MCDA CRITERIA – LANDSCAPE VALUES

Management Unit	Pathway	Pathway Description			Landscape values	
		Short term	Medium term	Long term	Score	Notes
Waikanae Unit 5A	1	**Enhance** - Dune and/or wetland resilience, community education and emergency management	**Soft Engineering** - Dune reconstruction	**Soft Engineering** - Beach renourishment		• Initial enhancement of dunes and wetland areas will maintain existing open sand beach and vegetated dune context and associated natural character and open coastal edge. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Ongoing implementation of soft engineering would continually disrupt natural patterns and processes, but otherwise maintain an open dynamic coastline influenced by existing settlement with little change in context of present day.
	2	**Enhance** - Dune and/or wetland resilience, community education and emergency management AND **Soft Engineering** - Dune reconstruction	**Enhance** - Dune and/or wetland resilience, community education and emergency management AND **Soft Engineering -** Beach renourishment	**Protect - Hard Engineering** - Sea wall		• Dune and wetland enhancement combined with soft engineering will initially maintain existing open sand beach and vegetated dune context along the coastal edge but with ongoing disruption to natural patterns and processes which will likely reduce natural character. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Eventual introduction of seawall will modify the existing open beach profile and dune sequence and reduce natural character, resulting in potential longer term adverse landscape effects.
	3	**Enhance** - Dune and/or wetland resilience, community education and emergency management AND **Soft Engineering** - Dune reconstruction	**Enhance** - Dune and/or wetland resilience, community education and emergency management AND **Soft Engineering -** Beach renourishment	**Protect - Hard Engineering** - Detached Breakwater		• Dune and wetland enhancement combined with ongoing disruption resulting through soft engineering will generally maintain existing open sand beach and vegetated dune context with a slight reduction in natural character. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Detached breakwater would likely extend sense of modification into presently open coastal marine areas and disrupt present-day open and unmodified coastal views. The design of the breakwater could potentially reduce the overall scale of effects.
	4	**Enhance** - Dune and/or wetland resilience, community education and emergency management AND **Soft Engineering** - Dune reconstruction	**Protect - Hard Engineering** - Sea wall	**Retreat**		• Dune and wetland enhancement combined with soft engineering will generally maintain existing open sand beach and vegetated dune context along the coastal edge but with some ongoing disruption to natural patterns and processes. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Ongoing engineering and introduction of hard structures including a sea wall has potential reduction in natural beach profile which would likely reduce natural character and may result in adverse landscape effects in context of existing settlement. • Retreat would occur in the context of an increasingly modified coastal environment with likely ongoing sense of modification and reduction in natural character.

Waikanae Unit 5A	5	**Enhance** - Dune and/or wetland resilience, community education and emergency management AND **Soft Engineering** - Dune reconstruction	**Protect - Hard Engineering** - Detached Breakwater	**Retreat**		• Dune and wetland enhancement combined with soft engineering will generally maintain existing open sand beach and vegetated dune context along the coastal edge but with some ongoing disruption to natural patterns and processes which will likely reduce natural character. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Detached breakwater would likely extend sense of modification into presently open coastal marine areas and further disrupt existing unmodified views. • Retreat would occur in the context of an increasingly modified coastal environment with likely ongoing sense of modification and reduction in natural character.
	6	**Enhance** - Dune and/or wetland resilience, community education and emergency management AND **Soft Engineering** - Dune reconstruction	**Retreat**	**Retreat**		• Dune and wetland enhancement combined with soft engineering will generally maintain existing open sand beach and vegetated dune context along the coastal edge but with some ongoing disruption to natural patterns and processes which will likely reduce natural character. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Retreat would occur in the context of adjoining dune restoration and within more modified urban environment with potential ongoing opportunities to restore natural character.

Waikanae Unit 5B	1	**Status Quo** AND Community Education and Emergency Management	**Status Quo** AND Community Education and Emergency Management	**Enhance -** Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management		• More frequent flooding would likely extend coastal environment inland and disrupt existing more modified landscape values within the present-day coastal context. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Enhancement of existing inundation protection plus dune and wetland enhancement occurs in context of existing modification with limited consequent change to natural character.
	2	**Status Quo** AND Community Education and Emergency Management	**Enhance -** 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		• More frequent flooding would likely extend coastal environment inland and disrupt existing more modified landscape values within the present-day coastal context. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Enhancement of existing inundation protection plus dune and wetland enhancement occurs in context of existing modification with limited consequent change to natural character. • Introduction of hard structures and bank protection may reduce natural character with adverse landscape effects in context of existing settlement.
	3	**Enhance -** Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	**Enhance -** 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		• Enhancement of existing inundation protection plus wetland and dune resilience occurs in context of existing modification with limited consequent change to natural character. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Accommodating buildings and infrastructure in flood prone areas would occur in context of existing modification with likely localised landscape impacts.
	4	**Enhance -** 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**		• Enhancement of existing inundation protection plus wetland and dune resilience occurs in context of existing modification with limited consequent change to natural character. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Accommodating buildings and infrastructure in flood prone areas would occur in context of existing modification with likely localised landscape impacts. • Retreat may offer ability to restore natural character and promote beneficial landscape outcomes in the longer term.
	5	**Enhance -** 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	**Retreat**		• Enhancement of existing inundation protection plus wetland and dune resilience occurs in context of existing modification with limited consequent change to natural character. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Hard protection in the form of stop banks, culverts and pumpstations would likely reduce natural elements, patterns and processes and reduce natural character. • Retreat offers more limited ability to restore natural character and promote positive landscape outcomes in context of increased modification.

Management Unit	Pathway	Pathway Description			Landscape values	
		Short term	Medium term	Long term	Score	Notes
Waikanae Estuary Unit 6A and B	1	**Status Quo** AND Community Education and Emergency Management	**Enhance -** Dune and/or wetland resilience, community education and emergency management	**Enhance -** Dune and/or wetland resilience, community education and emergency management		• Continuing with the status quo in the short term may see further loss of natural character through increasing impacts of erosion and inundation events. • The enhancement of natural elements, patterns, and processes, including native vegetation and associated dune and wetland habitats has potential to restore natural character in the medium and longer term. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place.
	2	**Status Quo** AND Community Education and Emergency Management	**Enhance -** Dune and/or wetland resilience, community education and emergency management	**Protect -** Bank protection		• Continuing with the status quo in the short term may see further loss of natural character through increasing impacts of erosion and inundation. • The enhancement of natural elements, patterns, and processes, including native vegetation and associated dune and wetland habitats has potential to restore natural character in the medium and longer term. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Introduction of hard structures and bank protection may reduce natural character with adverse landscape effects in context of existing settlement.
	3	**Enhance -** Dune and/or wetland resilience, community education and emergency management	**Enhance -** Dune and/or wetland resilience, community education and emergency management	**Protect -** Bank protection		• The enhancement of natural elements, patterns, and processes, including native vegetation and associated dune and wetland habitats has potential to restore natural character in the medium and longer term. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • The introduction of hard structures and bank protection may prevent migration of wetland areas and reduce natural character in confined context of estuary which remains in the longer term.
	4	**Enhance -** Dune and/or wetland resilience, community education and emergency management	**Protect -** Bank protection	**Protect -** Bank protection		• The enhancement of natural elements, patterns, and processes, including native vegetation and associated dune and wetland habitats has potential to restore natural character in the medium and longer term. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • The ongoing implementation of hard structures and bank protection would likely reduce natural character and result in adverse landscape effects in confined context of estuary which remains.
	5	**Enhance -** Dune and/or wetland resilience, community education and emergency management	**Retreat -** Retreat recreational infrastructure to make way for wetland migration	**Retreat -** Retreat recreational infrastructure to make way for wetland migration		• The enhancement of natural elements, patterns and processes, including native vegetation and habitats has potential to restore natural character. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Retreat of recreation infrastructure following enhancement provides opportunity to restore natural character, allowing for natural wetland and river migration in presently modified areas.

Management Unit	Pathway	Pathway Description			Landscape values	
		Short term	Medium term	Long term	Score	Notes
Otaihanga Unit 7B	1	**Status Quo** AND Community Education and Emergency Management	**Enhance -** 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)		• More frequent flooding would likely extend coastal environment inland and disrupt existing more modified landscape values within the present-day coastal context. • The enhancement of inundation protection alongside dune and wetland resilience has limited potential change to natural character in the context of increased modification. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • The implementation of hard structures and bank protection would likely reduce natural character and result in adverse landscape effects in the longer term.
	2	**Enhance -** Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	**Enhance -** 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		• The enhancement of inundation protection alongside dune and wetland resilience has limited potential to restore natural character in the context of areas of increased modification. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Accommodating buildings and infrastructure in flood prone areas would occur in context of existing modification and likely result in localised landscape impacts
	3	**Enhance -** 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**		• Enhancement of existing inundation protection plus dune and wetland resilience occurs in context of ongoing modification with limited reduction in natural character. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Accommodating buildings and infrastructure in flood prone areas would occur in context of existing modification with likely localised landscape impacts • Retreat offers limited ability to restore natural character and promote positive landscape outcomes in context of ongoing modification in the longer term.
	4	**Protect - Additional Hard Protection** (e.g. stopbanks, culverts and pump stations)	**Enhance** - Enhance new inundation protection, dune and/or wetland resilience, and c and community education and emergency management	**Retreat**		• Hard protection in the form of stop banks, culverts and pumpstations would likely reduce natural character and reduce existing natural landscape values within the more modified coastal context. • Enhancement of existing inundation protection plus dune and wetland resilience occurs in context of ongoing modification with a further likely reduction natural character. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Retreat offers more limited ability to restore natural character and promote positive landscape outcomes in context of increased modification.
	5	**Enhance** - 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)	**Protect - Additional Hard Protection** (e.g. stopbanks, culverts and pump stations)		• Enhancement of existing inundation protection plus dune and wetland resilience occurs in context of ongoing modification with limited reduction in natural character. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Ongoing implementation of hard protection in the form of stop banks, culverts and pumpstations would likely reduce natural elements, patterns and processes and reduce natural character over the longer term.

Management Unit	Pathway	Pathway Description			Landscape values	
		Short term	Medium term	Long term	Score	Notes
Paraparaumu Unit 8A	1	**Enhance -** Dune and/or wetland resilience, community education and emergency management	**Protect - Soft Engineering** - Dune Reconstruction	**Protect - Soft Engineering** - Beach Renourishment		• Initial enhancement of dunes and wetland areas will maintain existing open sand beach and vegetated dune context and associated natural character along cuspate foreland and open coastal edge. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Ongoing implementation of soft engineering including dune restoration and beach nourishment would disrupt natural patterns and processes, but otherwise maintain an open dynamic coastline influenced by existing settlement.
	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		• Initial enhancement of dunes and wetland areas will maintain existing open sand beach and vegetated dune context and associated natural character along cuspate foreland and open coastal edge. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Ongoing implementation of soft engineering including dune restoration and beach nourishment would disrupt natural patterns and processes, but otherwise maintain an open dynamic coastline influenced by existing settlement. • Introduction of hard structures including a sea wall would likely reduce natural beach profile and reduce natural character and result in adverse landscape effects in context of existing open beach adjoining existing settlement.
	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	**Protect - Hard Engineering -** Detached Breakwater		• Dune and wetland enhancement combined with soft engineering will generally maintain existing open sand beach and vegetated dune context along the coastal edge but with some ongoing disruption to natural patterns and processes which will likely reduce natural character. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Detached breakwater would likely extend sense of modification into presently open coastal marine areas and further disrupt existing open and unmodified coastal views. The design of the breakwater could potentially reduce the overall scale of effects.
	4	**Enhance -** Dune and/or wetland resilience, community education and emergency management AND **Protect - Soft Engineering** - Dune reconstruction	**Protect - Hard Engineering -** Sea wall	**Retreat**		• Dune and wetland enhancement combined with soft engineering will generally maintain existing open sand beach and vegetated dune context along the coastal edge but with some ongoing disruption to natural patterns and processes. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Ongoing engineering and introduction of hard structures including a sea wall has potential reduction in natural beach profile which would likely reduce natural character and may result in adverse landscape effects in context of existing settlement. • Retreat would occur in the context of an increasingly modified coastal environment with likely ongoing sense of modification and reduction in natural character.

Paraparaumu Unit 8A	5	**Protect - Hard Engineering -** Sea wall	**Protect - Hard Engineering -** Sea wall	**Retreat**		• Introduction of hard structures including a sea wall would likely reduce natural beach profile and reduce natural character and result in adverse landscape effects in context of existing open beach adjoining existing settlement. • Retreat would occur in the context of an increasingly modified coastal environment with likely ongoing sense of modification and reduction in natural character.
	6	**Enhance -** Dune and/or wetland resilience, community education and emergency management AND **Protect - Soft Engineering** - Dune reconstruction	**Retreat**	**Retreat**		• Dune and wetland enhancement combined with soft engineering will generally maintain existing open sand beach and vegetated dune context along the coastal edge but with some ongoing disruption to natural patterns and processes which will likely reduce natural character. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Retreat would occur in the context of a modified coastal environment with ongoing opportunities to restore natural character.

Paraparaumu Unit 8B	1	**Status Quo** AND Community Education and Emergency Management	**Status Quo** AND Community Education and Emergency Management	**Enhance -** Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management		• More frequent flooding would likely extend coastal environment inland and disrupt existing more modified landscape values within the present-day coastal context. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Enhancement of existing inundation protection plus dune and wetland resilience occurs in context of existing modification with limited consequent change to levels of natural character.
	2	**Status Quo** AND Community Education and Emergency Management	**Enhance -** 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)		• More frequent flooding would likely extend coastal environment inland and disrupt existing more modified landscape values within the present-day coastal context. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Enhancement of existing inundation protection plus dune and wetland resilience occurs in context of existing modification with limited consequent change to levels of natural character. • Introduction of hard structures and bank protection may reduce natural character with adverse landscape effects in context of existing settlement.
	3	**Enhance -** Enhance existing inundation protection, dune and/or wetland resilience, and community education and emergency management	**Enhance -** 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		• Enhancement of existing inundation protection occurs in context of existing modification with more limited change in natural character. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Accommodating buildings in restored natural character may enable greater alignment between humans and natural elements, patterns, and process within coastal context.
	4	**Enhance -** 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**		• Enhancement of existing inundation protection occurs in context of existing modification with more limited change in natural character. • Dune and wetland resilience will have limited initial benefit. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Seeking to accommodate buildings may enable greater alignment between natural elements, patterns, and process within coastal context. • Retreat would occur in the context of enhanced wetland areas within an increasingly modified coastal context which provides opportunities to improve natural character.
	5	**Enhance -** 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)	**Retreat**		• Enhancement of existing inundation protection occurs in context of existing modification with limited consequent change in context of reduced levels of natural character. • Dune and wetland resilience will have limited initial benefit. • Community education may reinforce recognition of indicators of a healthy environment and its contribution to natural character and sense of place. • Additional hard protection in the form of stop banks, culverts and pumpstations would likely reduce natural elements, patterns and processes and reduce natural character. • Retreat would occur in the context of an increasingly modified coastal context which provides more limited opportunity to improve natural character.