does this by dramatically overvaluing the gains resulting from the invasive plant removal and replanting compared to the potential habitat and permeable biologically active surface area permanently lost to the development. Given that every unmanaged urban lot will have invasive species intrusion into it, removing land from the riparian area will be justified in every case through the argument that the remaining land will be improved. If you want to encroach into a riparian area setback 10m, wait 5 years for sufficient invasive plant intrusion. If you want 20m wait 8 years before you apply for a permit. This is a coopted understanding of "no net loss" and an unjustified devaluing of degraded but undeveloped land that has the potential to be ecologically productive.

Every square foot of undeveloped space is more space for wildlife habitat, potential bio-diversity, hydrological services and community health benefits whether they are currently realized or not. Furthermore, area for wildlife habitat and other

important values become more important as urban density increases. Development of this square footage is a permanent loss, thus strong pro-active preventative measures to prevent loss is critical. As Nanaimo's density intensifies, more resources will become available to restore degraded leave strip sites because the value and need for that space to be biologically productive and healthy will increase. This highlights the need to draw attention to the difference between *protection objectives* and *enhancement objectives* in regulatory efforts. These objectives are not always the same. Protection is preserving the areas available for potential community benefits in as much of their entirety as possible. Enhancement objectives that rehabilitate the form and function of riparian areas are important but not equal to protection objectives. The community benefits of protected riparian areas can always be enhanced but once developed these potential benefits are permanently lost.

Case Study

The recent staff recommendation to support a 20m encroachment for the development of a single family home into a Riparian leave strip on one of the three specially designated streams in Nanaimo is a case study that highlights the weaknesses in the city's current watercourse riparian regulations to meet protection objectives. Cottle creek is one of three watercourses given a special designation within the city's OCP and protected with a 30 m leave strip because of its identified biological uniqueness and important characteristics connecting major parklands and bodies of water.

As background, almost the entire lot for the proposed single family home was within the 30m leave strip of Cottle Creek as outlined in Zoning Bylaw No. 4500. The lot was first created in 1995 *after* an earlier watercourse protection bylaw created in 1992 which mandated a 15m leave strip from high-water. As a condition of subdivision for the creation of the lot, it had to be demonstrated at that time that a footprint of a house was feasible outside of the 15m leave strip. This was demonstrated and the subdivision was allowed to occur.

In the intervening period to the recently approved development permit, Zoning Bylaw No. 4500 was enacted and it extended the Cottle Creek leave strip to 30m and a Development Permit Area was established to address situations of variances and site sterilizations. Despite the apparent increase in regulations on the

development of the lot, because of the weaknesses of the DPA1 process outlined above, the outcome of the development pert mit process led to an almost 5 m erosion of the land originally protected as a condition of the original subdivision approval. With this type of outcome it is clear that our current riparian protection mechanisms may not be supporting the protection objectives that are aligned with the intentions of our regulatory frameworks and the expectations of the community. This has led to much conflict with the community in recent years each time variances are requested to watercourse leave strips.

Development permit areas may not be the most effective tool to protect watercourse riparian areas and address cases of lot sterilization

Finally, DPAs may not be the appropriate regulatory tool to protect watercourse riparian areas, especially in cases where lots exist within Bylaw 4500 leave strips with legacy permitted uses for development. Without clear community targets for habitat conservation, natural asset protection for hydrological services and access to natural spaces, along with the methodological assessment tools to quantify and protect for these values, the DPA process will inevitably result in unbalanced recommendations favoring private interests and land conversion. DPA1 is however, currently depended on to protect the municipality from legal challenges by allowing for a mechanism to develop pre-existing lots that would otherwise be sterilized by the riparian leave strips of Zoning Bylaw No. 4500. This leaves two options 1) reform the current DPA process to better protect riparian area values or 2) develop a new regulatory tool such as a "Homeplate" policy found within the protection of ALR lands. The Homeplate policy would provide allowable maximum square footage for development on a property when it is potentially sterilized by a watercourse protection bylaw. Both DPA 1 reform and a Homeplate policy should be considered in the proposed review.