

APPENDIX A

**RESPONSIBILITIES FOR THE PROTECTION OF
STORMWATER**

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Appendix A

Responsibilities for Protection of Stormwater Quality

1.0 JURISDICTIONAL INVOLVEMENT WITH STORMWATER QUALITY ON THE SOUTHERN GULF ISLANDS

There are many jurisdictions on the Southern Gulf Islands (SGI) involved in enhancing or altering stormwater quality. The following discusses their jurisdictional roles and responsibilities:

1.1 Islands Trust

The Islands Trust has no jurisdictional authority for ensuring stormwater quality in the SGI. The Islands Trust's jurisdictional authority is generally limited to land use planning and those services described in Section 26 of the *Local Government Act (LGA)*.

The Islands Trust however, through provisions in the *LGA*, does have the ability to effect stormwater management. Section 907 of the *LGA* provides a local trust committee the ability through a bylaw to control stormwater runoff associated with roof areas and impermeable surfaces. A bylaw for this purpose might regulate the percentage of impermeable surface on a property.

Section 920, which provides for Development Permits, would allow a local trust committee, wanting to protect a natural environment, the ability to control drainage or prevent erosion through a Development Permit. A permit for this purpose might require vegetative planting.

Finally, Section 938 of the *LGA* allows a local trust committee, by bylaw, the ability to regulate drainage collection and disposal associated with the subdivision of land.

In order to ensure stormwater quality in the SGI, the Islands Trust supports the Capital Regional District's (CRD) initiative to establish best management practices and codes of practice for this purpose.

1.2 Capital Regional District Environmental Services Department

Environmental Programs

- management of Stormwater Quality program (SQP) (discussed in the body of the report, Section 1.0)

Operations and Local Services

- administration and operation of the Magic Lake Sewer and Water Local Service Areas
- operation of sanitary sewer collection, sewage treatment (Buck Lake sewage treatment plant and Magic Lake sewage treatment plant) and effluent disposal for the Magic Lake Estates sewer local services area
- operations and monitoring of water supply from Buck Lake (primary drinking water supply for Magic Lake Estates local service area) including the distribution system, water treatment plant (treatment includes ozonation, rapid sand filtration and post chloramination) and storage tanks. Any flows discharged into the lake for maintenance from this facility is dechlorinated (G. Hendren, pers. comm.)
- operations and monitoring of water supply from Magic Lake (secondary drinking water supply for Magic Lake Estate local service area) including the distribution system, water treatment plant (treatment includes ozonation, rapid sand filtration and post chlorination) and storage tanks. Any flows discharged into the lake for maintenance from the facility are dechlorinated (G. Hendren, pers. comm.)

- Buck and Magic lakes are monitored for a variety of water quality parameters by CRD Operations division since they are both drinking water supplies. Some of the laboratory analysis done on water samples collected in the lakes include metals and fecal coliforms (G. Hendren, pers. comm.)
- operations and monitoring of water supply from Money Lake and Money Creek (primary drinking water supply for Lyall Harbour local service area) including the distribution system, water treatment plant (treatment includes chlorination, rapid sand filtration and carbon filtration) and storage tanks. Any flows discharged back into the creek for maintenance from the facility are dechlorinated (G. Hendren, pers. comm.)
- Money Lake and Creek are monitored for a variety of water quality parameters by CRD Operations division. Flows entering Money Creek from Money Lake are used as a source for drinking water. Some of the laboratory analysis done on water samples collected in the lake and creek include metals and fecal coliforms (G. Hendren, pers. comm.).

1.3 Vancouver Island Health Authority (VIHA)

- approval of on site sewage disposal with flows less than 5,000 gallons per day (mostly single family dwellings)
- inspection of on site disposal and investigation of complaints
- issuing orders of remediation where threats to public health may exist

1.4 Ministry of Transportation (MOT)

- stormwater drainage from road rights-of way
- subdivision approval

1.5 Provincial Government

The following are the most pertinent pieces of provincial legislation related to stormwater quality. Most of this information was taken from *Tackling Non-Point Source Water Pollution in British Columbia* (Ministry of Environment, Lands and Parks, 1998):

- The *Community Charter* provides local municipalities with the power to adopt zoning, subdivision and other bylaws, permit construction, develop solid and liquid waste management plans, provide water and sewer services and address environment concerns. The municipalities can enact bylaws to control surface runoff, prohibit pollution and obstruction of flows in watercourses and allow the development of environmental policies regarding protection and enhancement of the environment in OCPs.
- The *Local Government Act* provides regional government with the authority to adopt zoning, subdivision and other bylaws, permit construction, develop solid and liquid waste management plans, provide water and sewer services and address environment concerns.
- The *Water Act* provides for approval of all water use, storage and diversion of water and works in and about streams. This is important for preventing activities that may negatively impact a stream.
- The *Water Protection Act* confirms Crown ownership of surface and groundwater and prohibits large-scale diversion or removal of water. This allows for the protection of the amount of flows being diverted from a creek or stream, which is vital for survival of aquatic life.
- The *Environmental Management Act* (formerly the *Waste Management Act*) requires permits, approvals or operational certificates under a liquid and solid waste management plan for discharges to land, air and water, and handling of solid and toxic wastes; prohibits dumping/discarding litter and sewage. The MOE (previously Ministry of Water, Land and Air Protection (MWLAP)) regulates sewage treatment facilities with sewage flows greater than 5,000 gallons/day. The *Act* can also require the development

of measures to prevent a spill of a potentially polluting substance by the person in possession of the substance. The Provincial Emergency Program (PEP) was initiated to protect people and property during disaster situations and is also the contact for reporting spills that can cause harm to public health and the environment such as oil spills. When an incident is reported to PEP they will contact the agency responsible for investigating the problem. The phone number for PEP is 1-800-663-3465.

- The *Environmental Assessment Act* requires environmental impact assessment for specific development projects and activities. This will allow MOE to request proposed development projects to consider stormwater quality issues.
- The *Fish Protection Act* protects fish by ensuring healthy fish-bearing streams and plentiful stocks. Stormwater pollution can impact the health of streams and aquatic species.
- The *Pesticide Control Act* regulates the use and application of pesticides. Pesticides have the potential to contribute pollution to stormwater runoff if not applied properly.
- The *Health Act* regulates approval of construction camps, public water supplies, sewage disposal, sanitation and food supply operations. This *Act* can be used to prevent pollution of stormwater from the mentioned operations.
- The *Fire Services Act* provides approval of onsite fuel storage and dispensing. Through this *Act* proper installation of fuel storage and dispensing facilities can be ensured to protect stormwater quality.
- The *Soil Conservation Act* established permitting requirements for soil removal from an agricultural land reserve and regulates use of land in agricultural land reserves. Some agricultural activities have the potential to contribute stormwater pollution, especially if soil erosion occurs, causing sedimentation in streams.
- The *Farm Practices Protection (Right to Farm) Act* ensures that farmers can farm in agricultural land reserves; adds specific powers to local governments; may regulate farm conduct and prohibit specific farm operations.

In 1997, the provincial government passed the *Fish Protection Act* to protect fish from the negative impacts of development. *Section 12 of the Act authorizes the Province to establish policy directives regarding the protection and enhancement of riparian areas that the Lieutenant Governor in Council considers may be subject to residential, commercial or industrial development* (Ministry of Environment, 2005). Effective March 31, 2005 and enabled by the *Fish Protection Act*, the *Riparian Areas Regulation (RAR)* provides local government with the necessary tools to protect fish and fish habitat.

The RAR applies to streams, rivers, ditches, ponds, lakes, springs and wetlands and sets out provisions to protect the stream side vegetation and soils during new residential, commercial and industrial development on land under local government jurisdiction. The following key components of the regulation were taken from the *Riparian Areas Regulation Implementation Guidebook* (MOE, 2005):

- Local government may permit development within 30 m of the high water mark of a stream or top of bank of a ravine provided the prescribed riparian assessment methods have been followed.
- A qualified environmental professional (QEP), using the riparian assessment method, shall provide an opinion -in an Assessment Report- that the development will not result in a harmful alteration of fish habitat and will provide required measures to protect the riparian area during development.
- The assessment methodology in the Schedule of the Regulation ensures that the assessment has been conducted to a standard level and that the standard reporting format is followed.

- The Regulation is based on current science regarding fish habitat, while recognizing the challenges in achieving science-based standards in an urban environment.

Also, in 2002, the provincial government developed *Stormwater Planning: A Guidebook for British Columbia*. This guidebook is intended to provide a framework for effective stormwater management that is usable in all areas of the province. The guidebook explains how stormwater systems have traditionally been developed and promotes an integrated approach to stormwater management which includes:

- identifying at risk drainage catchments
- setting preliminary performance targets
- selecting appropriate stormwater management site design solutions

1.6 Federal Government

Fisheries & Oceans Canada (F&OC) is responsible for reviewing all foreshore development proposals which may affect fish habitat.

The following are the most pertinent pieces of federal legislation related to stormwater quality and most were taken from *Tackling Non-Point Source Water Pollution in British Columbia* (MELP, 1998):

- The *Fisheries Act prohibits harmful alteration of fish habitat and the deposit of deleterious substances*. This Act applies to creeks, streams and storm drains that flow into watercourses and the marine shoreline where fish are present. Polluters can be charged under this Act.
- The *Canadian Environmental Protection Act requires certain facilities such as manufacturing or processing business to report when a toxic substance has spilled into a watercourse or storm sewer*.
- The *Canadian Environmental Assessment Act requires environmental impact assessment of all projects funded or authorized by the federal government, or which take place on federal lands*. An environmental impact assessment usually includes impacts to water quality which will allow the awareness of a potential impact to stormwater quality and therefore, allow requirements to prevent the impact from occurring in advance.
- The *Canadian Wildlife Act and the Migratory Bird Conventions Act protects wildlife; migratory birds and associated habitats*. Associated habitats include wetlands and the marine shoreline which can be sensitive to stormwater pollution.
- *Canada Shipping Act regulates shipping, including ship-sourced pollution, and the designation of water bodies under the Pleasure Craft Sewage Pollution Regulations and Non-Pleasure Craft Sewage Pollution Regulations*.
- *Transportation of Dangerous Goods Act defines safety requirements for transport of dangerous goods*. This can prevent accidental spills of toxic substances from occurring in watercourses and the marine shoreline while being transported.

1.7 First Nations

First Nations are responsible for stormwater on their lands. The Band and Health Canada usually address stormwater pollution issues on First Nation's land. Health Canada will carry out sampling investigations if requested by the Band.

There are opportunities for First Nation to adopt a bylaw that will allow for protection of stormwater quality similar to the CRD enhanced model storm sewer and watercourse bylaw (Humphrey, pers. comm.).

2.0 REFERENCES

K Bunting, Cameron, R.L.N. and Mount, C., 2004. Stormwater Quality Annual Report, Southern Gulf Islands Electoral Area – 2002/2003.

Ministry of Environment, Lands and Parks (MELP), 1998. *Tackling Non- Point Source Water Pollution in British Columbia.*

3.0 PERSONAL COMMUNICATIONS

Hendren, G. CRD Environmental Services, Operations division