Waikato Regional Council Plan Change 1 Hearing Block 2

> Presentation by Graham Pinnell

#### **Conditions and activity class of consents OTT**

 Consents subject to "the content" of the FEP, "mitigation actions", etc.<sup>1</sup>  $\rightarrow$ Double jeopardy  $\rightarrow$  Mandatory approval duplication  $\rightarrow$  costs, resource scarcity s42A recommendation for restricted discretionary consents gives power to close existing farming activities.  $\rightarrow$  Draconian power

<sup>1</sup> Rule 3.11.5.4: FEP not under a CIS, a general s42A recommendation

## **Seeking Permitted Activity class**

- FEP requirements target improved water quality.
- Improved water quality is said to generally reduce adverse effects on aquatic life.
  - →no "adverse effects" on (pre-existing) "aquatic life", let alone, "significant adverse effects".
- RMA s70(g) is thereby satisfied, allowing farming to be a permitted activity class subject to an approved FEP.
- WRC dairy effluent rules for discharges to land are a precedent.
- Requiring both FEPs & consents having the same conditions as permitted activities add costs without value.

## **Risk-based Controls for Farming Activities**

| Area                                | Intensity                 | Consent                     | Schedule Conditions |              |                  |           |
|-------------------------------------|---------------------------|-----------------------------|---------------------|--------------|------------------|-----------|
|                                     |                           |                             | A:Registration      | B:NRP        | C:Stock<br>excl. | 1:FEP/GFP |
| <4.1ha                              | All                       | Permitted                   | -                   | GFP          | V                | GFP       |
| >4.1ha                              | Pastoral<15su/ha          | Permitted                   | V                   | GFP          | V                | FEP       |
|                                     | Pastoral>15su/ha & Arable | Permitted                   | V                   | NRP          | V                | FEP       |
| Farmer-initiated alternative to GFP |                           | Restricted<br>Discretionary | -                   | As consented |                  |           |
| Land<br>use<br>change               | Reduced discharge         | Restricted<br>Discretionary | -                   | As consented |                  |           |
|                                     | Increased discharge       | Non-complying               | -                   | As consented |                  |           |

## Profitability of hard hill country farms

Hard hill country farmers face a perfect storm of high compliance costs of PC1<sup>1</sup> & low profitability<sup>2</sup>.

Past 10 years economic farm surplus: Average \$82/ha Range between the years \$71/ha loss to \$159/ha profit Average return on total farm capital 1.2%

#### Quintile analysis in 2014-15 (one of the better years)

| Quintile | Economic farm surplus (\$/ha) |
|----------|-------------------------------|
| 1        | -53                           |
| 2        | 52                            |
| 3        | 118                           |
| 4        | 231                           |
| 5        | 331                           |
| Average  | 146                           |

→ These farmers require financial assistance in order to implement GFPs that require significant investment, but often can adopt operational GFPs with little impact on profit.

<sup>1</sup> Federated Farmers FEP pilot study

<sup>2</sup> Beef & Lamb NZ economic study of hard hill country Northland Waikato BOP region – refer my submission Paras100

## Farm Environment Plans

Support s42A recommendation to emphasise GFP over NRP.

GFPs should:

- Be tailored to the priorities of the sub-catchment and downstream main stem reaches.
- Include N, such that NRP is the cap and GFP is the target.
- Risk-based mitigation of critical source discharges.
- Be practicable be practical & take account of cost effectiveness.

#### FEPs:

- Capacity of enterprise to be considered in determining rate of implementation of costly GFPs and critical source mitigations.
- To be revised when there is a significant increase in discharge risk (e.g., increased stocking, fertiliser, cultivation on slopes, in-situ winter fodder).
- Records & supporting evidence to be kept of either Overseer or stock numbers, fertiliser use & bought-in feed.
- Grading of FEPs to enable greater compliance focus on at-risk enterprises.

CIS serves no purpose providing rules cover:

- WRC & industry agreement on GFPs and Critical Source mitigations to achieve Objective 3 water quality targets and Policies 1-3.
- Certification of Farm Environment Planners.

Maxmer.

 <u>Sample</u> audits of contents & implementation of FEPs using CFEPs. Intensity of audits dependent on grading of FEPs and any previous audit.

#### Wetlands in hill country – Unintended consequences Folding and on the point of failure



#### Wetlands largely composed of recent peat



# Rapid build-up of peat covering culverts







## Easily eroded flax



#### **Mudflows exacerbate downstream scour**





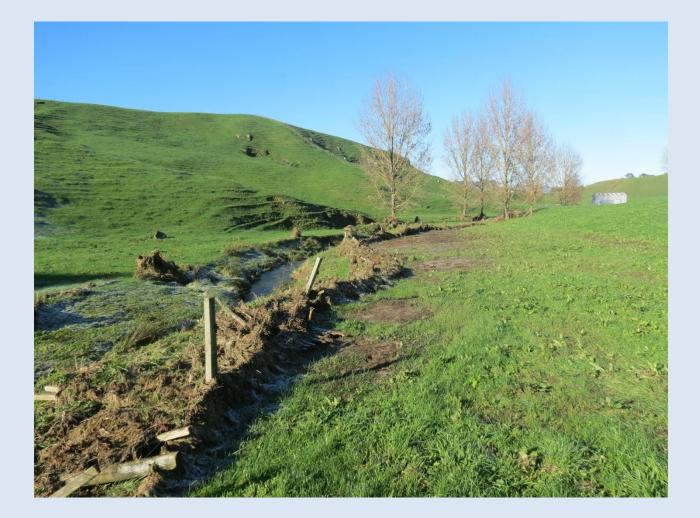
#### **Riparian fence flood damage**

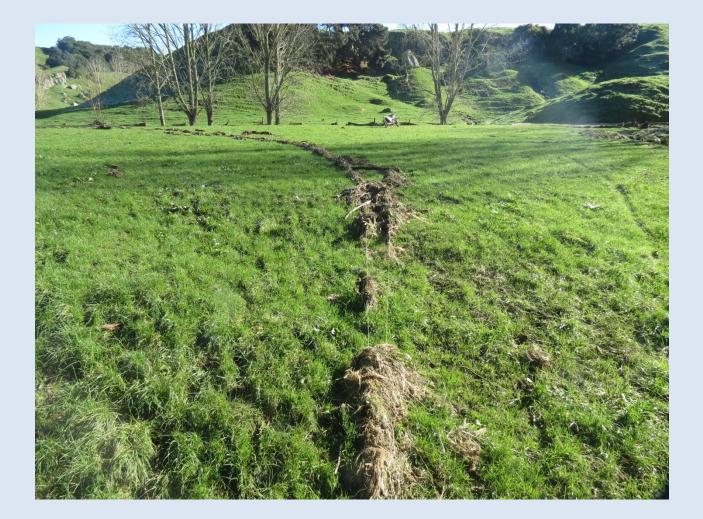




## Future fate of riparian planting?





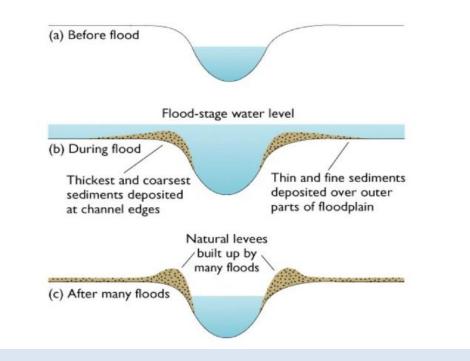


## Lessons

- Make haste slowly.
  - Set timeframes that provide opportunities to learn from experience.
  - Set interim milestones as well as completion dates to maximise learning opportunities.
- Streams in rolling and hill country have steep bed slopes and therefore high flood velocities.
  →Greater risk of erosion of riparian planting; and wrecking riparian fences.

# **Siting Riparian Fences**

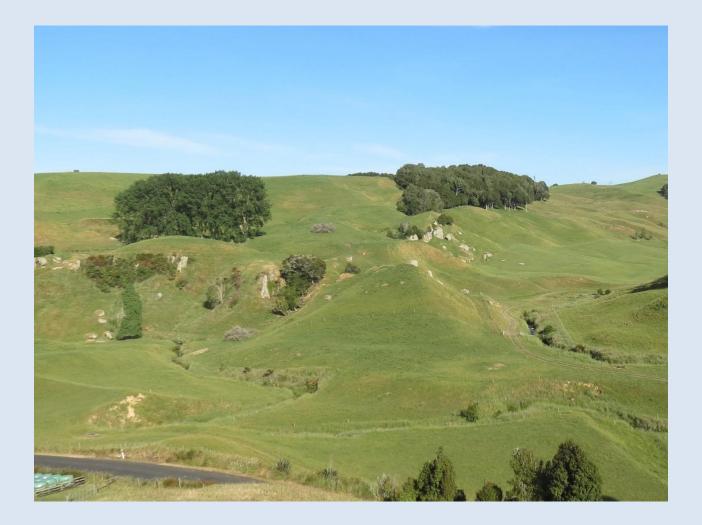
#### **Formation of Natural Levees**



 $\rightarrow$  Natural levees prevent runoff discharging directly into the stream , instead concentrating runoff via natural swales .

 $\rightarrow$  No filtering or other advantage in having wide setbacks of riparian fencing.

#### Fence setback restricted by access lane, hill slope



Fencing required under the proposed rules, in spite of measurement of complex slopes, toe seep, rock base, erosion hazard of benching or stock treading. Trough BPO alternative.



#### **Unrecognised costs of riparian fencing**

- Value of retired land (twice the construction cost). (Para 55 of my submission)
- Flood damage, debris removal & general fence maintenance.
- Weed control.
- Construction in hill country much greater cost (2-3 times), if feasible, due to closer post spacings, benching earthworks or hand construction.

## **Proposed Stock Exclusion rules**

- Complex terrain makes slope measurement subjective.
- Setbacks need to be flexible to meet access, terrain, & accelerated erosion constraints, reduce flooding risk, avoid seeps & rock.
- Wider setbacks desirable where overland flow is concentrated; no setback required where overland flow bypasses riparian fence.

## Stock Exclusion controls

- Complexities best addressed using a combination of high level rules & GFP/FEP taking account of above issues, supported by means of compliance.
- This plan should require all farmers to fence easy and moderate terrain, so as to gain experience before tackling more challenging sites in subsequent plan revisions.

 $\rightarrow$ Rule requiring stock exclusion <u>where practicable & elsewhere the</u> <u>adoption of the BPO</u>, with interim milestones & realistic completion dates (>3 years).

→A means of compliance to riparian fence all <u>paddocks</u> where <u>safe</u> <u>tractor access for construction</u> is available within <u>10m setback</u> of the water body (rather than a slope condition). BPOs include trough water, sheep-only paddocks, low intensity grazing, exclusion of cattle & deer during saturated soil or drought conditions.