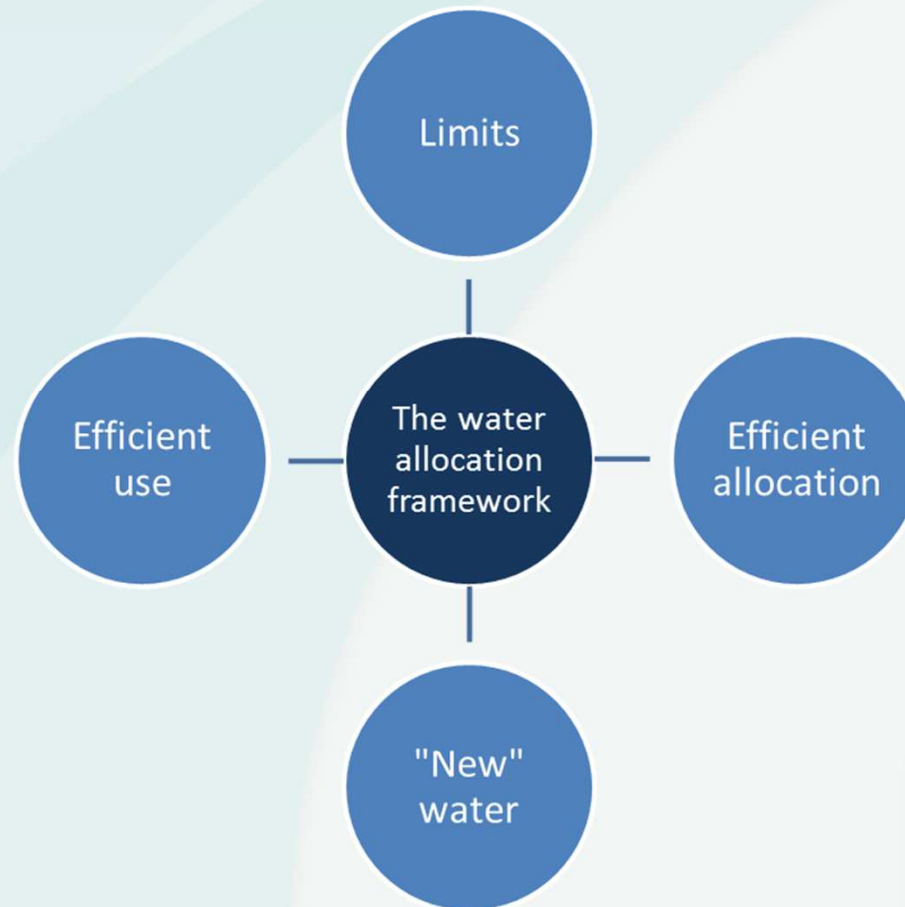


Water allocation concepts

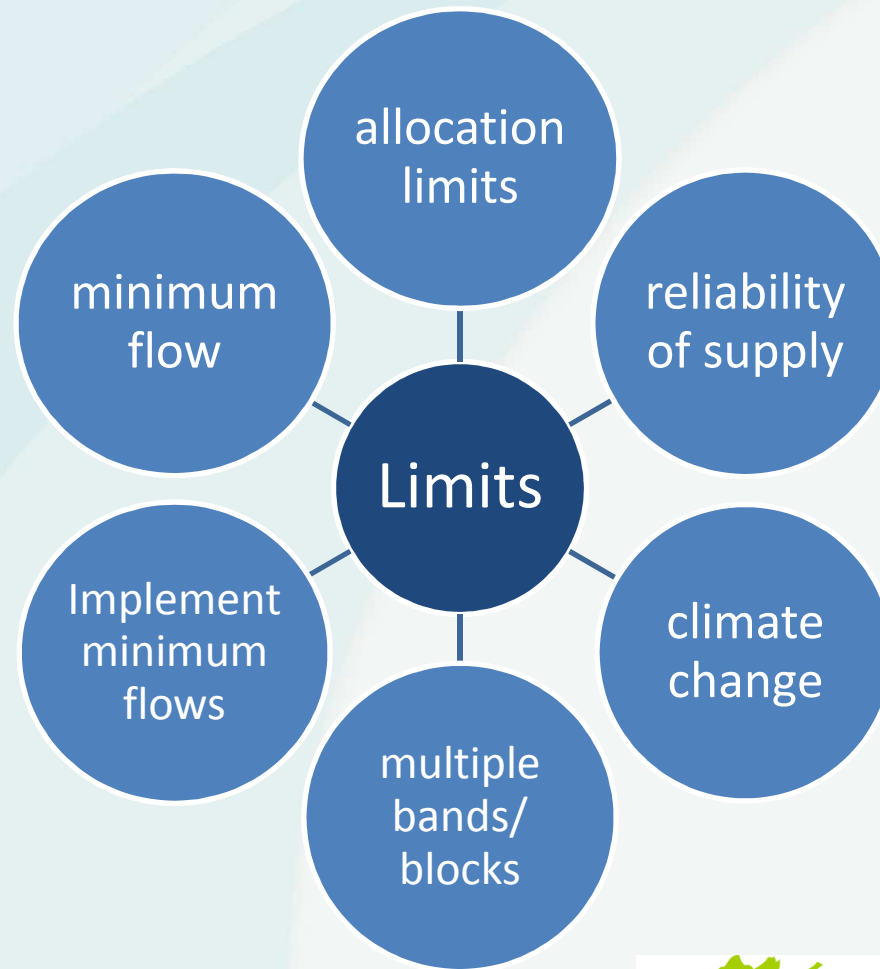


The water allocation framework

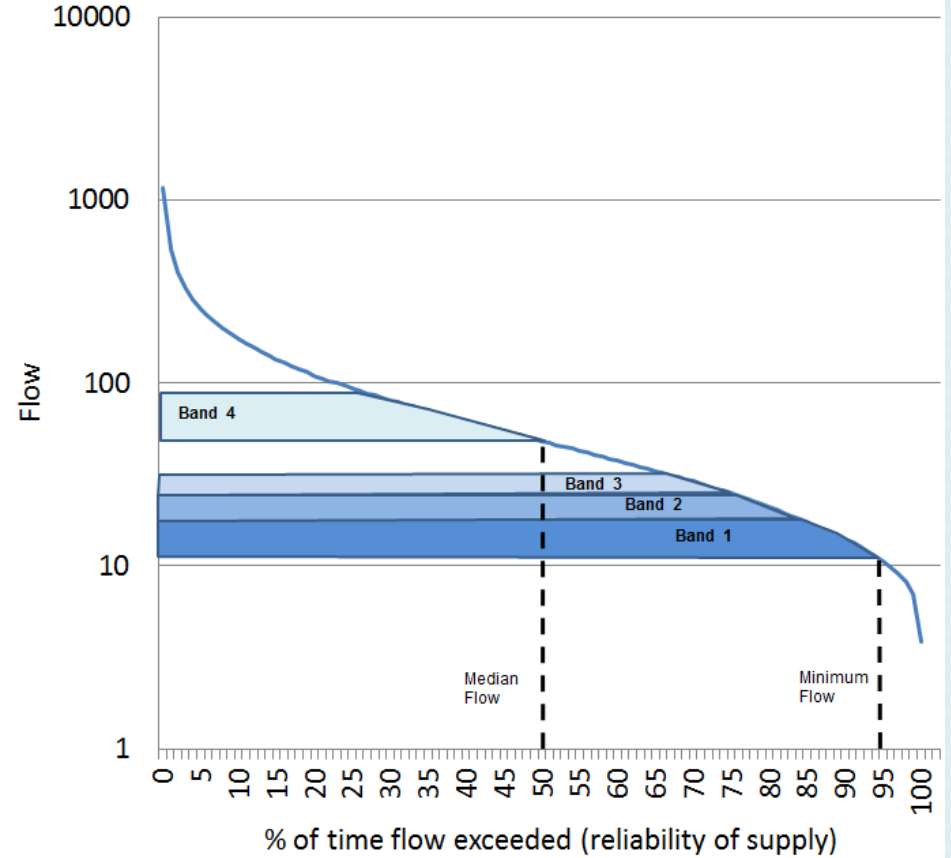
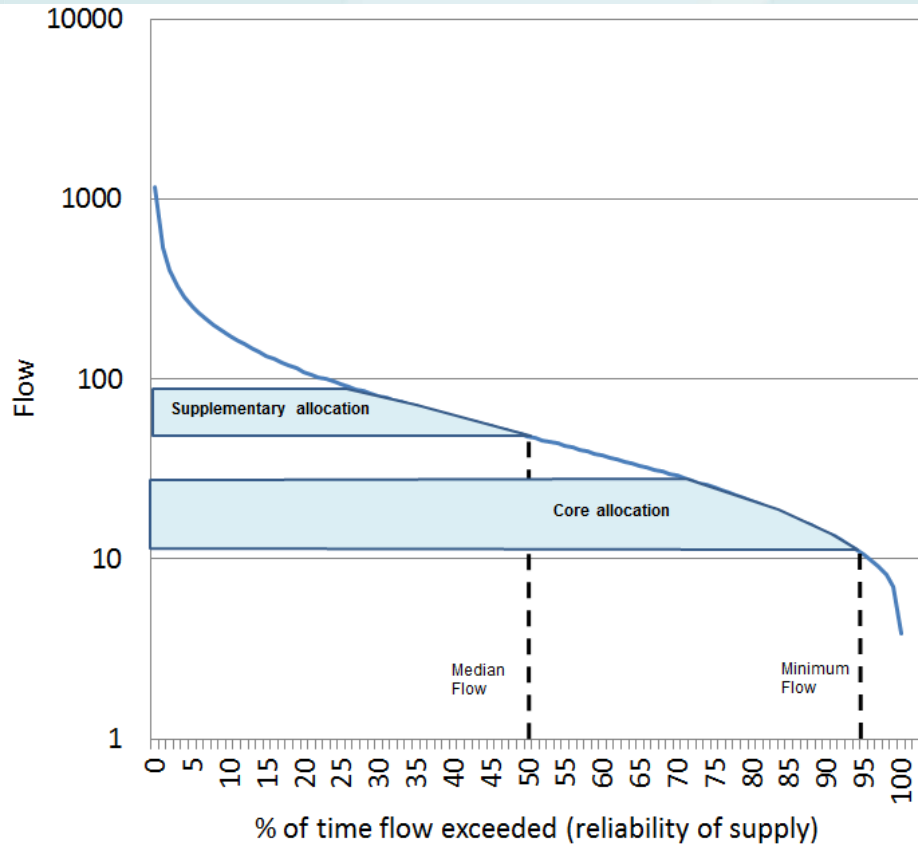


Limits

(the size of the pie)

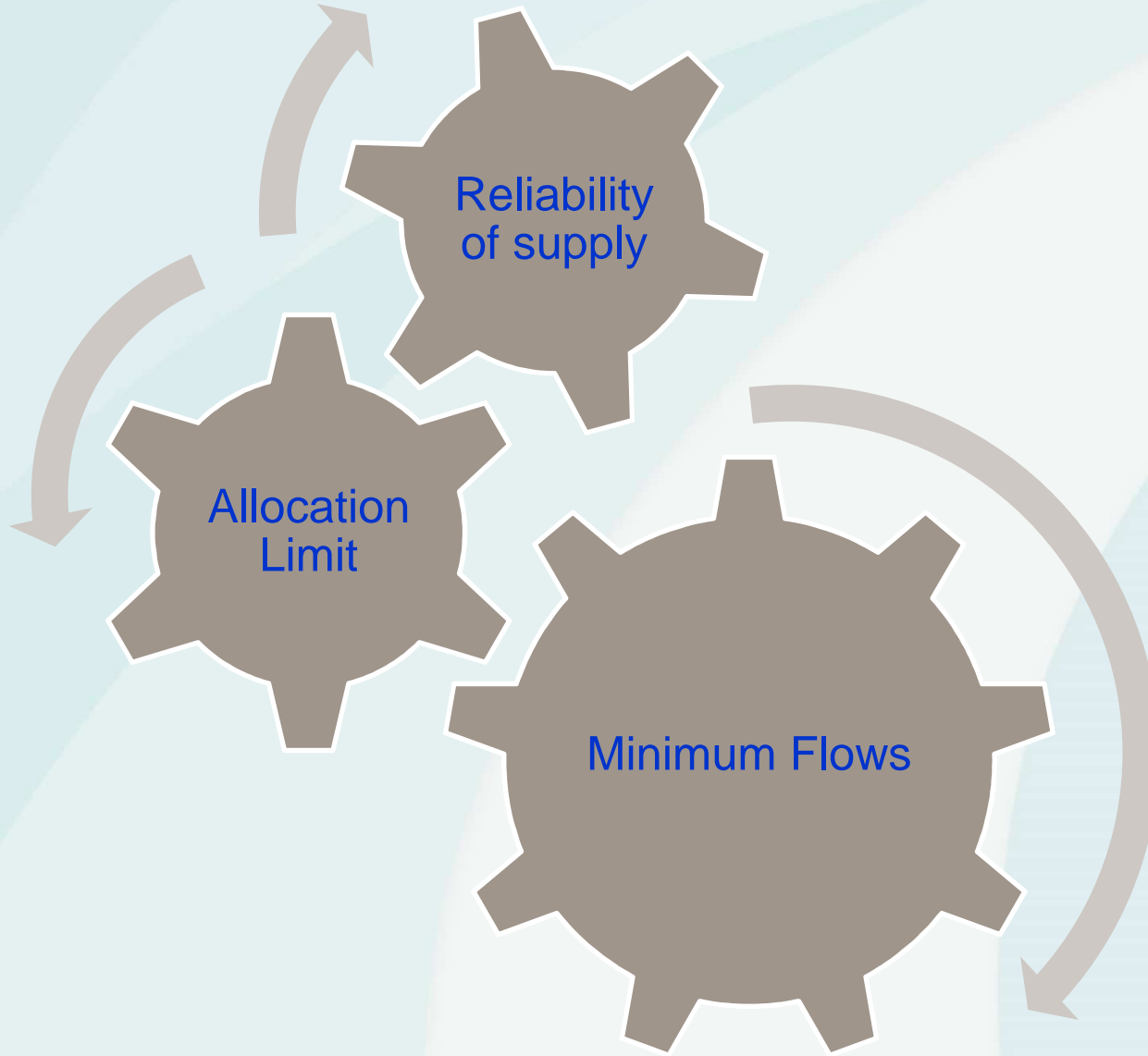


Multiple bands/block

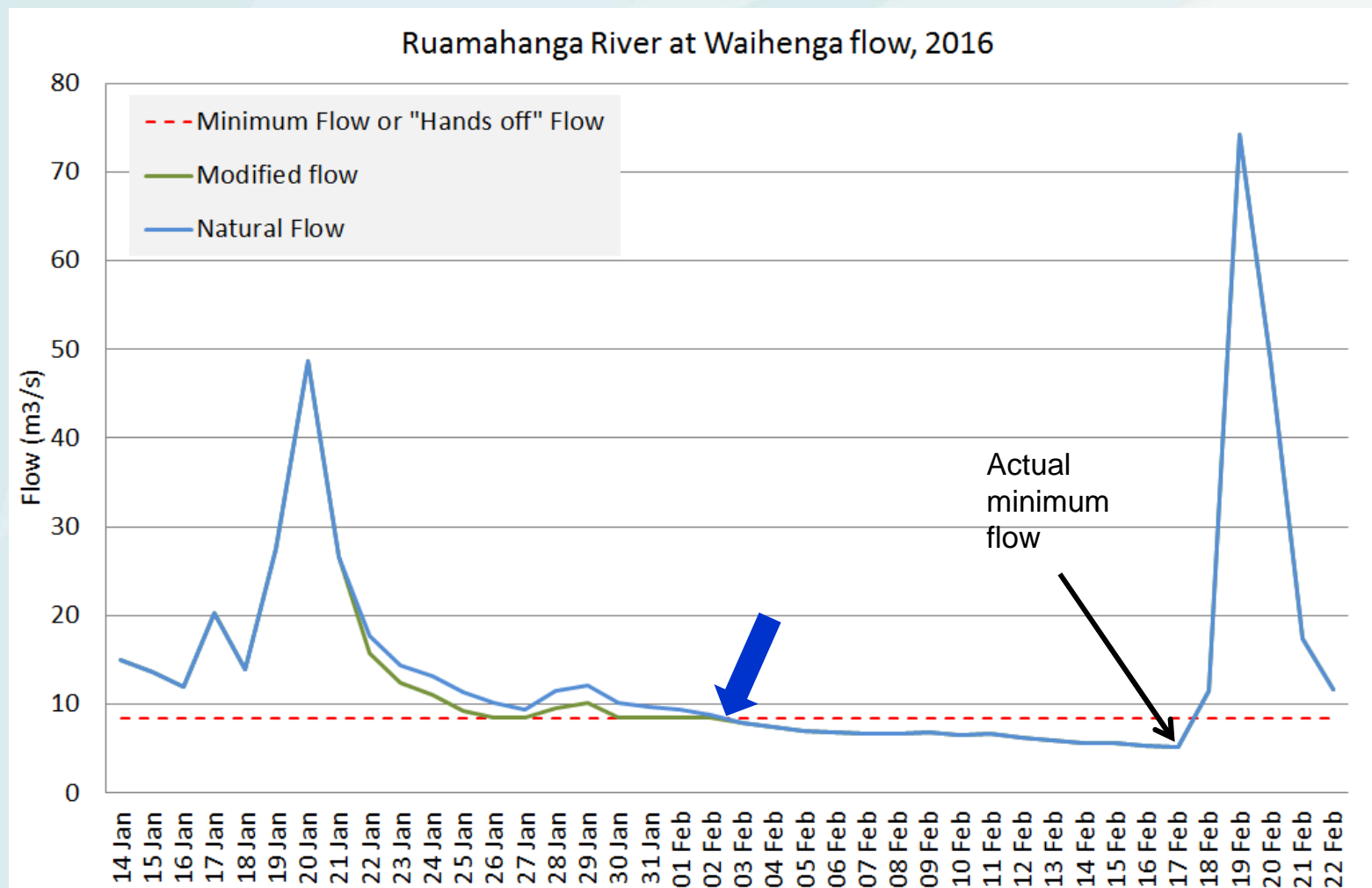


How and where to set the limits?

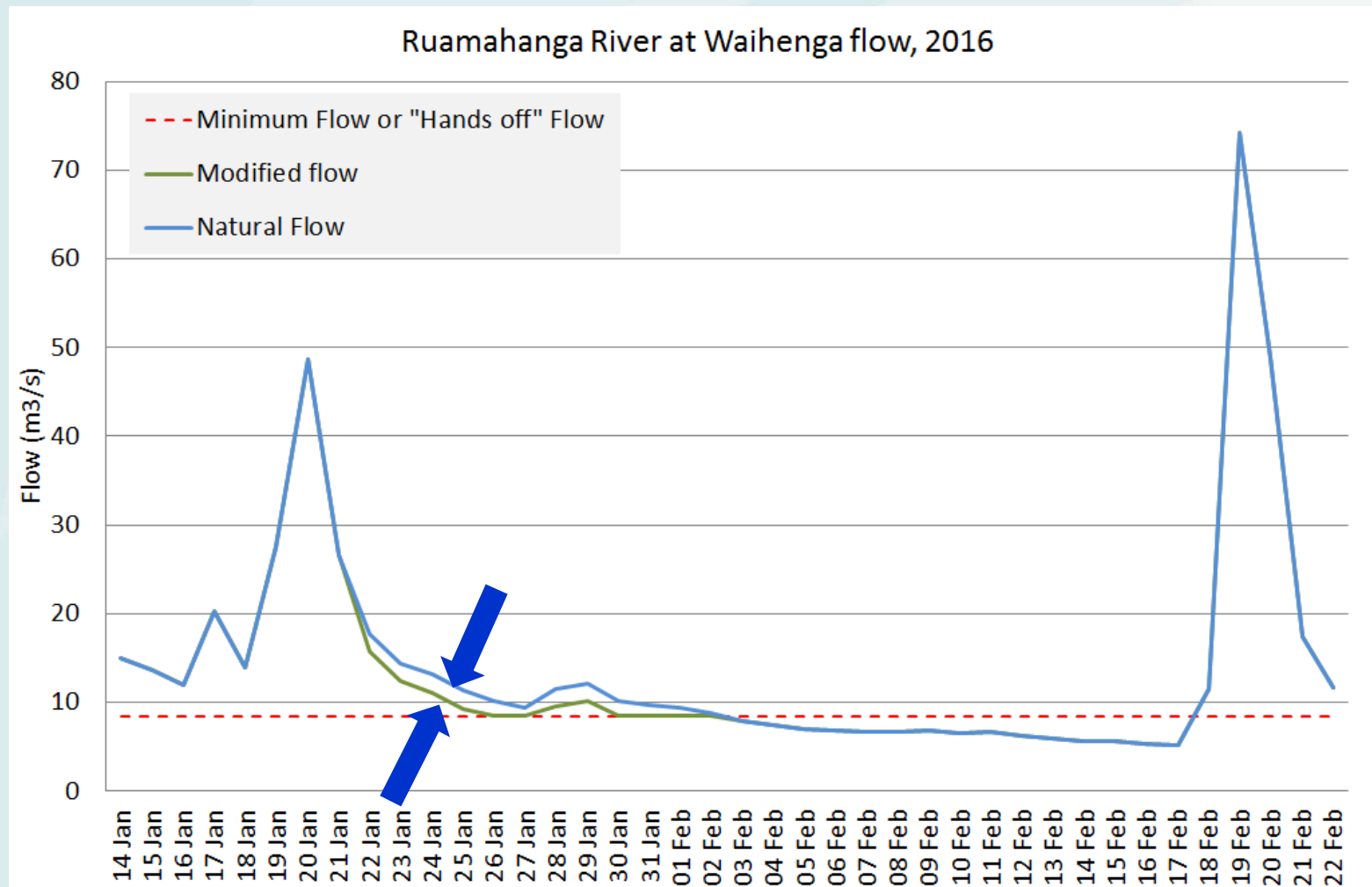




Minimum flows



Allocation limit



Reliability of supply

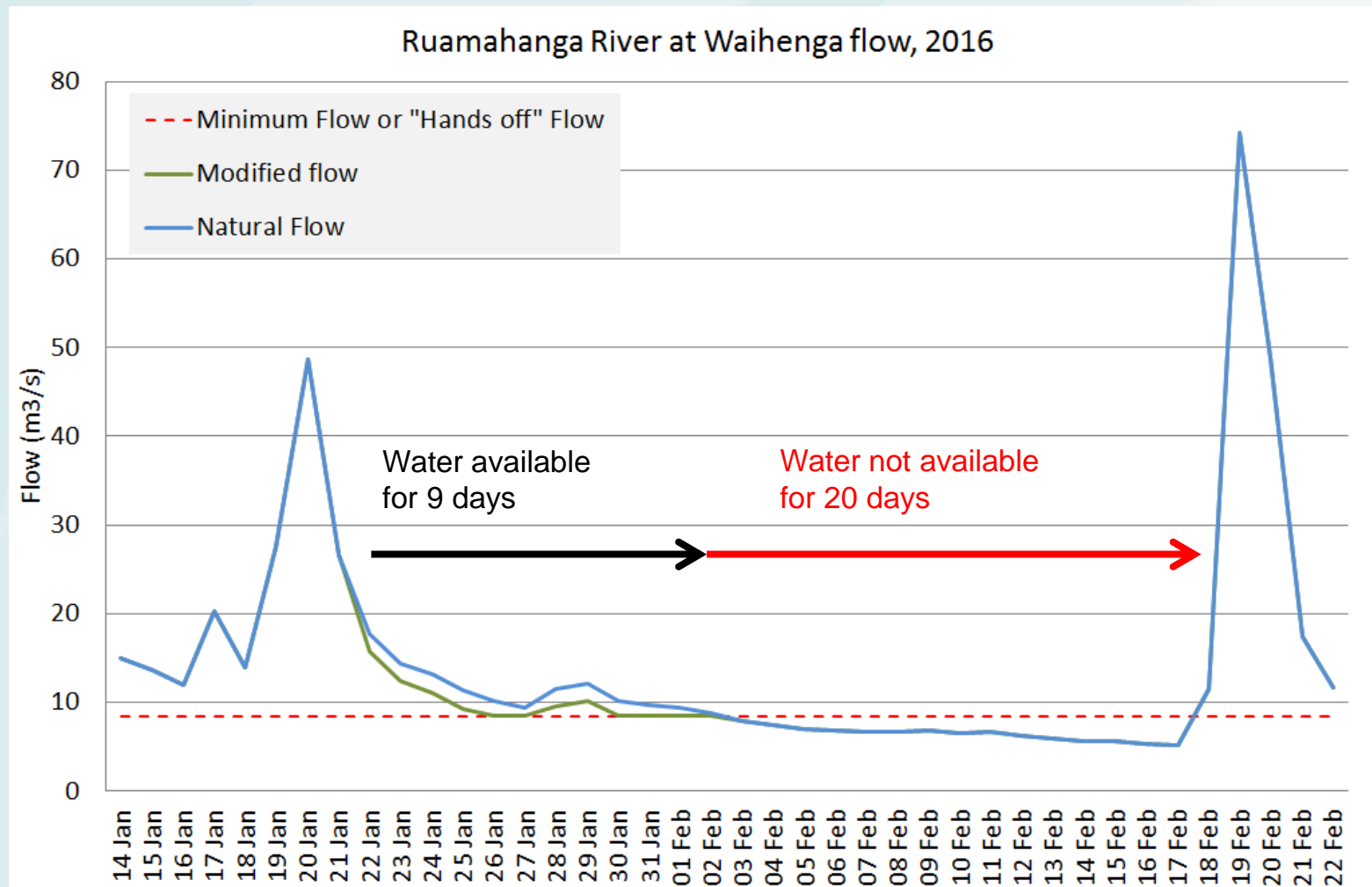
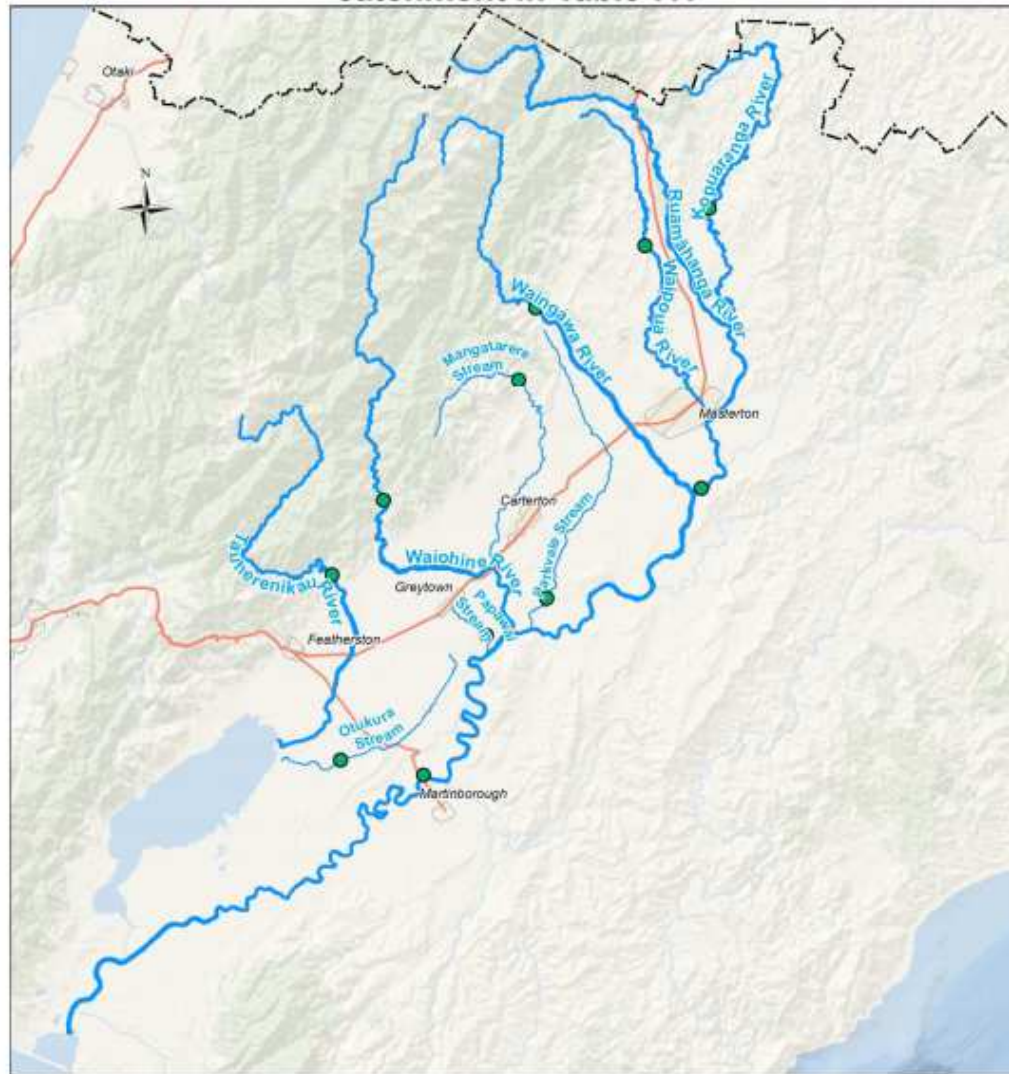


Figure 7.1: Rivers with minimum flows in the Ruamāhanga catchment in Table 7.1



This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <http://mapping.gw.govt.nz/gwrc/> (select theme Proposed Natural Resources Plan 2015) and can be accessed from the Council offices or public library.

- State Highway
- River with minimum flows
- Region boundary line
- River flow management sites
- Urban Areas

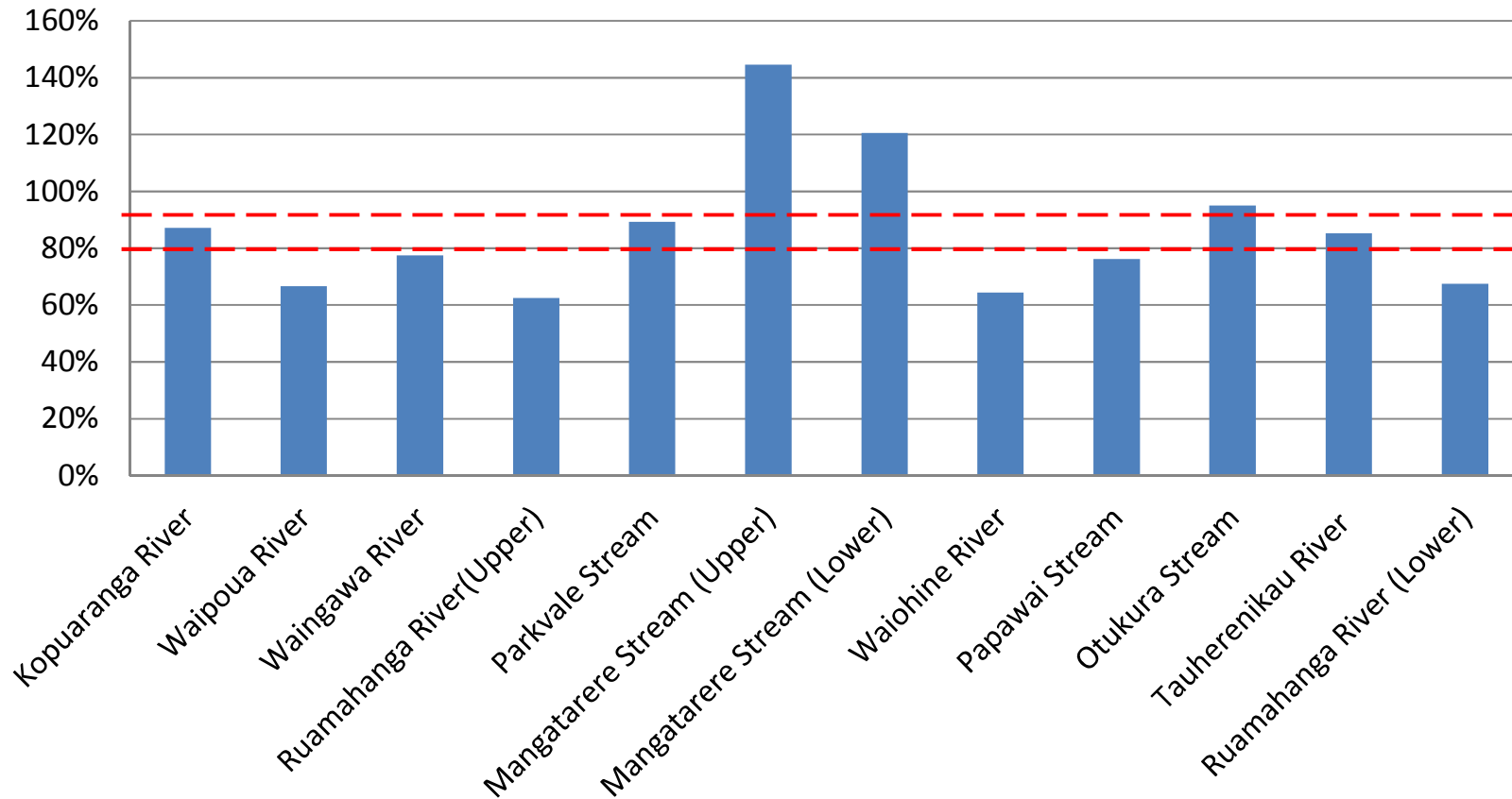


Basemap: World Ocean Base
Projection: NZTM 2000



Copyright © 2015
Basemap: Esri, DeLorme, GEBCO, NOAA, NGS, and other contributors
Topographic and Cadastral: LINZ & CoreLogic Ltd

Minimum flow as % of 7dMALF





10 Feb 2015
~12 cumecs

19 Feb 2015
~4 cumecs

07 March 2015
~3.2 cumecs

08 March 2015
~50 cumecs

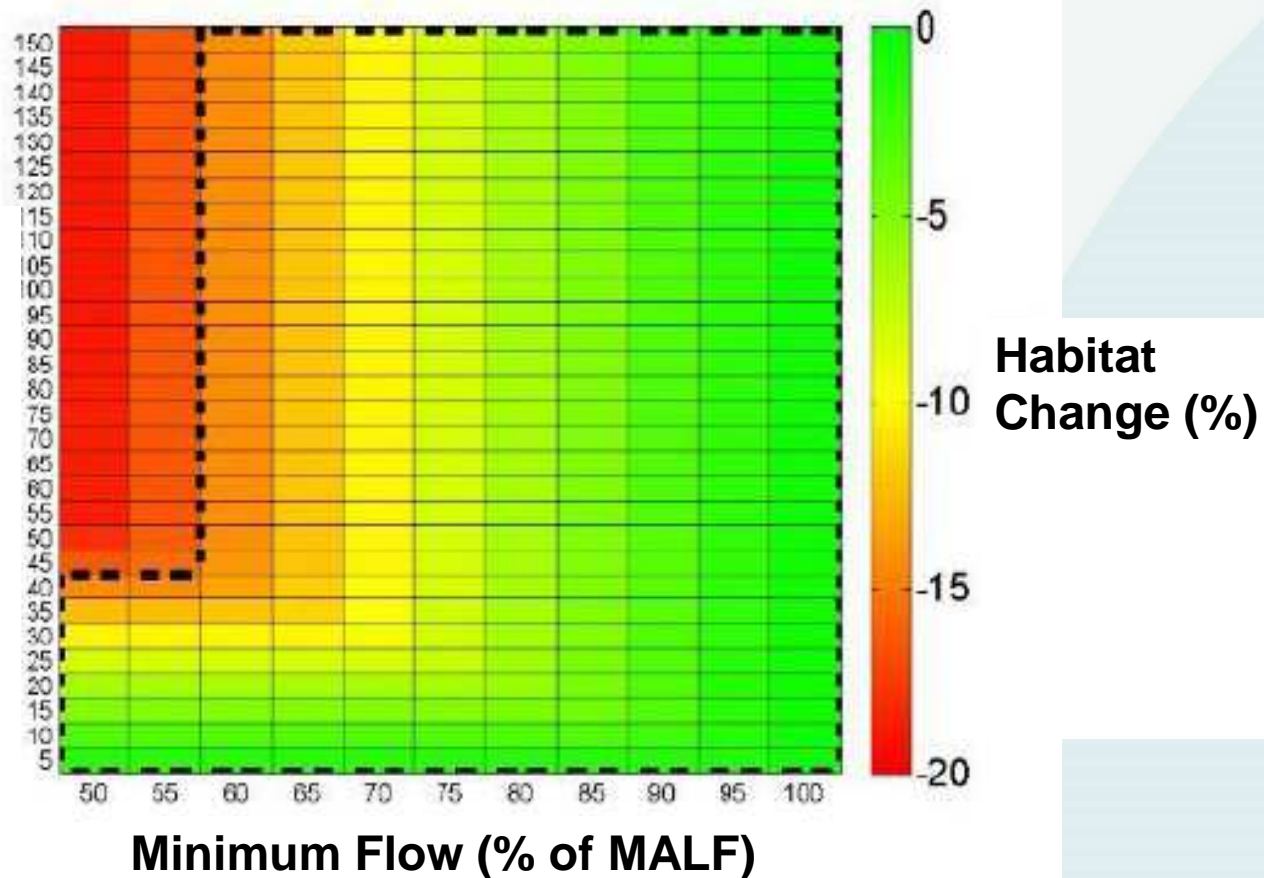
How do outcomes change with different combinations of limits?



Testing limit scenarios

Objective 1. Loss of long fin eel habitat is <15% of that available at MALF

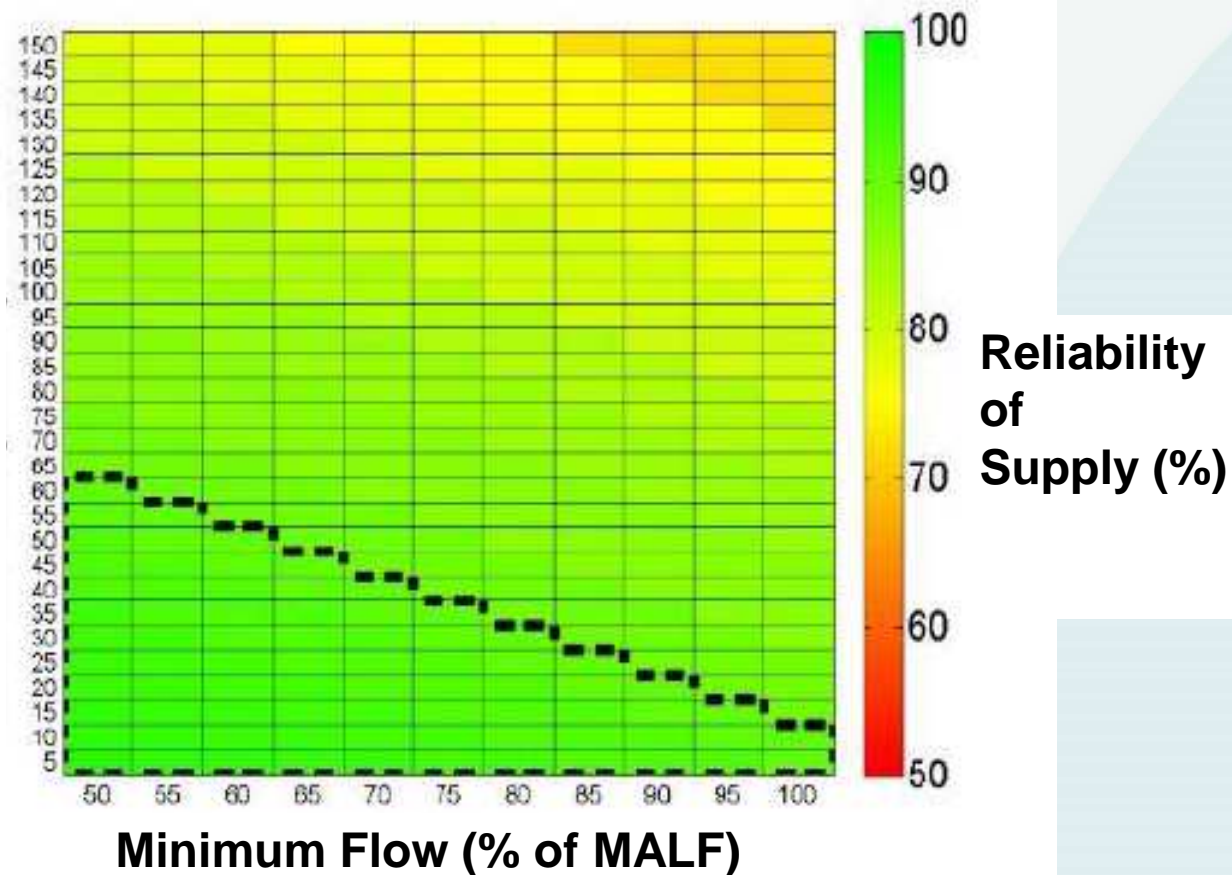
Allocation
Limit
(% of MALF)



Testing limit scenarios

Objective 2. Reliability of full supply of >90%

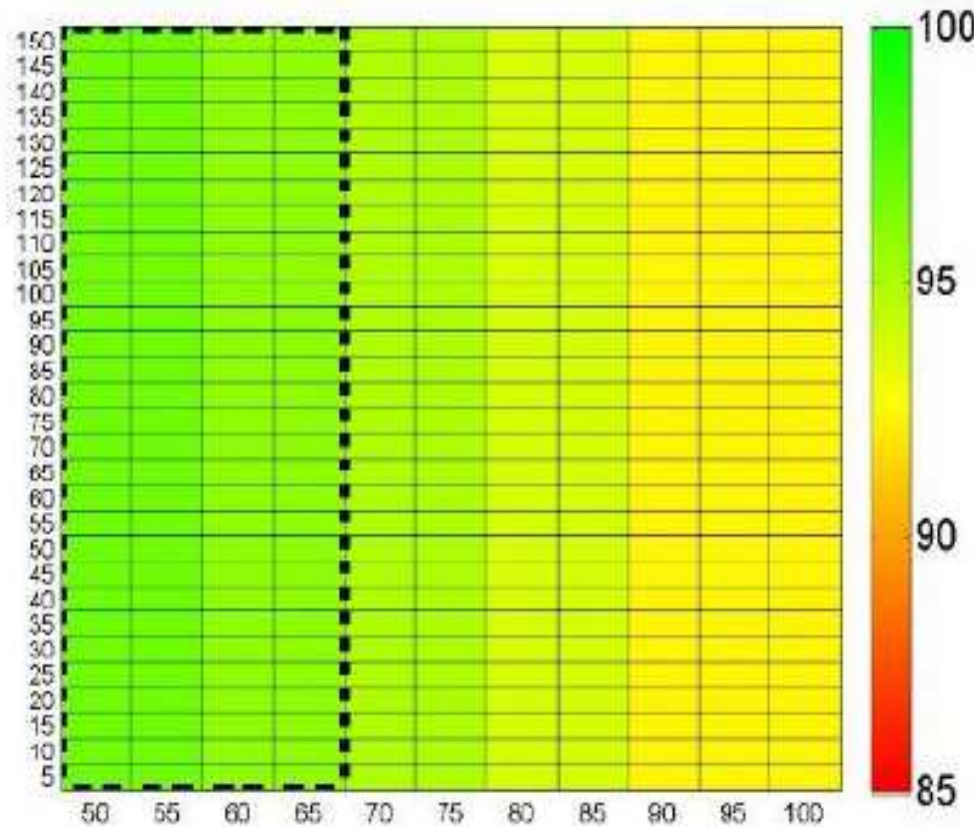
**Allocation
Limit
(% of MALF)**



Testing limit scenarios

Objective 3. Reliability of partial supply of >95%

**Allocation
Limit
(% of MALF)**

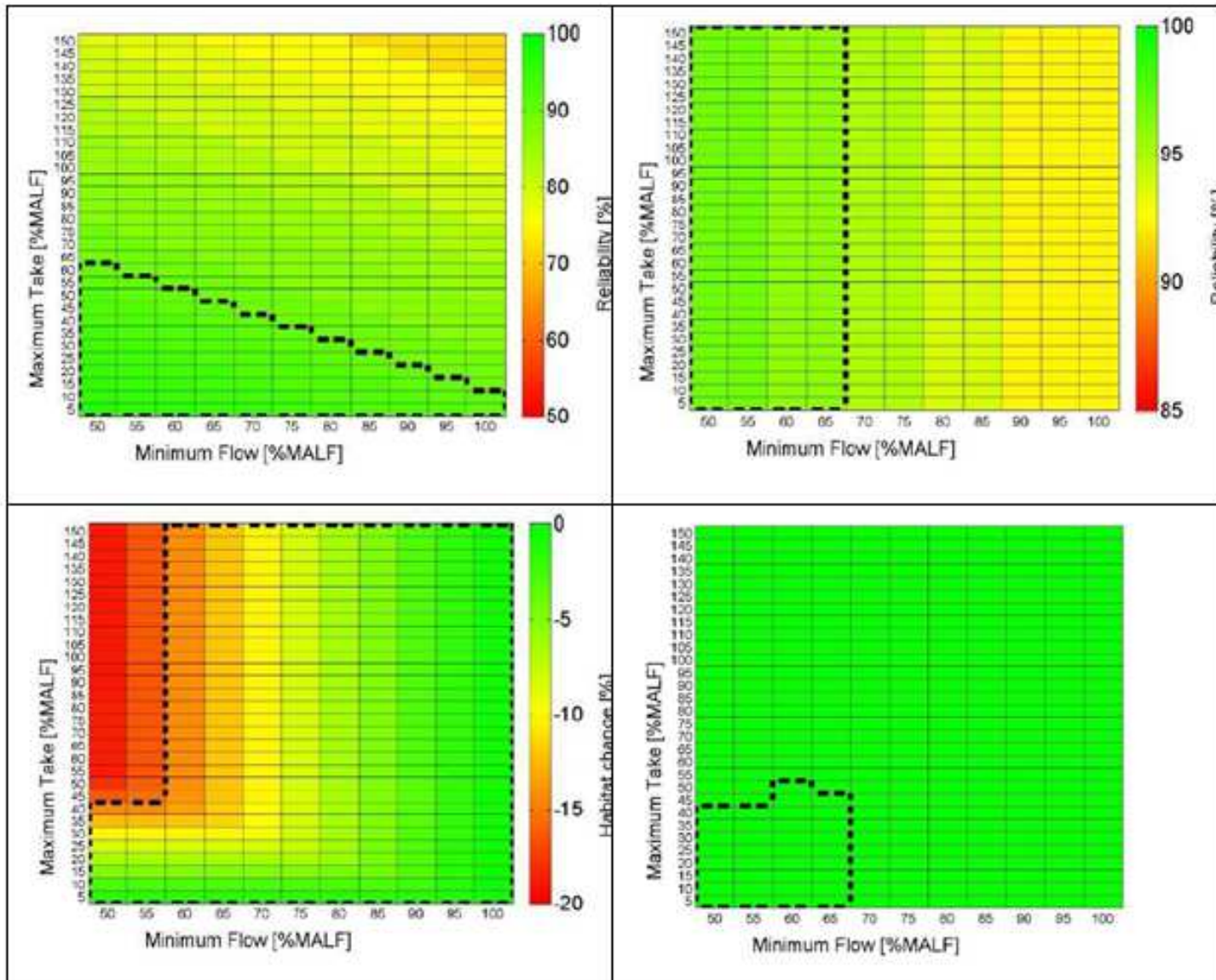


**Reliability
of
Supply (%)**

Minimum Flow (% of MALF)



Testing limit scenarios



Allocation efficiency

(the framework – dividing up the pie)



Current water availability at full allocation

No water available to new users when resource consents expire because:

- existing users can retain their water
- the sinking lid

Potential policy direction

The maximum amount of water available for allocation (core allocation) shall not exceed whichever is the greater of:

- The total amount allocated by resource consents
- The limit identified in the Plan

Key considerations

How will the Committee address allocation on expiry of resource consents?

- Potential allocation approaches:
 - status quo – first in first serve
 - market e.g. auction, tender
 - administrative e.g. priority allocation system, ballot, transfer
- Equity vs existing investment?