

**REPORT TO BEDDIS WATER SERVICE COMMITTEE
MEETING OF WEDNESDAY, 21 NOVEMBER 2007**

SUBJECT **BEDDIS WATER CAPITAL PROJECT COMPLETION PLAN**

PURPOSE

To provide the Beddis Water Service committee (BWSC) with a proposal to complete components of the capital project which are unlikely to be completed within the original budget set out for the project, using funds from the capital reserve fund.

BACKGROUND

The Capital Regional District, (CRD) has, on behalf of Beddis water local service area, received a Canada BC infrastructure grant for improvements to its water system, specifically a new water treatment plant and a new water storage reservoir with interconnecting piping. Owing to significant increases in the cost of construction and owing to some expenses originally proposed for the project not being considered eligible for funding under the program by the province, the project can not be completed within the budget originally identified. The challenge is to complete the primary works such that the intent of the water system upgrade is achieved in the most cost effective manner. A strategy has been developed by staff to achieve this end, presented in this report.

Design / Implementation

The project design intended to address water quality issues arising from water treatment deficiencies and from distribution system inadequacies. Specifically, the capital project was to install a new dissolved air flotation (DAF) water treatment process to treat source water from Cusheon Lake to a high degree prior to distribution to customers and to replace the highest water tank which contributed to stagnant water on the system, was difficult to service and was at some risk of toppling during a seismic event. It was desirable also to relocate the lower Lautman water tank to an alternate location to avoid problems with access and to undertake the necessary revisions to the distribution system to allow the new components to be interconnected.

Project Expenditures to Date

The following Table 1 presents a summary of major expenditures to date. The expenditures are summarized in two categories, those costs eligible to be claimed against the infrastructure grant and those costs considered ineligible for funding under the grant. Against a budget of \$760,304 are expenditures, including commitments to existing contractors, totaling \$672,714. As contracts are completed some of these commitments may be reduced. The funds available in this portion of the project to complete the works amount to \$87,590, which is insufficient to complete the project. Ineligible costs, with a budget of \$122,000, were meant to capture all CRD time for the project from inception. At this stage this portion of the project has expenditures totaling \$40,155, leaving some \$81,845 yet to be expended. As the funds for the eligible portion of the project are exhausted, a portion of these funds may be applied to the work tasks remaining.

Table 1 - Project Expenditures

Item	Description	Expenditure / Committed		Total
1	Purchase, Delivery DAF equipment	\$243,227	\$25,766	\$268,993
2	Purchase, Erection of Reservoir	\$29,435	\$34,065	\$63,500
3	Consultants, Design, Inspection, Right of way acquisition	\$109,044	\$28,426	\$137,470
4	Pre-design, pilot testing	\$44,036		\$44,036
5	Water Plant foundation	\$85,000		\$85,000
6	Water Plant Building	\$12,148	\$51,352	\$63,500
7	Miscellaneous, Permits, Sign, contract expenses	\$9,311	\$904	\$10,215
Summary	Expenditures – Eligible for Grant	\$532,201	\$140,513	\$672,714
	Project funding remaining			\$87,590
	Budget			\$760,304
	(Beddis Commitment 1/3)			\$253,435
Summary	Expenditures – Ineligible for Grant			
	Staff Time			\$40,155
	Project Funding available			\$81,845
	Budget			\$122,000
	Beddis Commitment 3/3			\$122,000
Summary	Total Project Expenditures to date			\$712,869
	Funds available (total)			\$169,435

Project Completion

There are a number of works which are required to be completed for the water system to be fully operational as proposed including:

1. completion of water plant structure
2. electrical supply and controls
3. mechanical installation of DAF plant, tankage, backwash system
4. interconnection of plant to water system and existing intake pumps
5. preparation of new reservoir site to allow for contract to construct reservoir slab, erection of tank
6. construction of pressure sustaining station, new reservoir site
7. interconnection of reservoir, new main between Sky Valley and Lautman
8. pressure reducing valve station, interconnection at Lautman to existing system
9. replace portion of main Cusheon lake to Lautman
10. relocation of Lautman tank to lower Sky Valley site

Item 1 has been largely completed. Items 2, 3 and 4 are currently in design and will be initiated in January and are expected to be substantially completed by 31 March 2008. Item 5 is planned for completion by 31 March 2008, although there remains an option to locate the tank at either the existing high Sky Valley (existing) site, or the proposed lower Sky Valley site. The completion of items 1-5 will consume the existing funds available in the current project. Items 6-10 require a further plan for completion but will require additional funds from the capital reserve fund. The following Table 2 indicates the expenditures by date for the items 1 – 5 and estimated costs for remaining work items 6-10.

Table 2 - Projected Expenditures

Item	Projected Expenditures for the Period Ending					
	Dec 31/07	Jan 31/07	Feb 28/07	Mar 30/07	After 30/07	Total
1	complete					
2		\$18,000	\$56,000			\$74,000
3		\$25,000	\$25,000	\$25,000		\$75,000
4				\$10,000		\$10,000
5	\$10,000					\$10,000
Sum 1-5	\$10,000	\$43,000	\$81,000	\$35,000		\$169,000
6					\$70,000	\$70,000
7					\$35,000	\$35,000
8					\$60,000	\$60,000
9					\$85,000	\$85,000
10					\$40,000	\$40,000
Sum 6-10					\$290,000	\$290,000

Discussion

The total budget for the project, including eligible and ineligible costs amounts to \$882,340, of which Beddis has budgeted, through borrowing \$325,000 and from a transfer from reserve of \$50,000, total \$375,000 with the remainder of the funds from an infrastructure grant.

Expenditures to date, plus those planned for the next five months will permit the completion of the water treatment plant and installation but not connection, of the new water reservoir. To complete the remaining works an increase in the project will be necessary amounting to an estimated \$290,000 which is considerably more than is available to the committee via its capital reserve fund. On this basis, if the committee does not wish to raise additional funds to complete the entire project, it will be necessary to prioritize the additional works to obtain the most value for existing funds.

In reference to the outstanding works, items 6 – 10 from the above Table 2, it is suggested that the works concentrate on the development of a functional upper reservoir site which requires the construction of a pressure sustaining station, as outlined in item 6, a new main between the reservoir and the water system on Lautman Road, as per item 7 and a PRV station as per item 8 for a total cost of \$165,000. This scenario provides a new reservoir to replace the aging Sky Valley tank, offers the opportunity for water from the new tank to enter the system through the PRV station to maintain water quality, but requires the Lautman tank and pump station remain in service at this time. A future work item would be to complete the replacement of the lower main from the water plant to Lautman, with new pumps added to the lower station, and moving the Lautman tank to the new site, decommissioning the old pump station (and Sky Valley tank) in the process. This latter work, identified as items 9 and 10, has an estimated cost of \$125,000. The committee could seek the approval of the area to approve a further borrowing for the total value of the work (\$290,000) or that portion which cannot be funded from the capital reserve, estimated at \$125,000 or could budget an annual increase to set aside funds for this purpose.

ALTERNATIVES

The committee may wish to direct staff to continue with the current project to complete the works, Items 1-5 at this time, and to review, after completion of these tasks, the budget and recommended work schedule for the remaining work items to be completed.

The committee may wish to approve at this time, as much work as can be completed through the current budget for the project and with all available funds from the capital reserve.

The committee may wish to amend the 2008 annual operating budget to increase the parcel tax to generate additional funds for the capital reserve.

FINANCIAL IMPLICATIONS

It is unlikely the full work program as originally proposed can be completed with all funds available through the existing capital works program even if supplemented with all funds from the capital reserve. To complete the works, BWSC will need to either seek authority from the electorate to borrow additional funds or will need to increase parcel tax or generate additional funds in the reserve to complete the work in future. It is estimated at this time that the funding within the current capital project is sufficient to complete the water treatment portion of the works, and to erect the reservoir.


SUMMARY/CONCLUSIONS

Staff have updated the expenditures and work program for the Beddis water system improvement program. It is estimated that the water plant portion of the project and the erection of the new reservoir can be completed within the current budget however the intended interconnection of the reservoir and the relocation of the Lautman tank to the new lower Sky Valley site cannot be completed within the present budget. Although much of this work can be completed with funds from the capital reserve, it is unlikely that the relocation of Lautman tank can be undertaken for the funds available. Staff are suggesting to the committee that the current work program to complete the plant and erect the reservoir be completed at which time staff will return to the committee with an updated schedule and budget for the remaining works at which time the committee may authorize the additional expenditures. As it is evident the entire project can not be completed without additional funds, committee may wish to consider an increase in the parcel tax for 2008 and beyond to facilitate this additional work.

RECOMMENDATIONS

That the Beddis Water Service committee:

1. receive this report for information;
2. direct staff to bring back for the committee's consideration, on completion of the water plant and reservoir, a final work plan to address outstanding works; and
3. advise staff whether there is a desire to amend the 2008 operating budget to provide increased reserve funds which could be applied to complete the project in future.



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