

Developing Options – What do you value

Waipukurau and Waipawa

Wastewater Treatment Plants (WWTP)

Community Reference Group

Hamish Lowe 15 October 2018

WASTEWATER DISCHARGE

After wastewater has been treated, it needs to be discharged somewhere – it doesn't just disappear or evaporate.

The options are:

- discharge to land
- freshwater bodies (lakes, rivers, streams)
- estuaries, and
- the ocean.

WASTEWATER DISCHARGE

Receiving Environment

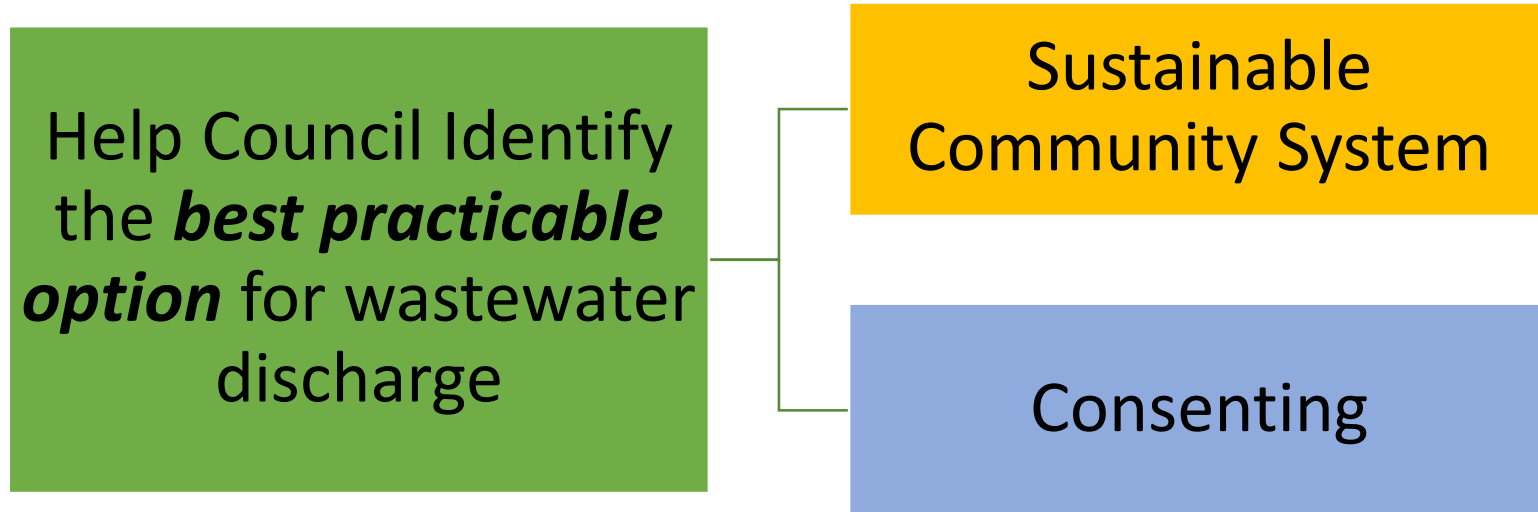


Water

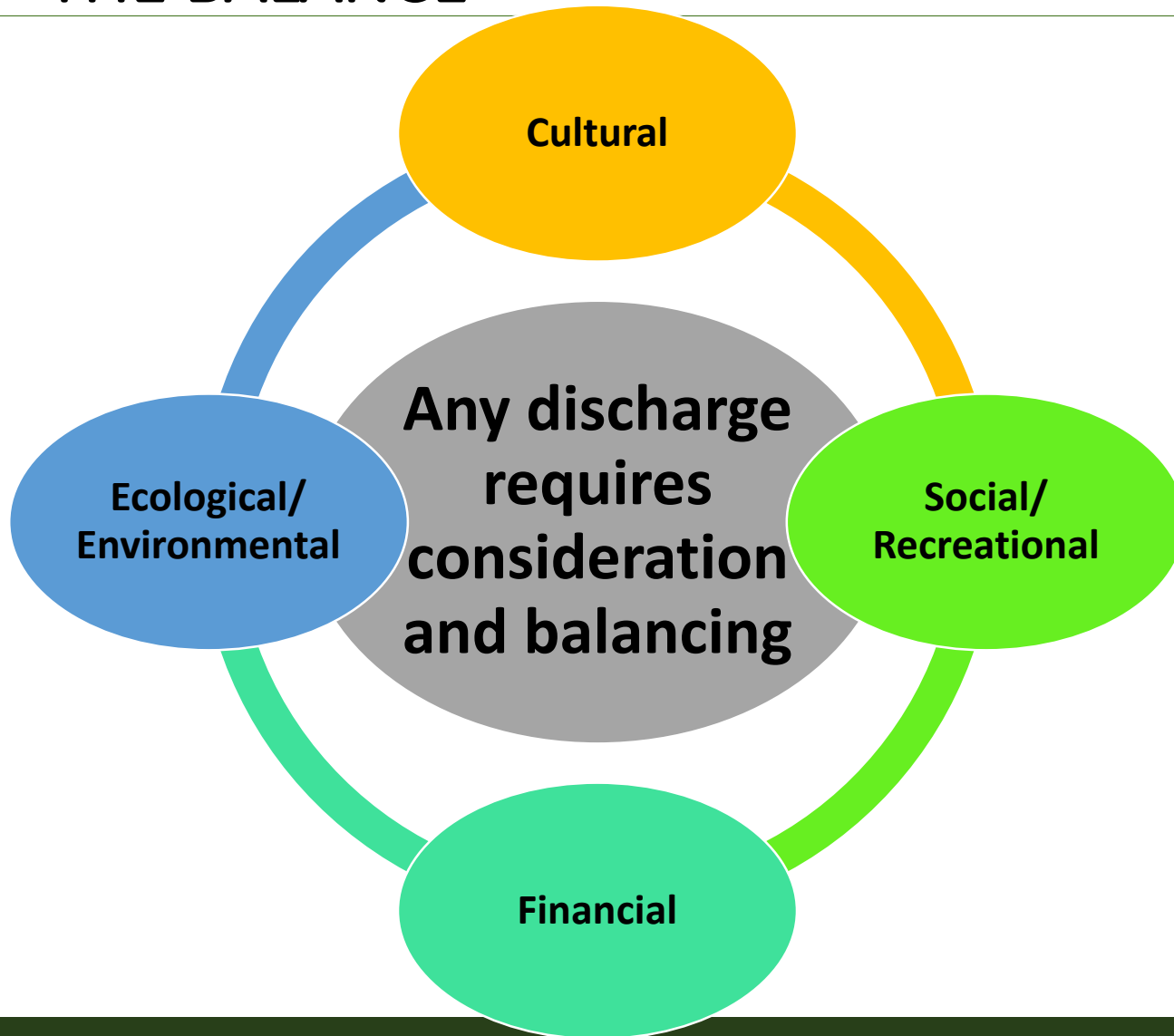


Land

WHAT IS A BPO



BPO – THE BALANCE



ARRIVING AT A BPO

Ultimately need to decide on a BPO

Need a selection criteria

Avoid pre-determination

Should be what the community wants

4 pillars – assessment criteria

- Social
- Environmental
- Cultural
- Financial

Bottom lines

- Cost – how much is too much
- Cultural – what must happen

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, boating

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 – IDENTIFICATION EXERCISE (Part 1)

For each pillar write down what you want to see happen regarding wastewater – what is important to you

Place relevant post-it on large sheet for each pillar

DEVELOPING OPTIONS – ADDITION EXERCISE (Part 2)

Quick discussion of comments comments

If one is missing, or another idea triggered, then add another note

DEVELOPING OPTIONS – SCORING EXERCISE (Part 3)

Take time to read them

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

DEVELOPING OPTIONS – RANKING EXERCISE (Part 4)

Which are the highest scoring comments?

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

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

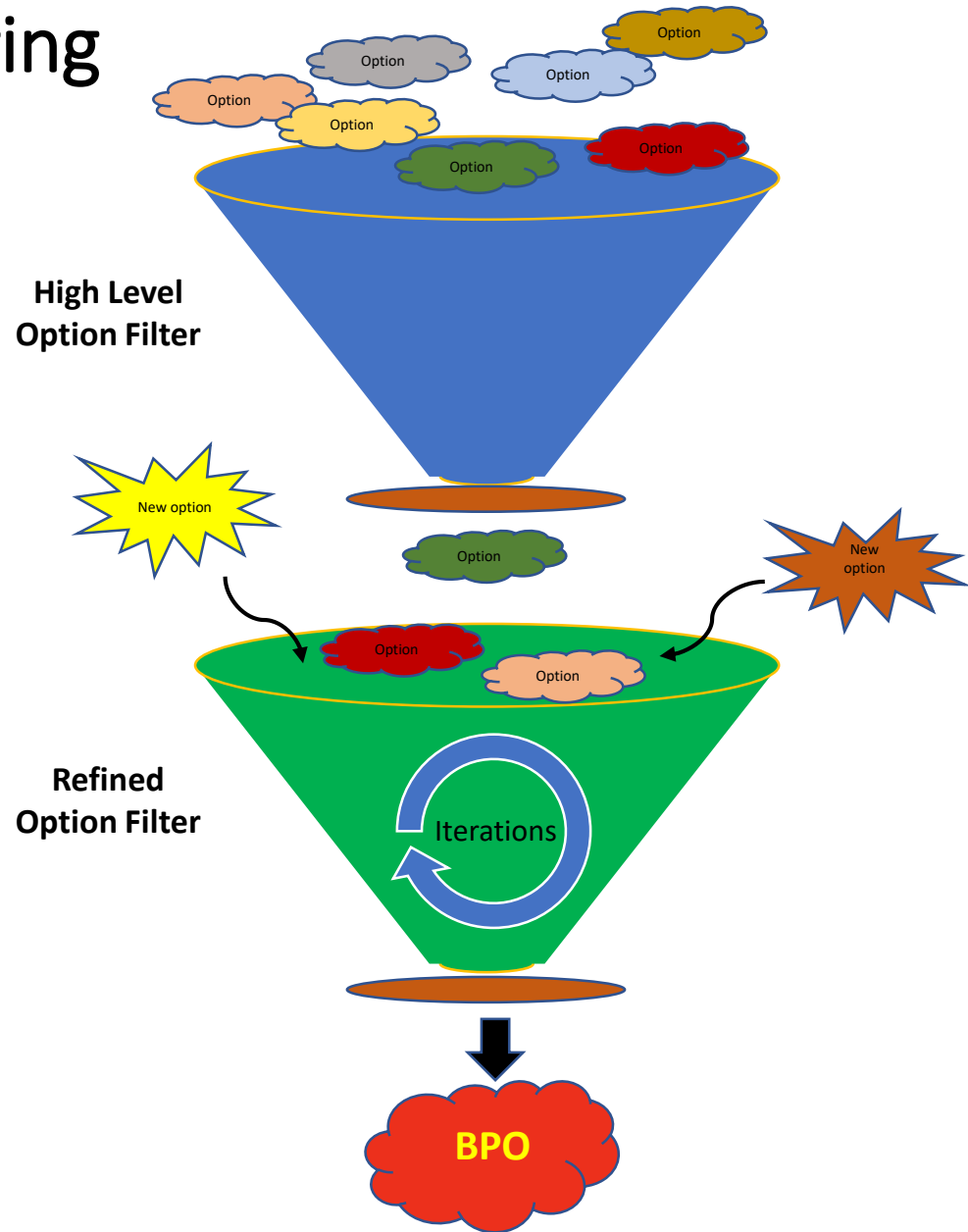
Negotiable or flexible bottom lines (nice to have)

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

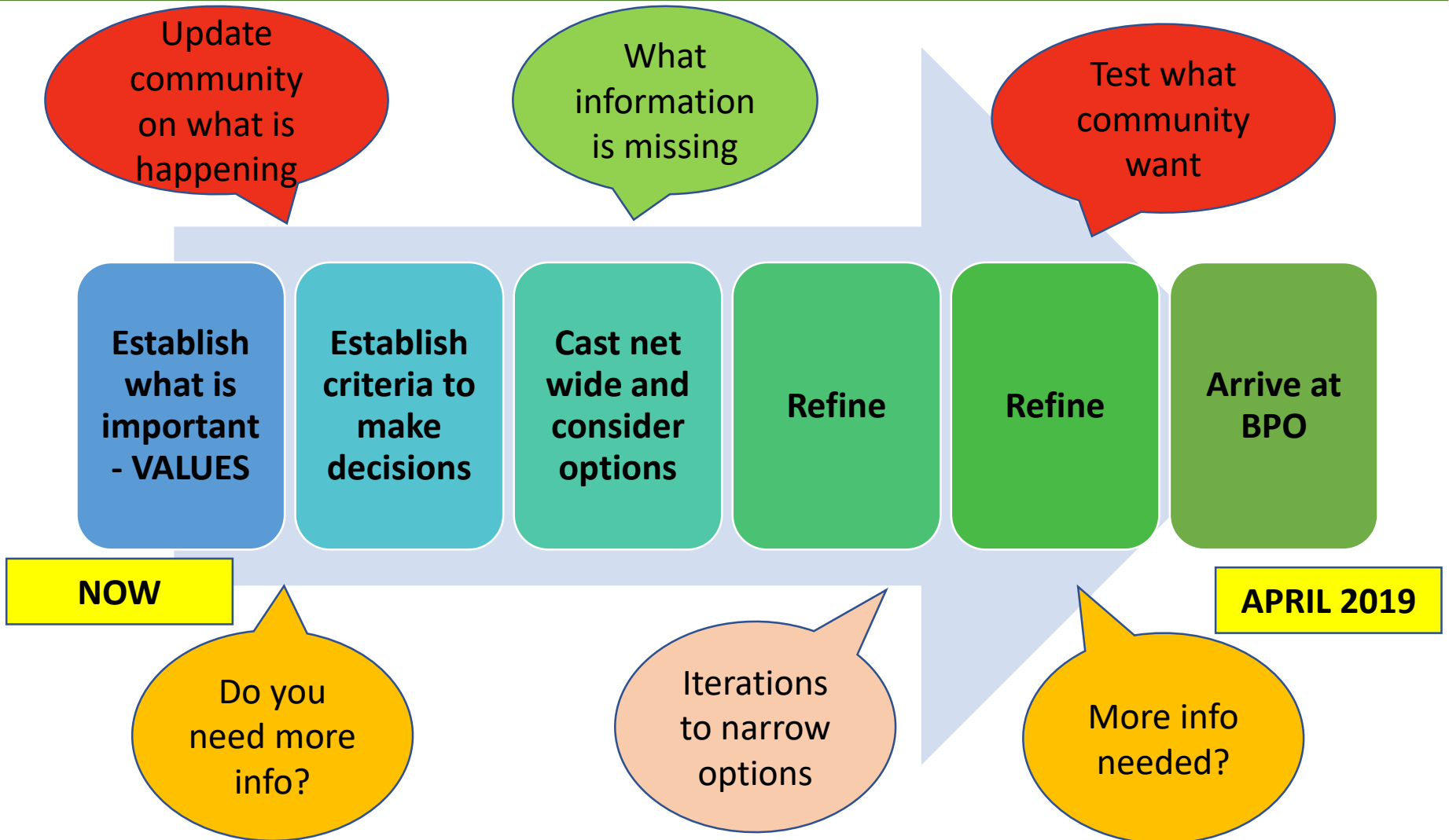
DEVELOPING OPTIONS – HOW TO DECIDE WHICH IS BEST?

	Option 1	Option 2	Option 3
Environmental			
Recreational			
Financial			
Cultural			
Workable			

OPTIONS – Filtering



TIMING



L W E Environmental I m p a c t

Advice AEE Agricultural Analysis Application Approachable Assessments Assimilation Assistance **Biosolids** Capability Client Communications Communities Compliance
Compost **Consents** Consultation Contamination Coordinate Council Cultural Current Data Degradation **Design** Detention Developments
Discharges Documentation Drafting E. coli Ecosystems Effects Engagement Environment Equipment Evidence Excellence Experienced Expert Facilitating Farming Feasibility
Fieldwork First-flush Fit-for-purpose Flooding Fun Geology Graphs Greywater Groundwater Guidelines Handbag Hazardous Hydraulics Innovation Interpretation Investigation
Irrigation Land Landfills Landscape Land-treatment Leaching Lodge **Management** Metals Microbiology **Modelling** Monitoring
NES **Nitrogen Nutrients** Onsite Optimisation Organics Overseer Papers Pathogens Phosphorus Plain-english **Plans** Preparation Presentations
Project Quality Relevant Remediation Reports Research Review **Sampling** Scientific Septage Sludge **Soil** Solutions Spreadsheets Standpipes Stormwater Strategy
Support Surface Water Sustainability Systems Team Testing Timely **Treatment** Validation **Wastewater** Water Water-balance Waterways