

Wainui Beach Management

Key Stakeholder Forum Meeting 5
13 November 2013

Purpose



- Walk KSF members through feedback on WBMS for Coastal Erosion Background & Discussion Document
- Agree key outcomes from feedback
- Determine what the KSF wants done next to take WBMS forward
- Next steps

Agenda

- Welcome
- Apologies
- Presentation & discussion of KSF survey results
- Agreeing key outcomes from the survey
 - small group discussions
 - feedback to/consideration by KSF as a whole
- Timeframes
- What does the KSF want done next to take this forward?
 - small group discussions
 - feedback to KSF as a whole
 - determining next steps
- Next meeting - 6pm Wed 11 December
- Wrap up



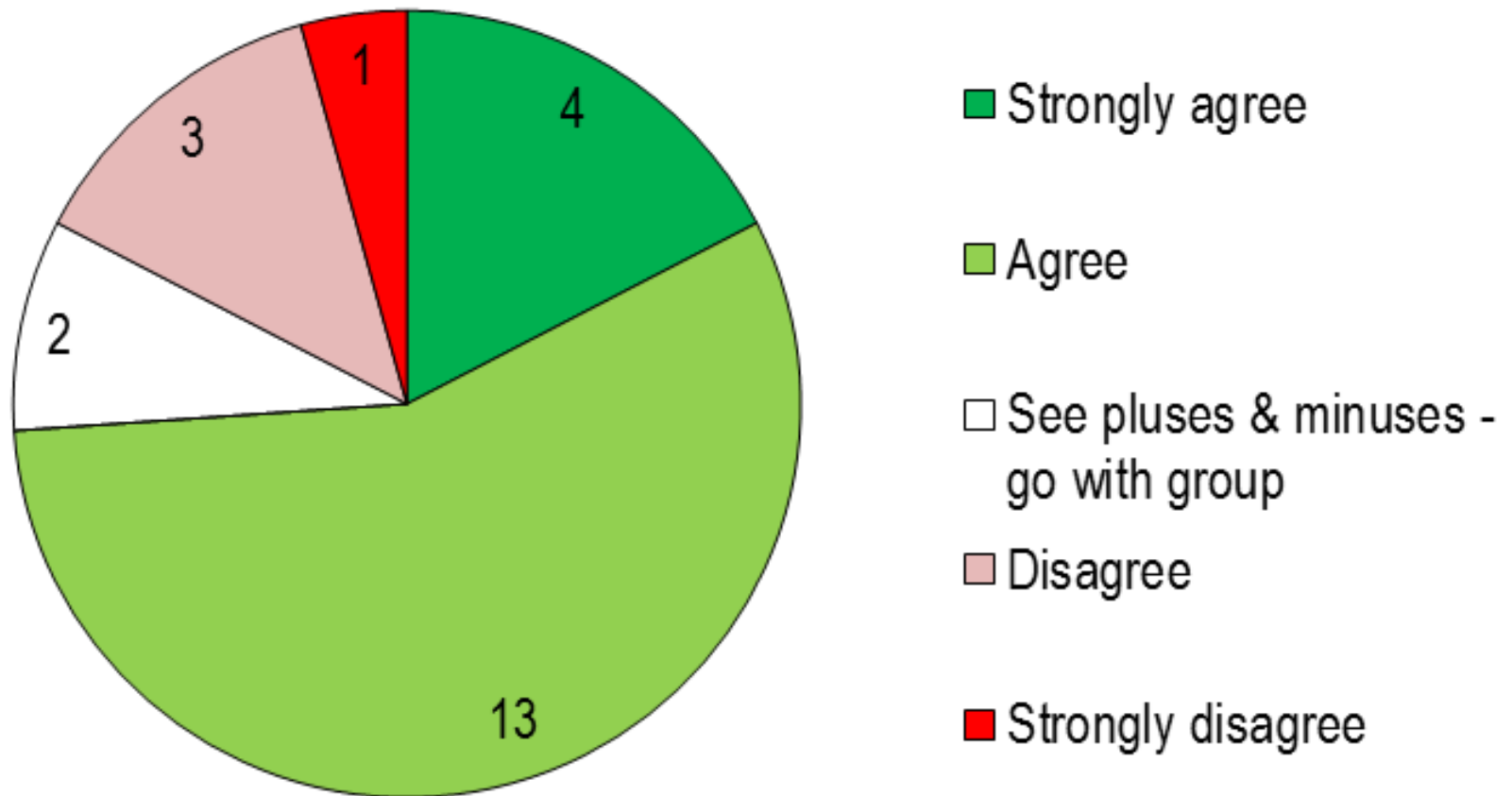
Since last KSF

- Clarifications received & responded to re discussion document
- KSF feedback sought on discussion document - survey
- Feedback analysed & emailed to KSF members



Qu 2: DRAFT VISION

“Integrated management of coastal hazards that conserves and enhances the environment of Wainui Beach for current and future generations”



DRAFT VISION

“Integrated management of coastal hazards that conserves and enhances the environment of Wainui Beach for current and future generations”

Areas Disagreement

- Challenge to ‘integrated’
- Scope should be more comprehensive than coastal hazards
- Needs to specifically capture & emphasise local community’s & policy priorities

Proposed response

- i. ‘Integrated’ remain
 - Reflects community & policy aspirations
 - Needs an integrated approach – within WBMS & with other Council strategies
- ii. Vision be supported by underpinning statements to reflect aspirations & priorities



DRAFT VISION AGREED

“Integrated management of coastal hazards WAINUI BEACH that conserves and enhances the environment of Wainui Beach for current and future generations”

Draft Broad Goals

- Retain beach access (public and private)
- Protect property (public and private)
- Conserve and enhance the natural environment

Draft Key Principles

- Evidence based approach to coastal management
- Management strategy supported and relevant over longer term
- Natural ecology of beach sustained
- Needs of beach users and beachfront property owners balanced
- Integrated and holistic approach recognising different issues along beach
- Affordability of management strategies for current and future generations
- Iconic surf breaks protected
- Community and tangata whenua values reflected
- Broad community acceptance



SECTION 6: Possible Options

Sets out 5 possible high level options/strategies for managing coastal erosion:

- Over next 100 years – focusing on 1st 20 years
- Each would involve a package of tools or responses
- Not intended as final options
- Intended to promote further discussion & refinement

Final strategy may be mixture of presented ideas or something quite different

Authors' initial thoughts only

Further assessment anticipated with key stakeholders & specialist advisers



Option 1: Protect Properties

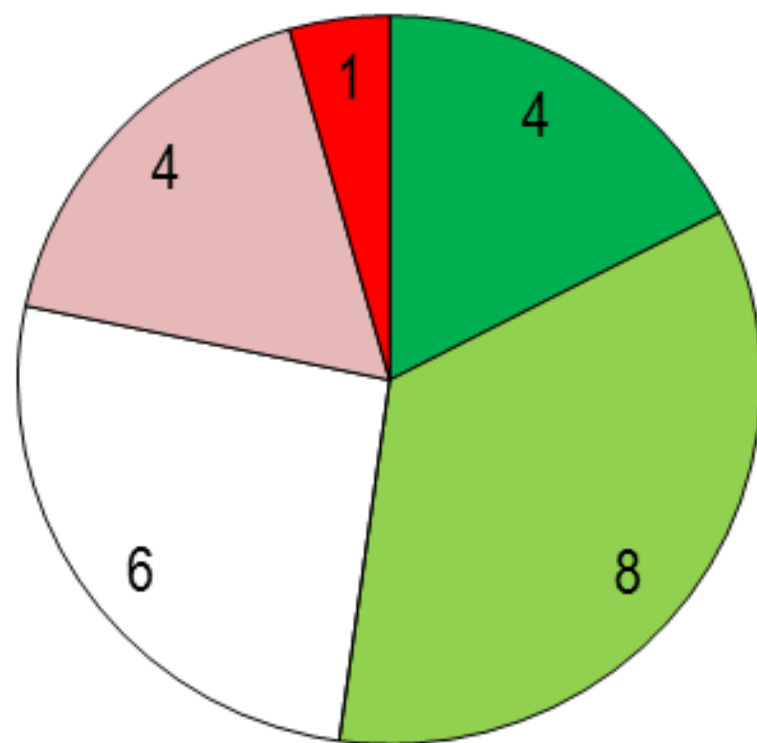
Protect properties (particularly dwellings), for as long as possible

While minimising adverse effects on environment

Avoid additional development in areas at risk in long term



OPTION 1: PROTECTING PROPERTIES



■ Strongly agree

■ Agree

□ See pluses & minuses -
go with group

■ Disagree

■ Strongly disagree

Option 1: Protect Properties

Option 2: Buy Time

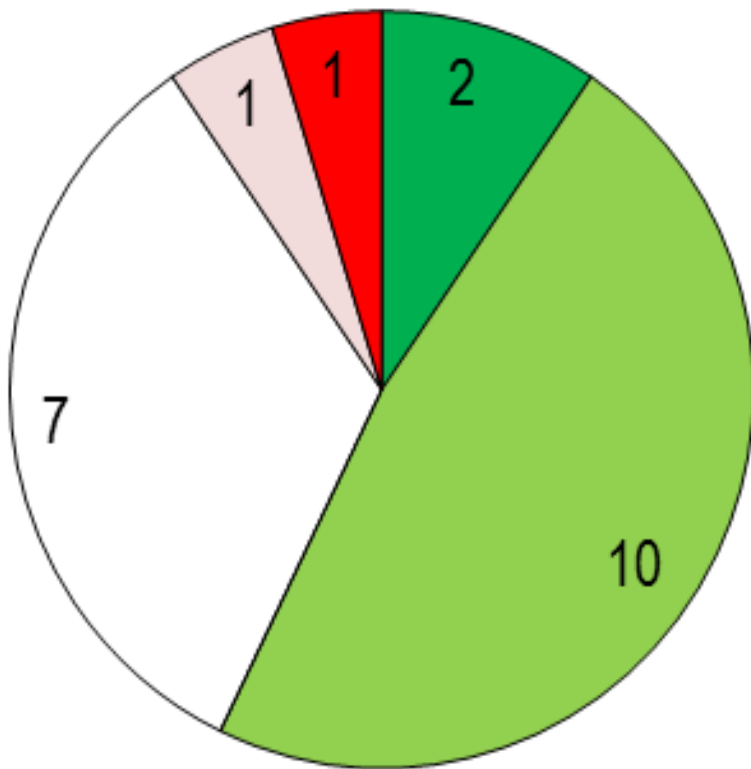
Protect properties for a finite period
(20 -50 yrs)

Use this time to avoid & reduce risk in
long term

Regulation to ensure no additional
development adds to risk



OPTION 2: BUY TIME



■ Strongly agree

■ Agree

□ See pluses & minuses -
go with group

■ Disagree

■ Strongly disagree

Option 1: Protect Properties

Option 2: Buy Time

Option 3: Maintain Structures

Maintain structures until provide no real benefit

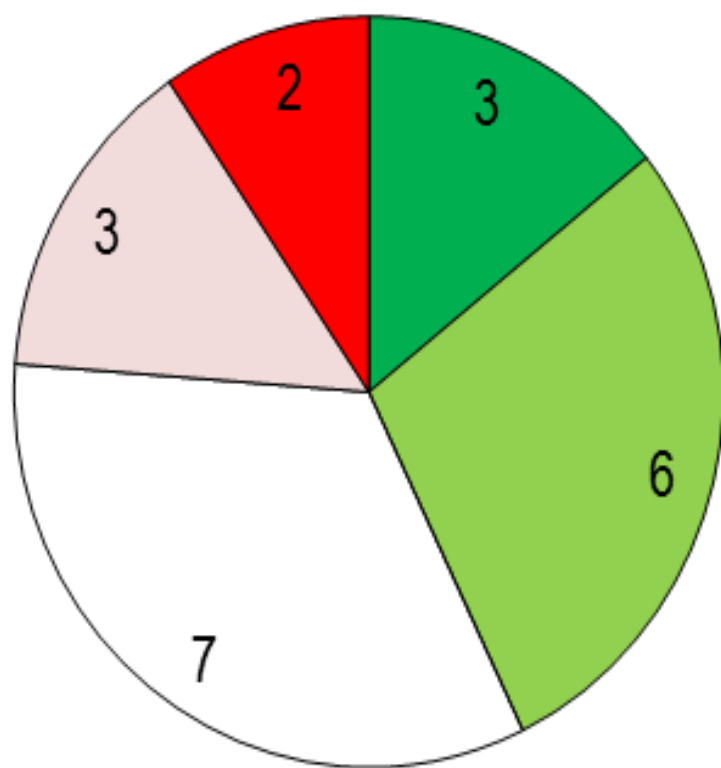
Add no new structures

Community-led retreat

- to address short-term risk not addressed by dune enhancement & long-term sea level rise risk



OPTION 3: MAINTAIN STRUCTURES



■ Strongly agree

■ Agree

□ See pluses & minuses -
go with group

■ Disagree

■ Strongly disagree

Option 1: Protect Properties

Option 2: Buy Time

Option 3: Maintain Structures

**Option 4: Soft Management &
Community-led Retreat**

Stop protection structure maintenance

- leave to degrade
- remove if become a hazard

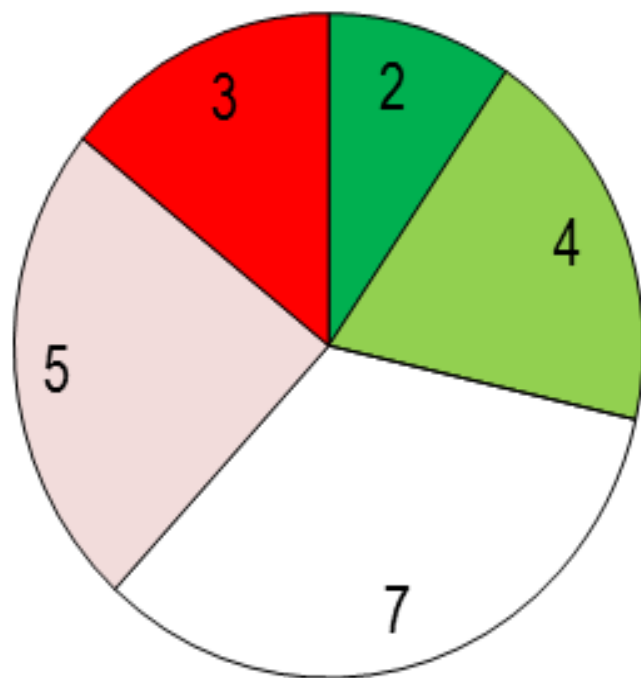
Dune enhancement

Community-led retreat

- to address short-term risk
not addressed by dune enhancement
& long-term sea level rise risk



OPTION 4: SOFT MANAGEMENT & COMMUNITY-LED RETREAT



■ Strongly agree

■ Agree

□ See pluses & minuses -
go with group

■ Disagree

Option 1: Protect Properties

Option 2: Buy Time

Option 3: Maintain Structures

**Option 4: Soft Management &
Community-led Retreat**

Option 5: Retreat Focus

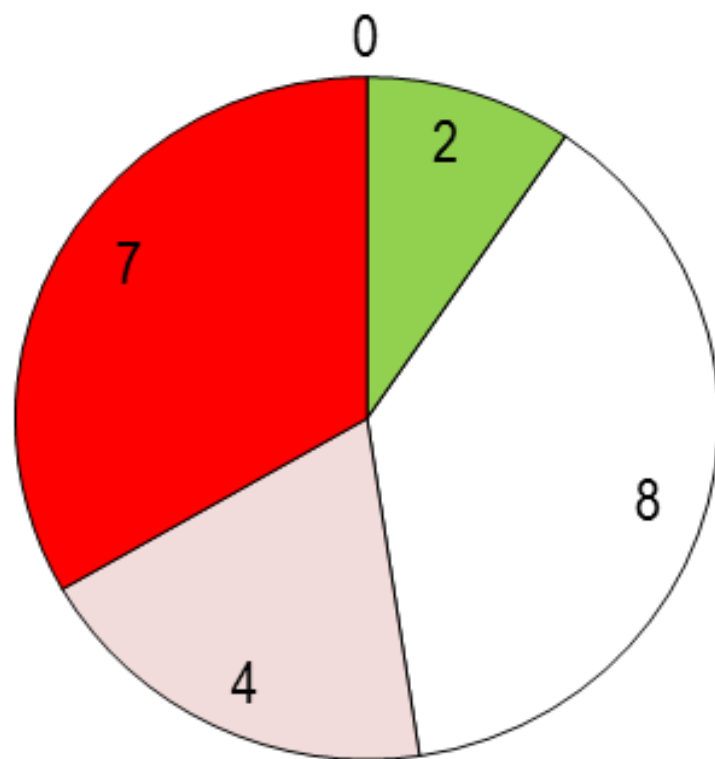
Relocate & remove assets away from harm
before situation could become critical

Retreat may be forced through regulation

Possibly incentivised by
financial instruments



OPTION 5: RETREAT FOCUS



■ Strongly agree

■ Agree

□ See pluses & minuses -
go with group

■ Disagree

■ Strongly disagree

Overview – 5 Options

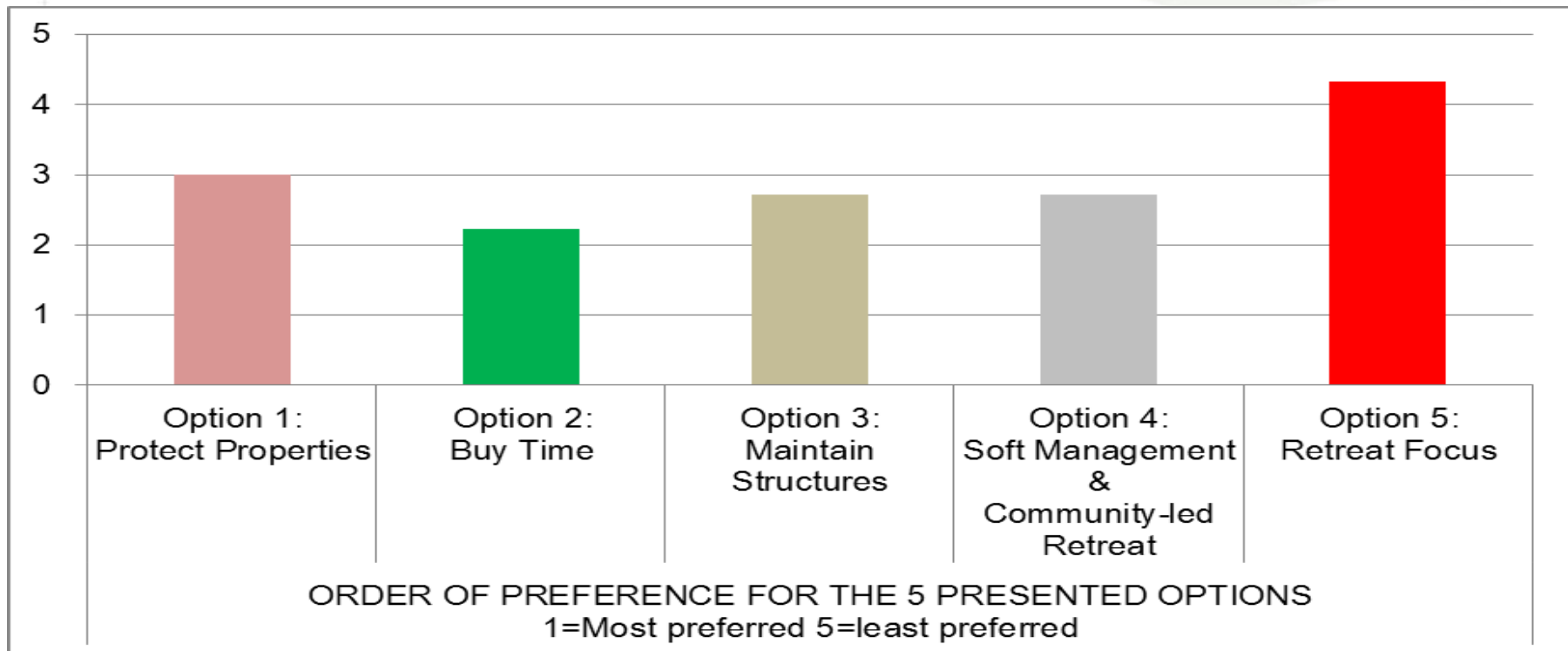
- Buy Time is most preferred option AGREED
- Most respondents were in agreement with, or open to, protection works being used in some areas AGREED
- There is a split in views re Soft Management & Community-Led Retreat NOT AGREED NEEDS CLARIFICATION
- Soft Management AGREED
- Retreat Focus is least preferred option AGREED



Average Order of Preference for each Option

1 =Most preferred 5= Least preferred

- Option 2: Buy Time has strongest average preference
- Followed by Options 3 & 4 – Maintain Structures and Soft Management & Community – Led Retreat
- Option 5: Retreat Focus is least preferred option



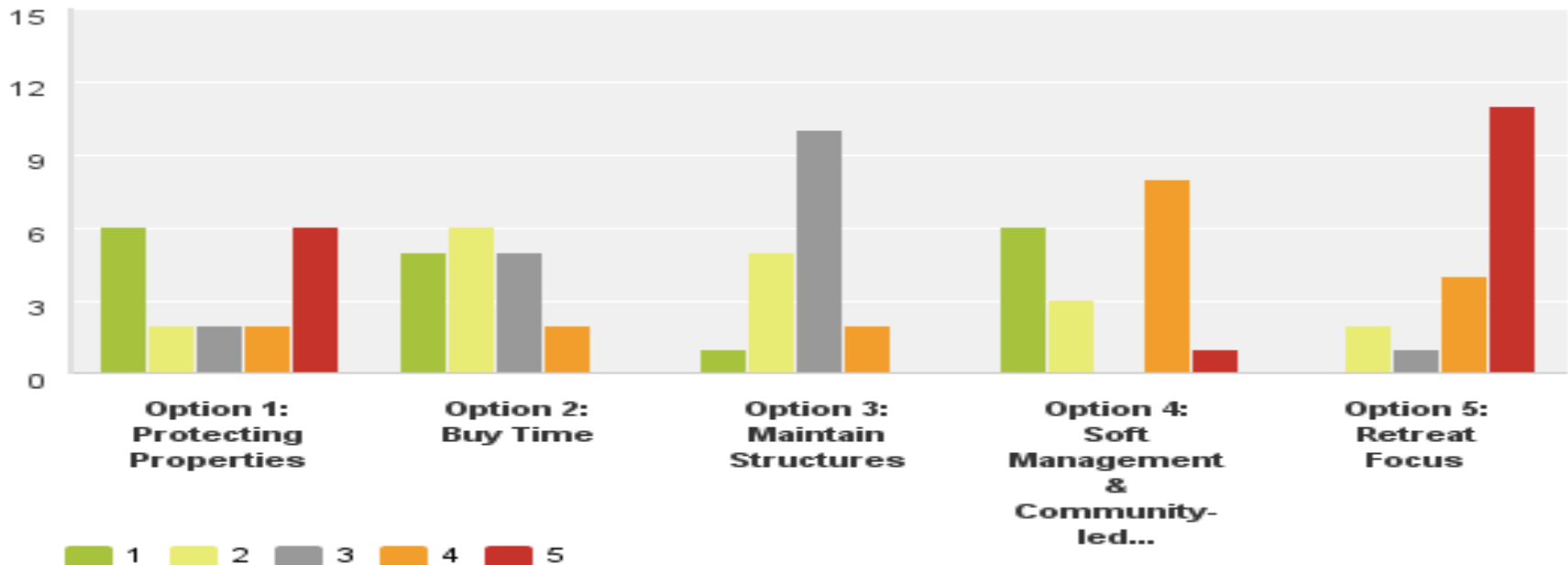
Range of Responses in Ranking each Option

1 =Most preferred

5= Least preferred

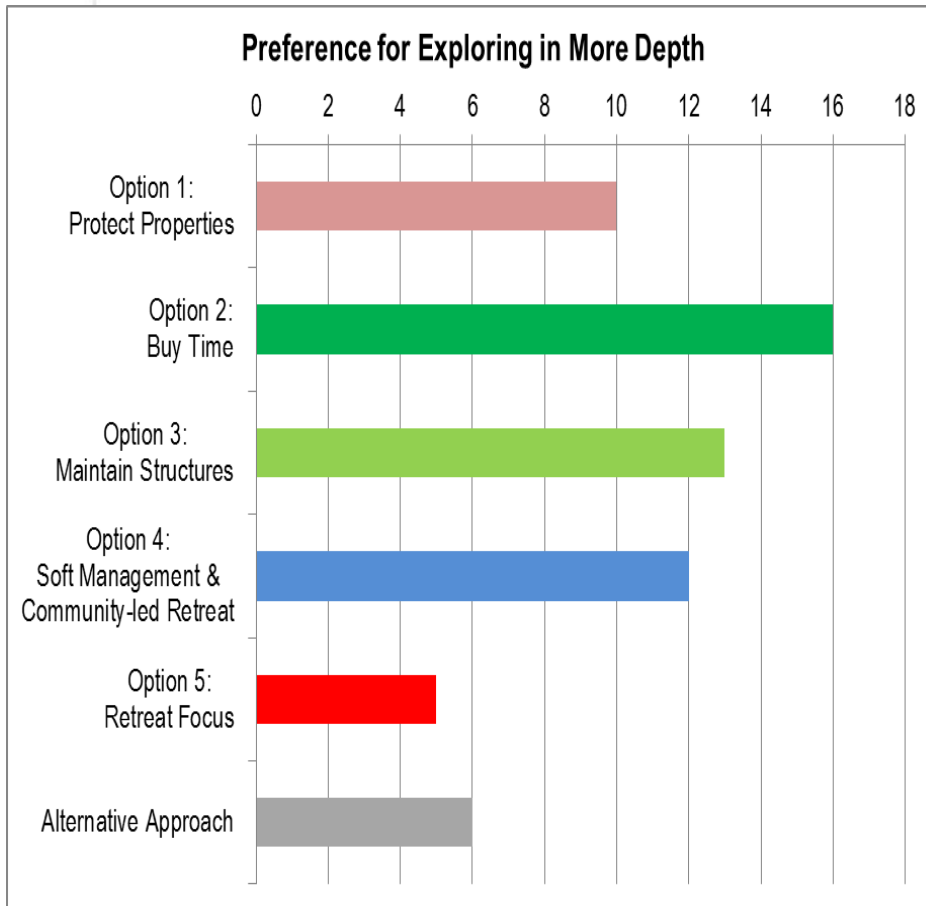
Chart gives more detail on spread of preference rankings → average ranking

- Most ranked Buy Time as 1st, 2nd, or 3rd preference - none as least preferred
- Most ranked Retreat Focus as 4th, or 5th preference - none as most preferred
- Options 3 & 4 had same average response, but:
 - Most ranked Maintain Structures as 1st, 2nd, or 3rd preference - none as least preferred
 - Split in ranking of Soft Management & Community – Led Retreat.
- Protecting Properties shows a clear split in level of preference.



Range of Responses in Ranking each Option

1 =Most preferred 5= Least preferred



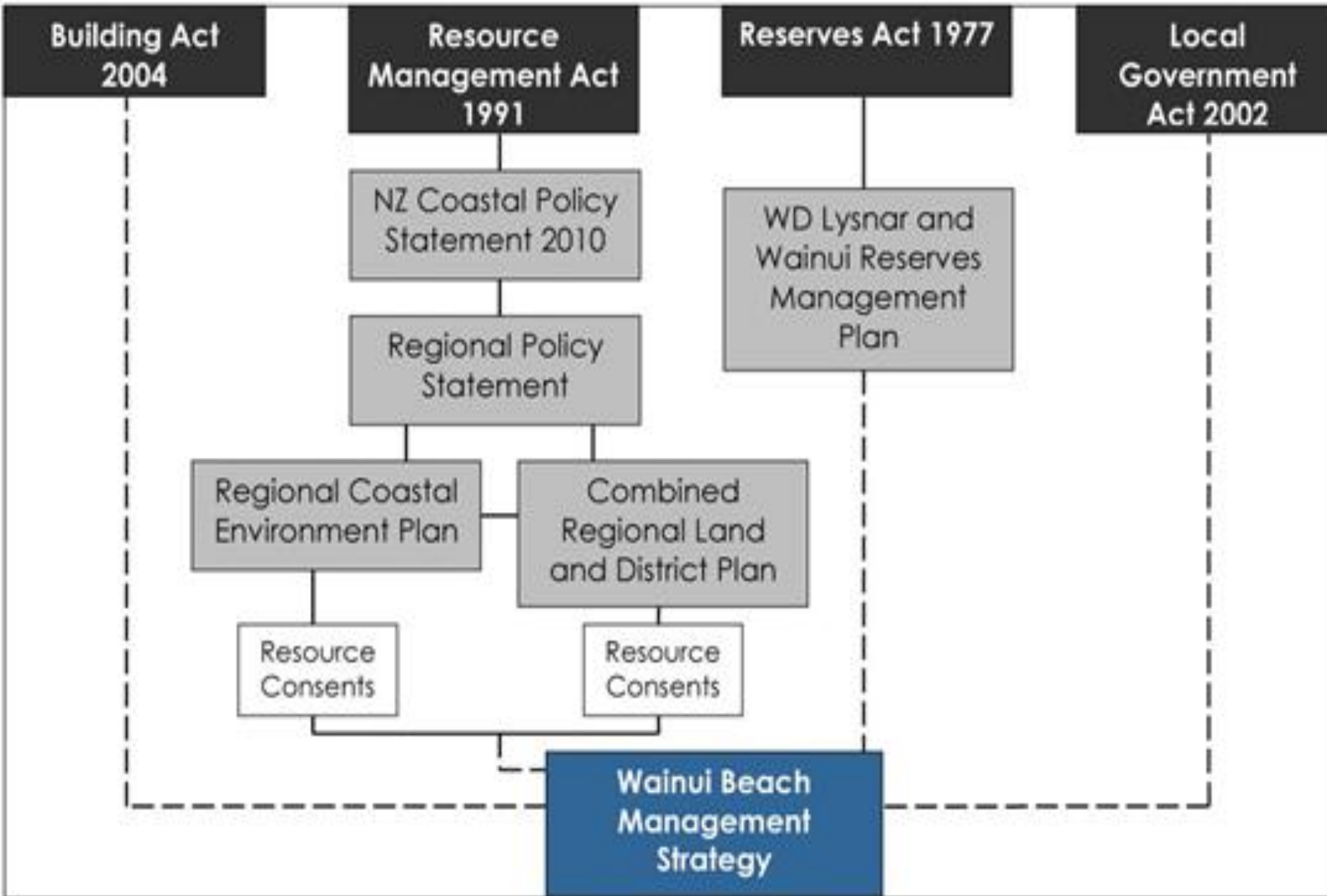
- Strongest support for exploring in more depth the option of 'buying time'
- Least support for exploring retreat in more depth.

Overview alternative approaches preferred to be explored:

- Mixture of these strategies
 - considered approach - time for "wait & see" & can adapt as more known
- Comprehensive mixed option
 - bold evidence-based dune restoration & enhancement
 - temp hard protections where essential - set back & buried on private land - & around stream mouths
 - retreat or set back of buildings where necessary
- Dune enhancement to restore natural defences; development restrictions in hazard zones with criteria; temp protection structures; Council investigating long term retreat mechanisms



Statutory & Policy Framework



Range of Tools - 1

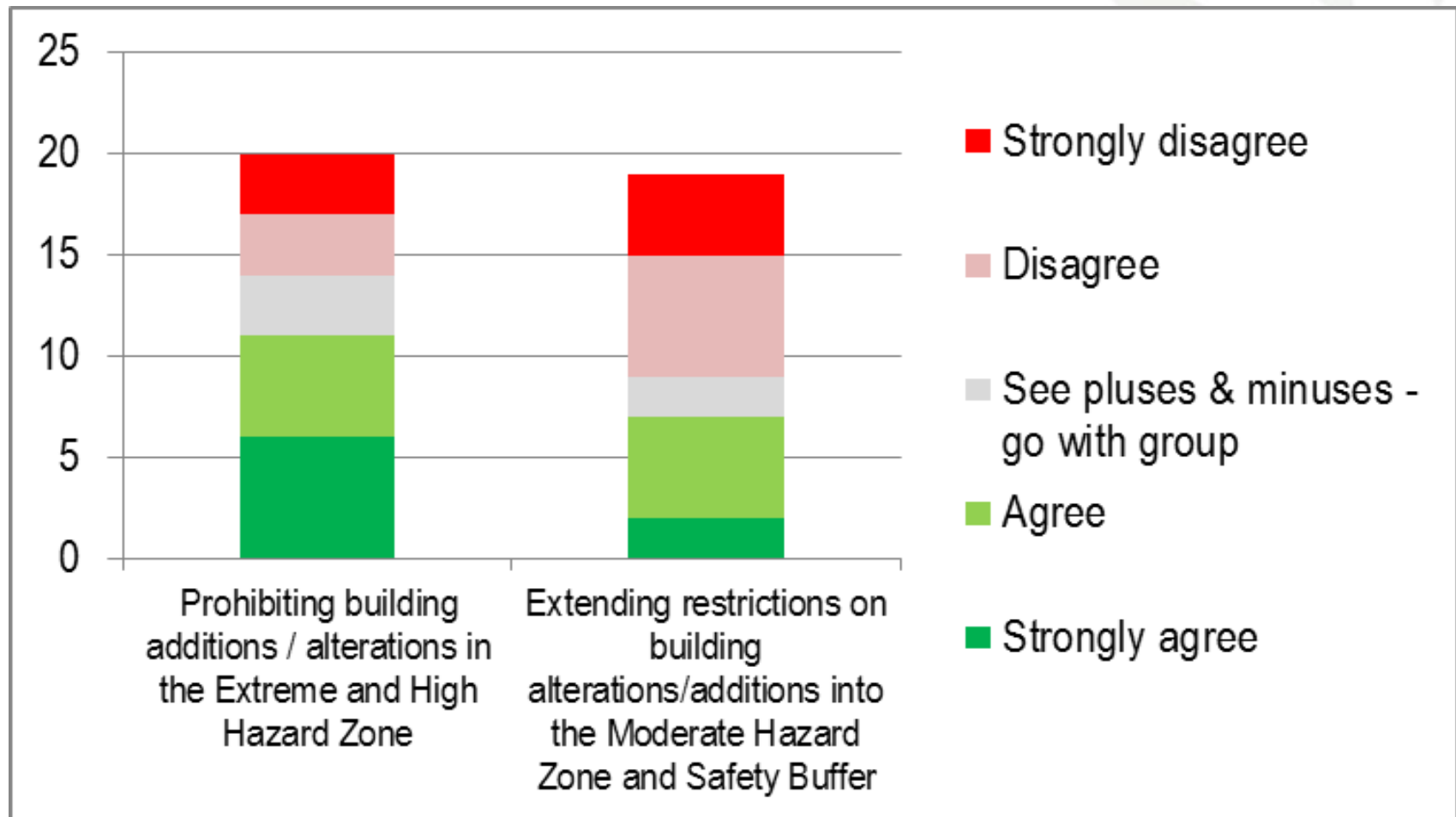
Regulatory Options

- Restricting additions/alterations
- Restricting location of new buildings
- Designing for relocatability
- Forced Retreat options
- Restricting subdivision to create additional residential lots
- Restricting construction of hard protection works
- Covenants



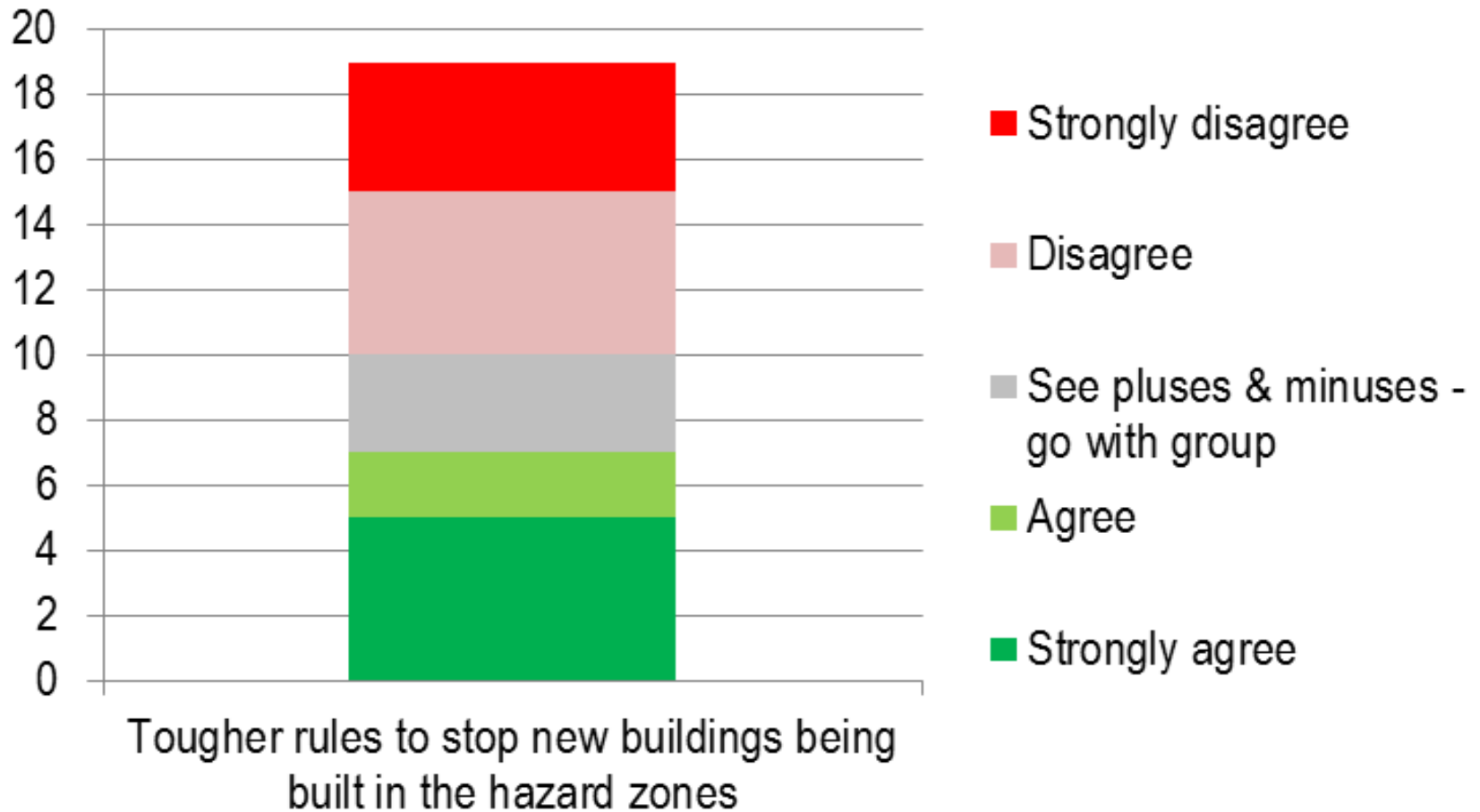
Regulatory Tools:

(i) Restricting Building Additions/Alterations



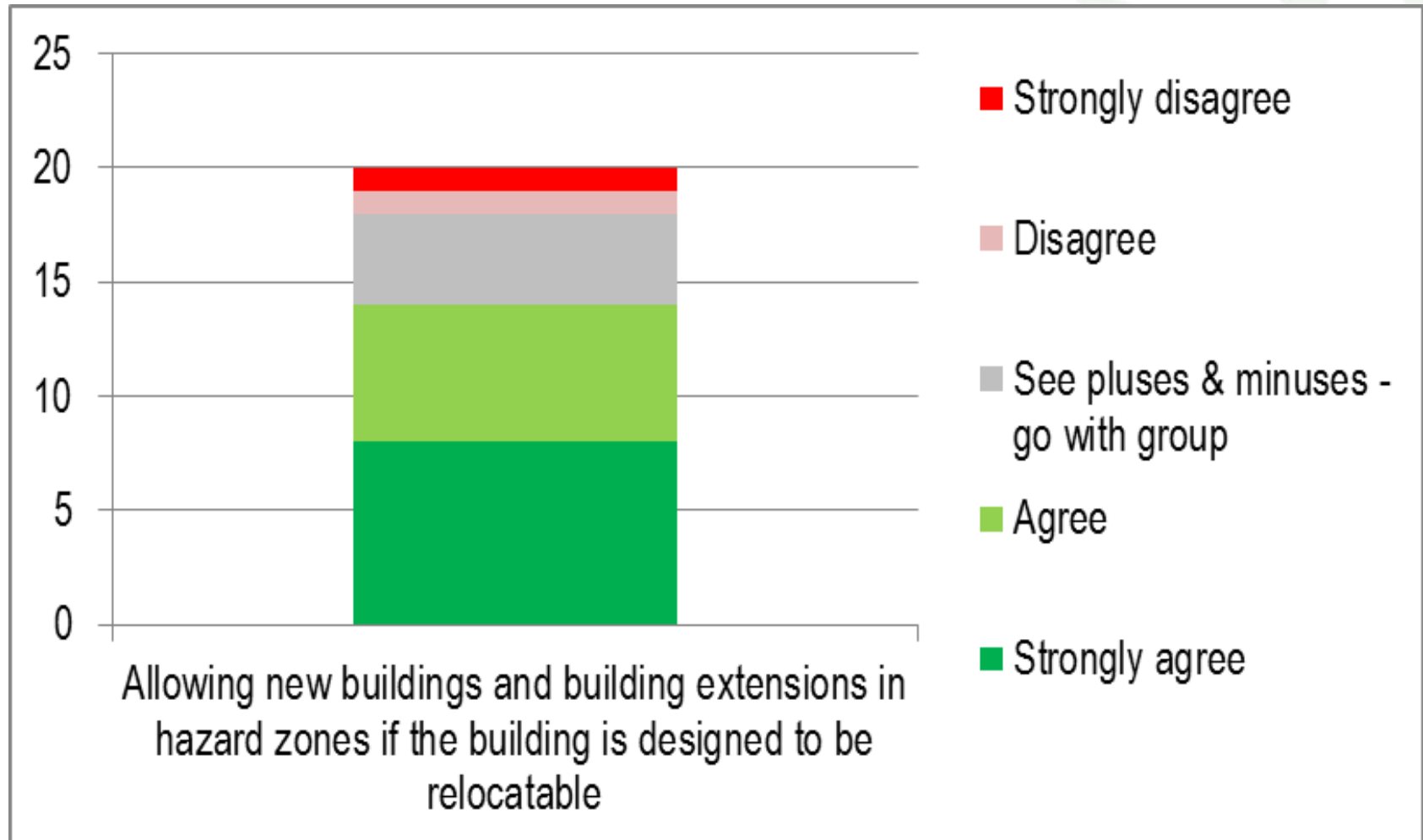
Regulatory Tools:

(ii) Restricting new buildings



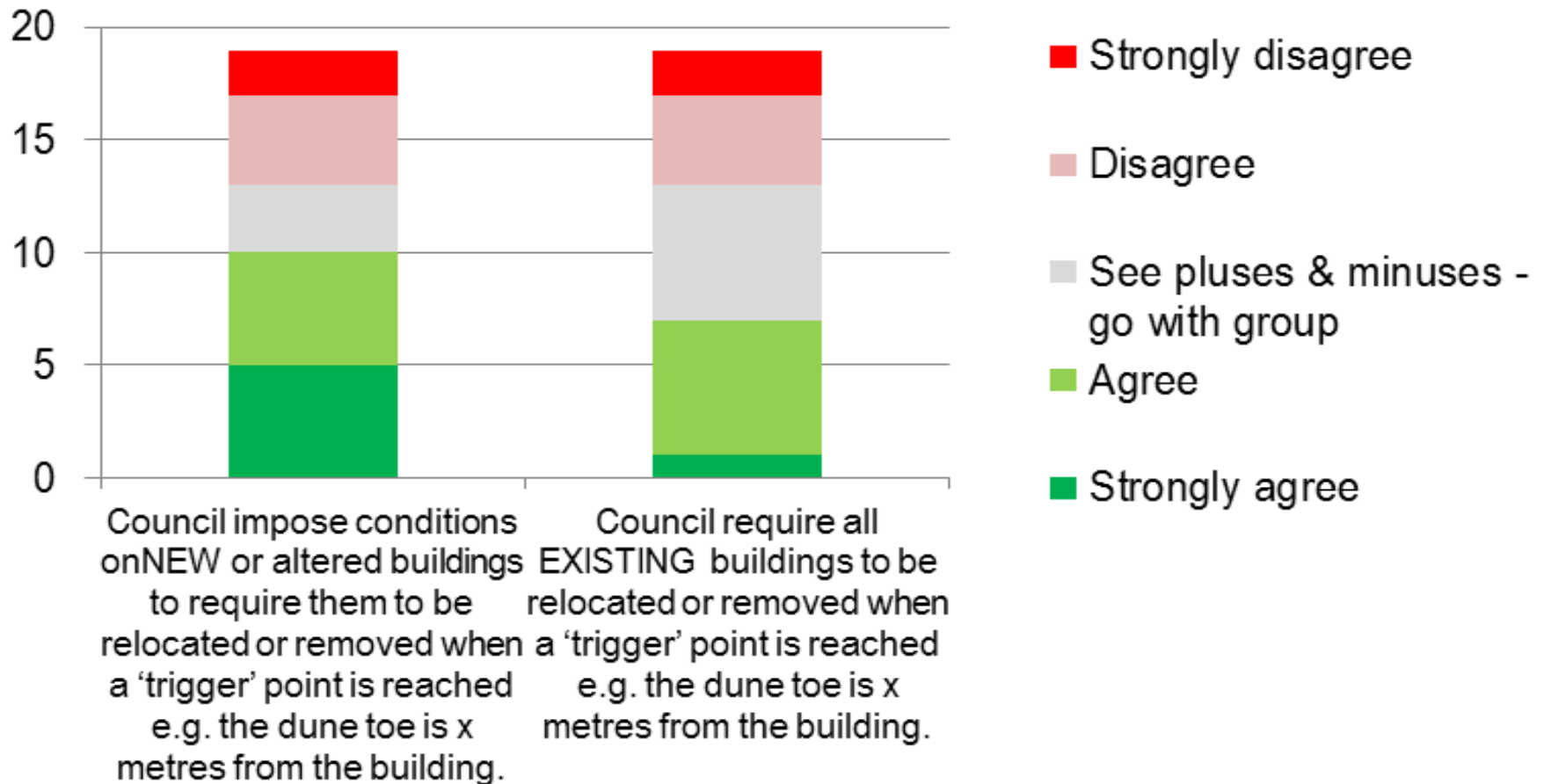
Regulatory Tools:

(iii) Designing for Relocatability



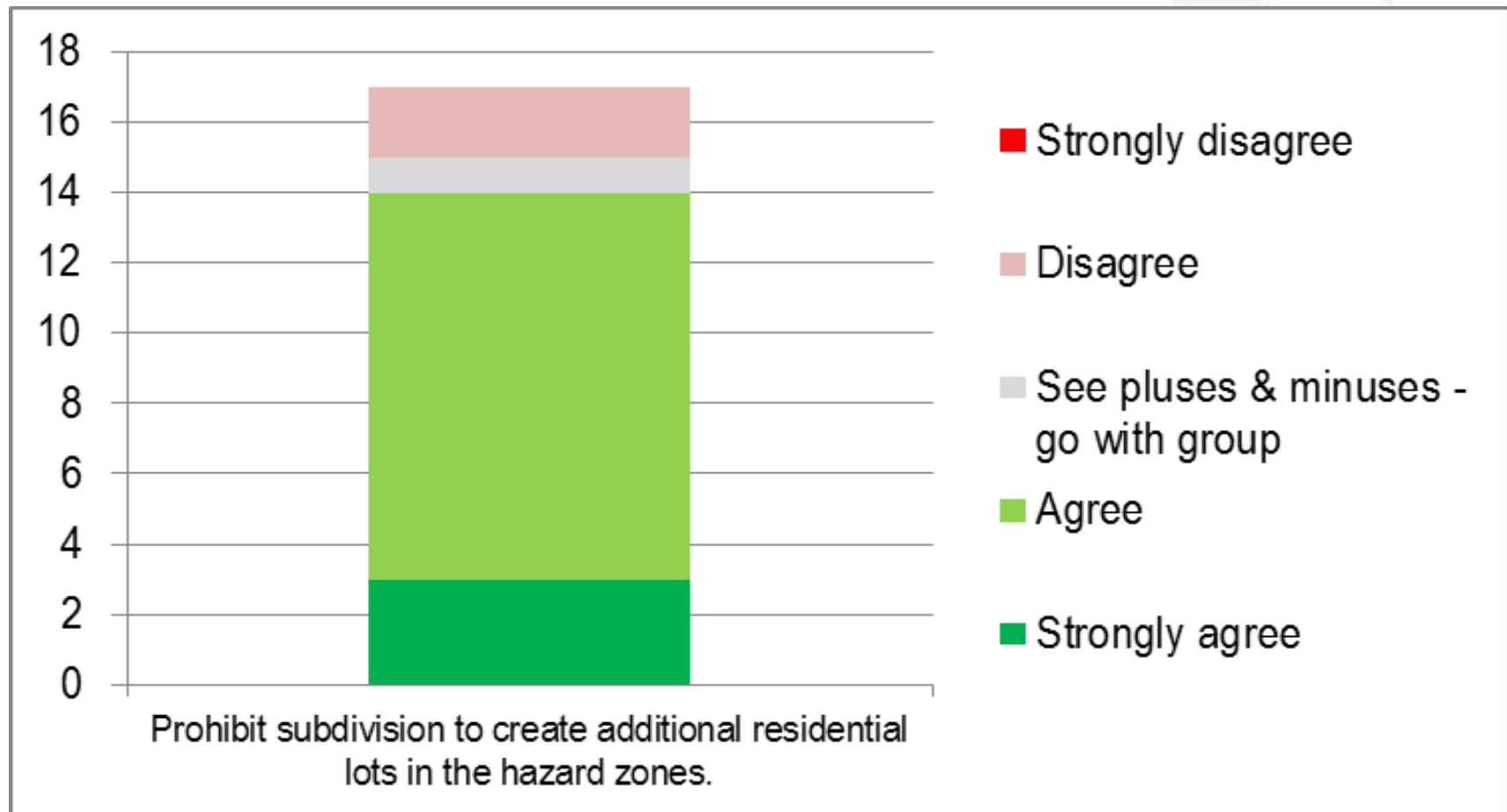
Regulatory Tools:

(iv) Forced Retreat



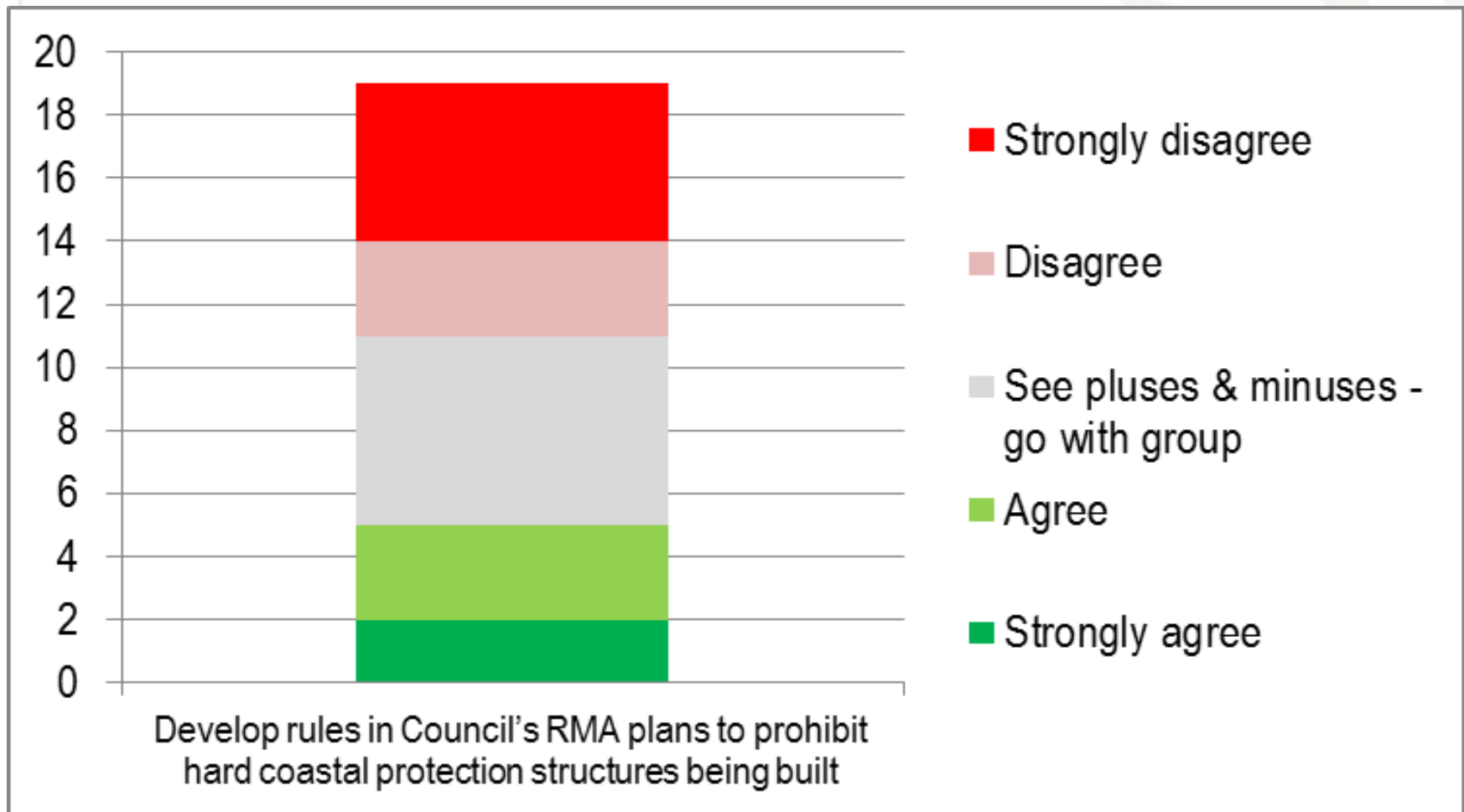
Regulatory Tools:

(v) Restricting Subdivision



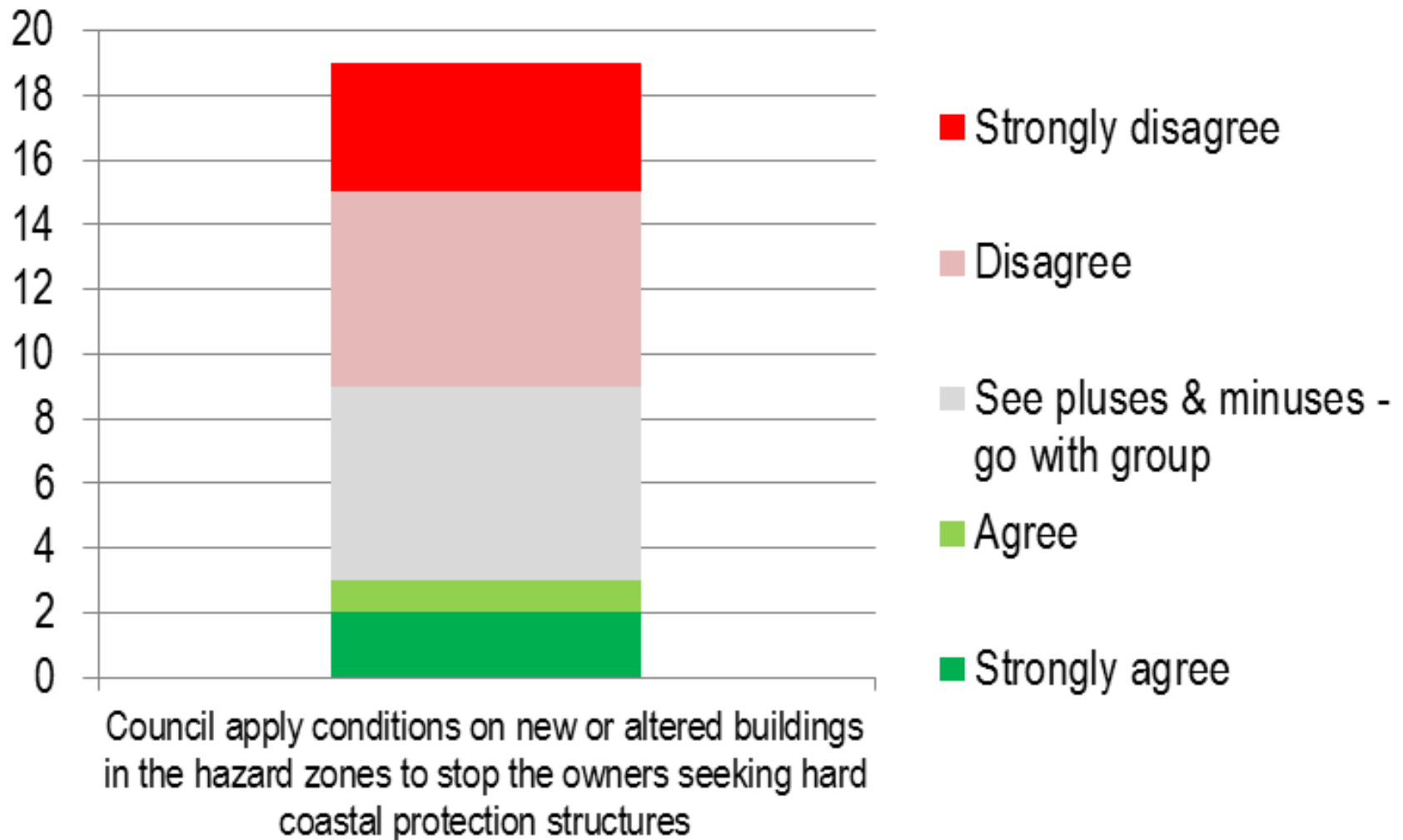
Regulatory Tools:

(vi) Prohibiting Protection Works



Regulatory Tools:

(vii) Covenants



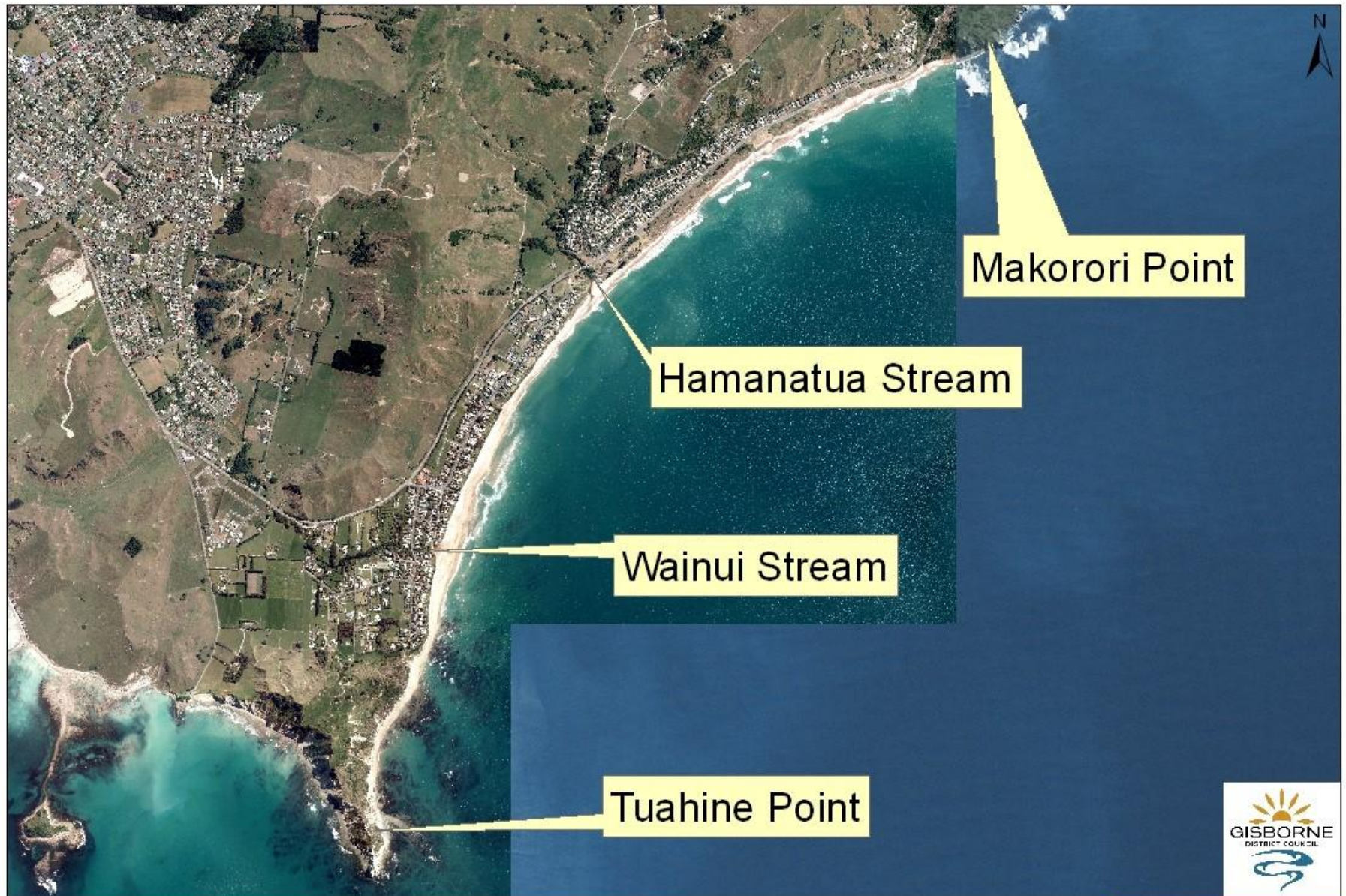
KEY:
 ✓ Most in agreement with, or +/-
 X Most not in agreement with, or +/-
Split Level of agreement divided
Split → ✓ Agreement divided with more agreeing
Split → X Agreement divided with more not agreeing

Overview

- Most in agreement with restricting subdivision AGREED
- Most in agreement with designing for relocatability AGREED
- Most in agreement with, or open to, restricting building additions & alterations, in Extreme & High Hazard Zones NOT AGREED
- Covenants have lowest level of responses in agreement AGREED

Overview Agreement/Disagreement Signals	(KEY opposite)
(i) Restricting Building Additions/Alterations	Extreme/high ✓ Mod split → X
(ii) Restricting new buildings	Split → X
(iii) Designing for Relocatability	✓
(iv) Forced Retreat	New ✓ Existing Split → ✓
(v) Restricting Subdivision	✓
(vi) Prohibiting Protection Works	Split → X
(vii) Covenants	X

WBMS Study Area



Range of Tools - 2

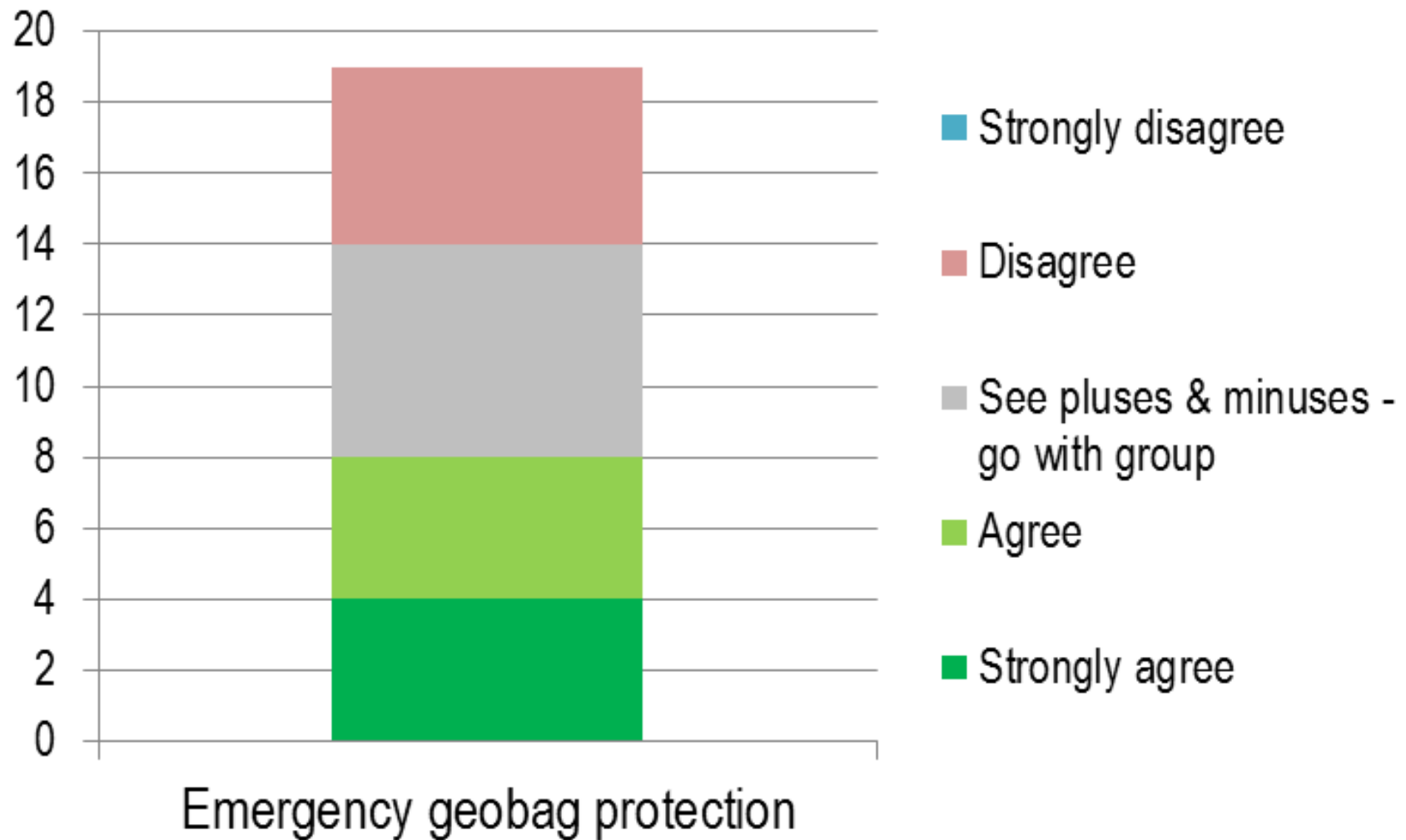
Hard Protection Structures

- Emergency geobag protection
- Cobble berm revetment
- Rock revetment
- Training groynes



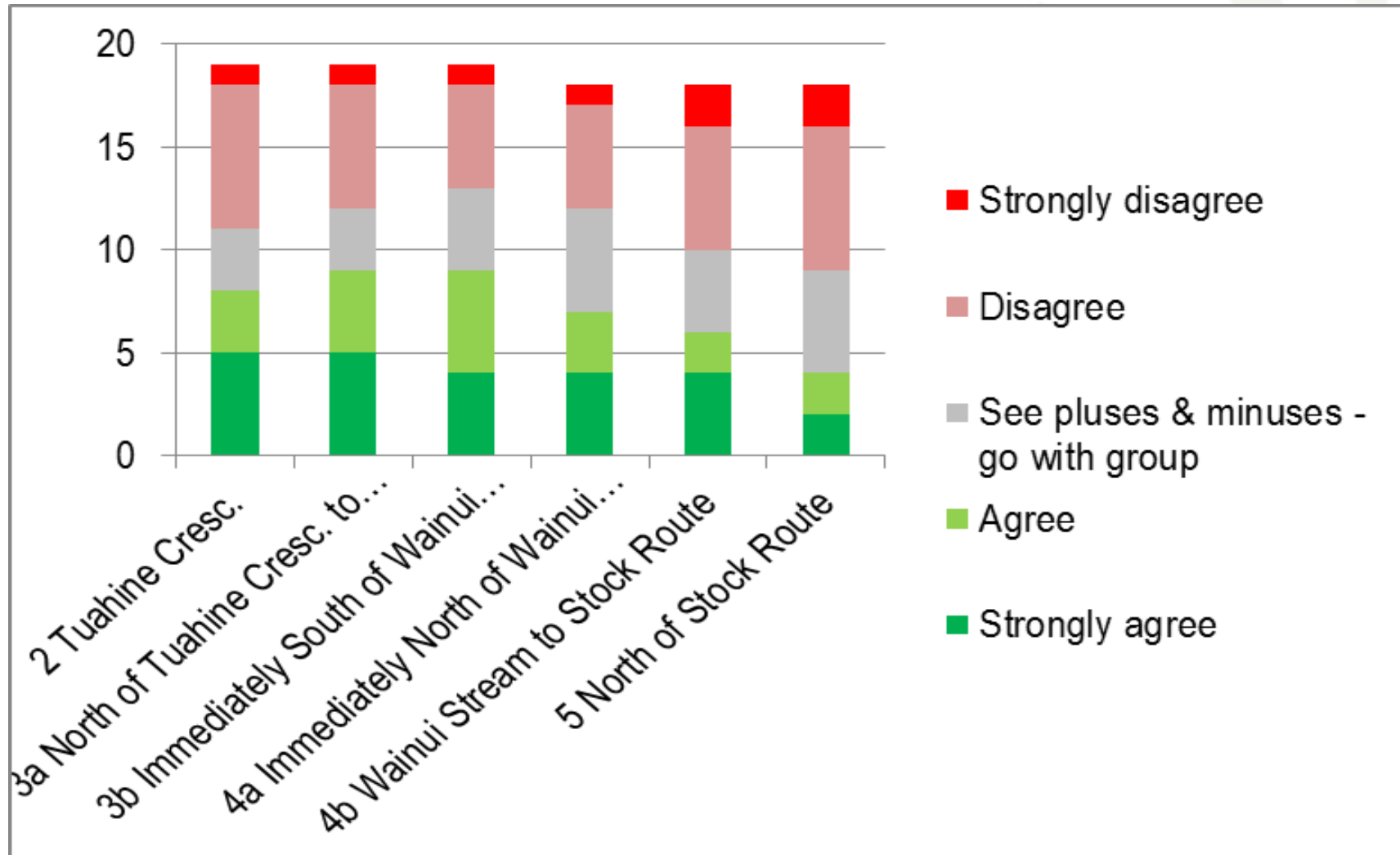
Hard Protection Structures

(i) Emergency geobag



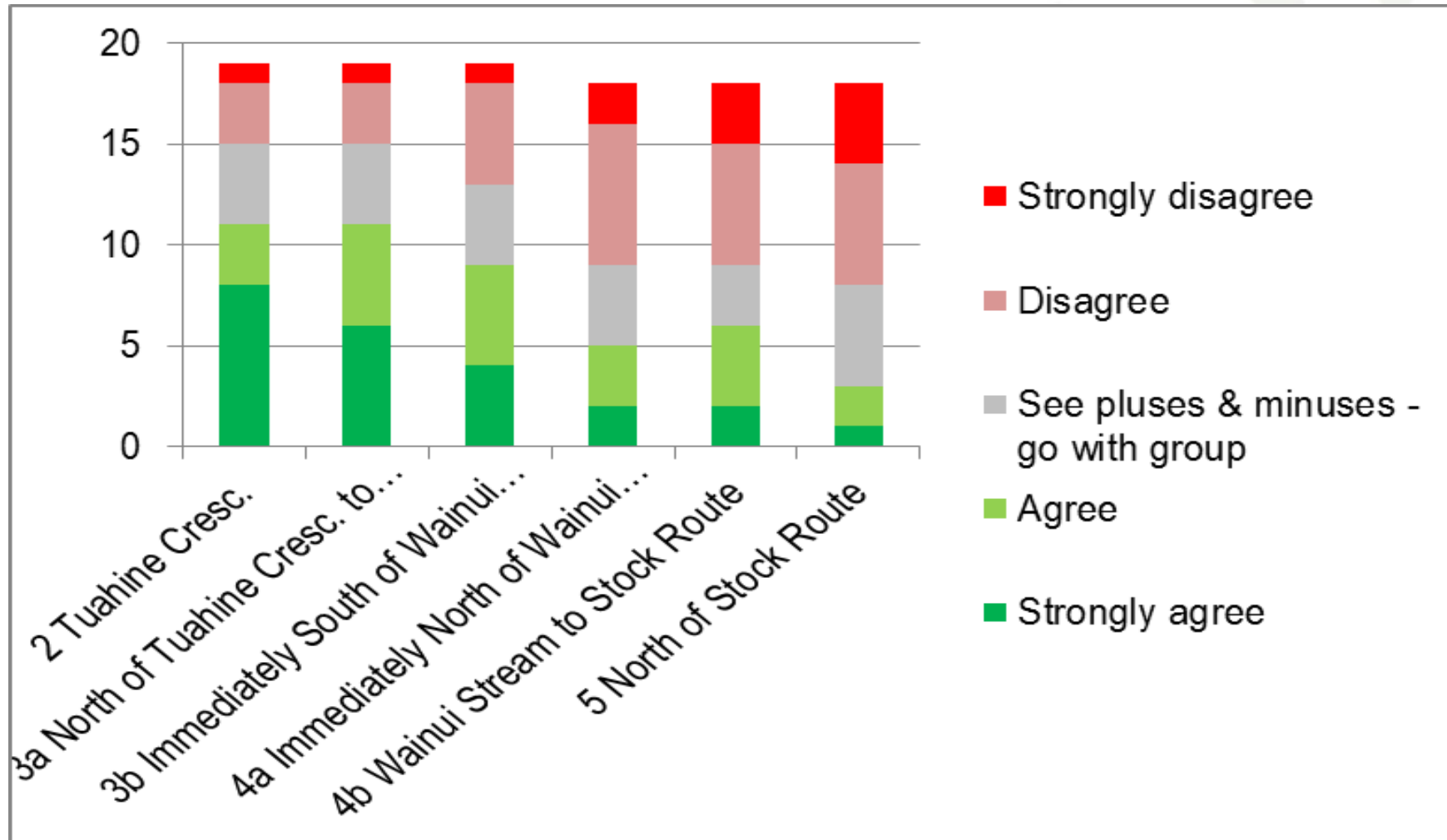
Hard Protection Structures

(ii) CobbleBerm Revetment



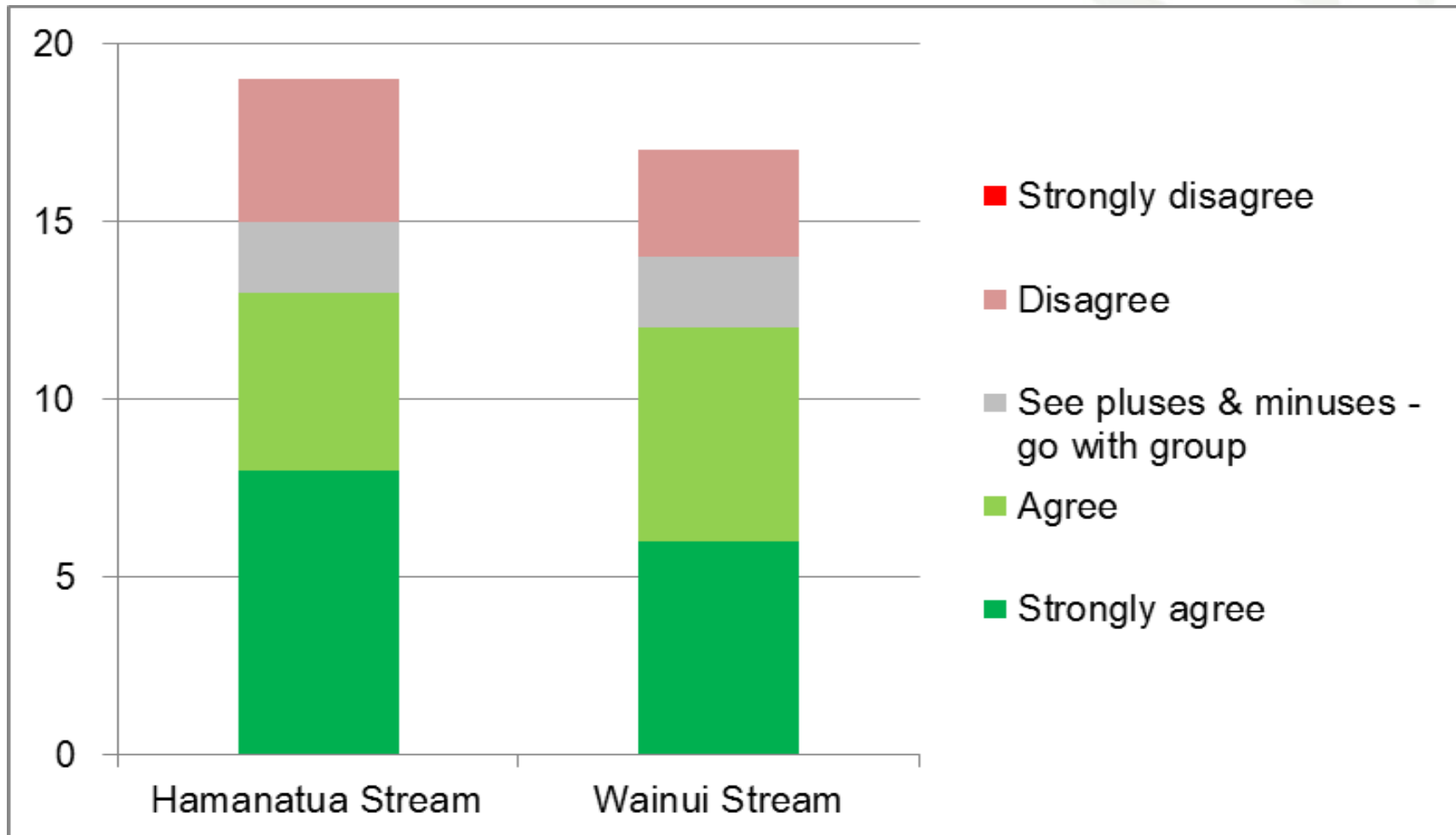
Hard Protection Structures

(iii) Rock Revetment



Hard Protection Structures

(iv) Training Groynes



KEY:
✓ Most in agreement with, or +/-
X Most not in agreement with, or +/-
Split Level of agreement divided
Split → ✓ Agreement divided with more agreeing
Split → X Agreement divided with more not agreeing

From the Responses

- High level of agreement with training WALLat Hamanatua Stream & Wainui Stream AGREED
- High level of agreement, or willingness to consider, rock revetment Tuahine Crescent, North of Tuahine Crescent & immediately south of Wainui Stream AGREED
- High level of disagreement with cobble berm revetment or rock revetment north of Stock Route AGREED

Overview Agreement/Disagreement Signals (KEY opposite)	
(1) Emergency Geobag	Split → ✓
(ii) Cobble Berm revetment	
▪ 2	Split
▪ 3a, 3b	Split → ✓
▪ 4a	Split
▪ 4b	Split → ✓
▪ 5	X
(iii) Rock Revetment	
▪ 2, 3a, 3b	✓
▪ 4a	X
▪ 4b	Split → X
▪ 5	X
(iv) Training Groynes	✓

Range of Tools - 3

- **Beach Nourishment**

Import sand from outside beach system to increase volume stored on beach & dunes

- **Dune enhancement**

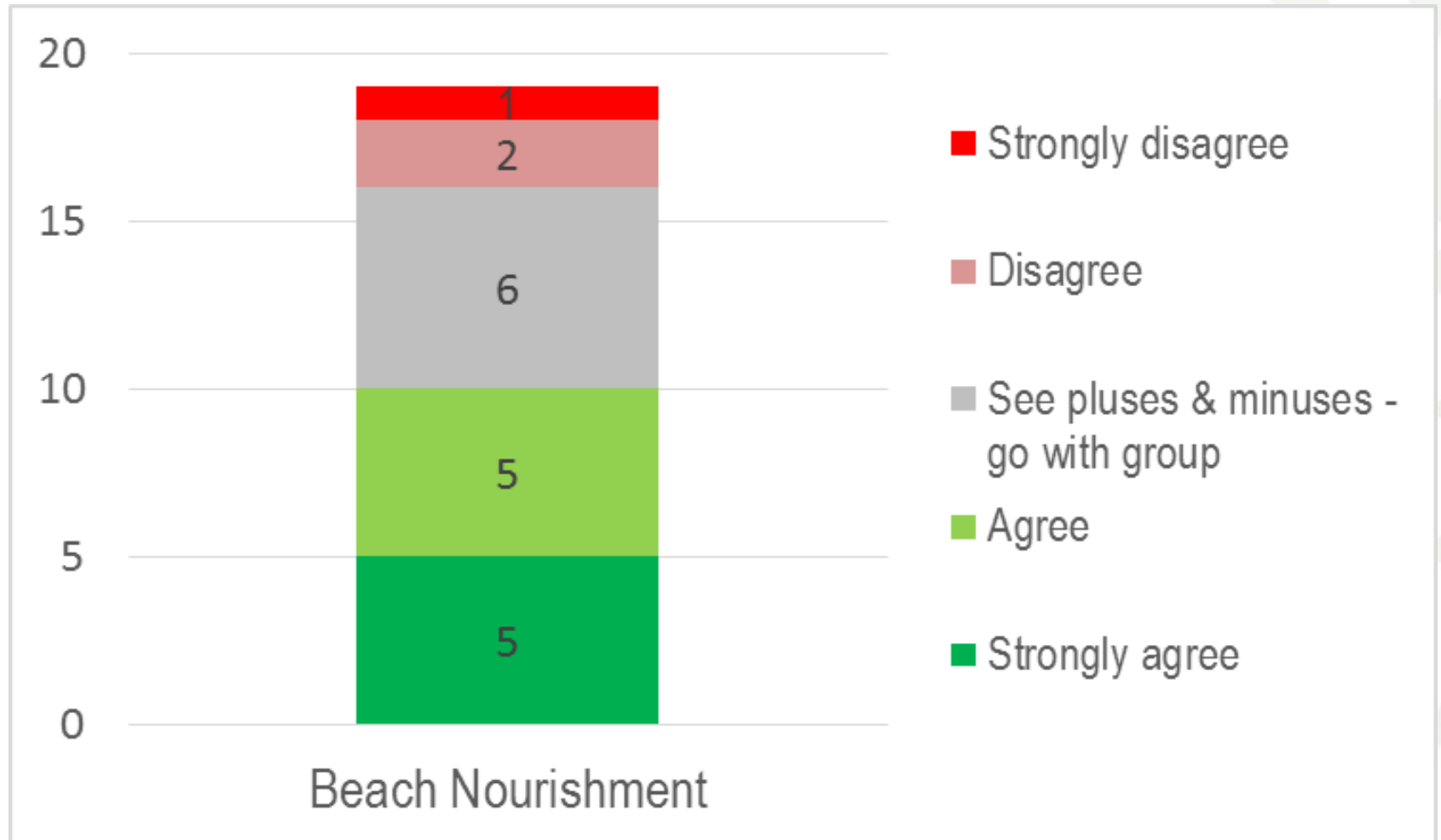
Encourage dunes to build (plant sand trapping species, weed & access control, reshape contour) to provide sand store for beach system & erosion buffer for property behind

- **Beach scraping**

Move sand from intertidal zone to dune or upper beach by mechanical means (diggers)



Beach Nourishment AGREED



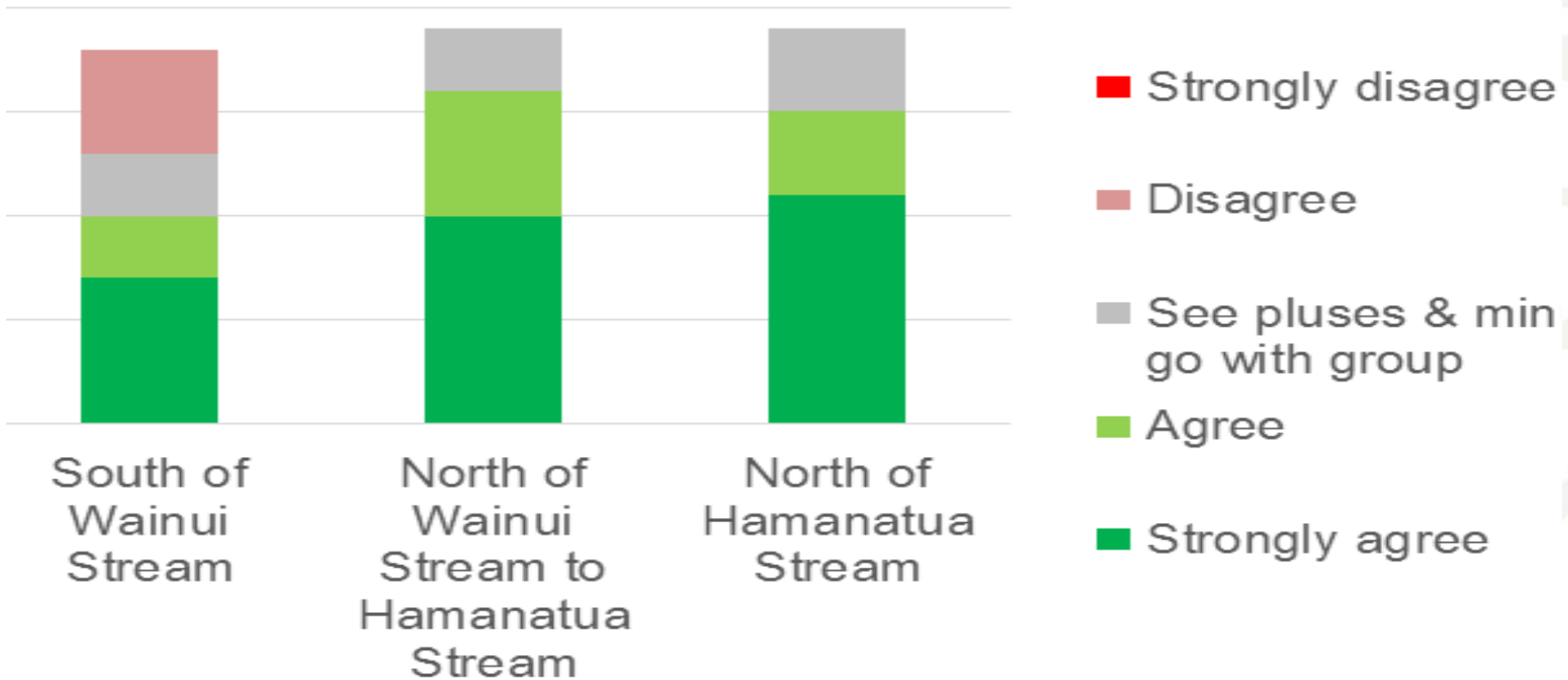
Dune Enhancement

Overview of Agreement/Disagreement Signals

South of Wainui Stream – **Split** → ✓ AGREED

North of Wainui Stream to Hamanatua Stream ✓ AGREED

North of Hamanatua Stream ✓ AGREED



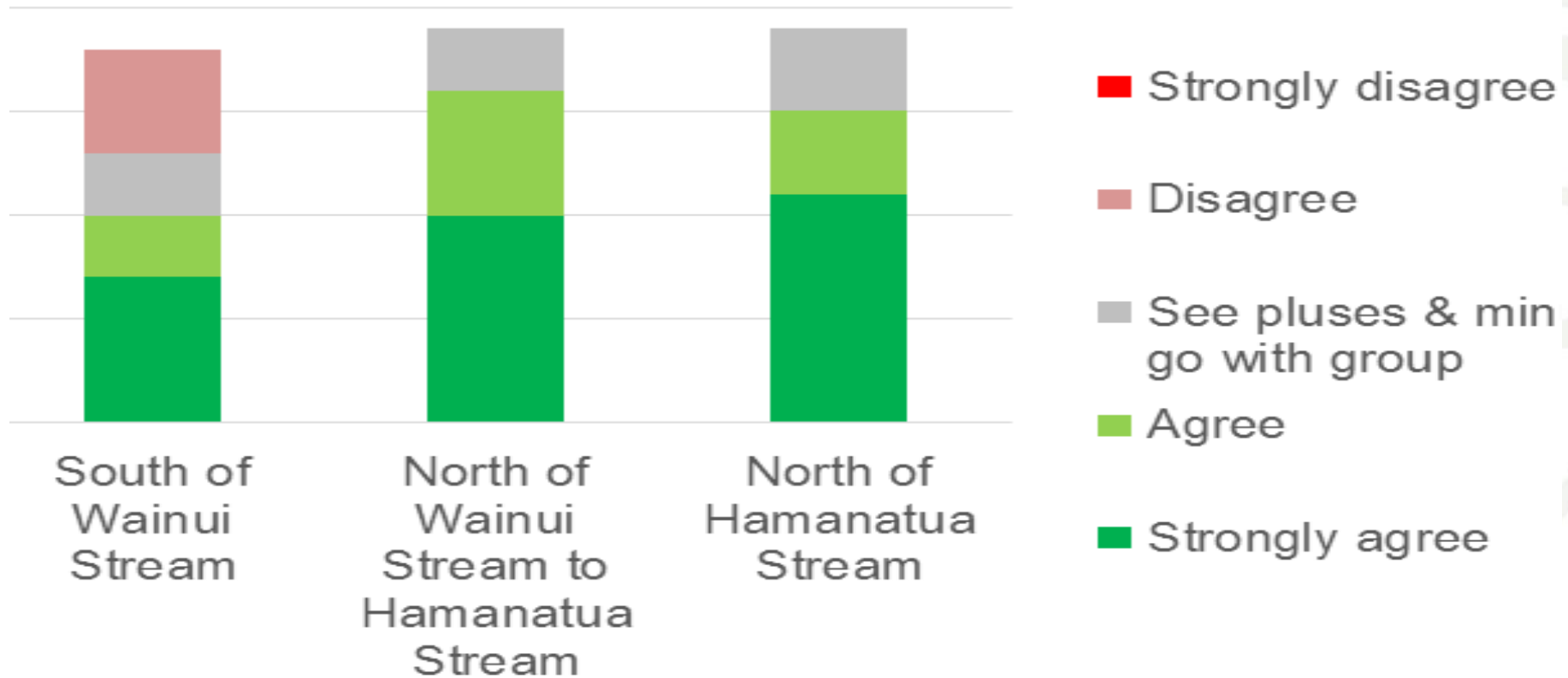
Beach Scraping

Overview of Agreement/Disagreement Signals

South of Wainui Stream – **Split** AGREED

North of Wainui Stream to Hamanatua Stream ✓ AGREED

North of Hamanatua Stream ✓ AGREED



Range of Tools - 4

Financial instruments

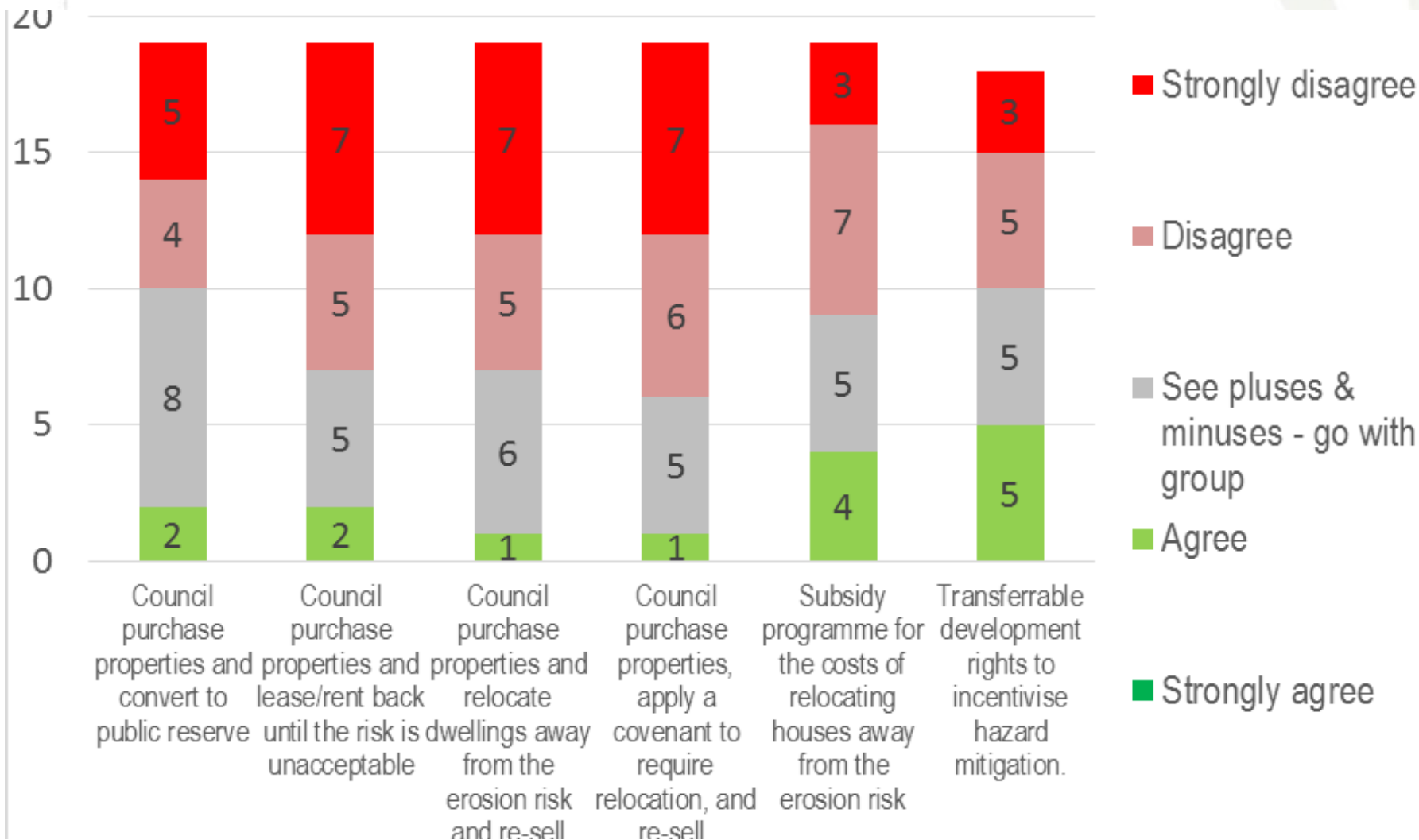
- Covert properties to public reserve
- Purchase properties
& lease/rent
& relocate dwellings
& covenant & sell
- Subsidies for relocation
- Pre-paid relocation fund
- Transferable development right



Financial Instruments

Overview of Agreement/Disagreement Signals

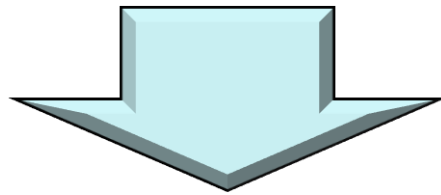
- Mainly not supported AGREED



Key Feedback Outcomes?

In small work groups:

- What are the key outcomes from the feedback?
 - Vision?
 - Strategy Options?
 - Tools?
- Write up key points
- Report back to whole group



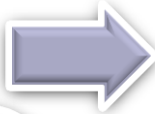
Determine Agreed Outcomes

Council Process & Timeline

May/June

Council Meeting

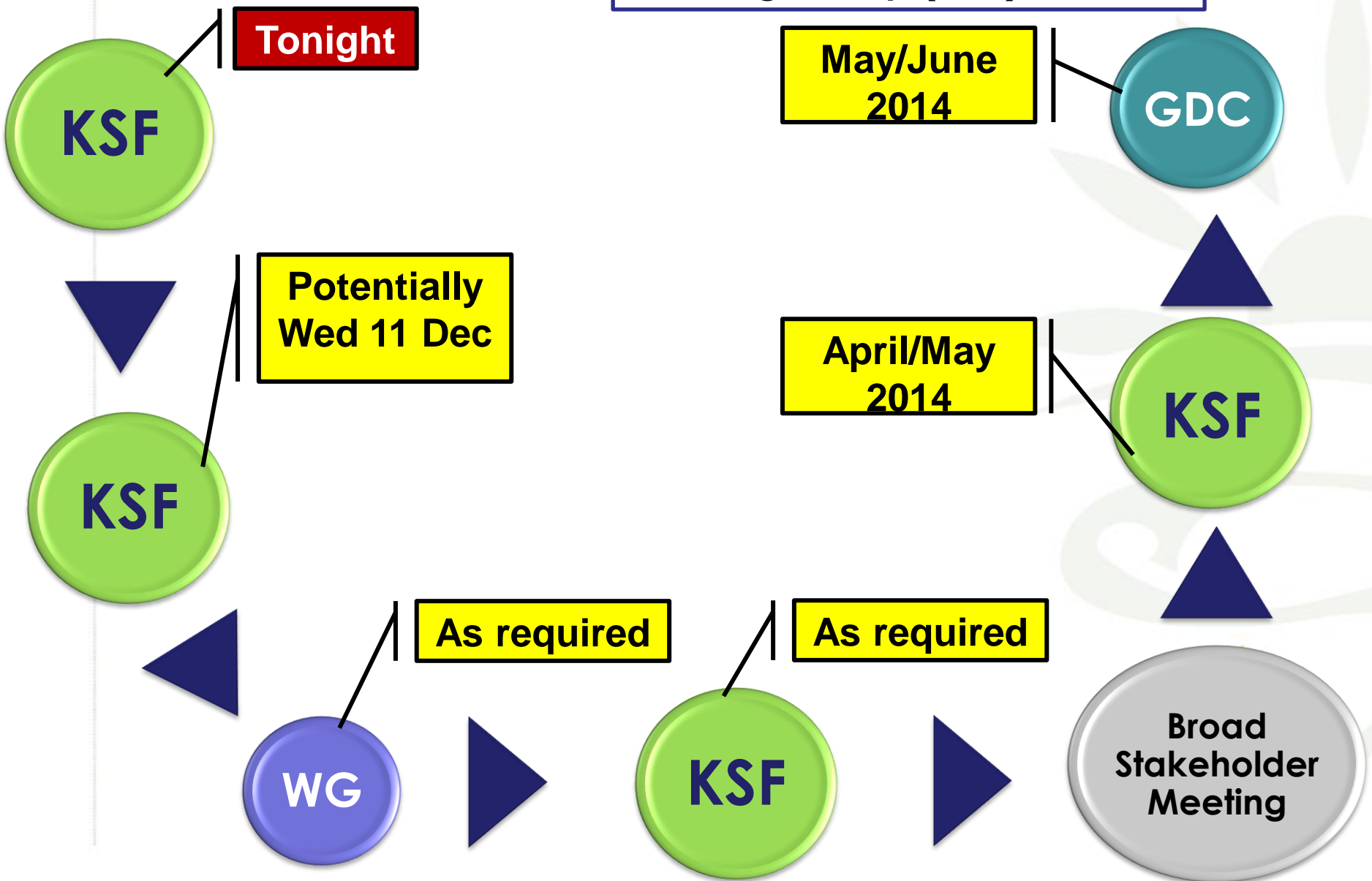
- Considers recommendations
- Council decision re amendments to WBMS



Council

- Communicates Council decision to all stakeholders

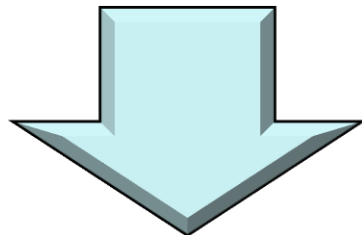
WBMS Process



How do we take this forward?

In small work groups:

- What do you want done next to take this forward
- How should we be communicating with wider stakeholders?
- Write up key points
- Report back to whole group

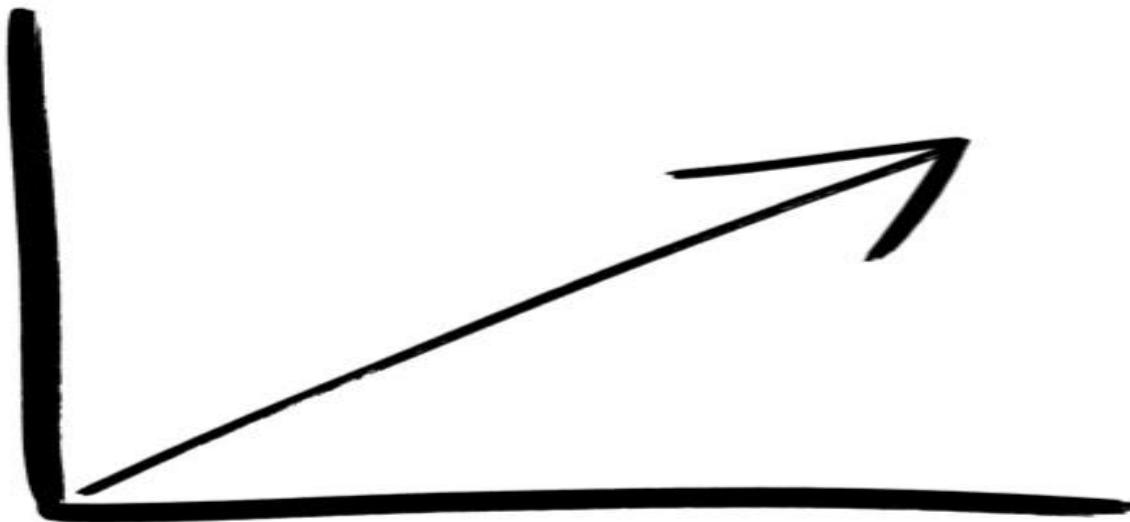


Determine Next Steps



Where to From Here?

- To be determined at KSF meeting



Next Steps?

- To be determined at KSF meeting
- Pencil in potential KSF meeting 6pm Wed 11 Dec

