# MCDA CRITERIA – COMMUNITY SOCIAL AND ECONOMIC WELLBEING VALUES

Management	Pathway		Pathway Description		Community Social and Economic Wellbe		
Unit		Short term	Medium term	Long term	Score	Notes	
Unit 5A	1	<b>Enhance</b> - Dune and/or wetland resilience, community education and emergency management	<b>Soft Engineering</b> - Dune reconstruction	<b>Soft Engineering</b> - Beach renourishment		<ul> <li>Increasing dune resilience over short term aligns with stated control included in implementation, it could promote social and economy cohesion &amp; health outcomes.</li> <li>Over medium-long term, the community may need further infore evidence of suitability, effectiveness, costs &amp; engagement) before</li> <li>In the long term, the ongoing beach monitoring required to ass renourishment, could potentially be done at the local/community and technology.</li> <li>Insurability of personal assets will be determined by insurance assessment).</li> </ul>	
Waikanae	2	<b>Enhance</b> - Dune and/or wetland resilience, community education and emergency management AND <b>Soft Engineering</b> - Dune reconstruction	<b>Enhance</b> - Dune and/or wetland resilience, community education and emergency management AND <b>Soft Engineering -</b> Beach renourishment	Protect - Hard Engineering - Sea wall		<ul> <li>Over the short and medium term, increasing dune resilience all community is actively included in dune resilience/enhancement a wellbeing, as well as enhance social cohesion &amp; health outcomess on dune reconstruction option (e.g. evidence of suitability and ersupporting.</li> <li>In medium-long term, the community may require further infor of the beach renourishment and long-term seawall options, prio</li> <li>The ongoing beach monitoring required to assess the success or done at the local/community level, if they are given appropriate to assessment).</li> </ul>	
	3	<b>Enhance</b> - Dune and/or wetland resilience, community education and emergency management AND <b>Soft Engineering</b> - Dune reconstruction	Enhance - Dune and/or wetland resilience, community education and emergency management AND Soft Engineering - Beach renourishment	<b>Protect - Hard</b> <b>Engineering</b> - Detached Breakwater		<ul> <li>Over the short and medium term, increasing dune resilience a community is actively included in dune resilience/enhancement a wellbeing, as well as enhance social cohesion &amp; health outcomes</li> <li>Community may need further information on dune reconstruct effectiveness, costs &amp; engagement) before supporting.</li> <li>The community may need further information re: beach renout breakwater options (effectiveness, costs, etc) prior to supporting.</li> <li>The ongoing beach monitoring required to assess the success or done at the local/community level, if they are given appropriate to assessment).</li> </ul>	

### being values

community values. If community is actively mic wellbeing, as well as enhance social

- nformation on dune reconstruction option (e.g. ore supporting.
- assess the ongoing success of **beach**
- nity level, if they are given appropriate training

ce companies (based on own site-specific risk

aligns with stated community values. If nt activities, it will promote social and economic es. Community may need further information effectiveness, costs & engagement) before

formation on effectiveness, costs and suitability rior to acceptance and/or implementation. of beach renourishment, could potentially be te training and technology.

ce companies (based on own site-specific risk

aligns with stated community values. If nt activities, it will promote social and economic ies.

- uction option (e.g. evidence of suitability and
- ourishment and long term detached ng.
- of **beach renourishment**, could potentially be te training and technology.
- ce companies (based on own site-specific risk

ae Unit 5A	4	<b>Enhance</b> - Dune and/or wetland resilience, community education and emergency management AND <b>Soft Engineering</b> - Dune reconstruction	<b>Protect - Hard</b> <b>Engineering</b> - Sea wall	Retreat	<ul> <li>Over the short term, increasing dune resilience aligns with st actively included in dune resilience / enhancement activities, it well as enhance social cohesion &amp; health outcomes. Communit reconstruction option (e.g. evidence of suitability and effective)</li> <li>In medium term, the community may require further informat costs, and suitability, etc), prior to acceptance and/or implemented in long term, the community may require assurance and furthe sessment).</li> </ul>
Waikanae	5	<b>Enhance</b> - Dune and/or wetland resilience, community education and emergency management AND <b>Soft Engineering</b> - Dune reconstruction	<b>Protect - Hard</b> <b>Engineering</b> - Detached Breakwater	Retreat	<ul> <li>The option to increase dune resilience over short term aligns actively included in dune resilience / enhancement activities, it well as enhance social cohesion &amp; health. Community may nee option (e.g. evidence of suitability and effectiveness, costs &amp; er</li> <li>In medium term, the community may require further informateffectiveness, costs, and suitability, etc), prior to acceptance and</li> <li>In the long term, the community is more likely to support retatavailable to relocate to, are aware of any financial implications.</li> <li>place to promote social and economic wellbeing and enhance social and economic wellbeing and enhance social assessment).</li> </ul>
	6	<b>Enhance</b> - Dune and/or wetland resilience, community education and emergency management AND <b>Soft Engineering</b> - Dune reconstruction	Retreat	Retreat	<ul> <li>The option to increase dune resilience over short term aligns actively included in dune resilience / enhancement activities, it well as enhance social cohesion &amp; health. Community may nee option (e.g. evidence of suitability and effectiveness, costs &amp; er</li> <li>In medium-long term, the community is more likely to suppor available to relocate to &amp; are aware of any financial implication Also, important to ensure that support is in place to promote se social cohesion &amp; health outcomes.</li> <li>Insurability of personal assets will be determined by insurance assessment).</li> </ul>

tated community values. If community is t will promote social and economic wellbeing, as ty may need further information on **dune** eness, costs & engagement) before supporting. ation on the **seawall** option (e.g. effectiveness, entation.

her information on **managed retreat** ce companies (based on own site-specific risk

s with stated community values. If community is t will promote social and economic wellbeing, as ed further information on **dune reconstruction** ngagement) before supporting.

ation on the **detached breakwater** option (e.g. nd/or implementation.

treat if they are assured that suitable land is Also, important to ensure that support is in social cohesion & health outcomes.

ce companies (based on own site-specific risk

s with stated community values. If community is t will promote social and economic wellbeing, as ed further information on **dune reconstruction** ngagement) before supporting.

ort **retreat** if they are assured that suitable land is ns.

social and economic wellbeing and enhance

1	<b>Status Quo</b> AND Community Education and Emergency Management	<b>Status Quo</b> AND Community Education and Emergency Management	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	<ul> <li>In the short and medium term, maintaining existing dunes and ovalues. However, with 10% of Waikanae properties likely exposed SSP8.5), a Status Quo approach may not be tolerated by the computed approach may be needed.</li> <li>Ongoing education and increased awareness of risk will ensure of may need to be supported to identify dwellings at risk from inund dwellings to accommodate risks to health and safety. Likely to be</li> <li>In the long term, enhanced inundation protection may provide Improved dune and/or wetland resilience aligns with community economic benefits.</li> <li>Insurability of personal assets will be determined by insurance or assessment).</li> </ul>
2	<b>Status Quo</b> AND Community Education and Emergency Management	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	<b>Protect - Additional</b> <b>Hard Protection -</b> e,g. stopbanks, Culverts and Pump stations	<ul> <li>In the short term, maintaining existing dunes and current infrast However, with 10% of Waikanae properties likely exposed to inun a Status Quo approach may not be tolerated by the community - of approach may be needed.</li> <li>Ongoing education and increased awareness of risk will ensure of may need to be supported to identify dwellings at risk from inund dwellings to accommodate risks to health and safety. Likely to be</li> <li>In the medium term, enhanced inundation protection may provide Improved dune and/or wetland resilience aligns with community benefits. In the long term, additional hard protection may provide during flood events.</li> <li>Insurability of personal assets will be determined by insurance of assessment).</li> </ul>
3	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	Accommodate - Elevate floor levels of buildings and flood proofing buildings and infrastructure	<ul> <li>In the short -medium term, enhanced inundation protection alipprotection could provide the community with some assurance. Im aligns with community values, with potential social and/or econor.</li> <li>Ongoing community education and increased awareness of risk Landowners may need to be supported to know how to respond t and undertake proactive accommodation efforts to reduce risks to</li> <li>In the long term Accommodate allows homeowners to plan for measures relative to affordability &amp; whether they have continued</li> <li>Insurability of personal assets will be determined by insurance c assessment).</li> </ul>

Waikanae Unit 5B

d current infrastructure aligns with community ed to inundation with 0.2m RSLR (~by 2050 at mmunity - engagement on medium term status

e community preparedness. E.g. Landowners ndation and to undertake proactive efforts on be made on a case-by-case basis.

de the community with some assurance. ity values, with potential social and/or

e companies (based on own site-specific risk

astructure aligns with community values. undation with 0.2m RSLR (~by 2050 at SSP8.5), - engagement on medium term status quo

e community preparedness. E.g. Landowners ndation and to undertake proactive efforts on be made on a case-by-case basis.

ovide the community with some assurance.

ty values, with potential social and/or economic vide the community with further assurance

e companies (based on own site-specific risk

aligns with community values. Inundation Improving **dune and/or wetland resilience** nomic benefits.

isk will ensure community preparedness. E.g. d to flood risk and to identify dwellings at risk s to health and safety.

or and choose effective flood mitigation

ed access to roading & critical infrastructure. e companies (based on own site-specific risk

Waikanae Unit 5B	4	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	<b>Accommodate -</b> Elevate floor levels of buildings and flood proofing buildings and infrastructure	Retreat	<ul> <li>In the short term, enhanced inundation protection aligns with the community with some assurance. Improving dune and/or we values, with potential social and/or economic benefits.</li> <li>Ongoing community education and increased awareness of risk Landowners may need to be supported to know how to respond and undertake proactive accommodation efforts to reduce risks t</li> <li>In the medium term Accommodate allows homeowners to plar measures relative to affordability &amp; whether they have continued</li> <li>In the long term affected homeowners and Councils can plan fo planning, level of infrastructure maintenance, etc).</li> <li>Insurability of personal assets will be determined by insurance of assessment).</li> </ul>
Waik	5	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	<b>Protect - Additional</b> <b>Hard Protection -</b> e,g. stopbanks, Culverts and Pump stations	Retreat	<ul> <li>In the short term, enhanced inundation protection &amp; improving community values and has potential social and/or economic bener community with some assurance.</li> <li>Ongoing community education and increased awareness of risk Landowners may need to be supported to know how to respond and undertake proactive accommodation efforts to reduce risks t</li> <li>In the medium term additional hard protection will provide fur and allow homeowners time to plan for and/or choose other effere.</li> <li>In the long term affected homeowners and Councils can plan for planning, level of infrastructure services, etc).</li> <li>Insurability of personal assets will be determined by insurance of assessment).</li> </ul>

th community values. This option could provide wetland resilience aligns with community

isk will ensure community preparedness. E.g. nd to flood risk and to identify dwellings at risk as to health and safety.

lan for and choose effective flood mitigation ed access to roading & critical infrastructure. for **Retreat** (e.g. relocatable homes, spatial

ce companies (based on own site-specific risk

ing dune and/or wetland resilience aligns with enefits. This option could provide the

risk will ensure emergency preparedness. E.g. nd to flood risk and to identify dwellings at risk as to health and safety.

further reassurance in the event of flood events ffective avoidance measures.

for Retreat (e.g. relocatable homes, spatial

Management	Pathway	Pathway Description				Community Social and Economic Wellbein		
Unit		Short term	Medium term	Long term	Score	Notes		
it 6A and B	1	<b>Status Quo</b> AND Community Education and Emergency Management	<b>Enhance</b> - Dune and/or wetland resilience, community education and emergency management	<b>Enhance</b> - Dune and/or wetland resilience, community education and emergency management		<ul> <li>Continuing with status quo in the short term aligns with current conflood events (e.g. frequency, social impact, etc) may be needed to all levels.</li> <li>Ongoing community education could focus on ecosystem protectine cological benefits, etc.</li> <li>Education to increase awareness of risk to public safety will ensure road / footbridge access around the estuary is at risk, or poses a public of the med-long term, continued enhancement of dunes and wet a community wellbeing and connection to place.</li> <li>Emergency management efforts will need to continue to be bolsted flood and/or erosion risks increase.</li> </ul>		
Waikanae Estuary Unit 6A	2	Status Quo AND Community Education and Emergency Management	<b>Enhance</b> - Dune and/or wetland resilience, community education and emergency management	Protect - Bank protection		<ul> <li>Continuing with status quo in the short term aligns with current conflood events (e.g. frequency, social impact, etc) may be needed to all levels.</li> <li>Ongoing community education could focus on ecosystem protection ecological benefits, etc.</li> <li>Education to increase awareness of risk to public safety will ensure road / footbridge access around the estuary is at risk, or poses a public of the medium term, continued enhancement of dunes and wetlat community, could support their wellbeing and provide connection to in the long term, Bank Protection at Waikanae estuary may not priproperties (<i>i.e. up to 50% of properties likely be exposed to inundation</i>).</li> </ul>		
	3	<b>Enhance</b> - Dune and/or wetland resilience, community education and emergency management	<b>Enhance</b> - Dune and/or wetland resilience, community education and emergency management	<b>Protect</b> - Bank protection		<ul> <li>In the short -medium term, enhancement of dunes and wetland a community could support their wellbeing and provide connection to 0 Ongoing community education could focus on ecosystem protection ecological benefits, etc.</li> <li>Education to increase awareness of risk to public safety will ensure road / footbridge access around the estuary is at risk, or poses a puble. In the long term, bank protection at Waikanae estuary may not properties (<i>i.e. up to 50% of properties likely be exposed to inundation)</i></li> </ul>		

#### ing values

t community values. However, monitoring of a align with changes to community tolerance

ction and the role of wetlands and estuaries,

- ure emergency preparedness. E.g. particularly if public safety hazard.
- etland areas around the estuary, could support

stered over time to protect public safety, as

community values. However, monitoring of align with changes to community tolerance

ction and the role of wetlands and estuaries,

ure **emergency preparedness**. E.g. particularly if public safety hazard.

tland areas around the estuary area by the n to place.

provide enough protection for Otaihanga ation under 1.25m RSLR, by 2130).

id areas around the estuary area by the to place.

ction and the role of wetlands and estuaries,

ure **emergency preparedness**. E.g. particularly if public safety hazard.

provide enough protection for Otaihanga ation under 1.25m RSLR, by 2130).

ary Unit 6A and B	4	<b>Enhance</b> - Dune and/or wetland resilience, community education and emergency management	<b>Protect</b> - Bank protection	<b>Protect</b> - Bank protection	<ul> <li>In the short -medium term, enhancement of dunes and wet community could support their wellbeing and provide connection.</li> <li>Ongoing community education could focus on ecosystem provecological benefits, etc.</li> <li>Education to increase awareness of risk to public safety will e road / footbridge access around the estuary is at risk, or poses</li> <li>In the med-long term, bank protection at Waikanae estuary r properties (<i>i.e. up to 50% of likely be exposed to inundation und</i></li> </ul>	ion te tecti nsur a pu nay
Waikanae Estuary	5	<b>Enhance</b> - Dune and/or wetland resilience, community education and emergency management	<b>Retreat</b> - Retreat recreational infrastructure to make way for wetland migration	<b>Retreat</b> - Retreat recreational infrastructure to make way for wetland migration	<ul> <li>In the short term, enhancement of dunes and wetland areas support their wellbeing and provide connection to place.</li> <li>Ongoing community education could focus on ecosystem proecological benefits, etc and role of retreat in restoration.</li> <li>Education to increase awareness of risk to public safety will e road / footbridge access around the estuary is at risk, or poses</li> <li>In the med-long term, retreat of recreational infrastructure a loss of a valuable public recreation asset, as there may be opporminimise impact and retain public access.</li> </ul>	tecti nsur a pu at Wa

**d areas** around the estuary area by the to place. to place. tion and the role of wetlands and estuaries,

re **emergency preparedness**. E.g. particularly if ublic safety hazard. not provide enough protection for Otaihanga

not provide enough protection for Otaihanga 1.25m RSLR, by 2130).

ound the estuary area by the community could

tion and the role of wetlands and estuaries,

- re **emergency preparedness**. E.g. particularly if ublic safety hazard.
- /aikanae estuary, may not necessarily signify a nities to relocate / redesign amenities to

Management Unit	Pathway	Pathway Description				Community Social and Economic Wellb		
Unit		Short term	Medium term	Long term	Score	Notes		
7B	1	<b>Status Quo</b> AND Community Education and Emergency Management	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	Protect - Additional Hard Protection (e.g. stopbanks, culverts and pump stations)		<ul> <li>Short term: Continuing with status quo aligns with current commproperties likely exposed to inundation with 0.2m RSLR (~by 2050 by the community. Monitoring of flood events (e.g. frequency, so align with changes in community tolerance levels.</li> <li>Ongoing community education and increased risk awareness (of emergency preparedness. Efforts in this area to be increased over</li> <li>Landowners may need to be supported to respond to flood risk a reduce risks to health and safety.</li> <li>Medium term: enhancing existing inundation protection could p with continued community preparedness.</li> <li>Long term: additional hard protection at Otaihanga could proteet exposed to inundation under 1.25m RSLR (by 2130).</li> <li>Insurability of personal assets will be determined by insurance coassessment).</li> </ul>		
Otaihanga Unit	2	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	Accommodate - Elevate floor levels of buildings and flood proofing buildings and infrastructure		<ul> <li>In the short-medium term, enhanced inundation protection alig could provide the community with some assurance, given that 309 inundation with 0.2m RSLR (~by 2050 at SSP8.5).</li> <li>Ongoing community education and increased community aware and to identify dwellings at risk.</li> <li>Long term: Accommodate allows time for homeowners to plan a Also to consider affordability &amp; gauge if access to roading &amp; critica properties (50% of Otaihanga properties are likely exposed to inun Landowners may need to be supported to know how to respond accommodation efforts to reduce risks to health and safety.</li> <li>Insurability of personal assets will be determined by insurance co assessment).</li> </ul>		
	3	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	Accommodate - Elevate floor levels of buildings and flood proofing buildings and infrastructure	Retreat		<ul> <li>In the short term, enhanced inundation protection aligns with c community with some assurance, given that 30% of Otaihanga pro 0.2m RSLR (~by 2050 at SSP8.5).</li> <li>Ongoing community education and increased awareness of dwe</li> <li>Landowners may need supported to know how to respond to flo efforts to reduce risks to health and safety.</li> <li>Medium term: Accommodate allows homeowners to plan for an consider affordability vs liveability (continued access to roading &amp; Long term: affected homeowners and Councils can plan for Retrolevel of infrastructure maintenance, etc).</li> <li>Insurability of personal assets will be determined by insurance coassessment).</li> </ul>		

### being values

mmunity values. However, with 23% of Otaihanga 50 at SSP8.5), this approach may not be tolerated social impact, etc) & engagement may be needed to

(of properties & infrastructure at risk) will ensure er time.

k and take proactive accommodation measures to

provide the community with assurance, along

tect the up to 50% of Otaihanga properties likely be

companies (based on own site-specific risk

ligns with community values. Inundation protection 80% of Otaihanga properties are likely exposed to

reness of risk will ensure emergency preparedness

and choose effective flood mitigation measures. cal infrastructure can be continued. High risk to *undation with 1.25mm RSLR -~by 2130 at SSP8.5).* and to flood risk and undertake proactive

companies (based on own site-specific risk

community values. This option could provide the roperties are likely exposed to inundation with

vellings at risk to ensure community preparedness. Tood risk and undertake proactive accommodation

and choose effective flood mitigation measures & & critical infrastructure).

treat (e.g. relocatable homes, spatial planning,

ıga Unit 7B	4	Protect - Additional Hard Protection (e.g. stopbanks, culverts and pump stations)	<b>Enhance</b> - Enhance new inundation protection, dune and/or wetland resilience, and c and community education and emergency management	Retreat	<ul> <li>In the short term, additional hard protection is not consistent with of Otaihanga properties are likely exposed to inundation with 0.2m further tested with the local community.</li> <li>Ongoing community education to increase awareness of properties emergency preparedness. Also allows landowners to take proactive to health, safety, and dwellings.</li> <li>Medium term: costs associated with new inundation protection to gain support.</li> <li>Long term: affected homeowners and Councils can plan for Retre level of infrastructure maintenance, etc).</li> <li>Insurability of personal assets will be determined by insurance co assessment).</li> </ul>
Otaihanga	5	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	<b>Protect</b> - <b>Additional</b> <b>Hard Protection</b> (e.g. stopbanks, culverts and pump stations)	Protect - Additional Hard Protection (e.g. stopbanks, culverts and pump stations)	<ul> <li>In the short term, enhanced inundation protection aligns with concommunity with some assurance, given that 30% of Otaihanga prop 0.2m RSLR (~by 2050 at SSP8.5).</li> <li>Ongoing community education to increase awareness of properties emergency preparedness. Also allows landowners to take further preduce risks to health, safety, and dwellings.</li> <li>Med-long term: the community may need better understanding of Additional hard protection measures in order to support this option.</li> </ul>

with community values. However, given that 30% 2m RSLR (~by 2050 at SSP8.5), the option could be

rties and infrastructure at risk to ensure ve measures (accommodate/avoid) to reduce risks

n measures may need to be understood for this

reat (e.g. relocatable homes, spatial planning,

companies (based on own site-specific risk

community values. This option could provide the roperties are likely exposed to inundation with

rties and infrastructure at risk to ensure proactive measures (accommodate / avoid) to

g of long-term costs and effectiveness of ion.

Management	Pathway		Pathway Description		Community Social and Economic Wellb		
Unit		Short term	Medium term	Long term	Score	Notes	
Unit 8A	1	<b>Enhance</b> - Dune and/or wetland resilience, community education and emergency management	<b>Protect - Soft</b> <b>Engineering</b> - Dune Reconstruction	<b>Protect - Soft</b> <b>Engineering</b> - Beach Renourishment		<ul> <li>Increasing dune resilience over short term aligns with stated control included in implementation, it could promote social and econom &amp; health outcomes.</li> <li>Over medium-long term, the community may need further inforevidence of suitability, effectiveness, costs &amp; engagement) before.</li> <li>In the long term, the ongoing beach monitoring required to as renourishment, could potentially be done at the local/communitien and technology.</li> <li>Insurability of personal assets will be determined by insurance assessment).</li> </ul>	
Paraparaumu Unit 8A	2	Enhance - Dune and/or wetland resilience, community education and emergency management AND Protect - Soft Engineering - Dune reconstruction	Enhance - Dune and/or wetland resilience, community education and emergency management AND Protect - Soft Engineering - Beach Renourishment	Protect - Hard Engineering - Sea wall		<ul> <li>Over the short and medium term, increasing dune resilience a community is actively included in dune resilience/enhancement wellbeing, as well as enhance social cohesion &amp; health outcomes dune reconstruction option (e.g. evidence of suitability and effect supporting.</li> <li>In medium-long term, the community may require further info of the beach renourishment and long-term seawall options, price. The ongoing beach monitoring required to assess the success of done at the local/community level, if they are given appropriate</li> <li>Insurability of personal assets will be determined by insurance assessment).</li> </ul>	
	3	Enhance - Dune and/or wetland resilience, community education and emergency management AND Protect - Soft Engineering - Dune reconstruction	Enhance - Dune and/or wetland resilience, community education and emergency management AND Protect - Soft Engineering - Beach Renourishment	<b>Protect - Hard</b> <b>Engineering -</b> Detached Breakwater		<ul> <li>Over the short and medium term, increasing dune resilience a community is actively included in dune resilience/enhancement wellbeing, as well as enhance social cohesion &amp; health outcomes</li> <li>Community may need further information on dune reconstruct effectiveness, costs &amp; engagement) before supporting.</li> <li>The community may need further information re: beach renot options (effectiveness, costs, etc) prior to supporting.</li> <li>The ongoing beach monitoring required to assess the success of done at the local/community level, if they are given appropriate</li> <li>Insurability of personal assets will be determined by insurance assessment).</li> </ul>	

## lbeing values

l community values. If community is actively omic wellbeing, as well as enhance social cohesion

- nformation on **dune reconstruction** option (e.g. ore supporting.
- assess the ongoing success of **beach**
- nity level, if they are given appropriate training

ce companies (based on own site-specific risk

e aligns with stated community values. If ent activities, it will promote social and economic nes. Community may need further information on fectiveness, costs & engagement) before

formation on effectiveness, costs and suitability rior to acceptance and/or implementation. s of **beach renourishment**, could potentially be te training and technology.

ce companies (based on own site-specific risk

e aligns with stated community values. If nt activities, it will promote social and economic nes.

uction option (e.g. evidence of suitability and

ourishment and long term detached breakwater

s of **beach renourishment**, could potentially be te training and technology.

		1	1		
8A	4	Enhance - Dune and/or wetland resilience, community education and emergency management AND Protect - Soft Engineering - Dune reconstruction	Protect - Hard Engineering - Sea wall	Retreat	<ul> <li>Over the short term, increasing dune resilience aligns with statincluded in dune resilience /enhancement activities, it will promenhance social cohesion &amp; health outcomes. Community may ne option (e.g. evidence of suitability and effectiveness, costs &amp; enge In medium term, the community may require further informatic costs, and suitability, etc), prior to acceptance and/or implemen</li> <li>In long term, the community may require assurance and further</li> <li>Insurability of personal assets will be determined by insurance assessment).</li> </ul>
Paraparaumu Unit 8A	5	<b>Protect - Hard</b> <b>Engineering -</b> Sea wall	Protect - Hard Engineering - Sea wall	Retreat	<ul> <li>In the short-medium term, a seawall at southern end of Parap community - it would involve informing the community of the p lifetime of the seawall.</li> <li>Properties in this area will have more assurance that they will services (But this relies on regular maintenance &amp; has costs).</li> <li>In the long term, the community is more likely to support retro available to relocate to, &amp; they are aware of any financial implication in place for those affected, to promote social and economic well outcomes.</li> <li>Insurability of personal assets will be determined by insurance assessment).</li> </ul>
	6	Enhance - Dune and/or wetland resilience, community education and emergency management AND Protect - Soft Engineering - Dune reconstruction	Retreat	Retreat	<ul> <li>The option to increase dune resilience over short term aligns a actively included in dune resilience/enhancement activities, it wwell as enhance social cohesion &amp; health. Community may need option (e.g. evidence of suitability and effectiveness, costs &amp; engotion (e.g. evidence to suitability and effectiveness, costs &amp; engotial available to relocate to &amp; are aware of any financial implications. Also, important to ensure that support is in place to promote so cohesion &amp; health outcomes.</li> <li>Insurability of personal assets will be determined by insurance assessment).</li> </ul>

- ated community values. If community is actively mote social and economic wellbeing, as well as need further information on **dune reconstruction** ngagement) before supporting.
- tion on the **seawall** option (e.g. effectiveness, ntation.
- ner information on managed retreat
- e companies (based on own site-specific risk

baraumu beach could be acceptable to the boro and cons and associated costs over the

- continue to receive essential infrastructure
- reat if they are assured that suitable land is cations. Also, important to ensure that support is llbeing, and enhance social cohesion & health
- e companies (based on own site-specific risk

with stated community values. If community is will promote social and economic wellbeing, as d further information on **dune reconstruction** gagement) before supporting.

- rt **retreat** if they are assured that suitable land is s.
- ocial and economic wellbeing and enhance social
- e companies (based on own site-specific risk

1	<b>Status Quo</b> AND Community Education and Emergency Management	<b>Status Quo</b> AND Community Education and Emergency Management	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	<ul> <li>In the short and medium term, maintaining existing dunes and values. However, with 207 (4% of Paraparaumu properties) likely 2050 at SSP8.5), a Status Quo approach may not be tolerated by status quo approach may be needed.</li> <li>Ongoing education and increased awareness of risk will ensure could be supported to identify dwellings at risk from inundation at o accommodate risks to health and safety. Likely to be made on a</li> <li>In the long term, enhanced inundation protection may provide</li> <li>Insurability of personal assets will be determined by insurance of assessment).</li> </ul>
2	<b>Status Quo</b> AND Community Education and Emergency Management	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	Protect - Additional Hard Protection (e.g. stopbanks, culverts and pump stations)	<ul> <li>In the short term, maintaining existing dunes and current infras However, with 10% of Waikanae properties likely exposed to inun Status Quo approach may not be tolerated by the community - er approach may be needed.</li> <li>Ongoing education and increased awareness of risk will ensure may need to be supported to identify dwellings at risk from inunc dwellings to accommodate risks to health and safety. Likely to be</li> <li>In the medium term, enhanced inundation protection may pro the long term, additional hard protection may provide the comm events.</li> <li>Insurability of personal assets will be determined by insurance of assessment).</li> </ul>
3	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	Accommodate - Elevate floor levels of buildings and flood proofing buildings and infrastructure	<ul> <li>In the short -medium term, enhanced inundation protection &amp; values. Inundation protection could provide the community with properties are likely exposed to inundation with 0.2m RSLR (~by 2</li> <li>Ongoing community education and increased awareness of risk Landowners may need to be supported to know how to respond to and undertake proactive accommodation efforts to reduce risks to In the long term Accommodate allows homeowners to plan for measures relative to affordability &amp; whether they have continued</li> <li>Insurability of personal assets will be determined by insurance of assessment).</li> </ul>

nd current infrastructure aligns with community ly exposed to inundation with 0.2m RSLR (~by by the community - engagement on medium term

re community preparedness. E.g. Landowners n and to undertake proactive efforts on dwellings n a case-by-case basis.

de the community with some assurance e companies (based on own site-specific risk

astructure aligns with community values. undation with 0.2m RSLR (~by 2050 at SSP8.5), a engagement on medium term status quo

re community preparedness. E.g. Landowners indation and to undertake proactive efforts on be made on a case-by-case basis.

rovide the community with some assurance. In numerity with further assurance during flood

e companies (based on own site-specific risk

& dune maintenance aligns with community th some assurance, given that 10% of Waikanae y 2050 at SSP8.5).

isk will ensure community preparedness. E.g. d to flood risk and to identify dwellings at risk s to health and safety.

or and choose effective flood mitigation ed access to roading & critical infrastructure. e companies (based on own site-specific risk

mu Unit 8B	4	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	Accommodate - Elevate floor levels of buildings and flood proofing buildings and infrastructure	Retreat	In the short term, <b>enhanced inundation protection</b> & dune mai option could provide the community with some assurance, giver exposed to inundation with 0.2m RSLR (~by 2050 at SSP8.5). • <b>Ongoing community education</b> and increased awareness of ris Landowners may need to be supported to know how to respond and undertake proactive accommodation efforts to reduce risks • In the medium term <b>Accommodate</b> allows homeowners to pla measures relative to affordability & whether they have continue • In the long term affected homeowners and Councils can plan for planning, level of infrastructure maintenance, etc). • Insurability of personal assets will be determined by insurance assessment).
Paraparaumu Unit	5	<b>Enhance</b> - Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	<b>Protect - Additional</b> <b>Hard Protection</b> (e.g. stopbanks, culverts and pump stations)	Retreat	<ul> <li>In the short term, enhanced inundation protection &amp; dune matoption could provide the community with some assurance, given exposed to inundation with 0.2m RSLR (~by 2050 at SSP8.5).</li> <li>Ongoing community education and increased awareness of rist Landowners may need to be supported to know how to respond and undertake proactive accommodation efforts to reduce risks.</li> <li>In the medium term additional hard protection will provide further and allow homeowners time to plan for and/or choose other effert.</li> <li>In the long term affected homeowners and Councils can plan for planning, level of infrastructure services, etc).</li> <li>Insurability of personal assets will be determined by insurance assessment).</li> </ul>

aintenance aligns with community values. This ren that 10% of Waikanae properties are likely

risk will ensure community preparedness. E.g. nd to flood risk and to identify dwellings at risk ks to health and safety.

lan for and choose effective flood mitigation ued access to roading & critical infrastructure. In for **Retreat** (e.g. relocatable homes, spatial

ce companies (based on own site-specific risk

maintenance aligns with community values. This ven that 10% of Waikanae properties are likely

risk will ensure emergency preparedness. E.g. nd to flood risk and to identify dwellings at risk ks to health and safety.

further reassurance in the event of flood events effective avoidance measures.

for Retreat (e.g. relocatable homes, spatial