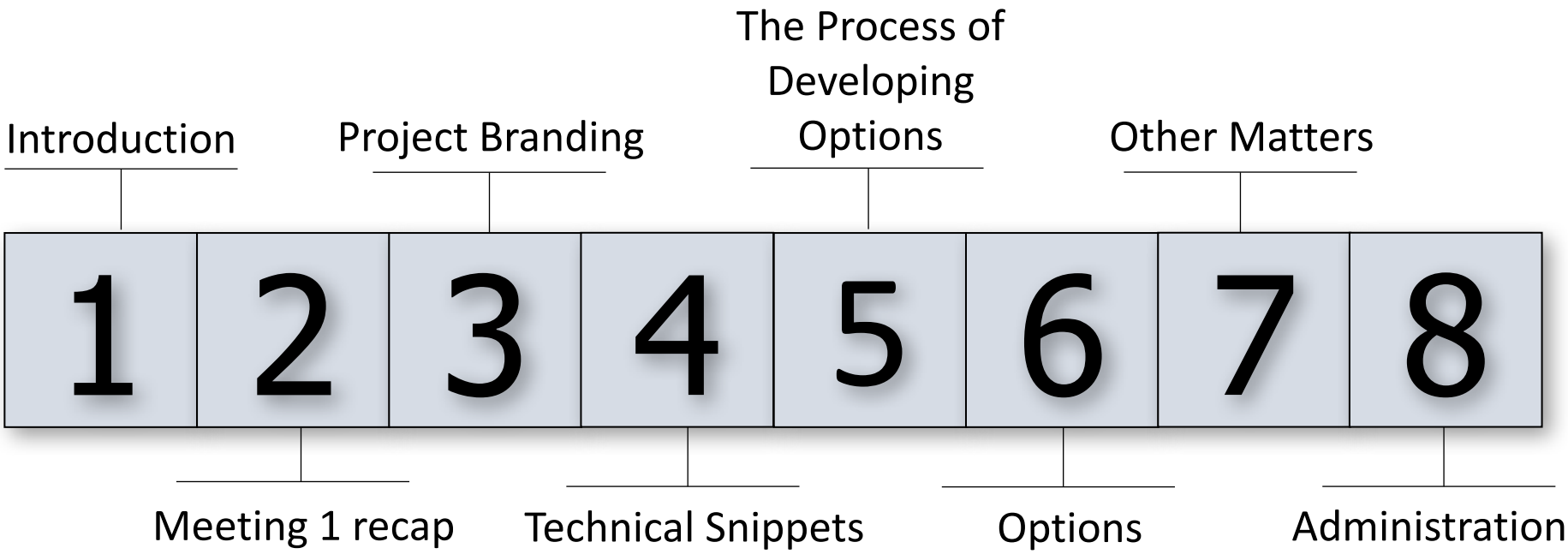
Wairoa Wastewater Scheme Stakeholder Group Meeting

4 May 2017

INTRODUCTION

Outline



RECAP - MEETING 1

- Any corrections to notes
- Stakeholder Group formation questions
- Wairoa's wastewater system questions
- Future of Wairoa's wastewater questions
- Public engagement questions

RECAP - STAKEHOLDER GROUP PURPOSE

Help Council Identify the ***best practicable option*** for wastewater discharge

Help us prepare for Public engagement and consultation

RECAP - WASTEWATER SYSTEM

- Current wastewater system
- Issues with system
- Resource consent process
- What others are doing

RECAP - PUBLIC ENGAGEMENT

We know a range of approaches is needed

We need your input – is our message clear?

What media/medium do we use and when?

PROJECT BRANDING

What do we call the project?

Combined Adolescent Challenge Training Unit Support (CACTUS)

MORNING TEA

TECHNICAL SNIPPETS – WASTEWATER TREATMENT –THE BASICS

Wastewater sources & characteristics

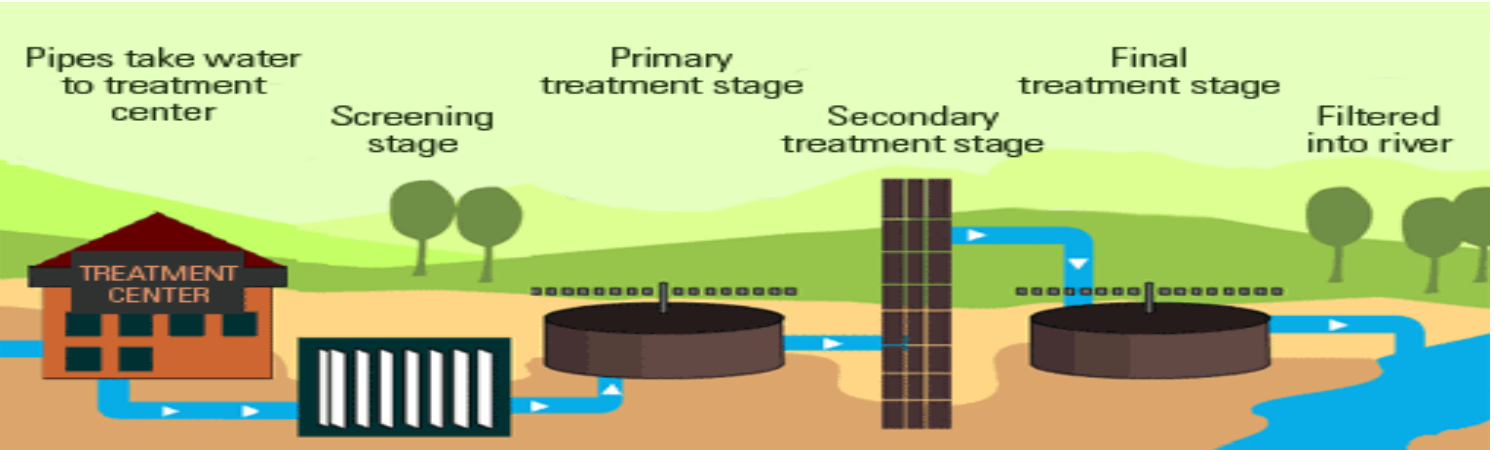
- From houses, industry and community facilities
- Contains stormwater and groundwater

What does treatment do?

- Bugs “eat stuff”
- Makes things more stable

Treatment technology can be used

- Ponds
- High rate plants
- Filters – screens, membranes
- Disinfection – UV, chlorine



TECHNICAL SNIPPETS – RETICULATION

Wastewater underground piping

- 40 km

Gravity or pressurised system

- Wairoa – most gravity, some lift and one rising main

Reticulation divided into catchments

- Areas that drain to common point (pump station) service a catchment

Separate drinking and stormwater piping

- Three waters. Focus here is on wastewater, but need to consider storm and potable water

TECHNICAL SNIPPETS – PUMPING

Gravity vs Pressure

- Wairoa mostly gravity

Lift stations

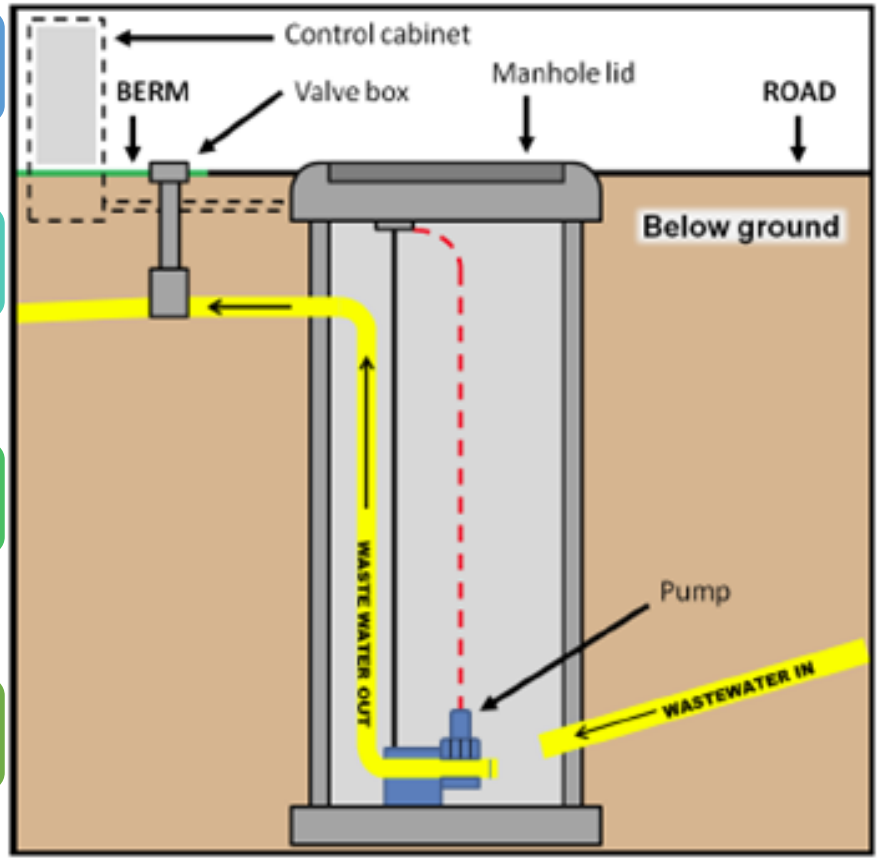
- Wastewater flows into base of wet well and lifted to next pipe

Rising main

- Just pumped system to treatment plant

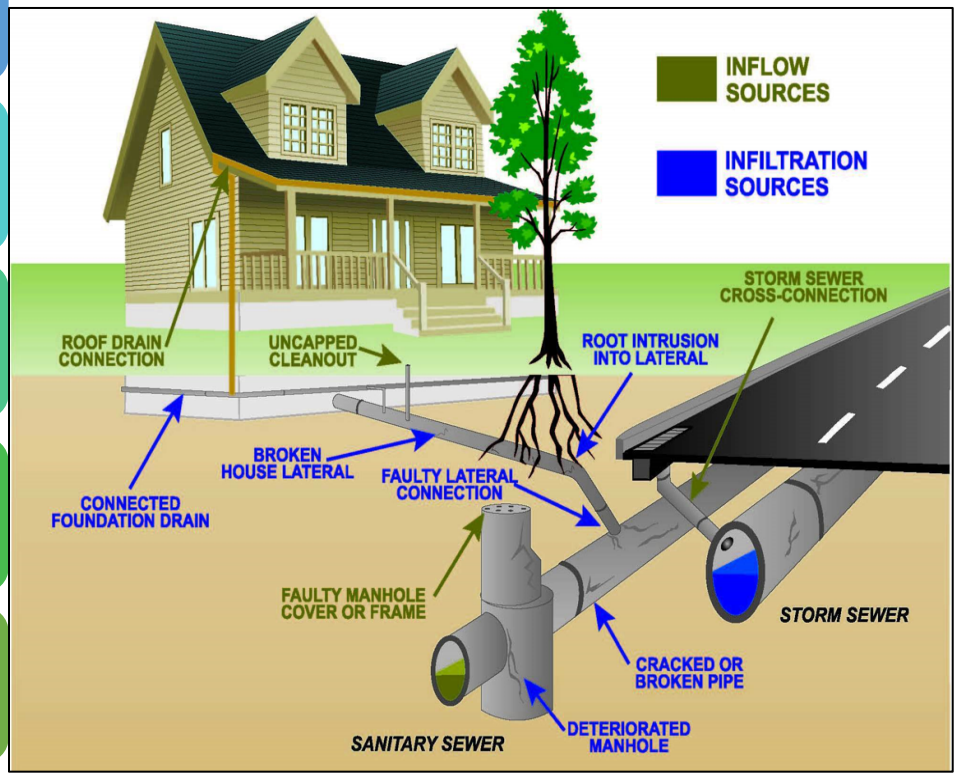
Surges

- High flows balanced
- If exceeded, get overflows



TECHNICAL SNIPPETS – INFILTRATION & INGRESS (I & I)

- Groundwater infiltration into wastewater reticulation
- Stormwater ingress into wastewater reticulation
- Water table, storm events, high river level
- Dilutes wastewater, adds unnecessary flow to wastewater reticulation
- Overflows occur, reduces treatment effectiveness



TECHNICAL SNIPPETS – DISCHARGE ENVIRONMENT

River, estuaries, ocean, wetland

Land – soil type, topography, climate

Combined land and water discharge (CLAWD)

Reuse

- Potable (drinking water?)
- Non-potable (toilets/industry)
- Cooling (loss by steam)

Land

Water

TECHNICAL SNIPPETS – CONTRIBUTORS TO WATER HEALTH

- Diffuse and point source discharges
- Sediment from erosion and land use
- Discharge from industry, commercial and residential wastewater and stormwater
- Nutrients and microbial contamination

TECHNICAL SNIPPETS – CONSENTS – WHAT ARE THEY?

RMA requires Regional and District Councils to prepare plans.

Plans outline policies and objectives and set rules.

Many rules for land use, taking resources (water) and discharging (wastes) require authorisation – resource consents.

Consents have to be approved and detail conditions under which an activity can operate.

TECHNICAL SNIPPETS – CULTURAL WASTEWATER MANAGEMENT

Cultural values must be considered.

Tangata whenua have a place in contributing to community wastewater option development.

Discharges of community wastewater directly to water is considered culturally abhorrent.

Elsewhere bioremediation has assisted with the transformation of wastewater from being tapu to noa.

DEVELOPING OPTIONS

How do we develop options?

How do we know what is a good option?

What criteria do we use?

Use of four pillars

- Environmental
- Cultural
- Recreational/social
- Financial

DEVELOPING OPTIONS – PILLAR 1 ENVIRONMENTAL ACCEPTABILITY

Land (where, NIMBY, how much?)

Water (where, level of treatment, how much?)

Ecology (habitats, species)

DEVELOPING OPTIONS – PILLAR 2
RECREATIONAL/SOCIAL ACCEPTABILITY

- Current use of the Wairoa River, estuary, ocean
- Current use of the surrounding land
- Fishing, kai gathering, white baiting
- Swimming, Waka ama, boating, yachting, surfing
- Hunting, rugby, netball, walking, running

DEVELOPING OPTIONS – PILLAR 3
FINANCIAL ACCEPTABILITY

- Affordability for the community
- How to pay? – part of rates?
- Length of payment – how many years?
- How much is too much? community impact

DEVELOPING OPTIONS – PILLAR 4 CULTURAL ACCEPTABILITY

- Importance to all
- Mauri of wai
- Mauri of the whenua
- Wahi tapu
- Tapu and noa

DEVELOPING OPTIONS – GROUP EXERCISE (Part 1)

In groups list on separate post it notes 10 factors important to your group when considering wastewater treatment and discharge

Order them in priority of 1 to 10

Sort them into the four pillars

If there are less then 2 for each pillar develop two

DEVELOPING OPTIONS – GROUP EXERCISE (Part 2)

Add post it notes to wall pads for each pillar, grouping them with like comments

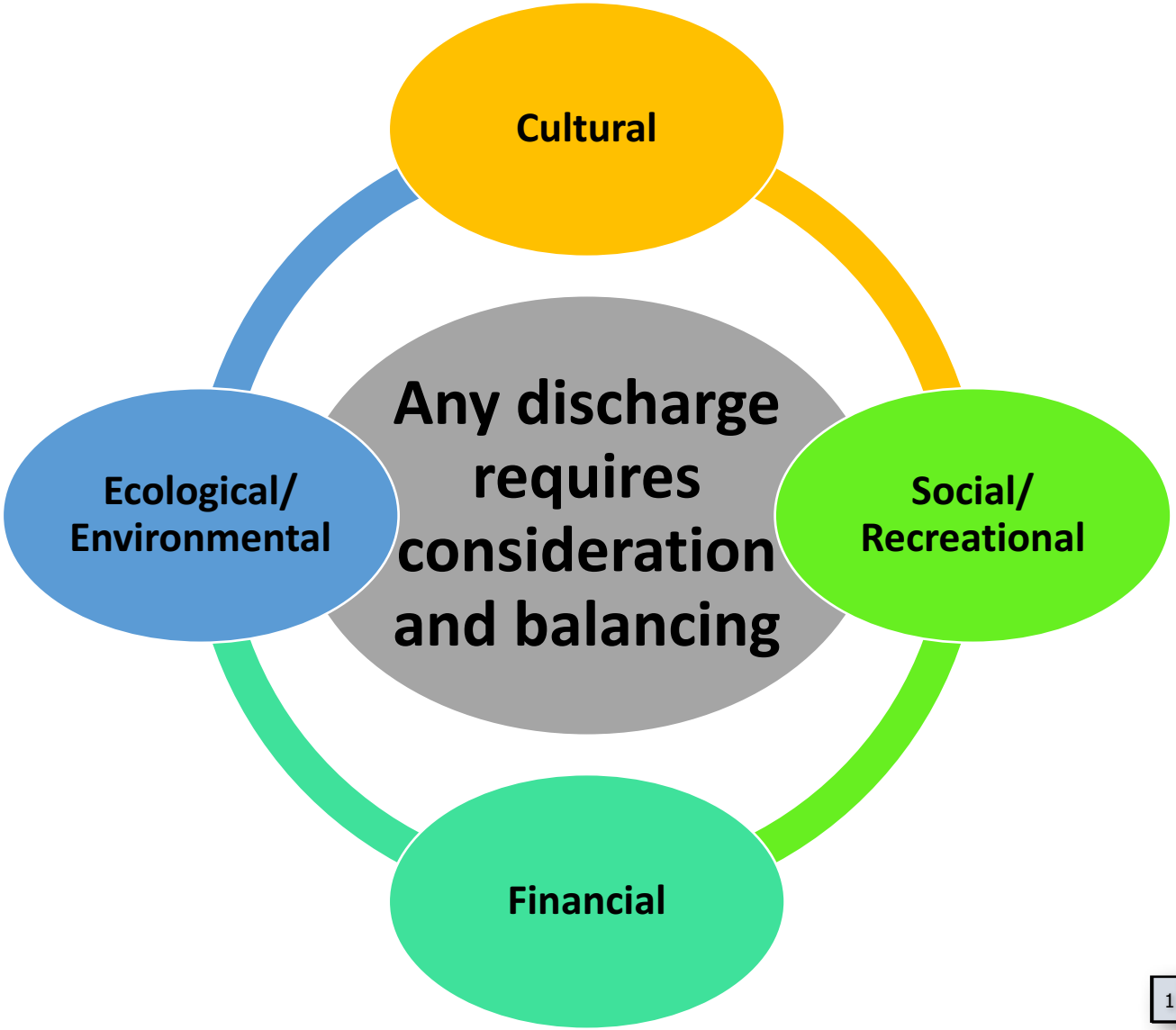
Take time to read them

Each person take 5 dots and allocate to a comment (group of comments)

Which are the highest scoring comments?

Are these a true reflection of what is important to the community?

DEVELOPING OPTIONS – THE BALANCE



DEVELOPING OPTIONS – ARE THERE BOTTOM LINES FOR EACH PILLAR?

Fixed bottom lines (must have)

- Requirements that HAVE to be met
- Don't change
- Can be a number
- Can be a position

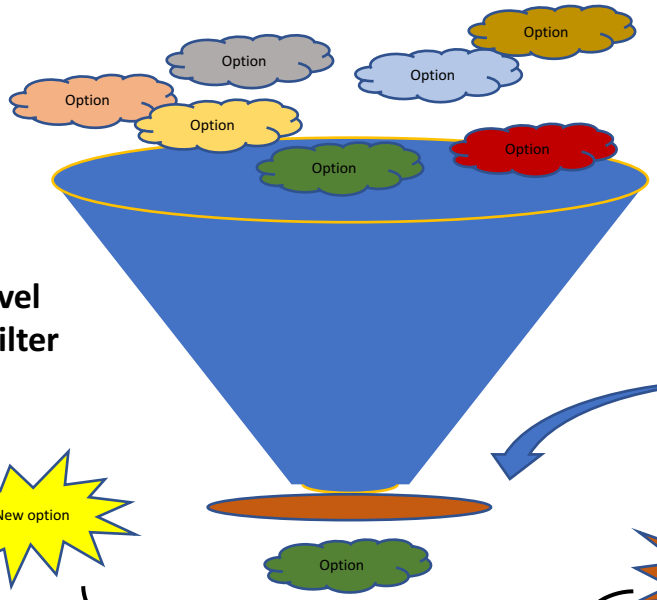
Negotiable or flexible bottom lines (nice to have)

- Conditional or can happen if other factors are addressed/met
- Factors include timing, frequency, duration, effect

DEVELOPING OPTIONS – HOW TO DECIDE WHICH IS BEST?

	Option 1	Option 2	Option 3
Environmental			
Recreational			
Financial			
Cultural			
Workable	X	X	

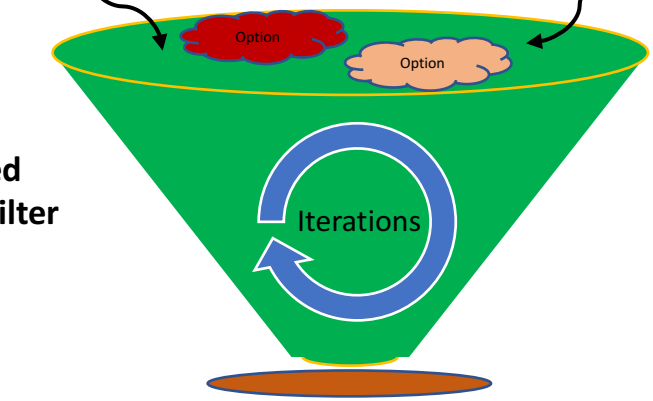
OPTIONS – FILTERING



High Level Option Filter

New option

New option



Refined Option Filter

BPO

Fixed bottom line

Flexible bottom line

Quadruple bottom line pillars

DEVELOPING OPTIONS –
HOW TO DECIDE WHICH IS BEST?

	Option 1	Option 2	Option 3
Environmental	☺	☺	☺
Recreational	☹	☺	☺
Financial	☺	☹	☺
Cultural	☺	☺	☺
Workable	X	X	✓

OPTIONS – WHAT TO INVESTIGATE

Consider all aspects of wastewater system

- Reticulation
- Treatment
- Storage
- Discharge

Current system – status quo?

Improve one or several areas of the wastewater system

Not just discharge to think about…

OPTIONS – POSSIBILITY & REALITY

What options work?

- Reticulation
- Treatment
- Storage
- Discharge

What options don't work?

- Reticulation
- Treatment
- Storage
- Discharge

What decisions can be made now?

What information do you need?

OTHER MATTERS - PROCESS

Purpose for this session

How to manage issues outside this project - Car Parking?

OTHER MATTERS – SPECIFIC ISSUES

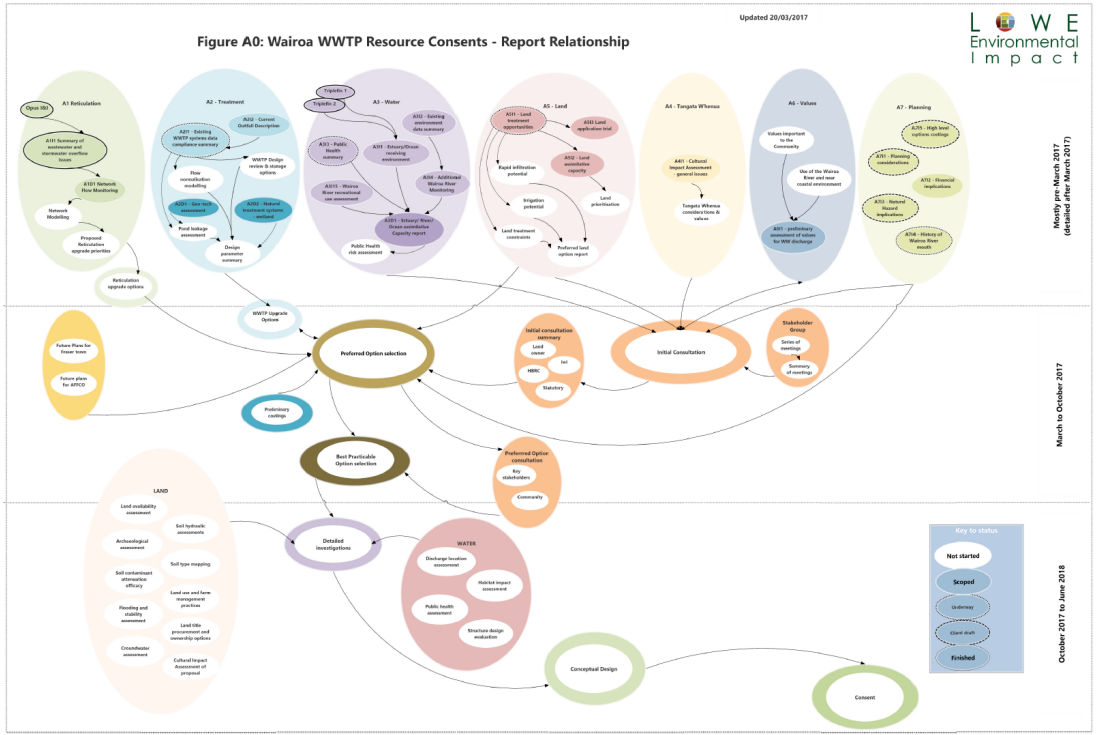
Technical reporting to support this programme

AFFCO reporting

OTHER MATTERS – TECHNICAL REPORTING

Engagement and option development

Supporting technical reports



ADMINISTRATION -OTHER BUSINESS

Future topics for discussion

Keeping to task

Who to contact when you have concerns

ADMINISTRATION - MEETING SCHEDULE

Next meeting focus

Day/date of meeting – what suits everyone?

Duration

LUNCH