Wainui Beach Management

Key Stakeholder Forum Meeting 2

17 October 2012

N272921

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Purpose

- To identify key issues WBMP needs to address
- To identify what is important to KSF members
- To monitor WG progress
- To endorse WG recommendations, or request further work
- To agree WG Work Plan

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Agenda

1. Welcome
2. Apologies
3. Minutes - KSF 17 Sep 2012
4. Purpose
5. Key WBMP Criteria
6. Key issues WBMP needs to address
7. WG Progress report & recommendations
8. Planning controls presentation & WG recommendations
9. KSF Background Information
10. Proposed Working Group Work Plan
11. Wrap Up

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Key WBMP Criteria

1. Thinking about different stakeholder perspectives you bring to KSF, Invite each of you to complete this statement:

   It is important to me (or stakeholder perspective I represent) that the WBMP ……..

   E.g. … *uses evidence about how Wainui Beach works*

   •One area of importance only on each post-it note

   •Write large so others can read

   •Begin each statement with a verb ('doing word')

2. In groups, identify all areas of importance to people in your group → flipchart (10 mins)

   Write large, legibly & unambiguously on flip chart so all can read & understand

3. Take opportunity to read feedback from each group
4. Will collate in a survey to get everyone's feedback on importance

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Key Issues WBMP to Address

1. What are key issues WBMP needs to address?

   E.g. Multiplicity of perspectives

   - Anyone may put anything on list
   - Suspend judgement - **No arguing or criticising**
   - **No discussion** while listing underway

2. Is what is meant by each issue statement clear? Questions of clarification?

3. Propose to incorporate into a survey to get everyone's feedback

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Initial Working Group Brief

KSF asked WG to produce & present for KSF discussion summaries of:

1. How beach works – agreed key points
2. What is existing infrastructure achieving?
3. Existing planning controls, policies & strategies
4. Effect of remaining with status quo

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WG Report - How beach works 1

WG agreed with experts re ALL beaches:

- No parts in nature only WHOLES – the beach is only part of a system
- Sand is meant to move & is a vital part of beaches' protective systems
- Moving sand offers natural protection
- Sand dunes act as store of sand for beach
- Storms, rips, surges will strike & cause erosion

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How beach works 1

KSF View re What Experts Agree re ALL beaches?

- No parts in nature only WHOLES – beach is only part of a system
- Sand is meant to move & is a vital part of beaches' protective systems
- Moving sand offers natural protection
- Sand dunes act as a store of sand for beach
- Storms, rips, surges will strike & cause erosion

- Questions of Clarification?
- Any discussion?
- KSF Consensus?

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WG Report - How beach works 2

WG agreed with experts about Wainui Beach:

- Beach needs to considered as a whole (Makorori Point to Tuaheni Point) although there are geometric variances (4 zones) along beach
- Beach (as modified by man) is a thin sand veneer over rocky basement with thin layer of cobbles for some parts of beach
- Beach considered to be mostly closed (not a lot is known about off shore sand movement but understand only a small amount of sand is lost from the system)
- Generally sand movement is "in and out" & along beach
- Cyclic cut & fill of sand occurring along beach from storm events
- Southern end of beach has more sand movement than northern end in Southerly storms
- Large storm events have caused significant erosion
- Astronomical (tidal) cycles coincide with significant erosion
- Sea level rise is occurring at a faster rate than tectonic uplift

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How beach works 2

KSF View re What Experts Agree re Wainui Beach?

- Beach needs to considered as a whole (part of a broader whole) although geometric variances
- Beach (as modified by man) is thin sand veneer over a variable rocky basement with thin layer of cobbles for some parts of beach
- Beach considered to be mostly closed
- Generally sand movement is "in and out" & along beach
- Cyclic cut & fill of sand occurring along beach from storm events
- Southern end more sand movement than northern end in Southerly storms
- Large storm events have caused significant erosion
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- Questions of Clarification?
- Any discussion?
- KSF Consensus?

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How beach works 3

Experts differ re long term erosion

WG re Long Term Erosion

- WG view is that there is cyclical & potential for long term erosion.
- Also noting: When is a lot of stormwater runoff from land, which permanently erodes property, the beach takes a long time to rebuild.
- WG agree that Tuaheni point is eroding over time

KSF View?

- Questions of Clarification?
- Any discussion?
- KSF Consensus?

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WG Report Effectiveness of Existing Infrastructure 1

WG agreed following re GROYNES:

- Hamanatua Stream groyne works in terms of controlling stream
- Southern groynes 2, 3 & 4 doing no harm
- More information needed re effectiveness/impact of groyne 27 at Southern end

KSF View?

- Questions of Clarification?
- Any discussion?
- KSF Consensus?

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WG Report Effectiveness of Existing Infrastructure 2

WG agreed following re Seawall:

- Help protect properties directly behind them
- Negative in terms of sand on beach - cause scouring

KSF View?

- Questions of Clarification?
- Any discussion?
- KSF Consensus?

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WG Report Effectiveness of Existing Infrastructure 3

WG agreed following re Rip Rap:

- Rip Rap works
- Prior to revetment there was no sand
- Protects property behind

Noted that end of Lloyd George Rd (23) is best example

KSF View?

- Questions of Clarification?
- Any discussion?
- KSF Consensus?

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WG Report Effectiveness of Existing Infrastructure 4

WG agreed following re Gabions:

- Work short term – property protection at toe
- Because of size are overtopped
  - cause/exacerbate erosion
- Do allow for free flow of bulk sand – most of time buried, so only stopping sand on limited occasions

KSF View?

- Questions of Clarification?
- Any discussion?
- KSF Consensus?

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WG Report Effect of Remaining with Status Quo

WG agreed following statements re status quo:

- Aesthetically not acceptable
- Current piecemeal approach not acceptable
- Lack of uniformity of approach
- Primary interest is an integrated approach along the beach
- In part status quo works
- Need to do better – not suitable for long term
- Removal of hazardous infrastructure

WG agreed:

- **Status quo is not acceptable**

KSF View?

- Questions of Clarification?
- Any discussion?
- KSF Consensus?

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Planning – Topics Covered

- Why is Planning Important?
- Main Themes in Guiding Policy (esp. NZ Coastal Policy Statement) – incl Policy 27
- Resource consent requirements for protection works
- Overview of Coastal Hazard Overlays and associated planning controls

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Why is planning important to the WBMP?

- Imposes controls and consent requirements for coastal protection works
- Controls landuse in the coastal environment to help reduce the risk of coastal hazards e.g. building location restrictions, subdivision restrictions.
- May control other options to mitigate coastal hazards e.g. dune planting.

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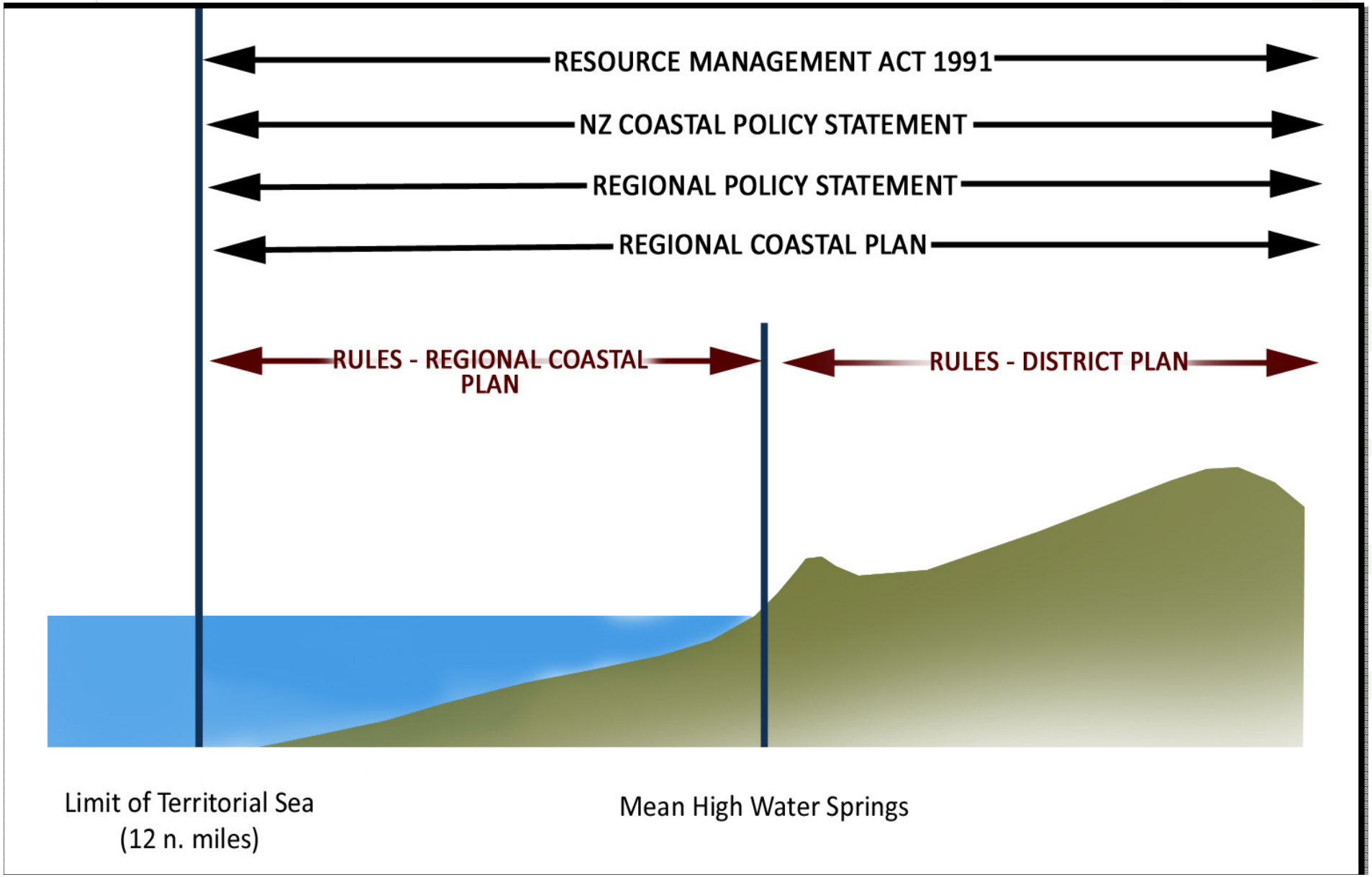
Policy Framework - Coastal Environment



Key Themes in Guiding Policy

- Protect surf break of national significance at Wainui (Stock Route-Pines-Whales)
- Preservation of the natural character of the coastal environment is a matter of national importance. Natural character includes natural processes, natural movement of water and sediment, natural landforms.
- The natural character of the coastal environment should also be restored and rehabilitated e.g. by removing redundant structures, encouraging natural regeneration.
- Protect outstanding natural features and landscapes from inappropriate subdivision and development (matter of national importance). Southern end of the beach and Tuaheni point = outstanding natural landscape.

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Key Themes Continued

- Maintain and enhance public access to and along the coast (matter of national importance)
- Involve tangata whenua in decision-making & protect sites of significance to tangata whenua
- Plan for climate change – national guidance = 0.5m 1999-2099 with consideration of 0.8m and 0.01m/year 2099+
- Take steps to reduce effect of stormwater incl. by promoting designs that mitigate stormwater at source
- Use indigenous species for revegetation in the coastal environment

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Key Themes Continued

Natural Hazards and Protection Works

- Identify natural hazards and assess hazard risks (at least for 100 year planning horizon)
- Avoid increasing the risk of harm from coastal hazrds (incl redevelopment or landuse change that would increase risk
- Encourage redevelopment to reduce the risk of natural hazards (e.g. retreat by relocation of structures)
- Protect natural defences (e.g. dunes)
- Hard protection works are discouraged and alternatives favoured.

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NZCPS - Policy 27

Strategies for protecting significant existing development from coastal hazard risk

(1) In areas of significant existing development likely to be affected by coastal hazards, the range of options for reducing coastal hazard risk that should be assessed includes:

a) promoting and identifying long-term sustainable risk reduction approaches including the relocation or removal of existing development or structures at risk;

b) identifying the consequences of potential strategic options relative to the option of 'do-nothing';

c) recognising that hard protection structures may be the only practical means to protect existing infrastructure of national or regional importance, to sustain the potential of built physical resources to meet the reasonably foreseeable needs of future generations;

d) recognising and considering the environmental and social costs of permitting hard protection structures to protect private property; and

e) identifying and planning for transition mechanisms and timeframes for moving to more sustainable approaches.

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NZCPS - Policy 27 Continued

(2) In evaluating options under (1):
a)focus on approaches to risk management that reduce the need for hard protection structures and similar engineering interventions;
b)take into account the nature of the coastal hazard risk and how it might change over at least a 100-year timeframe, including the expected effects of climate change; and
c)evaluate the likely costs and benefits of any proposed coastal hazard risk reduction options.
(3) Where hard protection structures are considered to be necessary, ensure that the form and location of any structures are designed to minimise adverse effects on the coastal environment.
(4) Hard protection structures, where considered necessary to protect private assets, should not be located on public land if there is no significant public or environmental benefit in doing so.

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Resource Consent Requirements for Protection Works

- Protection Works in the Coastal Marine Area need consent under the Regional Coastal Plan. If <300m in length parallel to the coast and <100m perpendicular to the coast they are a *discretionary activity*. If larger they are *non complying?*.
- Protection Works outside of the Coastal Marine Area but inside the extreme coastal hazard zone are also *discretionary* under the District Plan
- If outside extreme hazard zone might be caught by rules for structures in the Coastal Environment Overlay in the District Plan

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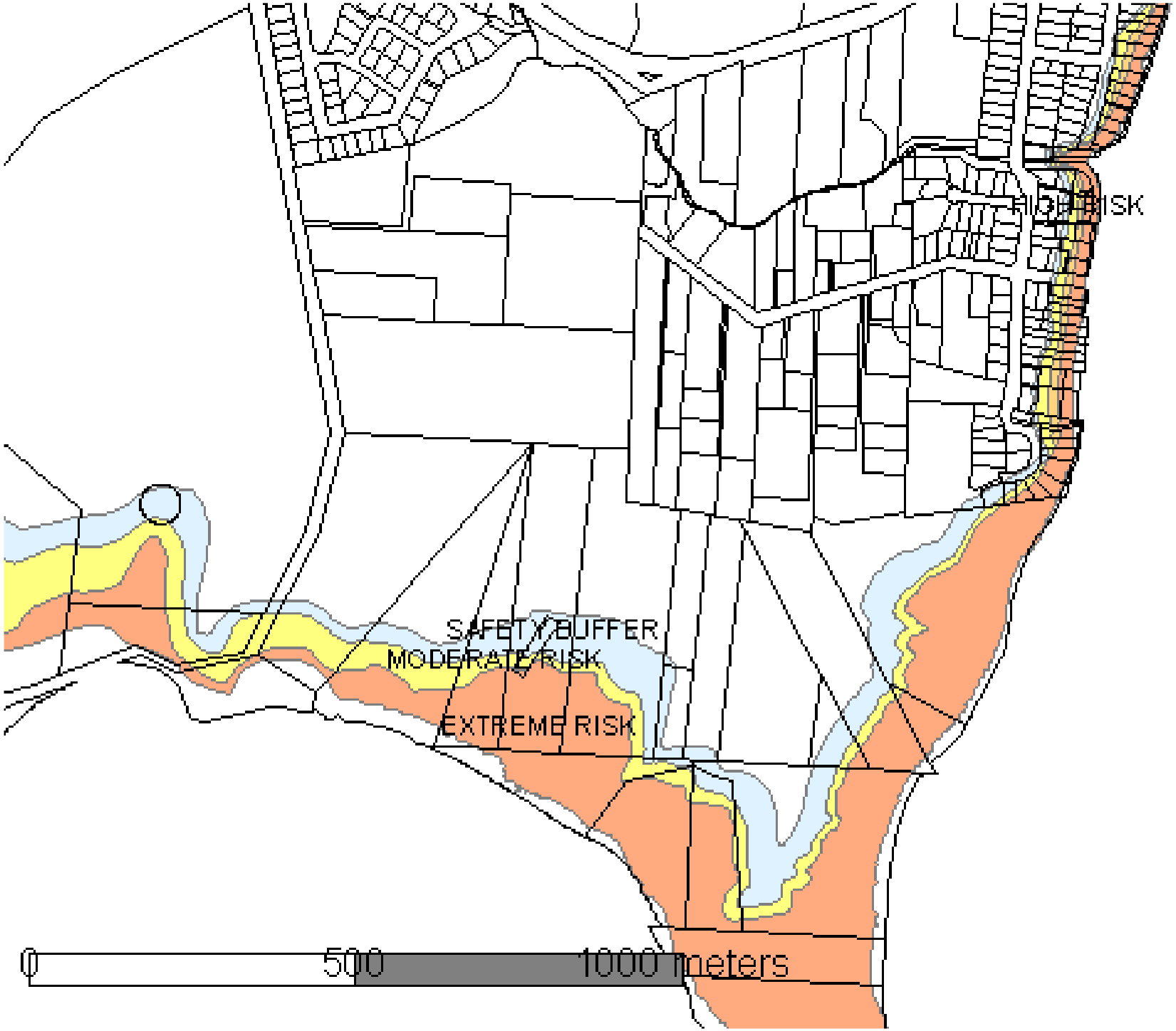
Coastal Hazard Overlays – controlling landuse to reduce the


SAFETY BUFFER
MODERATE RISK
EXTREME RISK
0
500
1000 meters

Coastal Hazard Overlays Continued

- Developed by J Gibb in 1995 and reviewed in 2001
- 4 types:
  - Extreme Risk – erosion could occur in a single storm
  - High Risk – high probability of erosion by 2050. Shoreline forecast to lie inland by 2050
  - Moderate Risk - high probability of erosion by 2100. Shoreline forecast to lie inland by 2100
  - Safety Buffer – likely to be affected beyond 2010
- Rules for subdivision and development in the overlay
- Essentially no landuse planning for storm surge or tsunami

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Which Planning Areas Require Further Consideration?

- Understand why the rock revetment consent was refused, noting that NZ Coastal Policy wasn't enacted at time of previous plan. (H)
- How critical are width & length requirements of protection works to their acceptability under the Plans and Policy Statements? (H)
- How critical is it for protection works to keep landward of mean high water springs? (M)
- How are current coastal hazard overlay rules (for buildings and structures) being applied? (L)
- How does the Lysnar Reserve Management Plan (& Wainui Reserve) address coastal hazards? (L)
- What obligations does Council have to protect its reserves from coastal hazards under the Soil Conservation Act 1941 and the Reserves Act 1977 s40? (L)

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WBMP Background Documents to Inform KSF

- Synopsis of key documents relative to WBMP on GDC website to inform KSF
- Any further information you require?

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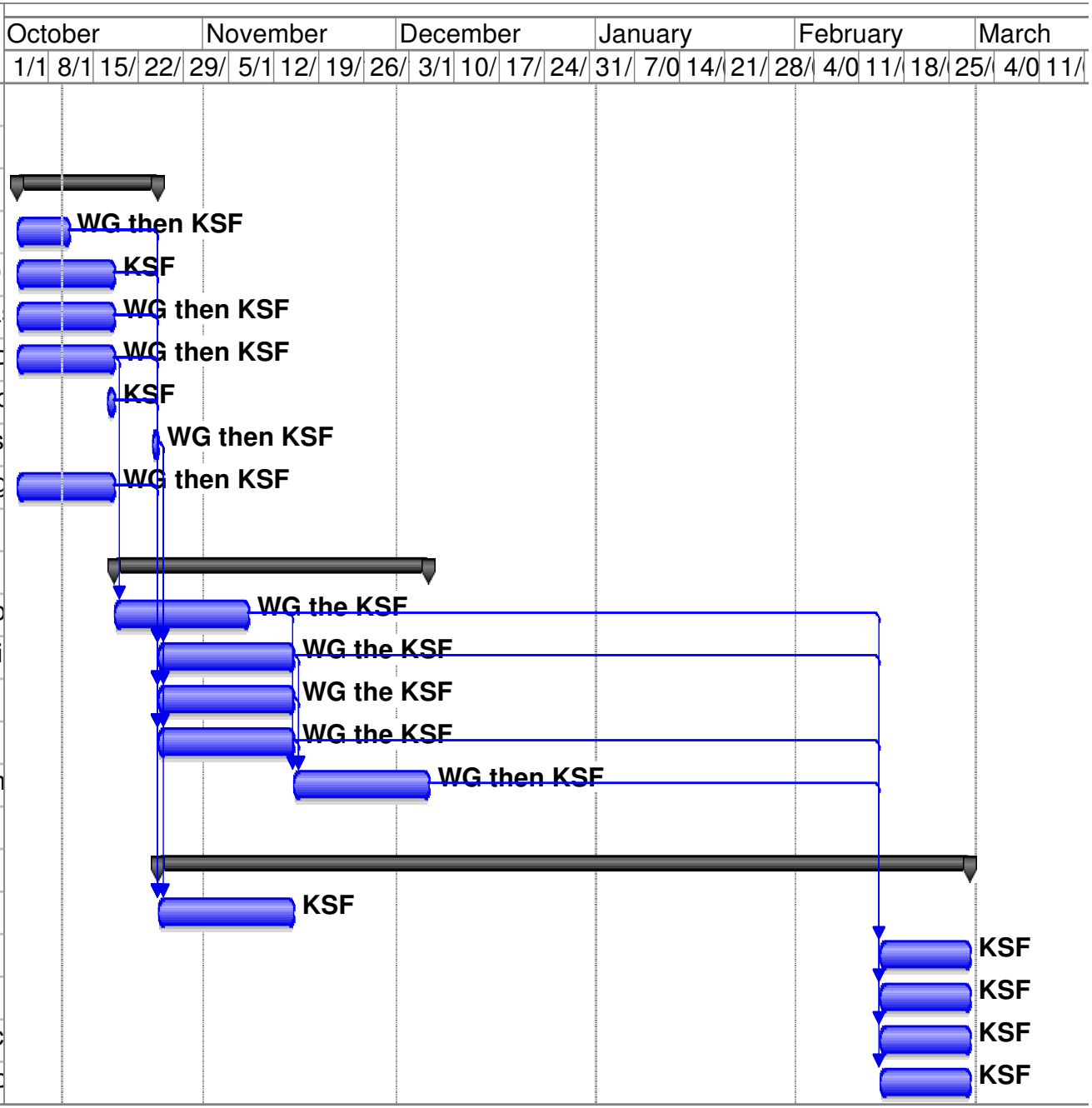
Draft Working Plan

ID	Task Name
1	
2	
3	**UNDERSTAND**
4	Understand how beach works
5	Understand existing documentatio
6	Understand what the existing infra
7	Understand the existing planning c
8	Identify the varying issues/values c
9	Understand other impacts on coas
10	Understand the effect of remaining
11	
12	**IDENTIFY AND CONSIDER**
13	Consider alternate planning contro
14	Consider future impacts on the exi
15	Consider non technical issues
16	Consider technical solutions
17	Consider cost recovery mechanism
18	
19	**BROAD ACCEPTANCE**
20	Each summary task above
21	Any required alternate planning
22	Impacts on beach front properties
23	Any required alternate non technic
24	Any required alternate technical sc

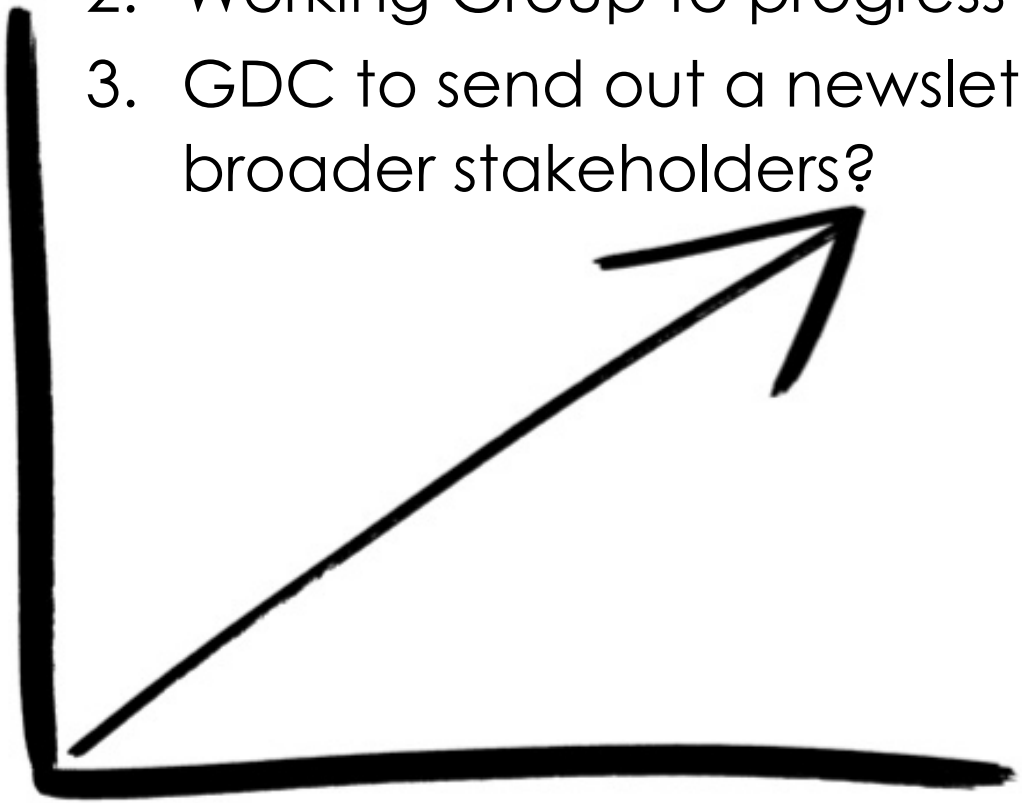


Proposed WG Work Plan

- Identify & Consider:
  - Technical Issues
  - Non – Technical Solutions
  - Technical Solutions
- Summary of protection works on the beach & how effective they are
- Summarise findings & present to KSF for discussion

Where to From Here?

1. GDC will email out a survey re key criteria and key issues
2. Working Group to progress Work Plan
3. GDC to send out a newsletter to update broader stakeholders?



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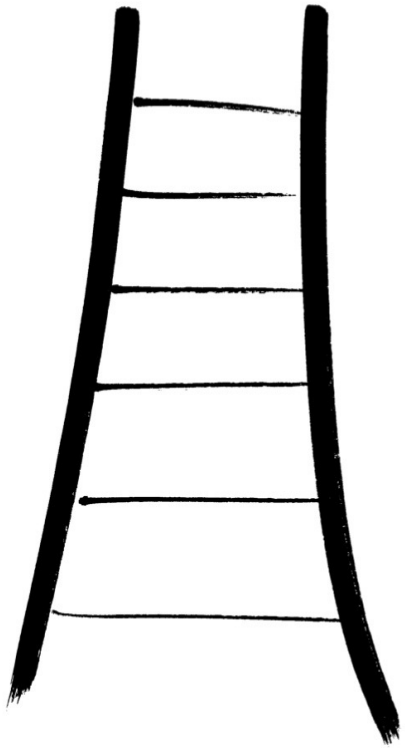
Next Steps?

1. GDC to email out minutes & post on GDC website
2. KSF members to respond to Survey Monkey to give feedback on key WBMP criteria & issues
3. Attend KSF Meeting 14 Nov



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