Before Independent Commissioners Appointed by the Canterbury Regional Council

UNDER	The Resource Management Act 1991
IN THE MATTER OF	Proposed Plan Change 7 to the Canterbury Land and Water Plan
IN THE MATTER OF	A submission by the Isaac Conservation and Wildlife Trust (Submitter 371) in respect of proposed Schedule 17
JOINT WITNESS STATEMENT OF:	
(1) SHELLEY MCMURTRIE (2) JARRED ARTHUR	

SALMON SPAWNING HABITAT

DATED: 20 AUGUST 2020

BUDDLEFINDLAY

NEW ZEALAND LAWYERS Barristers and Solicitors Christchurch

Solicitors Acting: Alanya Limmer / Jenna Silcock Email: alanya.limmer@buddlefindlay.com / jenna.silcock@buddlefindlay.com Tel 64 3 379 1747 Fax 64 3 379 5659 PO Box 322 DX WX11135 Christchurch 8140

Introduction

- 1. This Joint Witness Statement (**JWS**):
 - (a) Relates to the submission by Isaac Conservation and Wildlife Trust
 (Trust) on Plan Change 7 (PC7) to the Canterbury Land and Water Plan; and
 - (b) Relates to the existence and extent of salmon spawning habitat within the property owned by the Trust. The landholding is legally described as Lot 2 DP 318667 and Lot 1 DP 83039 (Site); and
 - (c) Reports on the outcome of expert conferencing between the two aquatic ecology experts¹ who have either filed evidence in this matter or co-authored the section 42A report for PC7.
- 2. The expert conference was held on 20 August 2020 via teleconference.
- The experts involved have read Appendix 3 of the Environment Court Practice Note and confirm compliance with it.
- 4. In particular (and as set out in paragraphs 1(a) and (b) of Appendix 3) the witnesses understand:
 - (a) the role of a JWS is to clearly record the issues agreed and not agreed, between them. Succinct reasons are to be captured in the JWS. This will assist all parties and the decision-makers in focussing on the matters that remain in dispute and the significance of them;
 - (b) expert conferencing is not a forum in which compromise or a mediated outcome between the experts is anticipated. Unlike mediation, the "aim" is not resolution. Rather, the aim is clear identification of, and possibly narrowing of, points of difference supported by expert reasoning.
- 5. The participating experts have read the following material in preparation for this expert conference:

¹ Shelley McMurtrie (witness for the Trust); Jarred Arthur (Canterbury Regional Council).

- Section 10 Schedule 17 (Salmon Spawning Sites)² of the section 42A
 Report on Plan Change 7; and
- (b) Ms McMurtrie's evidence in chief (dated 17 July 2020).
- 6. The experts have agreed that the following topics may be a useful starting point for discussions:
 - (a) Are there any historic records of salmon (or trout) spawning within the waterways of the Trust's land?
 - (b) Apart from Ms McMurtrie's recent survey, are there any other "groundtruthed" assessments available as to where salmon spawning habitat exists within the boundaries of the Trust's property?
 - (c) With reference to Ms McMurtrie's recent survey, is the use of four suitability categories (being "marginal", "poor", "good" and "fair") appropriate?
 - (d) Is there agreement on what constitutes "marginal", "poor", "good" and "fair" salmon spawning habitat?
 - (e) With reference to those categories, do the experts agree:
 - Habitat classified as "marginal" or "poor" is unsuitable for salmon spawning?; and
 - (ii) Habitat classified as "good" or "fair" could potentially support salmon spawning?
 - (f) Is it likely that natural flow fluctuations would alter any classifications applied at the present time?
 - (g) Is it likely that small-scale restorative intervention (e.g. sand wanding) would alter any classifications applied at the present time?
 - (h) Is the final classification of 'salmon spawning habitat' given by Ms McMurtrie in her evidence³ appropriate?
 - The map annexed to this JWS, which illustrates the differences between Ms McMurtrie's evidence and the s42A Report (based on the map annexed to the s42A report, Appendix E Part 2

 ² Section 42A Report - Plan Change 7 to the CLWRP and Plan Change 2 to the WRRP, March 2020, Pages 197-200, Paragraphs 10.1 to 10.24, planning author Andrea Richardson and technical author Jarred Arthur.
 ³ See paragraphs 40a, 40b and Attachment 4, Figure 13 and Figure 14).

Officer Recommendations, Map 2 Series PC7), is intended to aid this discussion.

- (i) Any other matters?
- 7. The experts have also considered whether a site visit would be helpful and have concluded that a site visit is not necessary.
- 8. The outcomes of discussion on the topics listed above are set out below.

Are there any historic records of salmon (or trout) spawning within the waterways of the Trust's land?

- 9. It was agreed by both experts that any discussion regarding trout spawning was beyond the scope of this matter, which is focused on salmon spawning.
- 10. It was agreed by both experts that to the best of their knowledge there are no specific records regarding salmon spawning habitat within the waterways of the Otukaikino catchment. Unpublished information may be held by organisations such as Fish and Game, but this information is not known to the experts.

Apart from Ms McMurtrie's recent survey, are there any other "groundtruthed" assessments available as to where salmon spawning habitat exists within the boundaries of the Trust's property?

 As noted by Arthur (2019) (page 13), Fish and Game have advised that the Otukaikino catchment has not been aerially surveyed for salmon spawning. Also refer to paragraph 10 above.

With reference to Ms McMurtrie's recent survey, is the use of four suitability categories (being "marginal", "poor", "good" and "fair") appropriate?

12. It was agreed by both experts that the use of the four suitability categories was appropriate. Both experts agreed that whilst the survey was a snap-shot in time, the conservative approach used for defining and applying the four categories (which allowed for a range of conditions within determinant criteria) had appropriate consideration for seasonal variability in flows and other environmental drivers of habitat condition.

Is there agreement on what constitutes "marginal", "poor", "good" and "fair" salmon spawning habitat?

13. As indicated in the response in paragraph 12, there is agreement on these by the experts.

With reference to those categories, do the experts agree:

- (i) Habitat classified as "marginal" or "poor" is unsuitable for salmon spawning?; and
- (ii) Habitat classified as "good" or "fair" could potentially support salmon spawning?
- 14. It was agreed by both experts that the 'marginal' and 'poor' classifications are unsuitable for salmon spawning, and that the 'good' and 'fair' classifications are suitable for salmon spawning.
- 15. Both experts are satisfied with the methodology, the approach of undertaking the surveys, and the way categories were applied to the waterways on the Trust's land (including on the basis of the photographic evidence provided in Ms McMurtrie's evidence). Both experts agree that the maps provided in Figure 2 and Figure 7 of Ms McMurtrie's evidence are an accurate representation of salmon spawning habitat suitability, notwithstanding the fact that Mr Arthur hasn't visited the sites in person.

Is it likely that natural flow fluctuations would alter any classifications applied at the present time?

- 16. The experts agree that natural flow fluctuations do occur in the catchment but would be unlikely to alter the current classifications applied at the present time. This is notwithstanding an extreme weather and flood event, such as a breach of the banks of the Waimakariri River.
- 17. Both experts are satisfied that the assessment was conservative enough to accommodate natural seasonal flow fluctuations (as per paragraph 12).

Is it likely that small-scale restorative intervention (e.g. sand wanding) would alter any classifications applied at the present time?

18. The experts agree that small-scale interventions (such as sand wanding) would not be sufficient to improve the current classification of 'marginal' or 'poor' salmon spawning habitat to that suitable to support salmon spawning activity in the surveyed waterways. The experts agree that larger scale and likely more-costly interventions would be required to alter the current classification of 'marginal' or 'poor' salmon spawning habitat to that suitable to support salmon spawning.

19. It is also the opinion of the experts that restoration efforts in relation to salmon spawning habitat in these smaller headwater streams could be hindered by the wider issues caused by reduced baseflows in these springfed systems.

Is the final classification of 'salmon spawning habitat' given by Ms McMurtrie in her evidence⁴ appropriate?

- 20. The experts agree that this is suitable, based on the outcomes of discussions on the above topics and the methodology put forward in the evidence of Ms McMurtrie.
- 21. This therefore pertains to the downstream 232 m of channel in Stillwater Creek assigned as salmon spawning habitat as per Figure 13 of Ms McMurtrie's evidence. More specifically this is from the confluence of Stillwater Creek with Plantation Creek (latitude -43.4520085, longitude 172.582795) upstream to latitude -43.4506642, longitude 172.5809471 in Stillwater Creek. The datum used for the coordinates is WGS1984.

Any other matters?

22. There are no other matters.

References

Arthur, J. 2019. Proposed amendments to LWRP Schedule 17: Salmon Spawning Sites [memo]. Environment Canterbury, Christchurch. 77 p (incl appendices).

Signed 20 August 2020

Shelley McMurtrie

⁴ See paragraphs 40a, 40b and Attachment 4, Figure 13 and Figure 14).

Suntas

Jarred Arthur

Annex 1

A copy of the map from the s42A Report (Appendix E Part 2 Officer Recommendations, Map 2 Series PC7) with sections highlighted in yellow where there is a difference in salmon spawning habitat definition between Ms McMurtrie's evidence and the s42A Report, as it relates to the Isaac Conservation and Wildlife Trust's land.

