

STAFF REPORT

March 20, 2009

File No.: MA-04-1-2

To: Mayne Island Local Trust Committee

From: Robert Kojima
Island Planner
Local Planning Services

CC: David Marlor, Regional Planning Manager

Re: Riparian Area Regulation Implementation

Preliminary Report

PURPOSE

The purpose of this report is provide the local trust committee with background on the provincial riparian area regulation, the results of watercourse mapping on Mayne, and to provide options and recommendations for implementing the provincial riparian area regulation.

BACKGROUND

The Riparian Areas Regulation (RAR) was enacted under Section 12 of the *Fish Protection Act* in July 2004 and took effect on March 31, 2006. The objectives of the Act are to: (1) ensure sufficient water for fish; (2) protect and restore fish habitat; (3) improve riparian protection and enhancement; and (4) provide stronger local government powers in environmental planning. The RAR is a policy directive from Cabinet which requires local governments (including local trust committees) to protect riparian areas. It requires local governments to protect riparian areas during residential, commercial, and industrial development by ensuring that proposed activities are subject to a science-based assessment conducted by a Qualified Environmental Professional. Section 4 of the RAR prohibits a local government from approving or allowing a development to proceed in a riparian assessment area unless the local government is notified by the Ministry of Environment that the developer has provided an assessment report by a qualified environmental professional (QEP) that certifies that the development can be carried out without damaging fish habitat.

“Riparian Assessment Area” is defined in the RAR to mean any area within 30 metres of a stream; a “stream” is defined to include all watercourses that provide fish habitat, including ponds, lakes, rivers, creeks and brooks as well as ditches, springs, and wetlands that are connected by surface flow to such watercourses. A watercourse may not currently have fish present, but is considered a “stream” for the purposes of the RAR if fish could potentially be

present if introduced obstructions could be made passable. "Fish" is defined for the purposes of this regulation to include salmonids, game fish and regionally significant fish.

Under the Regulation, local governments may only allow development within 30 metres of the high water mark of a stream or top of a ravine bank provided the prescribed riparian assessment methods have been followed. The riparian assessment method requires a Qualified Environmental Professional (QEP) to provide an opinion – in an Assessment Report – that the development will not result in a harmful alteration of riparian fish habitat. The QEP can also help plan any new development so that it will avoid impacting fish habitat. The Assessment Report can also identify measures to maintain the integrity of the riparian area in the development project.

"Development" is defined to mean a range of activities in the RAR that are subject to local government powers under Part 26 of the Local Government Act, these include applications such as rezonings, DPs, DVPs, TUPs and subdivisions, but do not include building permits and Board of Variance orders. The types of development that are subject to an RAR assessment are residential, commercial and industrial; not subject to assessment are: permits issued for repair or reconstruction of existing structures, pre-existing buildings or structures, agricultural activities, mining activities, hydroelectric facilities and forestry, parks, institutional development, and federal and First Nations lands. The Regulation does not give local governments any additional powers with respect to streamside protection. Rather, it requires local governments to use their existing land use planning and management powers under the *Local Government Act* to improve the protection of fish habitat in settlement areas.

Any application to a local government for a rezoning, development variance permit, development permit, temporary use permit or subdivision can trigger the requirement for an assessment by a qualified environmental professional.

In summary, the Regulation specifies that:

- local governments must protect riparian areas in accordance with the regulations when exercising their powers with respect to commercial, residential and industrial development; and
- local governments must meet or better the regulations, but cannot reduce them without specific authorization from Fisheries and Oceans Canada. For example, a local government could not issue a development variance permit for a new residential, commercial or industrial building except in accordance with the riparian area regulations.

As the RAR has been in effect for over 2 years, any Part 26 application can trigger the requirements for an assessment. For example, an unrelated variance for work that happens to be within 30 metres of any watercourse would trigger the requirement for an assessment.

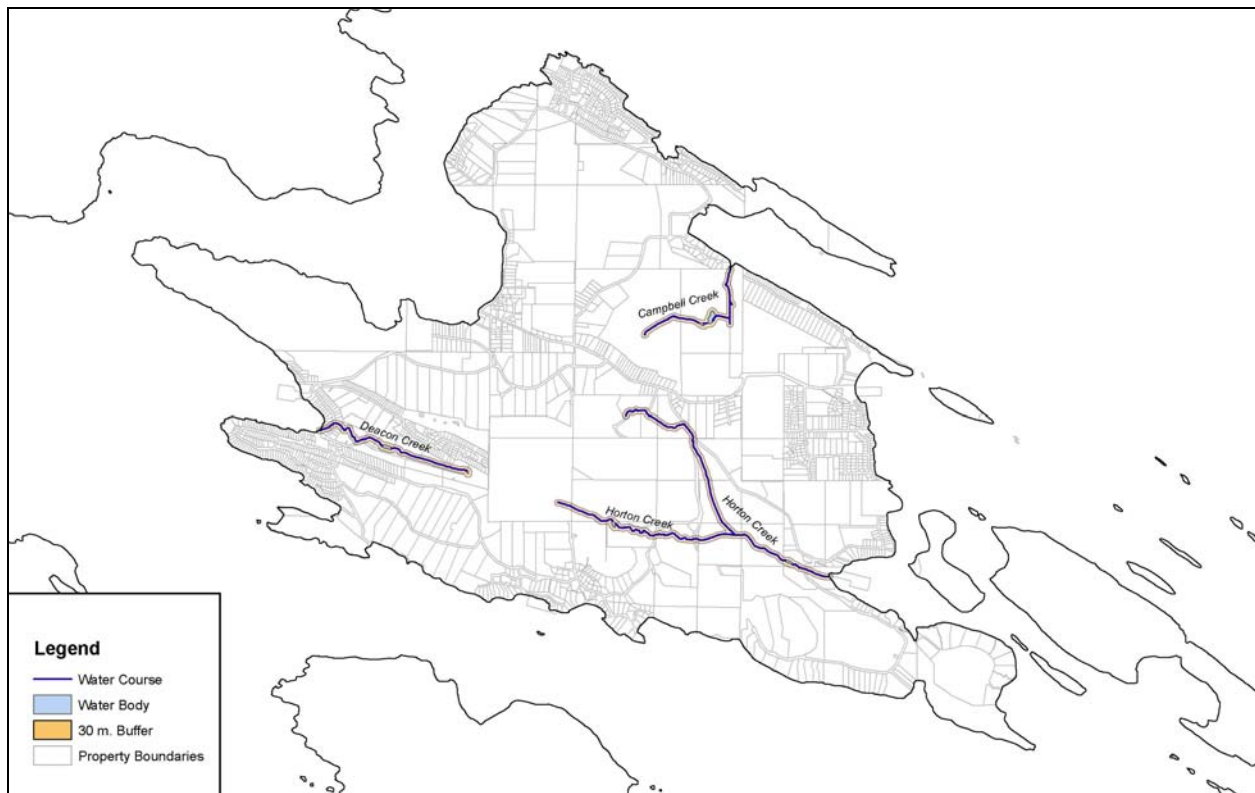
In 2006 Trust Council adopted a resolution directing staff to prepare development permit area provisions to implement the RAR. Local trust committees were also requested to consider amending setback provisions in their Land Use Bylaws as a first step prior to implementing development permit areas.

The implementation of RAR development permit areas in the Trust Area has been delayed since 2006. Principally, the delay is attributable to issues with identifying watercourses that are subject to the RAR and in accurately mapping those watercourses. During the North Pender OCP review in 2006, a draft version of the OCP included DPA for riparian watercourses based on the then available provincial mapping (TRIM). This mapping proved to not be accurate

enough to identify watercourses with the desired degree of certainty and the RAR provisions were removed from the draft OCP.

For Mayne, staff have undertaken an approach that attempts to provide greater certainty with respect to both the status of the watercourses and the accuracy of the mapping of the relevant streams. A qualified environmental professional (QEP) with experience in the southern Gulf Islands was retained to identify all existing and potential fish bearing streams on Mayne. This involved using the existing TRIM data to solely identify drainage systems, the QEP then ground-proofed each drainage system to ascertain those that were potential fish habitat. The biologist was accompanied by a mapping technician who mapped the watercourses using a GPS. The resulting GPS points were then used to create GIS mapping of the watercourses.

The QEP has provided a report which summarizes her findings (copy attached), and Islands Trust staff have prepared mapping of the three streams which are subject to the RAR (copies attached, reduced version below). The report confirms that there are three watercourses on Mayne that are subject to the RAR (Deacon Creek, Horton Creek and Campbell Creek). Five other small streams were assessed and determined not to be subject to the RAR. Under the RAR, the LTC may not allow development (as defined in the RAR) to proceed unless an assessment has been conducted. Any Part 26 applications (DP, DVP, TUP, rezoning) that fall within 30 metres of the boundaries of these streams would currently need an assessment before the LTC could issue a permit, adopt a zoning amendment, or before a subdivision could be approved. However, the LTC has not yet amended its bylaws to meet the RAR requirement to protect these riparian areas.



CURRENT POLICY

Trust Council Strategic Plan:

The current Trust Council Strategic Plan includes “Implementation of Riparian Area Regulations” as the first focus area. The Mayne LTC is specifically identified as one of three LTCs targeted to implement the RAR in 2009-10.

Trust Policy Statement:

3.3.2 Local trust committees and island municipalities shall, in their official community plans and regulatory bylaws, address means to prevent further loss or degradation of freshwater bodies or watercourses, wetlands and riparian zones and to protect aquatic wildlife.

Official Community Plan: Other than general policies supporting environmental protection and the use of development permit areas, the OCP has no specific reference to implementation of the RAR:

4.3.2.2 Development Permit Areas should be applied to environmentally sensitive areas.

COMMUNITY INFORMATION MEETING(S)

It is recommended that one or more information meetings be held to inform residents about the fact that the RAR is in place, that local governments are obliged to protect riparian areas, and the specifics of how the Mayne Island Local Trust Committee intends to implement the provincial requirements locally.

RESULTS OF CIRCULATION

Once a draft amending bylaw is prepared it will be circulated to any affected agencies for comment.

STAFF COMMENTS

The provincial RAR requires local governments to use their existing land use planning authority to protect fish habitat, including streams that are potentially fish-bearing if introduced obstructions are removed.

Ministry documents¹ suggest that local governments apply zoning or DPA to implement the regulation. Changes to zoning would establish a setback consistent with the 30 metre riparian assessment area. There are two problems with this approach: first, zoning would only regulate the siting of buildings and structures and would not affect land alteration; second, zoning setbacks do not provide the level of certainty for landowners that designating a DPA on a map schedule does. The DPA option would manage land alteration, including vegetation removal, provide a map schedule showing the designated streams and 30 metre buffers, and provide for the flexibility inherent in considering issuance of a development permit, which can attach conditions and include variances.

¹ Ministry of Water Land and Air Protection. Riparian Areas Regulation Implementation Guidebook. 2006.

The approach taken in identifying the RAR streams on Mayne uses the following approach:

- Islands Trust commissioned a report from a qualified environmental professional using a science-based method to identify three watercourses on Mayne that are subject to the RAR.
- Islands Trust mapping staff used the GPS coordinates obtained in the field to create maps which locate the watercourses with an acceptable degree of accuracy.
- A 30-metre buffer was applied to each of the three watercourses to establish the area within which applicable activities would be subject to a riparian assessment.

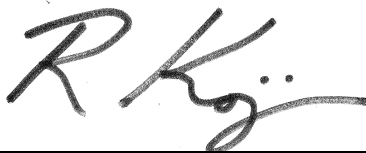
This approach lends itself to implementation through establishment of development permit areas.

The LTC is obliged, like all local governments, to protect riparian areas. The optimal approach to doing so, given the mapping data and supporting documentation, is to establish DPA for the three streams subject to the RAR. This will provide certainty to landowners and to the LTC that activities undertaken adjacent to those watercourses are assessed in conformity with the Riparian Area Regulations. As a next step, the LTC should direct staff to work on draft DPA provisions that would ensure that development within area is consistent with the requirements of the RAR. Once draft DPA provisions are ready, the LTC should consider undertaking community and stakeholder consultation before proceeding with bylaw amendments.

RECOMMENDATIONS:

1. THAT staff be directed to prepare draft development permit area provisions for LTC review that would be in accordance with the provincial Riparian Area Regulation.

Prepared and Submitted by:

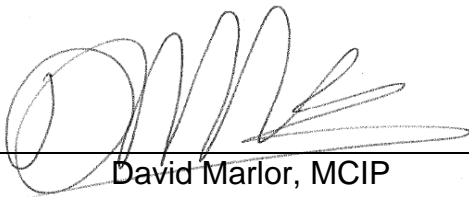


Robert Kojima

March 20, 2009

Date

Concurred in by:



David Marlor, MCIP

March 23, 2009

Date

Attachments: Mayne Island Stream Survey Report (Kathleen Reimer, MSc. R.P. Bio.)

Maps: Mayne Stream Map
Campbell Creek Map
Deacon Creek Map
Horton Creek Map

Mayne Island Stream survey report

Feb.-Mar. 2007

By Kathleen Reimer MSc., RPBiologist

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PURPOSE

The purpose of the survey was to identify the existing and potential fish bearing streams on Mayne Island and to map them using TRIMBLE equipment and a RIC certified operator.

SUMMARY OF FINDINGS

All medium and large drainage systems were identified from TRIM information, provided by the Islands Trust. These areas were then ground-proofed by a professional fisheries biologist and the mapping technician in February of 2007.

There were three streams identified that have existing or potential fish habitat. All three watercourses flowed through sections of Agricultural land.

1. **Deacon Creek** flows from the east from its origin in the Deacon/Heck Hill area into Village Bay. It has an existing stewardship group and it is being restocked yearly with Chum Salmon from the Goldstream hatchery on Vancouver Island. The contact for Deacon Creek is Bill Neill, a property owner in the Village Bay area. The upper reaches of the stream are on Agricultural land.
2. **Horton Creek** has two main tributaries. One tributary known as Hunt Brook begins in a springy area in the lowlands between Mt. Park and Heck Hill (On the 581 Glen Echo Road property). It flows southeast into a farm irrigation pond and through a natural area (Pither property) to Gallagher Bay Road, then into farmland (O'Brien property) and across Simpson Rd., into a large agricultural area /drained peat bog where it has been ditched for farming purposes. It then joins the other tributary and flows east into the estuary across Horton Bay Road. This stream was restocked for several years with Chum Salmon through the "Salmon in The Classroom Program" at the Mayne Island elementary school. There has been one oral record of Chum spawners seen since the restocking.

The second tributary of Horton Creek begins in a springy area in parkland off Montrose Road and flows south along Horton Bay Road where it then becomes a ditch on that farmland/peat bog mentioned above. There it combines with the Hunt Brook tributary and enters the estuary on Horton Bay. The local contact for Horton Bay Creek is Ron Pither.

3. **Campbell Bay Creek**. This stream flows through farmland off Campbell Bay Road into a large man made pond. The previous owner of the farm (Ardie

Wickham) enlarged the pond and restocked it with Rainbow Trout. Some of these became naturalized in the stream. The landowner also completed fish ladder work on the area where the stream drops steeply into Campbell Bay. There have been no recent reports of fish in the stream. The present landowners are Shanti and Don McDougall.

Mayne Island Streams -Watershed details

	Drainage Area Approx.	Length stream * Approx.	Barriers to fish	Comments	Watershed issues
Deacon	160 ha	1.9 km	none	Stewardship group has removed obstacles	Lack of summer water
Horton	340 ha	2.7 km Hunt Brook 1.9 km north Branch	Culvert may be impassable to fish Man made dam	The culvert under Simpson road may be passable for trout but it is a barrier for Chum Salmon The dam is upstream of Horton Bay road-it completely blocks the creek	Land Clearing in the upper watershed off Glen Echo Road, is causing serious flooding and erosion problems downstream on the farmland
Campbell	241 ha	0.4 km existing 1.2 km potential	Fish ladder Water quality	Some rock work has been done. Passable to fish at some flows Previous owner reported low summer oxygen levels in the ponds	This stream is “potentially fish bearing”

* includes seasonal areas

Small drainage areas from TRIM information

Five small streams were also ground-proofed during the two visits to Mayne Island. These were the ones flowing into Miners, Dinner, and Gallagher Bays and one was near Mariners Way. Another was a small tributary draining south into Horton Bay, not connected to Horton Creek. Even though it was February and all the larger streams had sufficient water to support fish, these small ones did not. So they were not mapped with the TRIMBLE equipment.

DISCUSSION

The three streams identified as potential or existing fish habitat are similar in size to small fish bearing streams on Salt Spring Island. For example Madrona creek on SSI has a watershed area of 161 ha, and Mansell Creek has a 272 ha watershed. Both of these creeks have sustainable populations of fish in them and have never needed to be restocked. So with some restoration work, all of the larger Mayne Island creeks identified in this report could support fish and therefore should not be damaged in anyway.

The erosion found on the O'Brien farmland property on Gallagher Bay Road is almost certainly due to increased peak flows in Hunt Brook, most likely resulting from clearing in the upper watershed. It is therefore recommended that any development of the watershed must include storm water planning and detention ponds. Otherwise there could be adverse affects on the farmlands downstream.

The summer water flows in all of the Mayne Island streams are dependent on the condition of springs and wetlands near the top of the watersheds. These can be easily diverted or drained during land clearing. It is therefore very important to protect any special wetland areas during the development process.

MONITORING

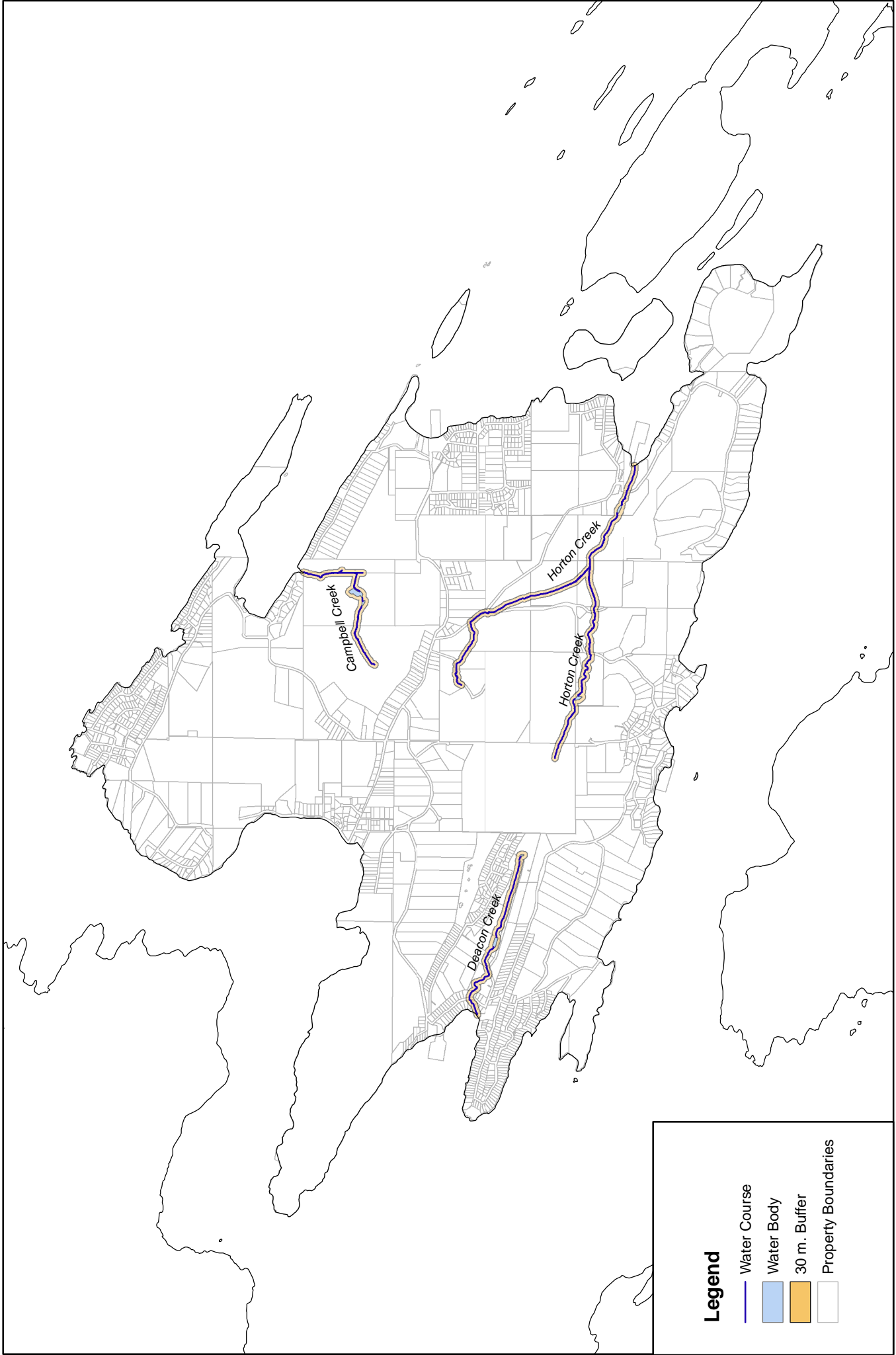
It is recommended that the Islands Trust or a local stewardship group monitor the streams over the winter months to determine what fish are present and where the problem erosion areas are.

RIPARIAN AREAS REGULATION

It is my opinion as a professional biologist and a QEP, that all three watercourses identified in this report are streams as defined by the Riparian Areas Regulation. It is important to note that this regulation does not apply to normal agricultural activities on farmland. The DFO Fisheries Act still applies to all land, including farms and institutions.

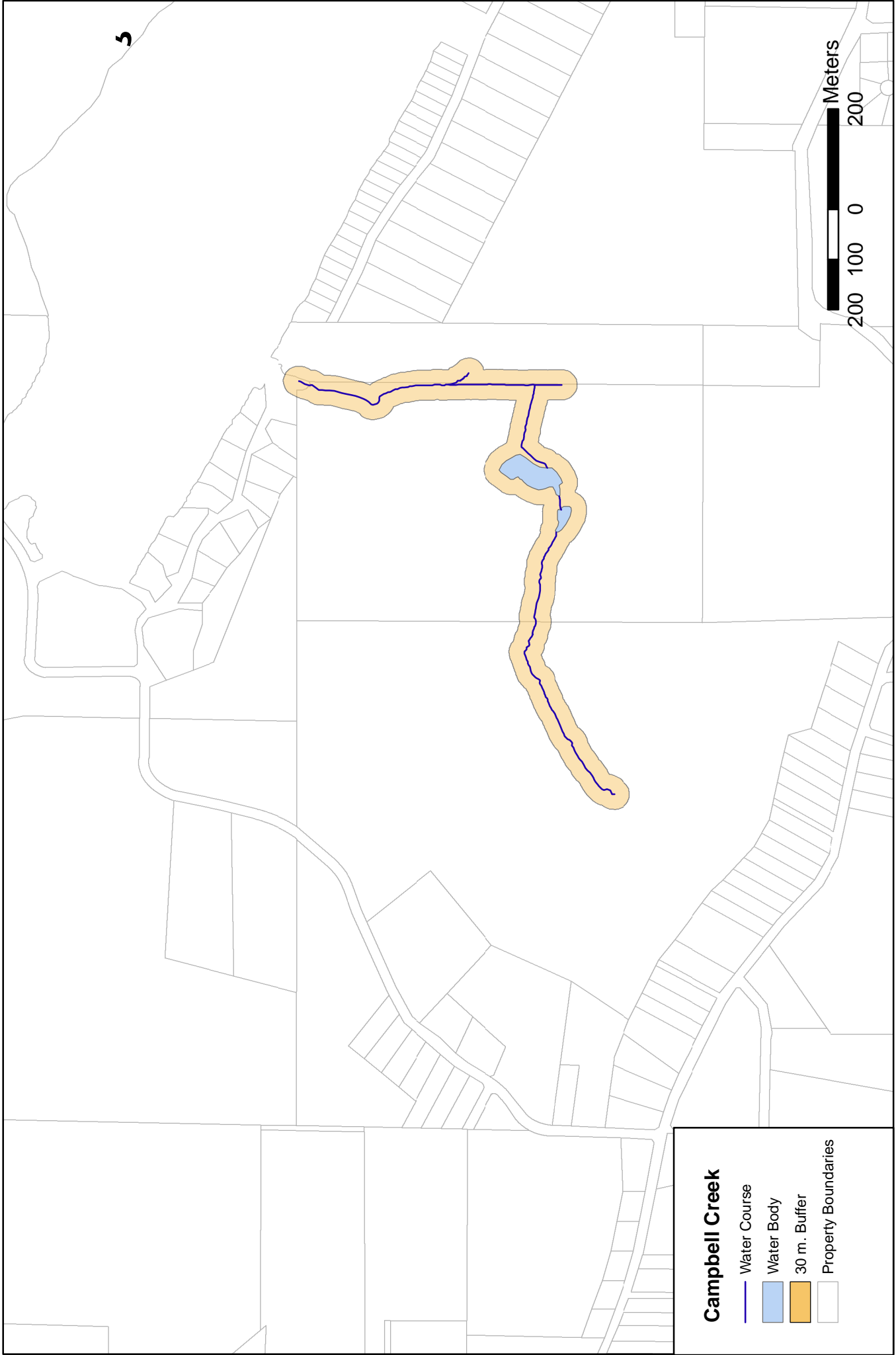
APPENDICES

Mayne Island TRIM showing approximate stream location. Copy of the Soils of the Gulf Islands Map. Trimble Maps showing stream data were sent separately.



Legend

- Water Course
- Water Body
- 30 m. Buffer
- Property Boundaries



Campbell Creek

- Water Course
- Water Body
- 30 m. Buffer
- Property Boundaries

200 100 0 200 Meters



Deacon Creek

- Water Course
- Water Body
- 30 m. Buffer
- Property Boundaries





Horton Creek

- Water Course
- Water Body
- 30 m. Buffer
- Property Boundaries