

Chairperson and Committee Members
CORPORATE BUSINESS COMMITTEE

12 MAY 2011

Meeting Status: Public

Purpose of Report: For Information

WATER SUPPLY PROJECT UPDATE

PURPOSE OF REPORT

- 1 The purpose of this update is to provide relevant information on progress being made within the Water Supply project since the last report to Council.

BACKGROUND

- 2 Council's resolution on 19 August 2010 (refer to report AS-10-922):

...approves further drilling, testing, monitoring, modelling and assessment work on the River Recharge with groundwater option with results being reported back to Council and community stakeholders before applying for resource consents.

- 3 At the same time:

...Council confirms the Maungakotukutuku Dam as the second ranked water supply option for the Waikanae/Paraparaumu/Raumati catchment.

That Council authorizes the Chief Executive to negotiate the conditional purchase of the Maungakotukutuku Dam site subject to final approval by Council.

- 4 And to continue the involvement of Te Āti Awa ki Whakarongotai in the process with:

... a Cultural Impact assessment be commissioned from local Iwi relating to both preferred options.

- 5 The following is the amended plan from the 30 September 2010 report (refer to report AS-10-997) with updates shown in italics.

<u>Activities</u>	<u>Estimated Completion</u>
Information Review of Solutions	Completed
Solution Selection	Completed
River Recharge Preliminary design/AEE	Sept 2011-May 12
- develop preliminary designs	Partial
- assess environmental effects for resource consent application	Partial
- prepare for statutory assessment, resource consent lodgement	Partial

<u>Activities</u>	<u>Estimated Completion</u>
- consult affected parties	<i>Ongoing</i>
- provide advise on procurement options	
- <i>improve hydrological model</i>	Partial
- <i>understand down-stream ecological effects</i>	Partial
- <i>drill test wells</i>	<i>Started</i>
- <i>optimise staged development</i>	<i>Partial</i>
- <i>cultural impact assessment</i>	<i>Started</i>
Maungakotukutuku Dam Land Purchase	2012/13
- <i>cultural impact assessment</i>	<i>Started</i>
- <i>develop covenant agreement</i>	<i>Started</i>
- <i>negotiate purchase agreements</i>	<i>Started</i>
Consent Approval	2011/12
- consent application, lodged, processed, including possible hearings	
Detailed Design	}
- produce a detailed design reflecting the consent requirements and the solution selected	
Construction	}
- procure a contractor to construct the solution	
- manage and monitor the construction, and finally	
- commission the built solution.	

CONSIDERATIONS

Groundwater Model

- 6 During the assessment of supply options, a groundwater model was developed. It had been the intention to improve the model as more information became available. During November 2010 GNS was engaged to undertake a peer review of the groundwater model with 12 recommendations proposed to improve the model. 10 of the recommendations have been implemented with the remaining 2 to be completed before the assessment of environmental effects.
- 7 One of the remaining recommendations relates to how the coastal water boundary is represented in the model. To aid this, during December 2010, 97 bores were tested to better define the location of the saline/freshwater interface. Of those tested bores one in five had water samples taken for analysis. The final analysis of results will be completed later in July 2011. In the tested bores there is no evidence of saline intrusion.

- 8 The other remaining recommendation highlighted the variability in aquifer characteristics used in the model. As part of the investigation drilling work there will be further pump testing to improve how the groundwater model represents actual aquifer characteristics.
- 9 In the Council report AS-10-922 further work was identified to better understand the effects on existing shallow bores. The work done to implement the 10 GNS recommendations mentioned above has lead to a better understanding of these effects. This incorporated Greater Wellington (Gyopari 2005) reported information on shallow groundwater. Additional improvements to the surface water features included weekly rainfall data.

River Investigation

- 10 NIWA has been conducting river investigations to better understand the discharge effects on the downstream ecology in the Waikanae River. The field work, which has concluded, measured the effects on both water chemistry and ecology. During the field work water from the current borefield was discharged to best represent a 1 in 50 year drought and the demand of the expected 2060 population.
- 11 The experiment was setup below the discharge point at the Water Treatment plant with measurements taken there, downstream near Jim Cook Park and in Waikanae Beach wetland lagoons. To manage the effects of flood events during the experiment, an off-river fish tank experiment was also set up. The full results from NIWA investigation are expected by June 2011.
- 12 NIWA has been asked to comment on the adequacy of the current 750l/s minimum flow set for the Waikanae River.

Investigation Wells

- 13 A contract for the investigation drilling has been let and awarded to Richardson Drilling.
- 14 Drilling started on 30th March with the first investigation well on Greenhill Road completed. The information collected will be incorporated into the groundwater model. The order of drilling and location has been set out in the Drilling Strategy, CH2M Beca, 1 November 2010
- 15 Each new drilling site will be blessed by Te Āti Awa with the Water Working Group members observing the first few meters drilled at each location.

Cultural Impact Assessment

- 16 Adhering to our memorandum of understanding with Te Āti Awa Water Working Group and Council's August 2010 resolution, a tender has been awarded. A local consultant Hapai Whenua – Environmental Advocates Ltd is conducting the cultural impact assessment of the two solutions. This work is underway with initial meetings and interviews with Iwi members having been conducted. The draft report is expected before the end of September 2011.

Land Purchase

- 17 Discussions are progressing with Department of Conservation (DoC) regarding the alteration of the covenant that exists over indigenous vegetation at the dam site. Council staff confirmed the preferred option as partial removal of the covenant with mitigation now to future proof the site.
- 18 Progress is being made on negotiating a conditional purchase agreement with landowners for the potential dam site. Council has engaged the services of a local valuer, Brian Whitaker to help with the negotiations. Each of the parties, Ikham Holdings, Kaitawa Forests, and Greater Wellington have been provided with Council's preferred land requirements.
- 19 Ikham Holdings negotiations have progressed well with both parties' valuers agreeing on the process to be followed for assessing the land value. Council's valuer is expecting to provide a valuation report later this month.
- 20 Progress with Kaitawa Forests is on hold until negotiations with Ikham Holdings has progressed further. A valuation on the recent forestry block sales will help form Council's purchase proposal.
- 21 Following discussions with the Forestry Manager, Greater Wellington has acknowledged Council's desire to purchase land and have engaged their valuer to work with Councils' valuer.

Staging of Design/Assessment of Environmental Effects

- 22 Once results from NIWA river investigations, the cultural impact assessment, and drilling are analysed the final staged solution will be developed. A report provided to Council will outline the conclusions and recommendations seeking Council's confirmation of the preferred solution.

OTHER CONSIDERATIONS

Consultation

- 23 Public consultation has continued with a key stakeholder meeting held at Whakarongotai Marae in October 2010. There have been ongoing discussions with Greater Wellington relating to minimum flows in the Waikanae River and for the resource consent required for the investigation work. Regular updates have been provided at meetings of Friends of the Waikanae River.
- 24 TAG has met several times since September 2010 to discuss progress and to ensure investigations cover previously identified concerns.
- 25 The Te Āti Awa Water Working Group has been kept informed and has been actively involved in investigation work and engaging Hapai Whenua.
- 26 Interested members of the public on the project register are still being provided regular project newsletters keeping them informed of progress.
- 27 As part of the investigation drilling resource consent application Greater Wellington provided advice on who needed to be consulted. Council staff

contacted landowners in November 2010 who may be effected by water discharge from the investigations works.

- 28 Once the groundwater model update was completed and the drilling contract awarded, an information letter was provided to all residents on Greenhill Road. Due to concerns raised by the Greenhill Road letter an information letter was delivered in April to all residents within 250m of the next two sites, inviting them to contact Council if they had concerns.

Financial Considerations

- 29 Council resolved on 30 September 2010 (refer to report AS-10-997):

That Council approves amending the timing of capital expenditure on the water supply project as detailed below.

	<i>Financial Year</i>	<i>June 2010 2010/11 Annual Plan</i>	<i>Proposed RRGW Budget (Inc Dam site purchase)</i>	<i>Variance</i>
1	2009/2010	\$1,610,000	\$1,610,000	0
2	2010/2011	\$1,275,000	\$1,725,000	\$450,000
3	2011/2012	\$1,725,000	\$2,425,000	\$700,000

- 30 A major budget review was conducted in January with monthly updates provided to the Project Steering Group. Current projections indicate the budget set in September 2010 will be met.

Programme Considerations

- 31 The programme reported in September 2010 is being met. However, this is subject to the success of the investigation works. If all 6 investigation wells have to be drilled (or limited water is found) the programme may slip. It is expected that before the end of this year Council will have a better understanding of the final completion date concluding the early investigation work.

RECOMMENDATION

33 That the Committee receives report IS-11-199 on the Water Supply Project.

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Services**