CENTRAL HAWKE'S BAY DISTRICT COUNCIL
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E: info@chbdc.govt.nz
W: www.chbdc.govt.nz

Meeting Minutes – Wastewater Treatment Plants Reference Group #7

Project	Wastewater Treatment Plant Upgrades	**From**	Darren de Klerk
Subject	Community Reference Group Meeting #7		
Venue/Date/Time	CHBDC Council Offices (Council Chambers) 9 April 2019, 9:00am		
Present	Mayor Alex Walker Cr Ian Sharp (CHBDC Councillor) Cr David Tennent (CHBDC Councillor) Clint Deckard (Community) Michael Severinsen (Community) Tania Diack (HBRC) Malcolm Miller (HBRC) Etu Araipu (Grey Power and Community)		Monique Davidson (CHBDC) Josh Lloyd (CHBDC) Darren de Klerk (CHBDC) John Crawford (BECA) Hamish Lowe (LEI) Katie Beecroft (LEI)
Apologies	Haana Wilcox (Community) JB Smith Marge Hape (Tai Whenua) Simon White Ricky Carnie		Sarah Burgess (BECA) Karen Bothwell (CHBDC) Shane Kingston (CHBDC)

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Time	Topic	Presenter/ Facilitator
9:00-9:15	Welcome	Darren de Klerk
9:15-9:45	Recap on last meeting - Overview the packages that were presented - Overview of the instructions to refine	Hamish Lowe
9:45-10:30	Option refinement - Characteristics and design of three options - Assumptions considered; o design o costs - Option costing - Refinement process - Component cost sensitivity	John Crawford
10:30-10:45	Morning Tea	
10:45-11:00	Affordability	Hamish Lowe
11:00-11:15	How do we fund what the community wants	Hamish Lowe
11:15-11:30	Land suitability	Hamish Lowe
11:30-12:00	Are compromises needed - timing of implementation - essential vs aspirational	John Crawford/ Hamish Lowe
12:00-12:15	Next step(s) - Cost development - Funding streams - Env Court Letter/ Memo	Darren de Klerk
	Light Lunch and Finish	

Minutes

Subject	Action
Introduction	**Note**
Objectives Objectives The following are high level outcomes we wish to achieve following this meeting/ workshop: • Final option refinement • Agree on preferred option(s) to progress • NPV vs Affordability discussion – can we progress • Members to meet with Councillors on 24th April 2019	
Recap on last meeting	

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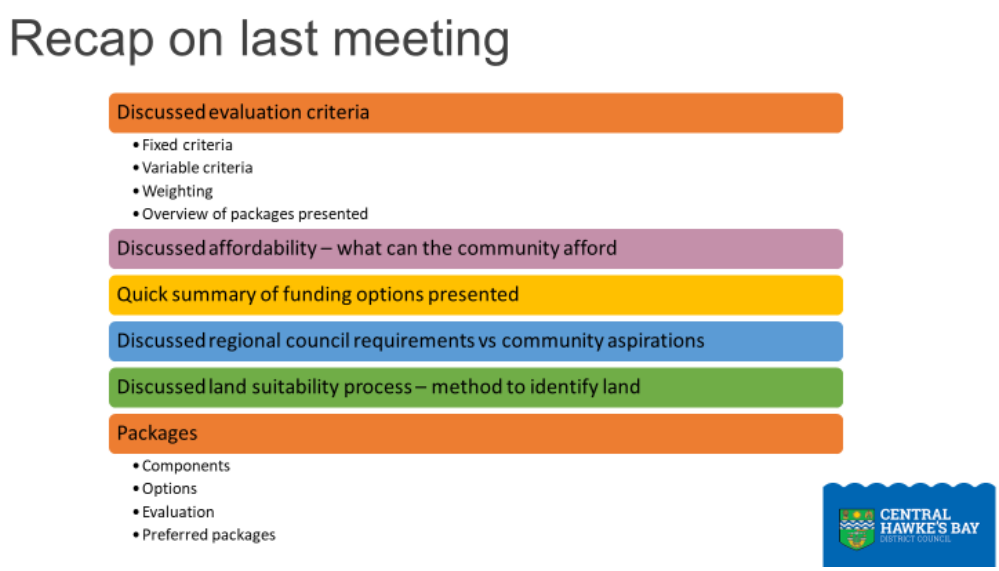
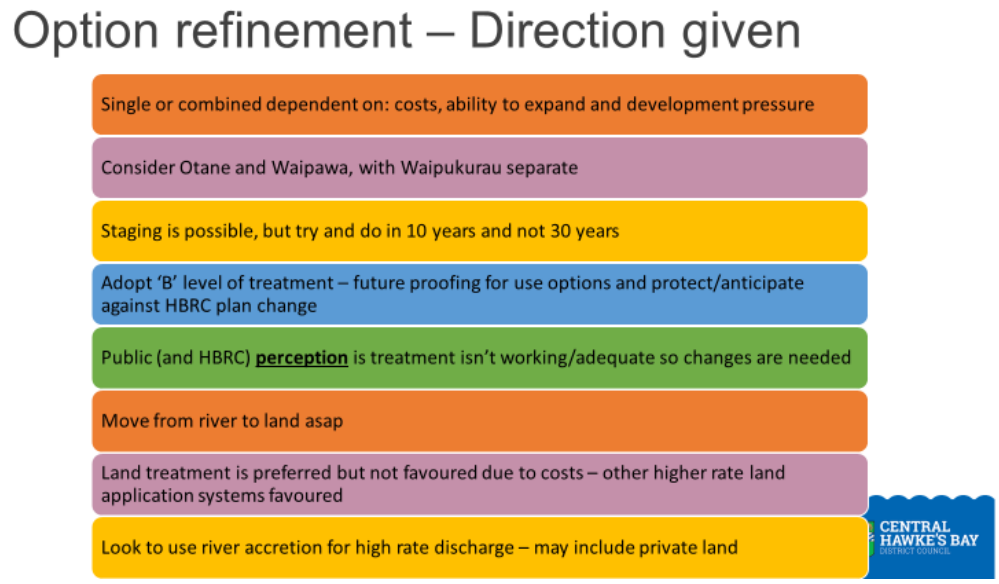


Note

Option refinement



Note

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Option refinement

Characteristics and design of three options

- A2 – Combined treatment upgrade and land disposal;
- A3 – Combined, treatment upgrade and land treatment;
- B1A2 – Upgrade and separate treatment and combined land disposal;
- *D1A2 – Centralised disposal and possibly land treatment and treatment upgrades later and as needed;*
- *E1A2 – Centralised treatment and disposal, no 3rd party farm supply;*
- *Status quo – current system; specifically to compare NPV.*

- Introduction of additional package variants identified as NPV exercise undertaken

Option refinement

A2 – Combined treatment upgrade and land disposal

- Up to 3 years maintain same discharge system
- Reticulate raw sewage to Waipawa in 3 years
- New treatment plant at single site in 3 years
- Common land disposal year 4. Area of 10 ha but may only need 3 ha for system
- Develop 3rd party land for irrigation 6 years on. Council only pay consent and reticulation to boundary.
- 20,000 m^3 of peakflow and low river flow buffer storage. Increase to 60,000 m^3 to help with irrigation at later stage.

The Reference Group:

- Noted that income from sale of water cannot be relied upon
- Noted that the quality of water would be treatment level B.

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Option refinement

A3 – Combined, treatment upgrade and land treatment

- Up to 3 years maintain same discharge system
- Reticulate raw sewage to Waipawa in 3 years
- New treatment plant at single site in 3 years
- Common land treatment year 4. Area of 150 ha using HBRC plantations
- Expand land treatment by 100 ha in year 7 and a further 100 ha in year 10.
- Establish 3 ha of land disposal in year 5 as highflow contingency
- 7,500 m^3 at year 5 and a further 120,000 m^3 before year 10.

The Reference Group:

- Noted that irrigation infrastructure below ground can be designed to avoid damage. Laterals are surface laid to enable to remove during harvest. Upgrade as necessary.

Option refinement

B1A2 – Upgrade and separate treatment and combined land disposal

- Up to 3 years maintain same discharge system
- New treatment plant at each of the two sites within 3 years
- Separate land disposal areas year 4 near each WWTP. Area of 10 ha but may only need 3 ha for system
- Develop 3rd party land for irrigation 6 years on. Council only pay consent and reticulation to boundary.
- 20,000 m^3 of peakflow and low river flow buffer storage. Increase to 60,000 m^3 to help with irrigation at later stage.

Option refinement

E1A2 – Combined treatment upgrade and land disposal

- Up to 3 years maintain same discharge system
- Reticulate raw sewage to Waipawa in 3 years
- New treatment plant at single site in 3 years
- Common land disposal year 4. Area of 10 ha but may only need 3 ha for system
- 20,000 m^3 of peakflow and low river flow buffer storage.

- A question regarding the likelihood of Environment Court being willing to accept a 3 year delay to system improvements was parked for later discussion.

The Reference Group:

- Noted that Council should supply storage (60 ML) for no income/pay back only if the driver is to move to land treatment from disposal.

Option refinement

Implementation schedule

Table 1: Summary of Preferred Packages

Package	Component	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20	Y21	Y22	Y23	Y24	Y25	Y26	Y27	Y28	Y29	Y30
A2	Pretreatment																														
	Sewer reticulation (km)			17																											
	Treatment			40%	40%	20%																									
	Effluent reticulation to LD (km)			3.5																											
	Effluent reticulation to LT (km)						3					3					3					3									
	Storage - seasonal (m3)					60,000																									
	Storage - buffer at discharge site (m3)				20,000																										
	Discharge - Land disposal (ha)				10																										
	Discharge - Land treatment, council owned or operated (ha)											-					-					-					-				
	Discharge - Land treatment, third party owned and operated (ha)							20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20				
A3	Pretreatment																														
	Sewer reticulation (km)			17																											
	Treatment			40%	40%	20%																									
	Effluent reticulation to LD (km)						3.5																								
	Effluent reticulation to LT (km)			2			2			5																					
	Storage - seasonal (m3)					120,000																									
	Storage - buffer at discharge site (m3)				7,500			5,000			5,000																				
	Discharge - Land disposal (ha)						3																								
	Discharge - Land treatment, council owned or operated (ha)				150			100			100																				
	Discharge - Land treatment, third party owned and operated (ha)																														

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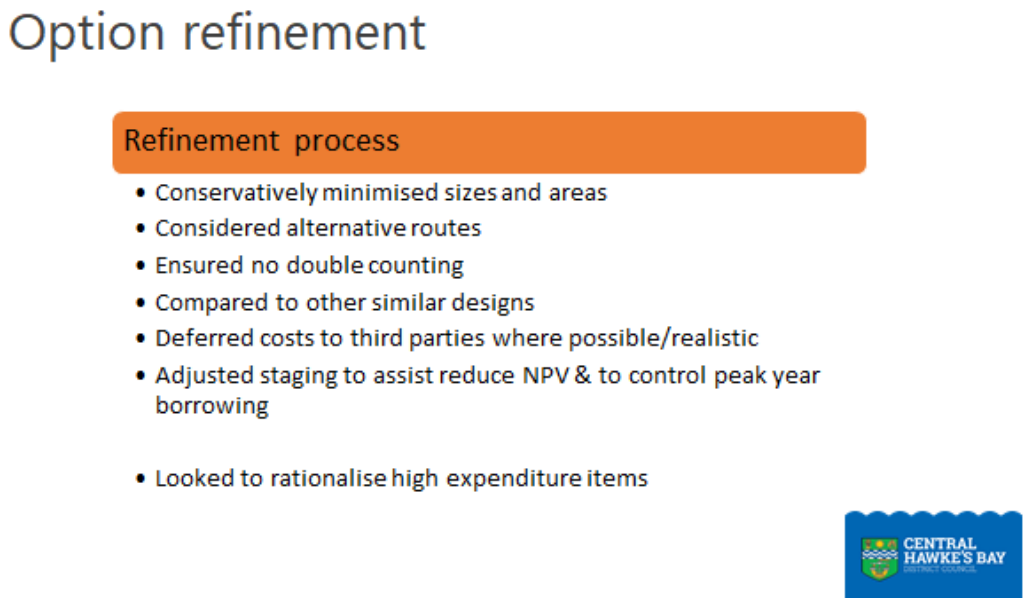

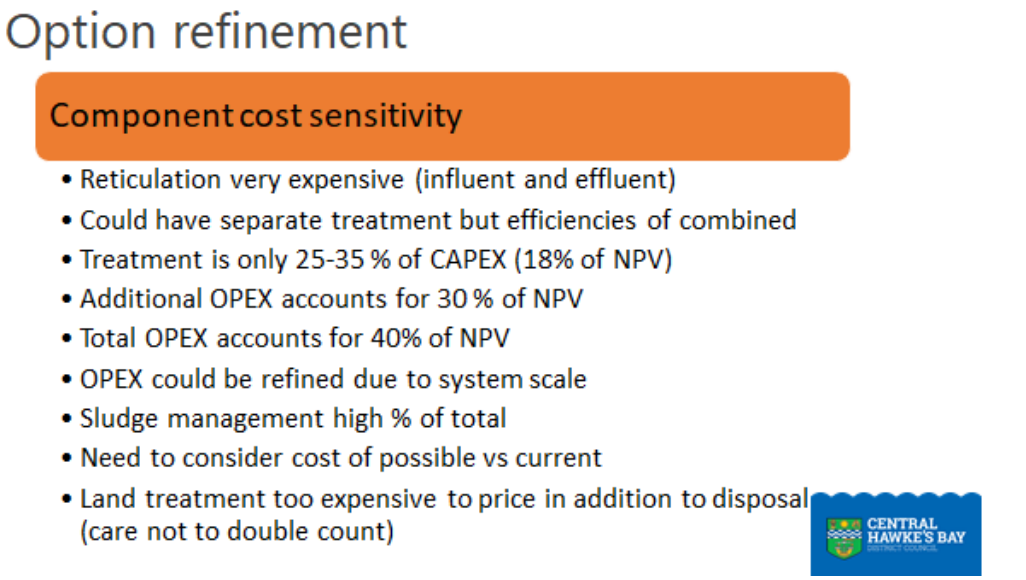

Discussion around sale of water to farmers

The Reference Group:

- Noted that this is not being used in NZ.
- Noted winter flows also go up – when farmers don't want the water.
- Noted that climate change could drive wastewater demand up.
- Noted that OPEX is modelled in NPV for up to 30 y from implementation (depending on scheduling).
- Noted that "additional OPEX" refers to the amount over current OPEX (included in LTP).
- Noted high cost of sludge processing and disposal.
- Noted that a solar drying facility could be used in this environment. Speeds up process, makes it more consistent.

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Discussion about Imhoff tank

The Reference Group:

- Noted this is for primary sludge.

Option refinement

Component cost sensitivity

- Reticulation very expensive (influent and effluent)
- Could have separate treatment but efficiencies of combined
- Treatment is only 25-35 % of CAPEX (18% of NPV)
- Additional OPEX accounts for 30 % of NPV
- Total OPEX accounts for 40% of NPV
- OPEX could be refined due to system scale
- Sludge management high % of total
- Need to consider cost of possible vs current
- Land treatment too expensive to price in addition to disposal (care not to double count)

The Reference Group:

- Noted that trade waste is important for long term costs and/or cost recovery

Option refinement

Component cost sensitivity

- Reticulation very expensive (influent and effluent)
- Could have separate treatment but efficiencies of combined
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Discussion about need/advantage of taking Otane flows to Waipawa The Reference Group: • Noted that farmers could supply their own storage. • Noted that the life expectancy of pipes is 60 years. • Noted that Council technical staff consider significant plant upgrade is essential, therefore rule out D1A2. • Noted that the most sensitive aspect of the NPV is inflation (0.5 % change results in $5M costs). The effect of growth rate can be managed by pumping, buffering to manage pipe size and design will enable "add-ons" to expand treatment capacity over time • Noted that it is more cost effective to have extra treatment than to chase the last 20% of I&I improvements • Noted that no one component (treatment, conveyance, discharge, etc) corresponds to the bulk of the costs and so a significant change to one aspect doesn't result in a large change to costs. • Noted that there is still a need to retain several options for the LTP process • Noted that costs related to the use of HBRC land are at this stage assumed to be only infrastructure and operational costs.	
Morning tea break	
Darren de Klerk (CHBDC) – introduced the next session, a discussion on the Environment Court requirements: The Reference Group: • Noted that for LTP need at least status quo plus 2 additional options • Noted that while there may be potential for temporary discharge to land for immediate improvement, anything temporary will require new consent • Noted it may be possible to use a rotorainer to land for small land application area • Noted CHBDC will need to enter into talks with HBRC • Noted that John/Sarah doing some work on the effect of landfill leachate on the WWTP ponds. Initial indications are it seems not to result in much difference. • Noted that the cost of temporary measures could be used to bolster case for allowing delayed start i.e. dead money to treat for ammonia while getting ready for long term option then mothball. • Noted the importance of ensuring info to Regional Council so they can see the value of compliance penalties withheld in light of programme.	**Note**

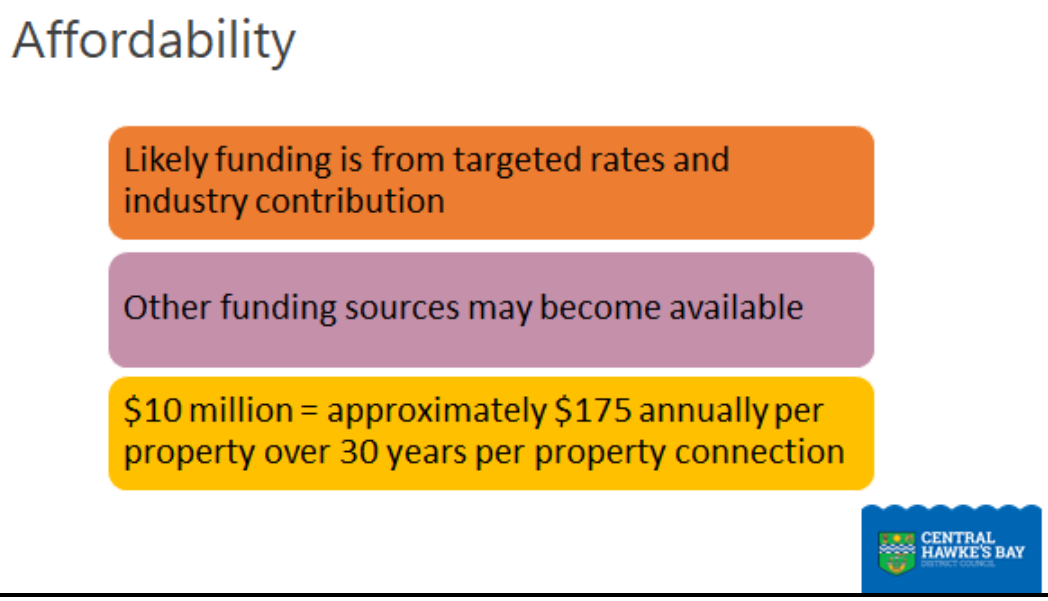
Minutes

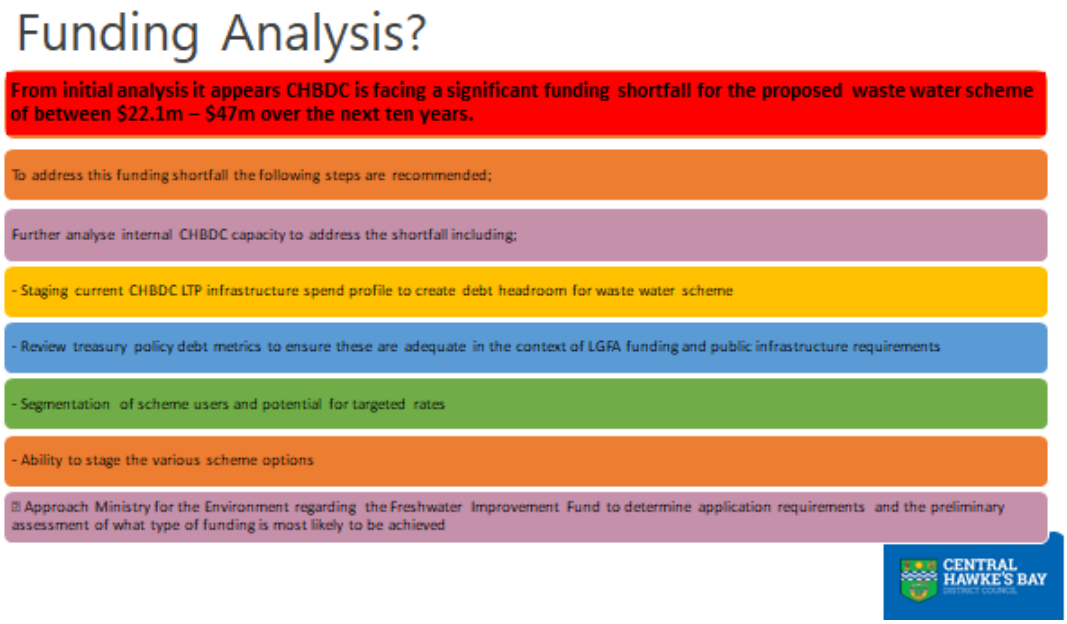
Darren de Klerk (CHBDC) – Do we have two options? The Group appears to prefer [Darren suggests]: E1 and B1A2.

The Reference Group:

- Noted some concern that land disposal to accretion zone is still a discharge to the river.
- Noted enhancement to treatment train to get longer pathway into river could be included.
- Noted that the length of time before discharged WW gets into river is dependent on the direction and rate of flow beneath the disposal area.
- Noted that there remains some concern about Waipukurau odour.
- Noted that treatment improvements will largely take care of this.
- Noted that originally including Takapau and Porangahau was considered.
- Noted that these communities can be considered again after this environment court process is out of the way.

Review option descriptions for E1 and B1A2





The Reference Group:

- Noted that $11.5 M is self-imposed debt cap
- Noted that a lot of work needs to be done to make funds available match funds needed.

Darren de Klerk (CHBDC) – what are the other ways we can access funds?

The Reference Group:

- Noted there is little difference in UAC?
- Noted that there is scope to lift debt cap, however Ratepayers' ability to pay does not improve if debt cap is lifted – there is a need central government help

Hamish Lowe (LEI) - asked the group to consider if these costs be met by ratepayers?

The Reference Group:

- Noted that the NPS-FM says we have no choice!! Business case to take to central govt is the funding shortfall to be compliant with requirements of NZ Inc.
- Noted that GHD/Boffa Miskall report numbers are lower than what we have here, indicated that govt has underestimated costs.

Hamish Lowe (LEI) – How far can we go forward with these options?

The Reference Group:

- Noted that we need to demonstrate a plan to achieve goals then it is up to CHBDC team to go to government and say this is what we need to achieve it.
- Noted that a rural user paying for discharge system would be paying similar to

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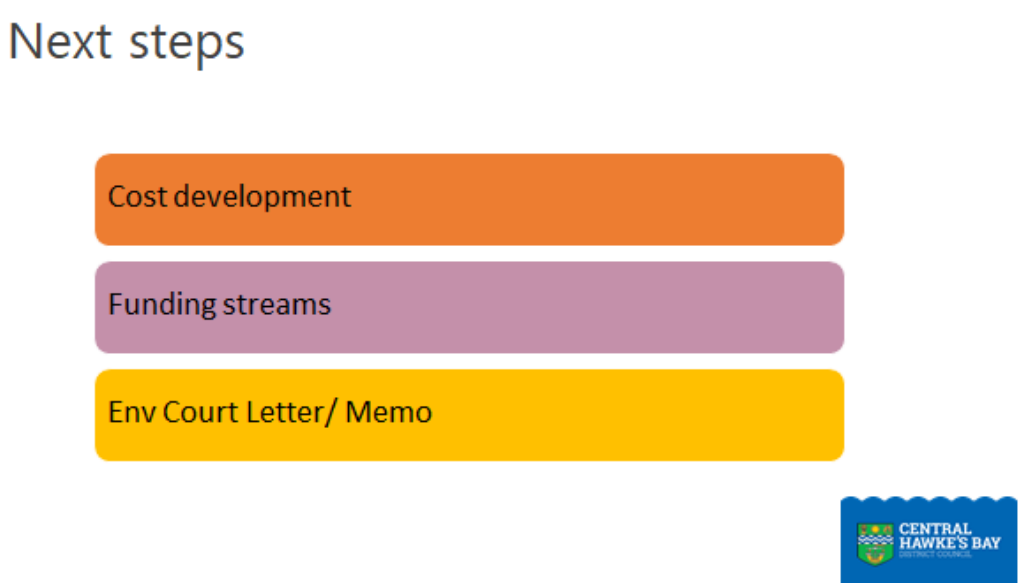
$1000/y if over 30 years.

- Noted that this is a significant affordability issue, but if we wait, it will be worse.
- Noted the two options (not accounting for status quo), E1 and B1A2 are very similar when viewed by lay person

Hamish Lowe (LEI) – Experience

The Reference Group:

- Noted that this Group represents community (but also self).
- Noted that the options have come out similar – this is reassuring.
- Noted that for community consultation we need to be able to show the process we have been through i.e. what we have looked at and why they are left off.
- Noted that some options may find their way back into contention in further consultation.
- Noted John's experience in South Waikato – the longer term of going to land to manage the costs.
- Noted that the Group has decided where they want to go; roadblock is how we are going to get there.
- Noted a suggestion that the proposed solutions should include D1A2 as close to status quo, but better outcome – more in line with court order.



The Reference Group:

- Discussed the future of this group, noting that while Environment Court is the official finish, it is actually the start. There will be a need for community champions to get the word out.
- Considered post Environment Court – what the implementation of project will look like?
- Noted that $175 / ratepayer – accounts for current OPEX accounted in costs.

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• Noted a comparison to user/value of swimming pool upgrade to per person per day costs for wastewater system may be useful illustration. • Noted there is capacity to encourage new business as trade waste available. • Noted there is ability to move through the options as development programme. • Team – best to lock in as consent.	
Meeting closed at 12:00pm	