

Sustainable Rainwater Management: What Does It Look Like?

Integrating the Site
with the Watershed
and the Stream



The 'Cowichan Valley Regional Team'
presents:

Rainwater Management
in the Cowichan Valley

Rainwater Management
in Central Saanich

Rainwater Management in a
Watershed Sustainability Context

An Introduction to the
Rebuilt Water Balance Model



RAINWATER MANAGEMENT: A Central Saanich Perspective

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District Background

- District has a population of just over 16,000 with 2/3rds of land located in the Agricultural Land Reserve
- Land use is primarily agricultural often adjoining other uses
- Significant industrial and residential uses occur at various locations in the District



District Background

- Three large watersheds –Hagan, Tetayut & McHugh
- Drainage consists of both natural and constructed systems
- Mixture of land uses presents unique challenges for rainwater/stormwater management



Integrated Storm Water Management Project Study (ISMP)

- Started in 2007 completed in 2009 - WorleyParsons Consultants
- Included the three major watersheds
- Stakeholders Advisory Committee – Farmers, Businessmen, Environmentalists, Government Agencies, Stream Keepers
- Done as per the BC Stormwater Planning Guidebook (BC MWLAP 2002)
- Integrates Engineering, Planning & Environmental values

ISMP

- Concentrates efforts on Rainfall Capture and Education – Surface Water Runoff Bylaw & HWC (to be discussed in further detail)
- Recommends establishing wetland areas within existing farm lands to increase productivity (shoulder season)
- Some hydrologic improvements were suggested to help reduce the risk of flooding i.e. Graham Creek
- Large wetlands are part of the implementation plan – long term goals
- 2010 EcoStar Award
- 2010 FCM Watershed Award



Maber Flats – Brentwood Lakes



East Saanich / Central Saanich Rain Garden



Healthy Watershed Committee

- Assist Central Saanich in implementing recommendations of the ISMP
- Members include Council, staff, community volunteers, stream keepers, farmers, First Nations

**Maber Flats
“Equalization”
Culverts**





Surface Water Runoff Control Bylaw 1606

- Enacts rigorous standards related to surface water runoff when redevelopment or new construction occurs.
- Development community are encouraged to use the WBM for preparation of their Runoff Control Plan
- Typical control infrastructure includes permeable pavements, rain gardens and retention tanks.

East Saanich / Veyaness Rain Garden





Uses of Water Balance Tools

- The WBM helps us educate the development community on the principles of Water Balance
- The Waterbucket site provides relevant information on rainwater initiatives and best practices from other jurisdictions



Conclusion

- Central Saanich presents unique challenges and opportunities for rainwater management
- Future developments will involve the further implementation of existing strategies while integrating new potential solutions, such as a storm water utility, to address sustainable rainwater management for the coming decades.

Town-Hall Sharing

What Do You Wonder?

What Story Would You Like to Tell?