

Surface water allocation

Minimum flows

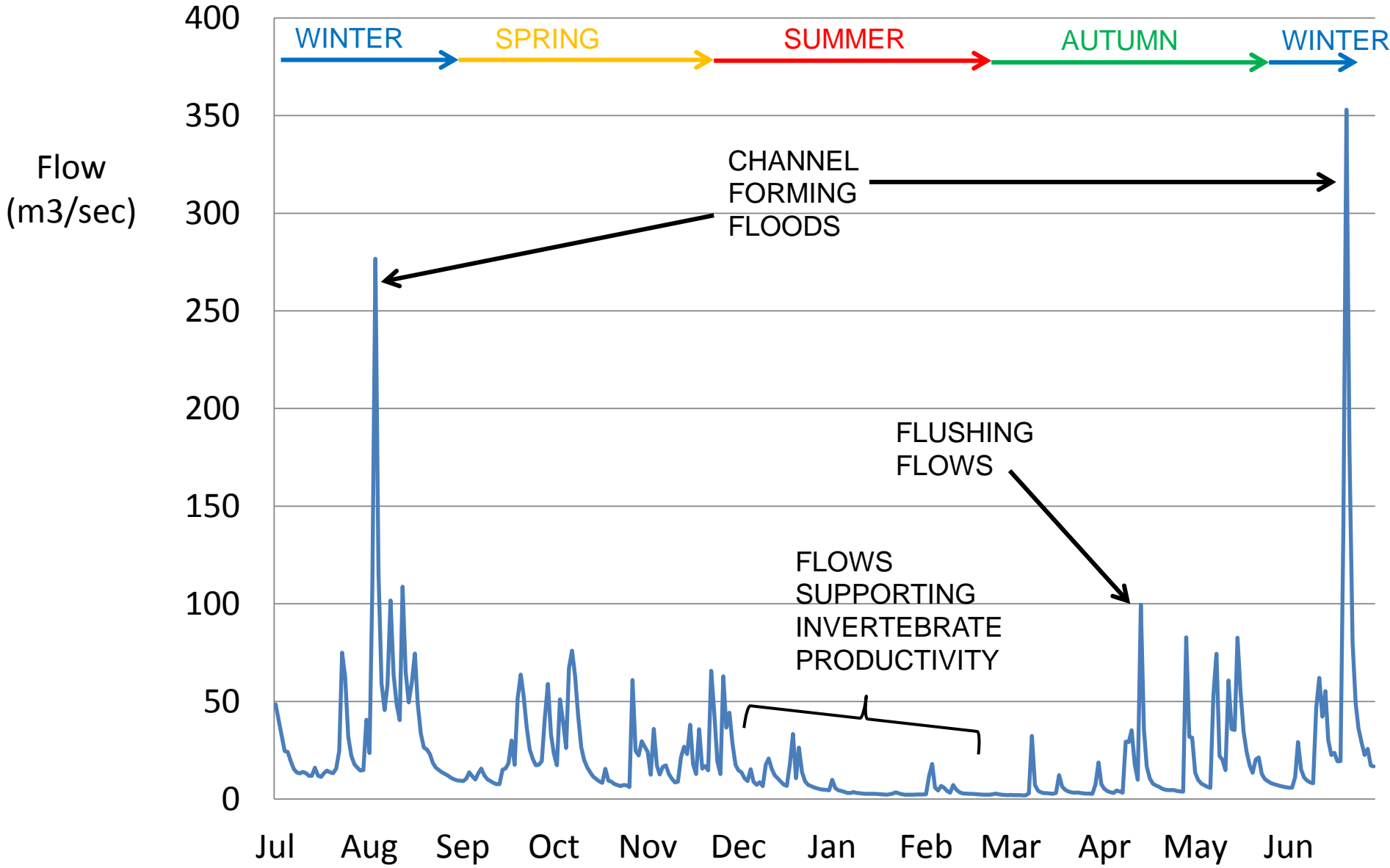
Allocation amounts

Supplementary allocation

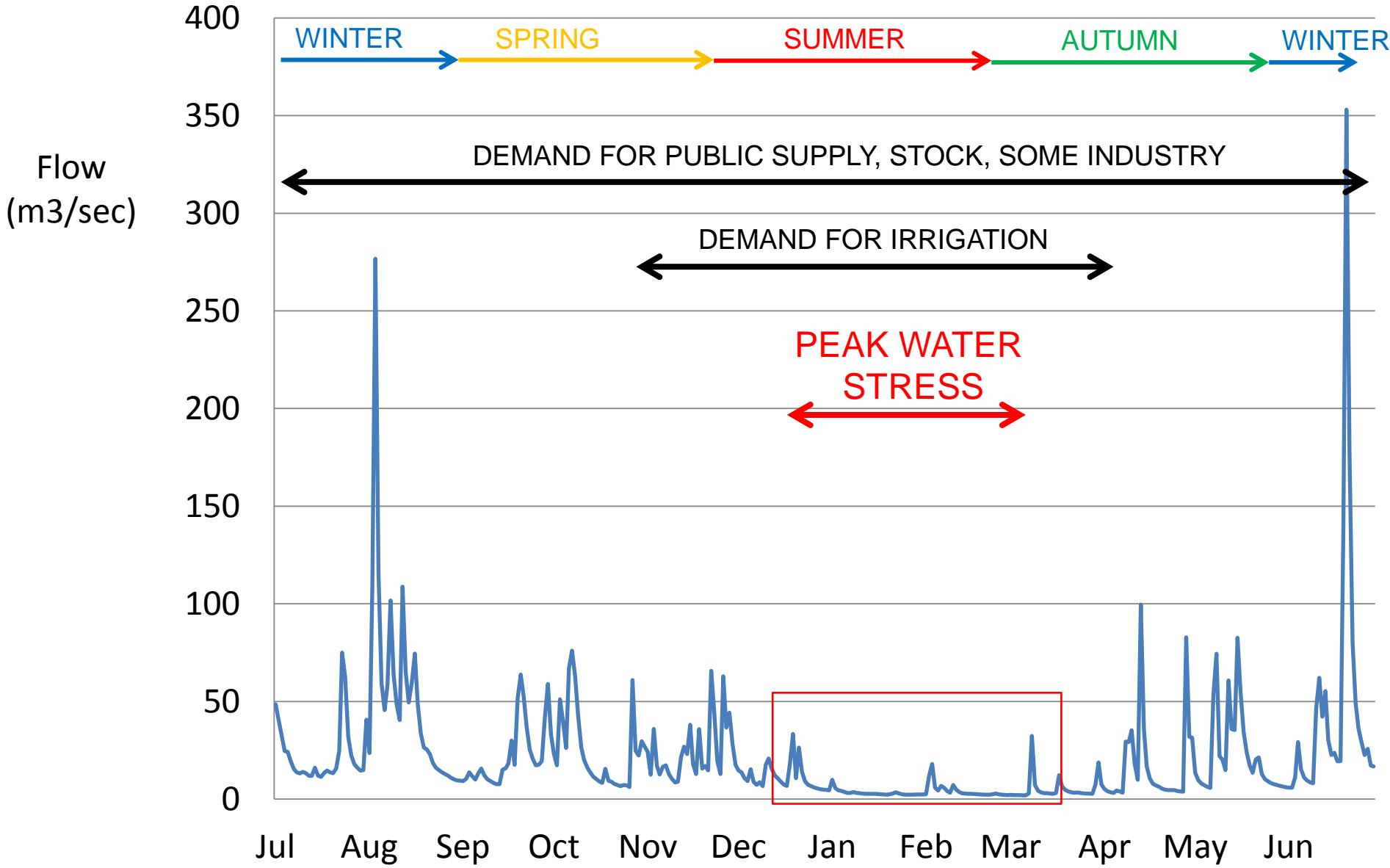
Mike Thompson

Senior Scientist GWRC – Hydrology (surface water)

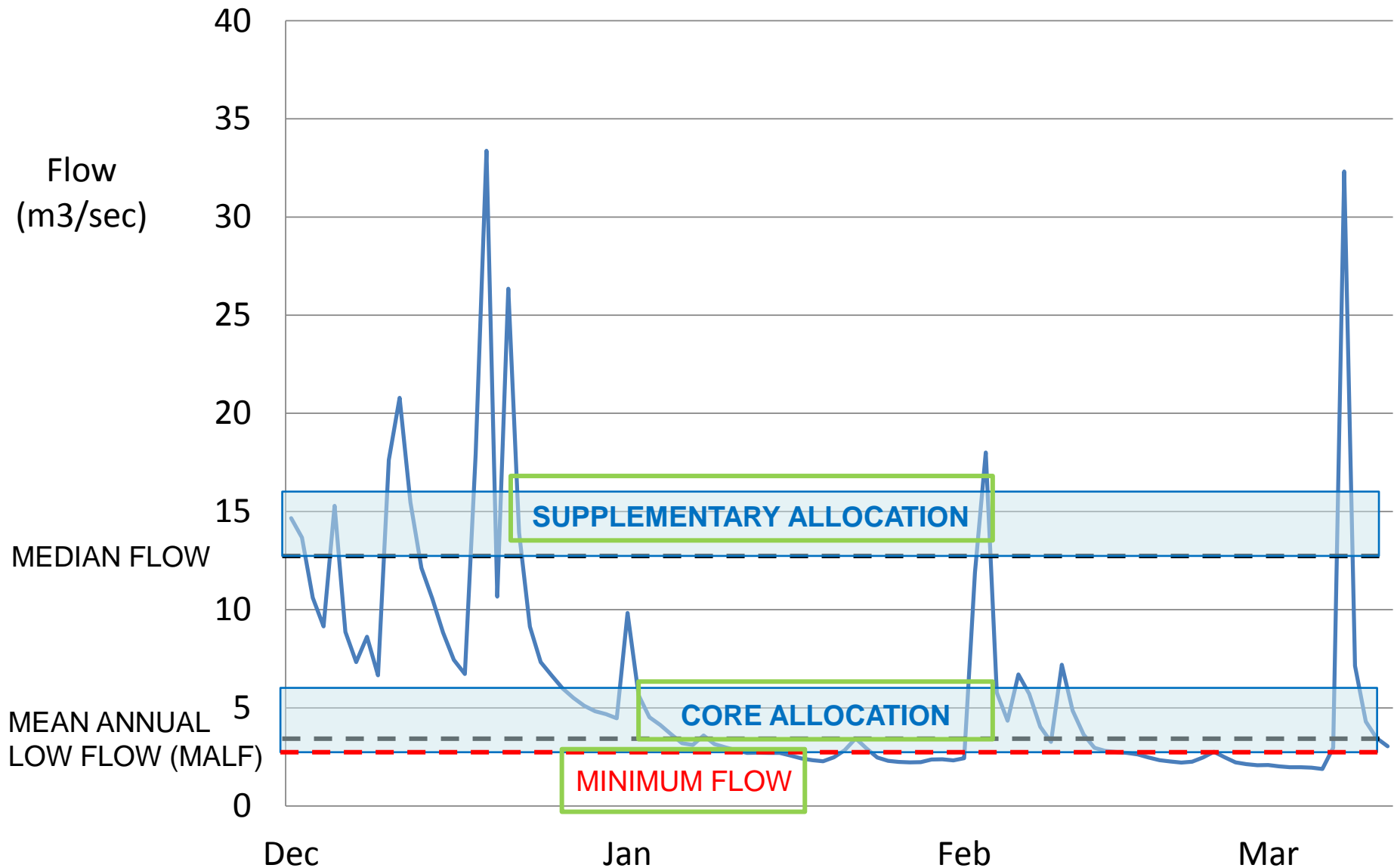
Purpose of the allocation regime



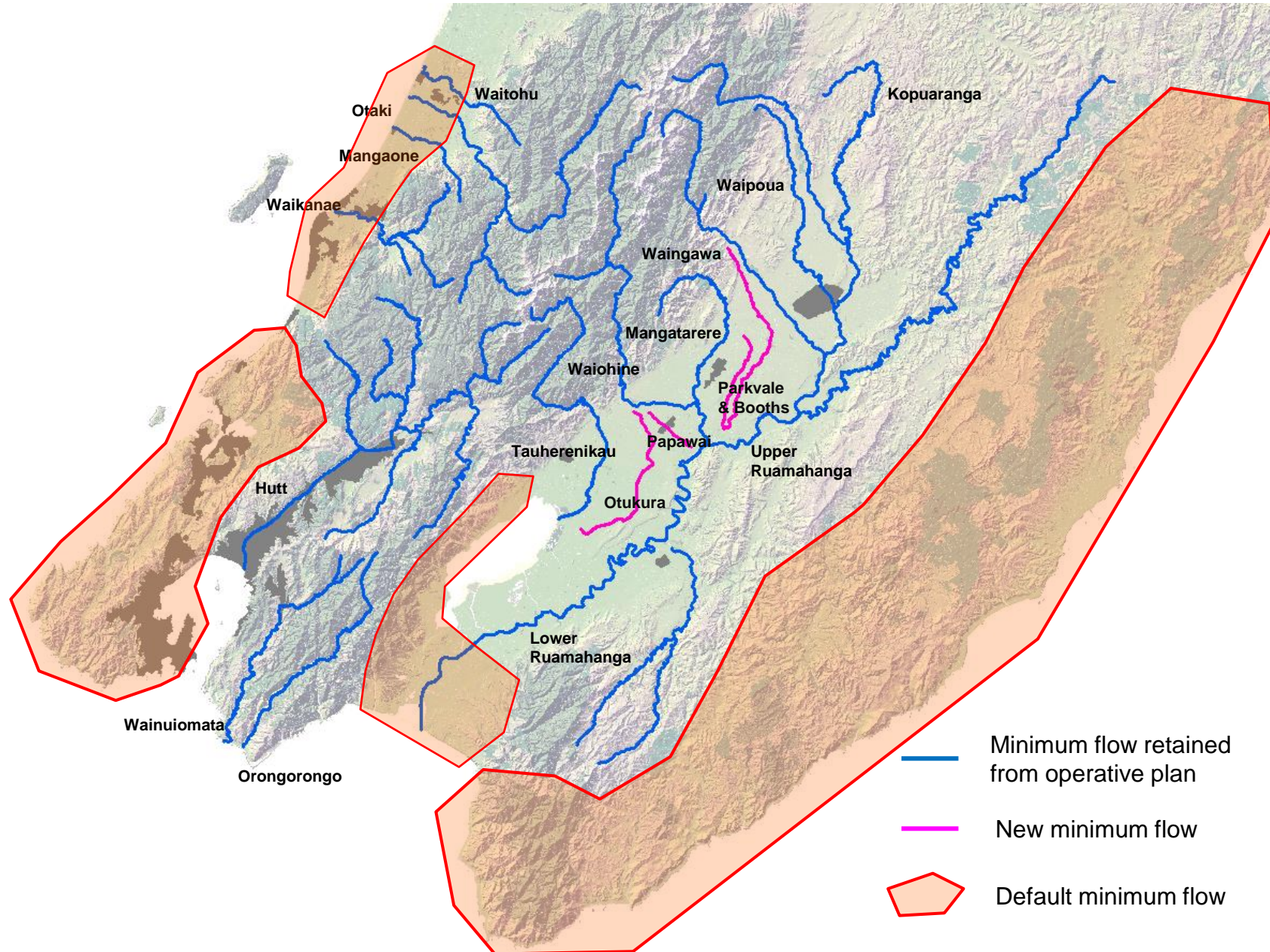
Purpose cont..



Purpose cont..



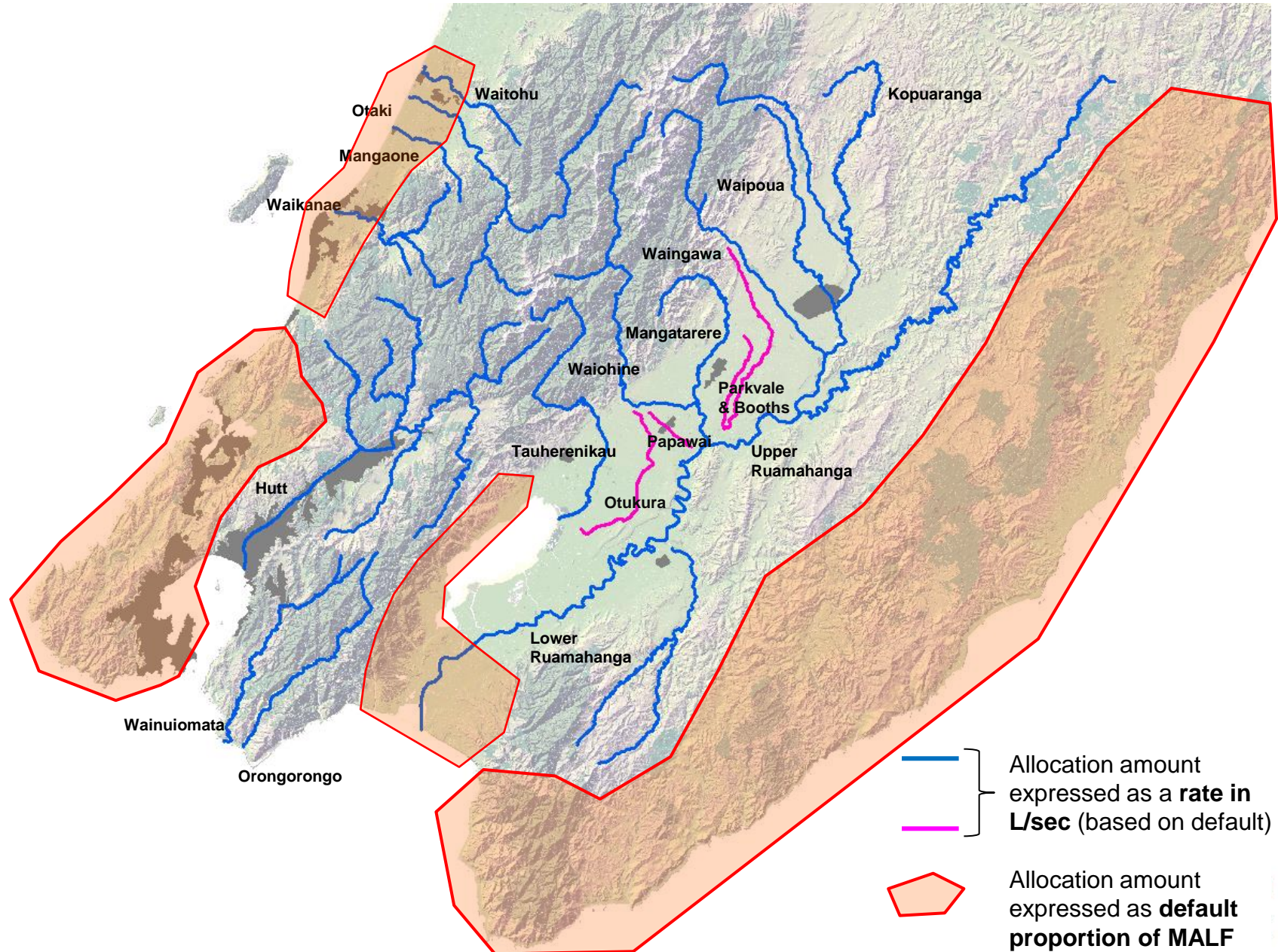
Minimum flows



Minimum flows

- Predominantly focused on ecological values; safeguarding life supporting capacity
- Hydraulic-habitat modelling a cornerstone method
- Instream flow studies identified most flow sensitive values
- Default = 90% natural 7D MALF

Allocation amounts



Allocation amounts

- Predominantly focused on ecological values; safeguarding life supporting capacity
- Guiding rationale: proposed National Environmental Standard for Ecological Flows and Water Levels
- Allocation amount set according to natural 'availability' at low flow
- Default = 30% of natural 7D MALF or 50% of natural 7D MALF (depending on stream size)

Supplementary allocation

- Enables flow harvesting and storage
- While ensuring: (1) water is only available above median flow and (2) the natural flushing flow regime must be preserved
- Change made to the notified rule on the basis of submissions to strengthen the protection for smaller waterways

Responding to evidence

Three main areas:

1. Definition of MALF
2. Application of default allocation amounts
3. Consideration of a broader set of values (and especially mana whenua values) in flow and allocation setting

Definition of MALF

- Wording change to clarify that MALF is the **natural** 7 day duration MALF (rather than observed MALF)
- Intent of the notified Plan has always been to use natural MALF (rationale provided in paragraphs 6.15 to 6.17 of my evidence)
- Allocation amounts already based on natural MALF so no need to recalculate

Application of default allocation amounts

- Provide a consistent & ecologically relevant signal of hydrological alteration and potential allocation stress
- Provide a framework that assists to distribute allocation more appropriately
- Provide a signal about risk: i.e. which catchments potentially warrant a higher level of scrutiny through the whaitua process

Mana whenua values

- Minimum flows for cultural values recommended by Caleb Royal are substantially higher than existing flows in most cases
- There would be significant consequences for water users
- Some of the flow values may require further substantiation in the context of local values and priorities
- In this respect, whaitua are an appropriate decision-making body