



**BEDDIS WATER SERVICE COMMITTEE
2007 ANNUAL GENERAL MEETING
OPERATIONS REPORT
MAY 15, 2007**

The following is provided for information to residents and users of the Beddis water service.

General

It has been regular practice for Capital Regional District (CRD) staff to present to the community an Operations Report at the annual general meeting (AGM), which is an opportunity for staff to pass on information pertaining to a variety of topics related to the operations, maintenance, performance or upgrade of your water system, which it is hoped, will be of interest to the water area users or property owners. The operations report is also intended to provide some information on any changes of direction the CRD may be considering with respect to your water system and to present any statistical information gathered during the previous operating period.

Operational Structure – CRD Staff / Operating Contractors

The CRD operates a large number of regional and local services in the greater Victoria area and on Salt Spring Island. Services for local water supply and distribution, sewage treatment and disposal, septage disposal and solid waste disposal are operated by the Environmental Services department, one of a number of such departments in the CRD which also includes Regional Parks, Regional Planning Services, Regional Water Services and Health Facilities Planning. The Environmental Services department is home to a number of separate divisions. The Operations division carries out the day to day operation and maintenance of the department's facilities of which the Beddis water system is one of the newest. The department also has divisions which look after solid waste disposal for the entire CRD, including operation of the recycling program, a Scientific Programs division which carries out a variety of monitoring and evaluation programs, and an Engineering Services division which designs and oversees capital works upgrade projects. It will be Operations division staff that Beddis water users will likely interface with. Key staff and responsibility include:

Name and Title	Responsibilities
Larisa Hutcheson, PEng Manager, Operations and Local Services	Manages the work force and budgets.
Murray McCallum Waterworks, Local Services Supervisor	Directly responsible for day to day operation of Beddis through the operating contractor.
Gary Hendren Local Services Engineering Coordinator	Primary liaison between Beddis Water Service committee and CRD.
Todd Kilvert Engineering Technician, Operations	Processes new water connections for Beddis.
North Salt Spring Water District	Carries out day to day operations of the system and first line contact for water system problems.

The division has on staff, numerous electricians, electronics/computer technologists, mechanic/fitters and welders based in Victoria who will be on the island from time to time to undertake emergency repair, programmed maintenance and routine upgrade of the mechanical and electrical components of the system.

The division maintains two staff on call during non working hours to organize a response to any reported emergency condition. First response will be from the North Salt Spring Water District who operate the water system on contract to the CRD. The committee and CRD management will be identifying a strategy to staff the new water treatment plant this year in preparation for the completion of the facility next spring. The plant will likely require a higher certification level than what is currently available on island hence training and certification of the operating staff will be a required component of next years operating budget.

Beddis Water Service Committee

By bylaw, the CRD Board has established the Beddis Water Service committee and has conveyed to the committee the CRD Board's responsibility for the general administration of the Beddis water service. The committee is your interface with the CRD, and is directed by bylaw to hold an AGM both to canvass for committee members and to liaise with the service area residents and property owners. The committee operates under the same rules, regulations and policy as does the CRD Board. Meetings are held at the call of the Chair. For questions of a routine (non emergency) nature, committee members are often available.

Your current committee members are:

Mr. Don Stevens (Vice Chair)	Term expires June 30, 2007	537-9554
Mr. Colin Campin	Term expires June 30, 2007	537-1370
Mr. Fraser Hope (Chair)	Term expires June 30, 2008	537-9997
Mr Michael Byrne	Term expires June 30, 2008	537-9988

Winter Events 2006/2007

The winter of 2006 created many significant problems for water systems in the CRD electoral areas. One CRD water system on Mayne Island was without water service for up to 24 hours before a temporary standby power source could be installed. An island wide power outage and an untimely system water leak initially caused the situation. A second large water utility on Pender Island suffered significant failures in household services which effectively drained the water system. The problems occurred in unoccupied structures which had no heat for extended periods of cold weather or in outside lines which were not adequately protected from the frost. As the weather returned to normal temperature many of these damaged service lines began to leak. At the peak of the thaw, the system was losing water at up to 200 gallons per minute and required mobilization of twenty staff, committee members and volunteers to go door to door to search out the 1000 odd services to find the problems. In total 24 services were isolated.

Beddis water was not one of the systems affected by the various events this winter, however the lessons learned by others would benefit the Beddis system. The following observations would apply to Beddis as with most other island water utilities:

- Provision to connect standby power to the new Beddis water plant, and ultimately the upper pump station, should be implemented. The CRD has one portable generator capable of operating a plant the size of Beddis on Salt Spring, but the necessary transfer switch and connector are required. Staff will endeavour to have the necessary equipment installed as part of the plant upgrade.
- Although the facility will have capability to connect standby power, the availability of the portable generator unit is doubtful if the outage is island wide as was the case on many islands this year. This winter the Salt Spring generator was stationed at the St. Mary water treatment plant for extended periods. On this basis the CRD may suggest to a number of water districts there is a need for more on island equipment.
- Access to the upper pump station at present would be an impediment at present. When the new station is constructed access should be improved.

- CRD has, available for deployment from Vancouver Island, a number of small portable generator units. The original intent was to maintain a small inventory of units to deploy to a facility in the case of a local extended outage. The effectiveness of this strategy was challenged this winter as there were too many localized and island wide power outages for a much longer duration on many islands then could be reasonably serviced.
- As the outage on a number of islands was long term and island wide, gasoline to power portable generators was not available locally, and needed to be transported to the island by water taxi (BC Ferries does not permit gas transport >5 gal). Diesel does not present the same problems.
- Owing to the need to maintain a regular watch on portable generators over several days, and to also respond to other systems in trouble local operators on Mayne Island and Salt Spring Island became fatigued and required staff support from Vancouver Island.
- Staff determined that where power was needed for reservoir level sensing, the sites should be evaluated for their performance during extended power failures. CRD staff, in responding to these events, made use of the emergency program in place for each electoral area. The various programs assisted in providing phone messaging through their neighbourhood fan out programs, provided volunteers to assist with looking for leaking services, supplemented CRD's emergency equipment stores and delivered bottled water.
- The support from the each island's emergency program was very much appreciated and was offered immediately and without question. Residents in the Beddis area should take an interest and further support this worthwhile program. The provision of a neighbourhood fan out program for the Beddis area would be particularly useful.
- CRD is also reviewing its internal business resumption strategy. During the events of 2006/2007 operations and supervisory staff were on continuous duty throughout the various storms leading to extreme fatigue by year-end. It is anticipated that many emergency response staff were faced with similar situations. More corporate support for the division will be employed in similar events in future to better support field staff and supervisors.

Staff will be working with the Beddis Water Service committee towards hardening of the Beddis system for future weather events.

Capital Works Project

After considerable delays in the project, construction of the base slab at Cusheon Lake is to proceed and be completed this month. After the slab has reached its design strength, the prefabricated water plant will be shipped to the island and lifted onto the base slab. The wood frame building will then be constructed around the new tankage. It is envisioned that the building should be completed by September at which time the internal piping modifications and installation of new pumps and water plant equipment will be initiated. It is intended to complete the water plant project to be operational by March of 2008.

The CRD, the Islands Trust and the Ministry of Transportation (MOT) discussed at length the siting of the new water plant building. The CRD would have preferred a site on the opposite side of Cusheon Lake Road, away from the lake, however the MOT wished to preserve the right of way for possible future road realignment. As the building, by default, lies within close proximity to the lake under high water conditions, the Islands Trust and CRD have agreed the design and construction of the facility will follow strict environmental specifications to avoid contamination of the lake or further damage to the lakeshore. Bullock Baur Associates, the design engineers on the project, have incorporated the necessary environmental protection language in the contract specifications and will inspect the contractors work during the construction period.

As was noted at the last AGM, the project costs, estimated some years ago, bear little resemblance to the costs being paid for similar work today. CRD staff have approached the province to try to address the cost issue however there appears to be little hope in receiving additional funding for the project nor a relaxation of the requirement that CRD administration and engineering costs are ineligible to receive compensation.

The project has now been parsed into small jobs with the hope that local contractors will bid competitively on the much smaller and simpler works. The original foundation design has been altered to use piles rather than an excavated slab to avoid any risk to contractors of a flooded excavation. The size of the structure has also been reduced to save costs by reutilizing the existing pump station to a larger degree than originally planned. The new station works are being designed in concert with a similar project for the Fulford water district so as to obtain the best quotations for construction of each component. The same works are being constructed at both sites to also allow both utilities to share in the costs of the design of the structures and to minimize construction inspection costs. The Fulford works have been purposely delayed such that the two projects can proceed together.

The original intention of the project was to install new pumps in the new facility and to decommission most of the original water plant infrastructure. New pumps will still be required; however they will now be mounted in the original water plant to permit the main building size to be reduced.

The engineers have concerns that some components of the works may be difficult to complete with local trades. The pipefitting and electrical/controls trades may remain in short supply on the island and may either need to be imported from Vancouver Island, or the work may be completed by CRD technical staff.

The costs of the project will be tallied after each component of the work is constructed. The committee will likely need to access reserve funds to allow the water plant project to be completed, however this will become clearer as each component of the project is completed.

Works Outstanding

The project originally also provided for a new reservoir to be constructed to permit the aging Sky Valley tank to be taken out of service. Although the water tank has been purchased through the project, there are unlikely to be sufficient funds to undertake the necessary watermain extensions to allow for activation of the tank. The committee will also need to revisit this portion of the project once the water plant is completed, to determine if the works can be done with available funds or if a new borrowing is necessary.

Water Conservation Plan

As a requirement of the Canada BC Infrastructure Program, the CRD has drafted a water conservation plan for the consideration of the committee. In providing funds for water treatment projects the federal government wishes to ensure that the water utility is properly managing the water resource. The water conservation plan is meant to demonstrate to the provincial and federal authorities that the Beddis water area supports the concept of conserving water. Unlike some water utilities operated by CRD, Beddis water has a number of the primary components of a comprehensive conservation plan, including:

- universal metering of all house connections
- source metering of water production
- a progressive billing bylaw which rewards users with lower water usage

There are additional components of a water conservation strategy which Beddis should also consider for implementation. These include:

- An active program to identify lost or unaccounted for water (production minus consumption) and a program to seek out and eliminate such losses.
- Promotion of the system as a potable only system to reduce the use of treated water for irrigation.
- Participation with other island water systems to explore methods to encourage the use of water conservation technology such as low flush toilets and shower heads, and to incorporate rainwater catchment for irrigation.

The benefits of the plan will include less demand on the resource and reduced operating costs for the water plant, electricity, chemicals and residuals disposal.

Annual Operating Budget 2006/ 2007

The CRD prepared a budget for the utility in advance of the referendum and this same budget was used to guide expenditures for 2006. Revenue for 2006 amounted to \$136,788. Expenditures for operations and debt servicing for 2006 amounted to \$113,336. The utility carried forward a surplus in 2005 to 2006 of \$11,882 after committee made a significant transfer of funds to the capital reserve fund in 2005. In 2006 the lower expenditures, arising as to the delay in operation of the water plant, allowed a further commitment of funds to reserve of \$35,334 leaving the budget balanced at year end. As a consequence of the transfers to reserve, the fund at year end 2006 amounted to \$155,093. As the capital project funding remains in question the reserve funds will likely be drawn on to complete the project.

A copy of the financial statement for Beddis Water Supply, as prepared by the CRD Finance and Corporate Services Department, is attached for information.

For 2007 the committee maintained the fees and charges to water users at 2005 levels. With the completion of the water plant in 2007 additional expenditures are anticipated which should be provided for in the 2007 budget. It is unlikely however that further transfers to the reserve fund will occur beyond 2007 unless rates are increased.

Gary Hendren, ASCT
Local Services Engineering Coordinator

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