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Corporate Plan Output: Liquid Waste	

The purpose of this report is to inform the Council of progress with seeking a new resource consent to discharge treated wastewater from the Council's wastewater treatment plant at Bromley, to confirm the role of the community Working Party, and to seek approval for an increase in the cost of the contract with Woodward-Clyde for preparing the Assessment of Environmental Effects.

BACKGROUND

In August 1996 the Council approved a program of investigation and consultation which would lead to an application for a new resource consent to discharge treated wastewater from the Council's main treatment plant. The present consent expires in October 2001.

At present the plant discharges to the sea twice a day via the Avon-Heathcote Estuary (Te Ihutai) on the outgoing tide. In August 1998 the Council resolved to "favourably consider" a discharge direct to the sea through a long ocean pipeline, and directed further investigations and consultation be done before the Council makes a final decision on which option to pursue. In August 1999 the Council confirmed there were only two realistic options, i.e. continuing to the estuary or going direct to sea.

CONSULTANCY REPORTS

The Council has a number of investigation and research contracts under way to lead to the best possible advice and Table 1 below notes progress with those investigations.

Table 1

Topic	Status
1. Fish resources of the Avon-Heathcote Estuary and inshore Pegasus Bay: current knowledge and assessment of effects of treated effluent discharge	completed
2. Assessment of effects of Bromley sewage effluent on phytoplankton growth at the proposed Pegasus Bay ocean outfall site	completed
3. Effects of the Bromley oxidation ponds effluent on colour, clarity and oxygen concentrations in the water of the Avon-Heathcote Estuary	completed
4. Pegasus Bay surf clam resources: a preliminary assessment	completed
5. Changes in the benthic macroinvertebrate communities of the Avon-Heathcote Estuary	completed
6. Coastal processes in southern Pegasus Bay: a review	completed
7. Christchurch City outfall – preliminary geotechnical investigation	completed
8. Design of Christchurch outfall	completed

Topic	Status
9. Ocean and estuary current modelling	
10. The benthos (i.e. bottom dwelling invertebrates) off South Brighton, Pegasus Bay: a preliminary assessment	completed
11. Estuary Green Edge	Initial draft only; being reviewed
12. Sea lettuce impacts	In preparation
13. Resident issues	First stage draft done; to be finished after Council decision made
14. Tangata Whenua values	Initial report completed; impacts to be evaluated after Council decision made
Viruses	To be prepared shortly

Completed reports have been peer-reviewed and are available for the public. They will be summarised and drawn together in the final Assessment of Environmental Effects report, which is presently being assembled by Woodward-Clyde.

ESTUARY GREEN EDGE

A major development is regarding the Estuary “Green Edge”. When the Council resolved in August 1998 to favourably consider a direct ocean outfall, it asked for a co-ordinated development plan to be prepared covering the western edge of the Estuary (i.e. the Green Edge). An initial draft has now been prepared covering the area from the Avon mouth at the north end of the Estuary to the Cobb Cottage to the east of the Ferrymead bridge, and it includes the revegetation of the Bexley landfill and development of wetlands in the Linwood paddocks. It also includes an imaginative reconfiguring of the ponds in a way that will maximise their effectiveness as treatment systems plus further heighten the visual appeal of an area that is already highly valued by the public. The plan would enhance still more the area’s value as a wildlife habitat and the wetlands could well develop into an attractive eco-tourist spot.

It is anticipated that this plan can be advanced with a wastewater solution as an integrated venture with either an estuary or ocean outfall.

FURTHER WORK

One of the next major tasks is to develop possible consent conditions. The sort of thing that has been done in other places, and this Council does already for other consents, includes:

- specifying a range of parameters that will be monitored, and when and how,
- setting up a public watchdog group to receive monitoring results and report to appropriate people,
- arranging for reviews of a consent where this might be necessary at some stage.

The point of this is to ensure there is no “out-of-sight, out-of-mind” approach to operating a consent but rather that information is public and visible so people can have confidence that their health and environmental values are being cared for.

CONSULTATION AND THE COMMUNITY WORKING PARTY

Over the three years of investigations into this consent application one of the main instruments the Council has used has been the broad based community Working Party, which has helped guide the Council as to the issues and options that are feasible. In August 1998 the Council substantially adopted the recommendations of this group and also resolved that “*The Council will ... retain the experience and expertise of the Working Party to help review the on-going research and AEE preparation, and develop appropriate conditions on a consent application*”.

After further discussions between the Council subcommittee and the Working Party it is considered that their role should be revised by amending that resolution to say; “*The Council will ... retain the experience and expertise of the Working Party to help review the on-going research and AEE preparation, to assess options, make recommendations and guide the Council’s decision making process, and to develop appropriate conditions on a consent application*”. The Council has been very appreciative of the efforts of the Working Party and this would confirm them in something similar to their original role. The Working Party understands that in the end the Council makes the decision on what solution to apply for and is not bound to accept the Working Party’s views.

COSTS OF OBTAINING THE CONSENT

In August 1996 when the Council started the process of obtaining a consent there was a budget of **\$1.70 million** allocated for the studies and administration. (Note this is included as part of the \$33.7M plant upgrade budget). Provided the Council is able to select an option and lodge a consent by about the middle of next year costs are expected to come inside that budget.

However it is requested that the Council authorise an increase in price for one contract within that budget, i.e. the contract with Woodward-Clyde Ltd for preparing the Assessment of Environmental Effects (AEE). In March 1999 the Council authorised an increase in the original contract cost from \$281,350 to \$365,000, in view of an expanded scope of work that was agreed to be necessary for having a robust scientific basis for a decision and application. This report now requests a further increase in this contract price of \$162,000 from \$365,000 to \$527,000.

The breakdown in costs of the requested increase is outlined in Table 2 below:

Table 2

(1) Extra costs caused by extensions in time	\$92,000
<p>Note: When the Council approved the extension to the AEE contract in March 1999 it was expected the Council would be in a position to make a decision by the middle of 1999. However this date has been extended twice because of unavoidable difficulties and delays in obtaining some key information and a need to extend the period of consultation. As a consequence there has been a large amount of additional work required from Woodward-Clyde in supervision of other contractors, contract management and administration, attending planning meetings, and so on all resulting in this additional cost. The new fee includes an estimate of the management and supervision required up to the middle of 2000.</p>	
(2) New work required because of changes in external requirements	\$22,000
<p>Note: This work arises from two main demands: Firstly over 1998 and 1999 there has been an expectation developing around New Zealand that wastewater consent applications need an expanded amount of viral investigation, including some expensive laboratory work. Secondly it has become clear as discussions have continued with Ngai Tahu representatives that the contract needed to be expanded to address adequately their issues and concerns. Other contributors to this cost (\$22,000) have included providing additional safety markers on some ocean surveying equipment at the request of the Regional Council, and investigating new water quality standards recently released by the Department of Health.</p>	
(3) Extensions to original work	\$19,000
<p>Note: This item covers a contractually agreed standby allowance that had to be paid when ocean drilling equipment was unable to do its work because of bad weather, an extension to the study of organic contaminants and metal levels in the Estuary that will be particularly useful if the Council continues to discharge to the estuary, and unexpected extra work required for investigating sea lettuce and algal blooms in the estuary.</p>	
(4) Late invoices not included in the March 1999 review, less savings (\$5,000) on work deleted from contract	\$4,000
(5) Further contingency allowance to be approved only if agreed by Waste Manager	\$25,000
Total	\$162,000

The following additional comments are relevant:

1. A condition on the March 1999 extension to the contract was that “the Waste Manager will investigate ways of reducing the contract price including reducing the cost of public consultation”. The outcome of negotiations was that Woodward-Clyde agreed to forego margins on all disbursements, including subcontractor fees, and their service charge on basic in-house disbursements, leading to a saving in costs of some \$10,000.
2. While the increase is significant the Council should bear in mind that due to the nature of research and investigative work it is impossible to predict beforehand the full details of the work. This is especially the case in assessing environmental effects of major projects in challenging and difficult ocean and estuarine environments. On-going adjustments are almost inevitable if the Council wants to have good quality information on which to base a decision.
3. Woodward-Clyde has provided an excellent level of service and their work is of a high quality and has been done efficiently.
4. The total cost of the consenting process is still expected to be within the allowance (i.e. \$1.7 million), even with this proposed increase, as a contingency sum still remains unused. However if the decision by the Council takes beyond the middle of 2000 it is expected the budget will need to be increased beyond the currently allocated \$1.7 million.

NEXT STEPS

The next steps are outlined in Table 3 below:

Table 3

Complete scientific studies	January 2000
Seminar for Councillors	16 March 2000
Formal public consultation period	May/June 2000
Councillors hear public submissions	July 2000
Council selects single option	August 2000
Consent application lodged	September 2000

SUMMARY

Most scientific studies have been completed to help the Council make a sound choice of a wastewater solution in the middle of 2000, and Council seminars and public consultation are planned for next year. The Council should note in particular the development of Green Edge plans and the possibility of making these integral with a strategy for a wastewater solution. There has been a substantial increase in costs of investigations and the Council is asked to approve an increase in the contract with Woodward-Clyde for the Assessment of Environmental Effects, while noting that the total cost of the consenting process up to the consent application is still expected to be inside the original budget of \$1.7 million. An enhanced role statement for the Working Party is outlined in this report.

- Recommendation:**
1. That the Committee receive this report.
 2. That the Committee note the date for the Councillors seminar on 16 March 2000.
 3. That the Committee confirms the role of the Working Party as indicated above.
 4. That the Committee approve an increase in the AEE contract price from \$365,000 to \$527,000 assuming the Council selects a single solution and lodges a consent application about the middle of 2000.

Chairman's Recommendation: That the above recommendation be adopted.