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Report No. 02.60

11 February 2002

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02.60

Report to the Utility Services Committee
from John L Morrison, Engineering Consultancy Manager

Kapiti Coast Water Supply

1. Purpose

To update the Committee on the present situation regarding investigations into the supply of water to the Kapiti Coast to the Wellington Regional Council (WRC) system.

2. Background

Report PE-01.470 was presented at the Utility Services Committee meeting held on 5 July 2001. This report gave an overview of the situation regarding the water supply in the Kapiti Coast District Council (KCDC) area. A copy of the report is attached as attachment 1. The grounds for keeping this report as Public Excluded no longer apply. Since then, the application by KCDC for a consent to take water from the Otaki River has been declined and KCDC did not appeal the decision.

3. KCDC Information

Earlier in the New Year a significant amount of information was received from KCDC regarding consumption patterns and future predictions. This information was necessary before an analysis could be commenced of the impact on the WRC wholesale system consequential on the supply of water to KCDC. Additional information is still required to evaluate the demand patterns.

4. KCDC Water Workshop

On Monday, 28 January 2002, KCDC convened a water workshop. The workshop included presentations from:

- The Parliamentary Commissioner for the Environment
- Paula Bullock, WRC, on the freshwater plan
- David Benham, WRC, on the outcomes of connecting to the WRC system and also funding options
- Stephen Palmer, Medical Officer of Health, on the public health considerations

A report prepared by KCDC for presentation to the District Development Committee to be held on Friday, 8 February 2002, is attached as attachment 2. This report gives a full summary of the workshop. The resolutions of the KCDC Committee meeting are attached as attachment 3.

Copies of the presentation by Paula Bullock and David Benham have been circulated in the Councillor's bulletin.

5. **WRC Involvement**

The resolutions from Report No. PE-01.470 were as follows:

- (i) *The report is received and the contents noted.*
- (ii) *Officers prepare a response to the KCDC request based on a draft project brief.*
- (iii) *Any request for further information beyond that provided for in recommendation (ii) is referred to the Utility Services Committee for approval to proceed.*

Little work was done subsequent to the 5 July Committee meeting, as the information was not forthcoming from KCDC. However, now that some information had been received, investigations in terms of the committee resolution can commence.

6. **Proposed Work Packages**

6.1 **Physical Infrastructure**

A preliminary route has been selected for the pipeline. It is proposed to run from the State Highway 58/Murphy's Road intersection, along State Highway 58 and over the Paekakariki Hill Road. A boost pumping station would be required on this sector. The pipeline would cross State Highway 1 at Paekakariki and follow Wellington Road to Queen Elizabeth Park. A route would be selected across the park to minimise impacts. The decision to cross Queen Elizabeth Park is based on the extensive road realignments that will be undertaken at the MacKays Crossing/Transmission Gully connection area, and the existing narrow road edges between Paekakariki and MacKays Crossing.

The pipeline would recross at State Highway 1 at Valley Road (Emerald Glen) and follow Valley Road to connect to the KCDC pipeline at Ruahine Street. The total length is about 31.1 km. When the design flow pattern has been established, the pipe diameter can be fixed. Preliminary investigations indicate that it will be between 500 mm and 600 mm diameter.

6.2 **Impact on WRC Water Supply**

An analysis will be carried out using two recently developed models. The sustainable yield model will analyse patterns of demand on predicted water availability. This model is currently being updated. The hydraulic model will be used to determine flows and pressures in the existing pipework with the additional draw-off. This new model is currently being calibrated.

The outcome of these investigations will determine if any enhancements are required to WRC system. This could include the bringing forward of construction of the Te Marua river intake pumping station and the possibility of boost pumping on the Porirua branch pipeline.

6.3 **Funding Options**

The presentation given by David Benham gave a wide range of options for funding this project.

At one end of the spectrum, KCDC could fund the total project and purchase water on a quantity basis from the WRC supply at Judgeford. At the other end of the spectrum, WRC could take over full responsibility for the supply of water to KCDC, with KCDC vesting the Waikanae Water Treatment Plant and delivery pipelines to WRC. This effectively would mean that KCDC rejoined the water supply club.

The option selected would have to be agreed with the four city councils to ensure that there is no adverse impact for them.

The preliminary estimated cost for the new pipeline and pumping station is \$25 million. Additional costs would arise from any enhancements required to the existing WRC system.

7. **Next Steps**

Investigation will continue on the issues raised in the previous section. Further discussion will need to be held with KCDC staff, in order to reach a firm understanding on the pattern and quantities of water to be supplied and future predictions. The present programme is that a full report will be prepared for the Utility Services Committee meeting to be held on 30 April 2002. The achievement of this target will depend on the calibration of the hydraulic model, completion of the upgraded sustainable yield model and the receiving of the required information from KCDC.

8. **Communications**

There is no immediate need for media communication.

9. **Recommendation**

That the report be received and the information noted.

Report prepared by:

Approved for submission:

JOHN L MORRISON
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DAVID BENHAM
Divisional Manager, Utility Services

Attachments

- 1 Wellington Regional Council Report No. PE-01.470
- 2 Kapiti Coast District Council report *Water Supply and Management*
- 3 KCDC Committee resolutions



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02.60 addendum

Kapiti Coast Water Supply - Report No. 02.60

Kapiti Coast District Council District Development Committee Meeting - 8 February 2002

The meeting considered the report, *Water Supply Management*. A copy of this report is attachment 2 to Report No. 02.60.

The minutes of the meeting have now been received and are as follows:

DDC 01/02/6

7.4.0

The District Development Committee considered report CE02-007 regarding views expressed at the Water Workshop held on 28 January 2002 and sought determination of a way forward.

1. That report CE02-007 be received.
2. That Council establishes a working party comprising the Mayor and five Councillors charged with undertaking the detailed design of a process and programme to resolve both the immediate and long-term issues of supply and management of water in the Kapiti Coast District.
3. That the following Councillors be appointed to the working party charged with undertaking the detailed design of a process and programme to resolve both the immediate and long-term issues of supply and management of water in the Kapiti Coast District:

Councillors Chapman, Jack, Strachan, Thomas, Tristram

4. That the programme be generally designed so that the following timetable is achieved:
 - a) 1 July 2002 - building community consensus on preferred approach;

- b) 31 December 2002 - obtaining necessary consents and approvals for desired approach.
 - c) 2003 - implementation of agreed projects.
5. That Iwi be invited to appoint representatives to the working part to act as equal participants in the process.

JOHN L MORRISON
Engineering Consultancy Manager