

2024 BUDGET

Storm Drains



Our role

Net budget \$2,467,000

Storm drains are designed to convey rainwater and groundwater flows to nearby water bodies, and they are typically located within public road rights-of-way or easements on private property. The Saanich storm drainage system includes 570 km of mains, 23,300 drain service connections, 11,270 catch basins, and 7,400 drain manholes. Saanich also boasts over 316 km of waterways, creeks, river with a complex network of catchment ponds and lakes.

Full life cycle asset management services for the drainage system are provided by the Engineering Department through collaboration of the Storm & Wastewater team of the Public Works Division and the Water Resources Division staff. Together they plan, analyse, operate, maintain, design, and construct the engineered and natural infrastructure that conveys stormwater from the community to the ocean.

Services we provide

ADMINISTRATION

Net cost \$327,600

This group provides overall management and administrative support for all sections including clerical support, public engagement, and communications. This includes drainage capital planning and project management, administering and coordinating the auxiliary call list, daily time records, hired and municipal equipment tracking, purchase reconciliation and the provision of equipment and safety training.

DRAIN MAINS CLEANING

Net cost \$366,000

Drain mains are susceptible to the accumulation of sediment and debris, as well as root infiltration and other blockages. These conditions affect the performance of the system and require pipe maintenance using jets of high-pressure water to remove the blockage and restore the optimal flow path. Operations target cleaning most of the drainage piped network on a 5-year schedule.

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CREEKS, WATERWAYS AND SURFACE DRAINAGE

Net cost \$702,200

Annual and periodic maintenance of the surface drainage systems reduces the potential for and severity of flooding in heavy rainfall events. These facilities include swales, ditches, waterways, creeks, lakes, ponds, and engineered structures like headwalls, trash racks and flow control systems. This sum also represents efforts related to emergency spills response as needed to protect the environment. Typically, this work is driven through service calls.

CATCH BASINS AND SILT TRAPS CLEANING

Net cost \$252,500

Annually, thousands of catch basins and silt traps are cleaned using a hydro excavator to remove accumulated sediments, contaminants, and debris to prevent mains from plugging and to enhance storm water quality. The cost to dispose of the waste from this maintenance activity is included in this sum.

CATCH BASIN AND MANHOLE REPAIR/REPLACEMENT

Net cost \$175,700

There are over 11,000 catch basins and 7,400 manholes in the drainage system. Catch basins trap, collect, and convey surface rainwater from streets to the drainage collection systems. Manholes provide inspection portals into the drainage system either using a camera or by human entry. Both are concrete structures that require regular maintenance to ensure their integrity. They are repaired and replaced when an inspection finds a defect that impacts their functionality. This work is part of the annual maintenance activities in the overall drainage system.

MAIN AND SERVICE CONNECTION REPAIR

Net cost \$469,200

There are approximately 23,300 storm service connections to the system. This program repairs and replaces storm service connections due to age, deterioration, or otherwise improper function. Substandard drains are pipes that were installed without any engineering standard. They are typically old, clay tile or concrete pipe materials, shallow, and are too small to provide adequate service for the catchment. They are an area of focus in the capital program for replacement to meet current engineering standards and the appropriate level of service for rainwater capture and conveyance.

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EMERGENCY FLOODING

Net cost \$81,400

The emergency flooding program is used to address seasonal high influxes of customer services request. During a typical storm event staff can respond to 100's of service calls and many more in a major storm event. Work includes homeowner customer service issues, main blockages, sink holes, obstructed catch basins and overland flooding.

CCTV VIDEO INSPECTION

Net cost \$92,400

Closed circuit television (CCTV) inspections and resulting pipe assessments are a key component to the system maintenance. These inspections provide an understanding of the condition of the pipes and any needs for action. The annual CCTV program includes efforts for overall system asset management and in preparation for capital project works.