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REPORT #CALWMC 2010-01

**REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE
MEETING OF 26 MAY 2010**

SUBJECT CORE AREA INFRASTRUCTURE UPGRADE PROJECTS FOR 2010

PURPOSE

To seek approval for completing infrastructure upgrades for 2010 as identified in the core area Liquid Waste Management Plan (LWMP) and/or the five-year capital budgets (Schedule G of various 2010 Environmental Services trunk sewer budgets).

BACKGROUND

Chapter 16 of the core area LWMP and Schedule G of various trunk sewer five-year capital budgets, include upgrading of the Capital Regional District (CRD) sewer infrastructure to address capacity, structural deficiencies, health and safety issues and other needs.

The CRD Board approved the updated Chapter 16 of the core area LWMP on 12 January 2005 and Schedule G of the 2010 environmental services budgets at the 31 March 2010 meeting. The Liquid Waste Management Core Area and Western Communities Service Establishment Bylaw No. 2312 provides the authority to undertake the proposed works.

This report identifies the infrastructure upgrade projects that are to be completed in 2010. Appendix A describes the projects and why they are needed. Appendix B presents the cost-sharing proportions for the projects based on each participant's contributory flow at each of the facilities.

ALTERNATIVES

1. That the Committee recommend to the Board that authorization be given to proceed with the infrastructure upgrading projects identified in Appendix A, that costs be shared as outlined in Appendix B, and that funding be provided by the trunk sewer reserve fund in the amount of \$540,000, which had \$4,192,614.85 uncommitted as of March 22, 2010.
2. That the Committee recommend to the Board to proceed with an amended list of infrastructure upgrading projects.

FINANCIAL IMPLICATIONS

There are sufficient funds available in each participant's trunk sewer reserve fund to pay for the proposed infrastructure upgrades. No loan authorizations or requisitions are required.

SUMMARY/CONCLUSIONS

Each year certain infrastructure upgrades are required, as identified in the core area LWMP and Schedule G of the annual budget, to address deficiencies, health and safety issues, and keep the system running well. Seven projects with a total estimated cost of \$540,000 have been identified for 2010.

RECOMMENDATIONS

That the Core Area Liquid Waste Management Committee recommend to the Board that:

1. authorization be given to proceed with the infrastructure upgrading projects identified in Appendix A;
2. costs be shared as outlined in Appendix B; and
3. funding be provided by the trunk sewer reserve fund in the amount of \$540,000, which had \$4,192,614.85 uncommitted as of March 22, 2010.

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**CORE AREA INFRASTRUCTURE UPGRADE PROJECTS FOR 2010
(IDENTIFIED IN THE LWMP AND SCHEDULE G OF THE 2010 BUDGET)**

Item	Improvement	Estimated Cost	Description and Need
1	Upgrade screen fan ducting at Macaulay Pump Station	\$95,000	<ul style="list-style-type: none"> The existing odour control ventilation equipment is exposed to the corrosive atmosphere of the screen chamber. It is proposed to replace the corroded equipment with a new fan and duct work suitable for the service environment and site specific conditions.
2	Replace screen channel gates at Macaulay Pump Station	\$125,000	<ul style="list-style-type: none"> The existing screen channel gates used to isolate flow during maintenance activities are old and no longer provide a water tight seal. It is proposed to replace two sluice gates, which will be challenging to construct while maintaining flow through the station.
3	Upgrade screen fan ducting at Clover Pump Station	\$75,000	<ul style="list-style-type: none"> The existing odour control ventilation equipment is exposed to the corrosive environment of the screen chamber. It is proposed to replace the corroded equipment with a new fan and duct work suitable for the service condition and site specific conditions.
4	Replace screen channel gate at Clover Pump Station	\$50,000	<ul style="list-style-type: none"> The existing screen channel gates used to isolate flow during maintenance activities are old and no longer provide a water tight seal. It is proposed to install a common sluice gate to control flow and construction will be challenging while maintaining flow through the station.
5	Upgrade wet well lighting at Marigold Pump Station	\$25,000	<ul style="list-style-type: none"> The existing wet well lighting is old and prone to failure and requires upgrading for safety and reliability reasons. It is proposed to install new explosion proof fixtures and receptacles for maintenance activities.
6	Replace pump #2 and # 3 at Currie Pump Station	\$125,000	<ul style="list-style-type: none"> Two of the existing pumps are scheduled for replacement (#2 and #3) since they are at the end of their service life. Pumps 1 and 4 and motors have been replaced in recent years. The replacement will result in increased station reliability and lesser maintenance costs related to repairs.

APPENDIX A

CORE AREA INFRASTRUCTURE UPGRADE PROJECTS FOR 2010
(IDENTIFIED IN THE LWMP AND SCHEDULE G OF THE 2010 BUDGET)

Item	Improvement	Estimated Cost	Description and Need
7	Repair deficiencies discovered from NWT inspection	\$45,000	<ul style="list-style-type: none"> The closed circuit TV inspections 2008 and 2009 identified deficiencies in the NWT that are in need of repair.
	Total	\$540,000	

APPENDIX B

CORE AREA PROJECTS FOR 2010
(IDENTIFIED IN THE LWMP AND SCHEDULE G OF THE 2010 BUDGET)

COST SHARING

Item	Improvement	Estimated Cost	Cost Sharing (% / Allocation)									
			Langford	Colwood	View Royal	Songhees IR	Esquimalt IR	Esquimalt and DND	Victoria	Saanich	Oak Bay	
1	Mac Pt Fan	\$95,000	7.10% \$6,745	6.60% \$6,270	4.50% \$4,275	0.70% \$665	0.30% \$285	25.10% \$23,845	24.30% \$23,085	31.40% \$29,830	--	
2	Mac Pt Sluice Gate	125,000	7.10% \$8,875	6.60% \$8,250	4.50% \$5,625	0.70% \$875	0.30% \$375	25.10% \$31,375	24.30% \$30,375	31.40% \$39,250	--	
3	Clover Pt Fan	75,000	--	--	--	--	--	--	64.50% \$48,375	19.20% \$14,400	16.30% \$12,225	
4	Clover Pt Sluice Gate	50,000	--	--	--	--	--	--	64.50% \$32,250	19.20% \$9,600	16.30% \$8,150	
5	Marigold Light Upgrade	25,000	--	--	--	--	--	--	--	100.00% \$25,000	--	
6	Currie Pump Replacement	125,000	--	--	--	--	--	--	43.10% \$53,875	30.80% \$38,500	26.10% \$32,625	
7	NWT-Northern Repair	45,000	--	--	--	0.05% \$23	--	--	34.20% \$15,390	44.20% \$19,890	--	
Total		\$540,000	\$15,620	\$14,520	\$9,900	\$1,563	\$660	\$64,918	\$203,350	\$176,470	\$53,000	
Current amount avail in Sewer Reserve Fund			\$47,728	\$37,172	\$348,000	\$190,000	\$11,497	\$98,944	\$1,470,000	\$1,806,000	\$742,830	