

REGIONAL COASTAL PLAN FOR SOUTHLAND
PLAN CHANGE 5:
RESPONSE TO COMMISSIONER'S QUESTION
FROM DR KAY BOOTH, 1 JULY 2023



The Hearing Panel has asked me to further explain what I mean by 'social carrying capacity' in relation to Fiordland. My answer follows.

Social carrying capacity:

1. Social carrying capacity is a recreation and tourism management framework used to address the negative impacts from increasing use levels upon the quality of the visitor experience.
2. The notion of 'carrying capacity' relates to the idea that there is a limit to changes in the quality of the experience before a point of unacceptable change is reached.
3. This used to be framed as 'how many visitors is too many' but research identified that the relationship between parameters of use and aspects of the visitor experience is complex; therefore, relying solely on the number of visitors was too simplistic. Consequently, social carrying capacity developed into a framework as described in point 6 below.
4. Parameters of recreation and tourism use (and the social impacts associated with them) include for example: number of users, type of use (activity, style – eg. motorised or non-motorised, frequency, etc), visitor characteristics and behaviour (eg. whether others speak the same language as you), interactions between users (eg. conflicts between competing uses – such as wilderness kayakers and 'party' motorboaters overnighing in the same location) and interactions between users and their environment (eg. conservation-oriented or not).
5. Terms commonly used when discussing social impacts for recreation and tourism are:
 - a. Crowding – when a person perceives their experience is impacted because the number of people they encounter is too high (ie. crowding is about their perception of the acceptability of the number of people); and
 - b. Conflict – when a person perceives their experience is impacted by other people because of who they are, what they are doing or how they are behaving (ie. conflict is about their perception of the acceptability of various aspects of other people's use).
6. The social carrying capacity framework includes two main components:
 - a. Describing what conditions are desired – the values of the area that require protection (such as wilderness); and
 - b. Defining the level of 'acceptability' for these conditions – a judgement about what standard is appropriate to ensure these values are maintained (which is measured via metrics such as % people who report experiencing wilderness on their trip).

Social carrying capacity with respect to Fiordland:

7. My study found that people generally agreed with respect to the first component of the carrying capacity framework – ie. about the values of wilderness and remoteness in Fiordland. However they differed with respect to the second component of carrying capacity – ie. the acceptability of current use levels upon these values. There was no agreement about whether

the existing level and type of use is adversely impacting the wilderness experiential values of the fiords.

8. The wilderness value of the fiords was most commonly defined as the absence of people and human modification. I note this because it inherently defines the impacts upon wilderness values (ie. the *presence* of people and human modification).
9. Certain social impacts emerged as more important than others from the study.
10. Impact upon the fiords' wilderness value was most often described as the increasing number of people and boats (ie. it is a crowding issue).
11. Interviewees described this increase in use in three main ways: (1) vessel numbers and visibility, (2) human structures, and (3) people at landing sites.
12. Seeing other boats/other people (visual intrusion) was the most significant impact on wilderness experience values.
13. Factors that contribute to this visual intrusion include:
 - a. Increased visibility of boats given vessels are bigger.
 - b. More frequent encounters (more boats, travel faster/more movements).
 - c. Boats present in remote locations for longer; use being displaced to previously little-used fiords (especially Northern fiords); leaving boats on (increasing number of) moorings.
 - d. Air access into remote fiords associated with boat cruises.
 - e. Crowding on moorings and at anchorages.
14. Other dimensions of social carrying capacity were also evident including (for example) non-natural noise (often related to aircraft), and concerns about the safety implications related to crowding on moorings and at anchorages, amongst other things.
15. Differences were apparent by fiord complex, with some hot spots evident, and also by time (through the day, week and year). These differences relate to seeing other people/boats but also to the variation in level of acceptability of that use in different places (eg. some people thought it was "alright" for Piopiotahi/Milford Sound to be busy because it had been "sacrificed").
16. While the study separated out different impact factors, it is their *combined* effect that impacts upon the water-based wilderness experience of the fiords – they do not operate in isolation.
17. This challenge for Fiordland particularly relates to the conflict between *solitude* (absence of other people, natural quiet, etc) and *access* (especially with respect to the need for motorised access). The challenge is measuring the trade-off between these two factors in order to develop social carrying capacity for the fiords.
18. Defining an acceptable level of use (whether by commercial boats or other types of user) with respect to the amount of boat activity was beyond the scope of my study (ie. a carrying capacity assessment is required).