



Recreation impact assessments: Energy

for NZ Association for Impact Assessment 2006 annual conference, Dunedin

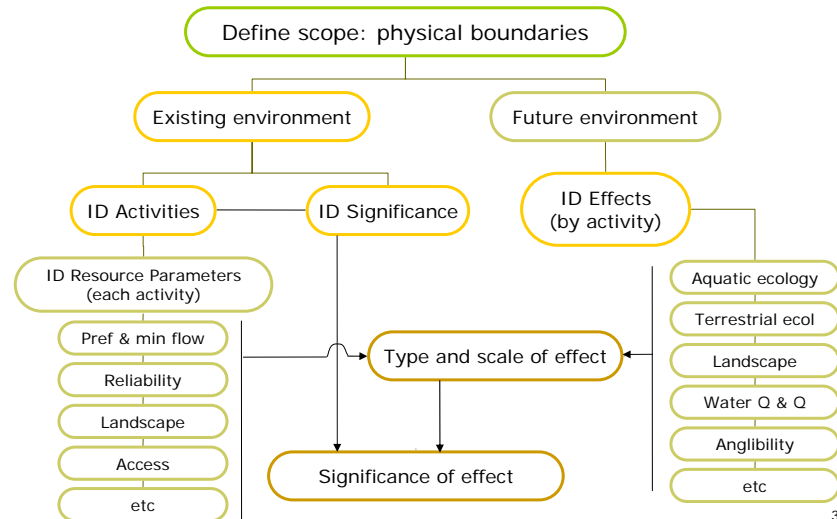


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Aims of presentation

- ❑ Review general approach ('the way we do it')
- ❑ Consider some methods for data gathering
- ❑ Consider some important definitions

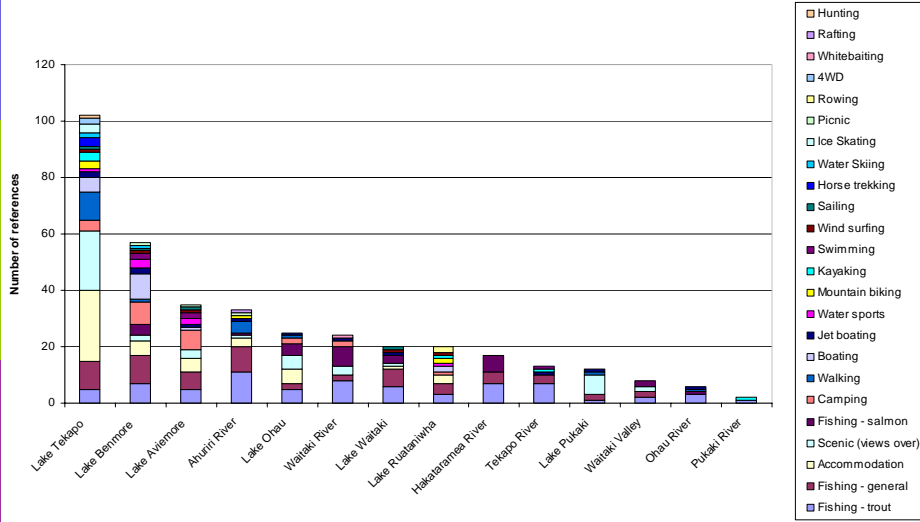
General approach (eg, hydro)



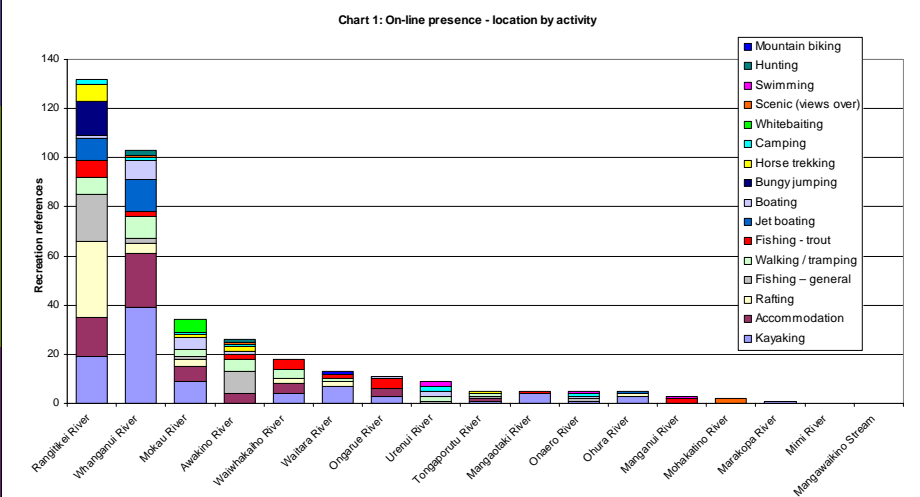
Identify activities – and resource parameters

- ❑ Survey – interception, observational
- ❑ Literature and Web review
- ❑ Quantified literature review
- ❑ Quantified on-line presence analysis
- ❑ 'Structured' interviews, workshops, etc
- ❑ Regional Council publications, NRRPs, water quality assessments, etc
- ❑ Other TA management plans, recreation strategies, etc

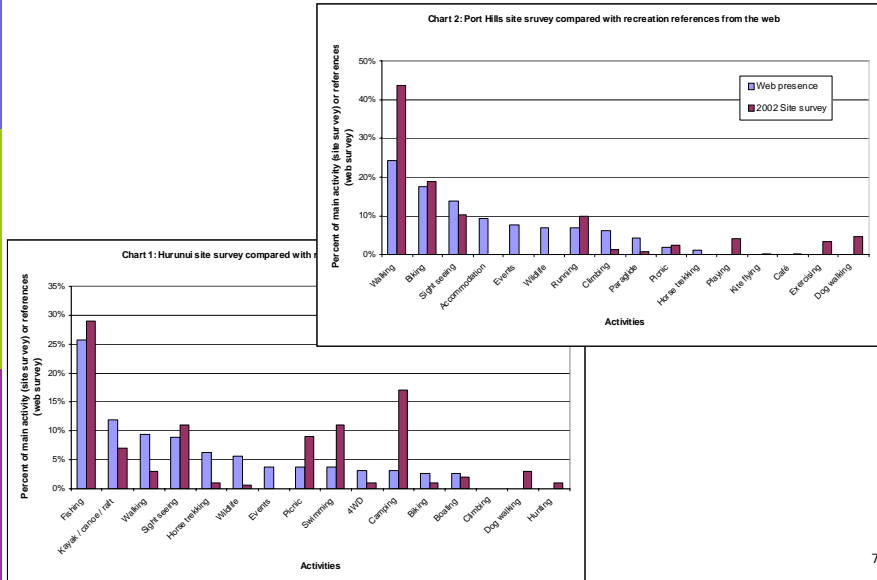
Quantified literature review



On-line presence analysis



On-line presence analysis: calibration



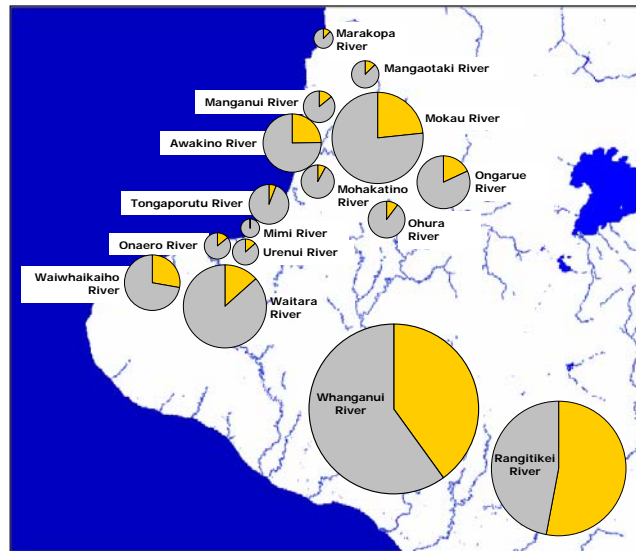
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Identify significance

- ❑ International, national, regional, local
 - MfE Flow guidelines for instream values. 1998
- ❑ Popular guides, eg:
 - Charles, G. 2002. *New Zealand Whitewater*
 - Egarr, G. 1989 / 1995. *New Zealand's North / South Island Rivers*
 - Kent, J. Magnano Madsen, P. 2003. *New Zealand's Top Trout Fishing Waters*
- ❑ National research, eg:
 - Ministry for the Environment. 2004. *Potential Water Bodies of National Importance for Recreation Value*
 - Unwin, M.J., Image, K. 2003. *Angler usage of lake and river fisheries managed by Fish and Game New Zealand.*
- ❑ Significance assessments, eg:
 - Grindell and Guest (eds). 1986. *A list of rivers and lakes deserving inclusion in a schedule of protected waters.*
 - Davis, S.F. 1987. *Wetlands of national importance to fisheries.*
- ❑ Interception survey

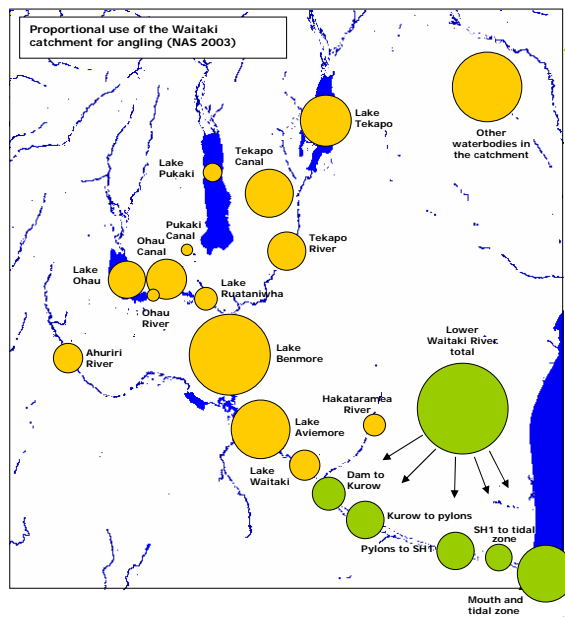
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Significance: On-line presence analysis



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Significance: National angler survey results (for 2001/02)



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Significance: interception survey

Measuring The Significance of Multi-Use Outdoor Recreation Resources: A Comparative Analysis of Three Sites in New Zealand. *Annals of Leisure Research* Vol. 5, 2002, 65 - 79

Table 8: Visitor profile indicators for Waitaki River

	Loyalty	Total loyalty	Frequency	Alternatives	Local
<i>Main Activity</i>	%	%	No.	No.	%
Viewing river	89%	53%	46	3.1	60%
Salmon fishing	84%	61%	35	1.9	38%
Swimming	84%	38%	19	1.3	61%
Whitebaiting	80%	53%	24	1.4	70%
Trout fishing	74%	37%	36	2.5	48%
Trout/salmon fishing	73%	35%	54	2.5	50%
Taking a break (driving)	54%	46%	26	1.6	21%
Picnicking	46%	17%	8	2.1	35%
Jet boating	43%	33%	16	3.3	34%
All (inc 'other')	68%	43%	32	2.1	47%

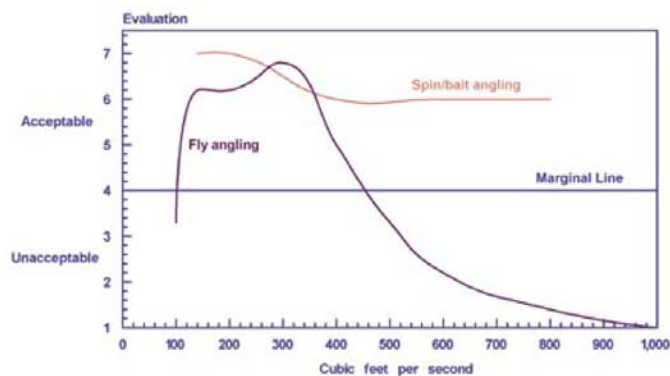
Table 9: Visitor profile indicators for Hurunui River.

	Loyalty	Total loyalty	Frequency	Alternatives	Local
<i>Main Activity</i>	%	%	No.	No.	%
Salmon fishing	61%	21%	14	2.1	8%
Swimming	52%	28%	14	1.2	33%
Camping	51%	25%	3	1.6	6%
Trout/salmon fishing	49%	18%	22	2.2	23%
Relaxing / picnic	48%	22%	4	1.7	9%
Kayaking	43%	6%	5	2.1	6%
Trout Fishing	41%	14%	6	1.9	12%
All (inc 'other')	32%	20%	7	1.7	13%

Identify effects

- Largely dependent on other technical assessments: terrestrial and aquatic ecology, landscape, morphology, depth modelling, anglibility, etc.

Whittaker, Shelby and Gangemi, 2005 (US). Experiential analysis for re-permitting existing schemes



Identify scale of effect

- ❑ Two elements: 'activity specific' and 'net recreation effect'
- ❑ Activity specific:
 - ❑ A 'minor' or 'no more than minor' effect refers to a small change in the recreation setting, but where the original recreational activities can continue.
 - ❑ 'More than minor' refers to an activity opportunity where a shift in the recreation setting may modify the characteristics of an activity – such as the frequency it may be undertaken, the location of the favoured sites, and some of the activity's qualities – but the activity setting retains most or many of its original values and may continue to be pursued. A question of scale applies – 25% effect (US National Parks Service overflight threshold, DOC), 20-50% ('effective control' for share ownership)?
 - ❑ A 'significant' effect would refer to an activity opportunity that was removed and for which no mitigation was possible (the net benefit of the setting to recreation would be significantly diminished).

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Identify scale of effect

- ❑ Net recreation effect:
 - ❑ 'More than minor' may also refer to a setting where mitigations would, on balance, afford a similar level of recreational benefit as the status quo, although these benefits might accrue to a different group of river users – for example, flat water kayakers and wind surfers as substitutes for whitewater kayakers. However, in this latter scenario the specific effect on white-water kayakers as a group would remain 'significant'.
 - ❑ The Clutha Dam had a significant effect on the whitewater opportunities on the Kawarau River (a 'significant' activity-specific effect). However, the development of Lake Dunstan has created a setting which receives greater recreational use for a more varied set of participants than existed prior to the scheme, and so the development has had a positive net effect on recreation in general (a greater variety of activities is now possible, and more 'person recreation days' can be counted in the setting).

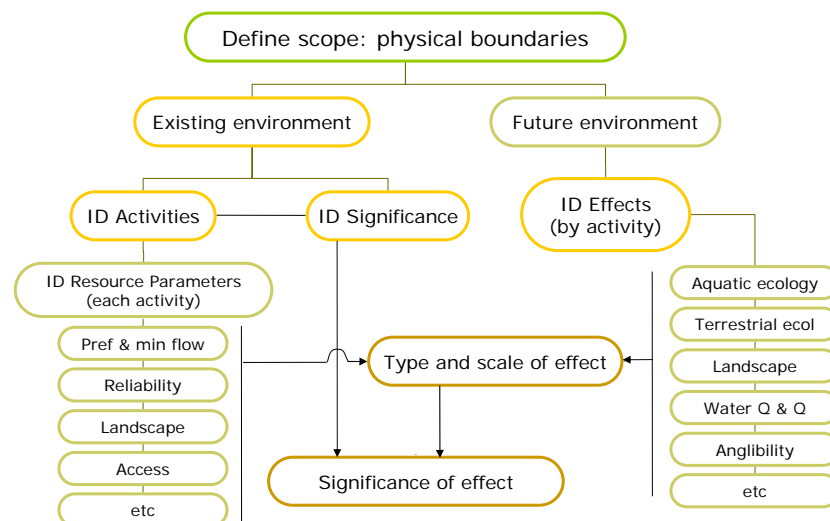
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Calibrate to significance of setting

- Indicate scale of significance where activity-specific effects are 'more than minor': local, regional, national or international?
- Review 'net recreation effect'
- Leave it to the commissioners and judges to make the final conclusion

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Summary



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