IN THE MATTER	of the Resource Management Act 1991
AND	
IN THE MATTER	of Plan Change 93 (Te Puna Springs) to the Western Barof Plenty District Plan
	STATEMENT OF EVIDENCE OF FIONA JOYCE WILCOX
	ON BEHALF OF TE PUNA SPRINGS ESTATE LIMITED (SUBMITTER 04)
	23 JUNE 2022

QUALIFICATIONS AND EXPERIENCE

- 1. My full name is Fiona Joyce Wilcox.
- 2. I am a Principal Ecologist with Wildland Consultants Ltd ('Wildlands'), based in Tauranga. I have been employed as a consultant ecologist with Wildlands since 2008.
- 3. I hold the qualifications of Bachelor of Science (Ecology, 2005) and Master of Science (Terrestrial Ecology, 2009) from the University of Waikato.
- 4. I have 13 years of experience as a professional ecologist. My work experience includes assessments of ecological effects; significant natural area identification and assessment; restoration, management, and implementation plans; wetland delineation; vegetation monitoring; threatened plant population monitoring; and pest animal monitoring.
- 5. My experience includes work within a wide variety of ecosystems, including forest, shrubland, scrub, riparian, wetland, geothermal, riverine, and coastal ecosystem types across a range of localities including the Coromandel, Waikato, Bay of Plenty, Taupō, East Coast, Taranaki, and north Canterbury regions. I am a generalist ecologist but am particularly experienced in significant natural area assessments, wetland delineations, and providing ecological advice and planning for restoration and enhancement of degraded riparian and wetland ecosystems.
- 6. I am a member of the New Zealand Ecological Society and the National Wetland Trust.
- 7. I undertook a walk-through survey of the riparian margin and wetland habitats at 23 Te Puna Road, Tauranga on 3 March 2022, accompanied by my colleague Lucian Funnell.
- 8. I took part in a pre-hearing meeting with Bay of Plenty Regional Council and Western Bay of Plenty staff on 16 June 2022 to discuss ecological matters that required resolution.
- 9. I confirm that I have read the Code of Conduct for Expert Witnesses outlined in the Environment Court's Consolidated Practice Note and I have complied with this in preparing this report. I agree to be bound by that Code of Conduct and confirm that I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express in the following evidence. The evidence I give is within my expertise, except where I state otherwise.

SCOPE OF EVIDENCE

- 10. I have been engaged by Te Puna Springs Estate to provide evidence relating to the aspects of the plan change that are relevant to the current and potential future ecological values within the 23 Te Puna Road site. In particular with reference to the stream course, riparian margin habitat, and wetland habitat.
- 11. The proposed Structure Plan identifies the future road access, riparian margin enhancement areas, a landscape buffer area, height limits, stormwater areas, greenspace, and existing and proposed utilities and services.

CURRENT SITE CHARACTER AND VALUES

- 12. The current ecological character and values within the site have been described in detail in the May 2022 Wildlands report. The following paragraphs provide a brief summary of those values for context.
- 13. The existing unmanaged vegetation within the site has been modified many times during the past 20 years or so as a result of earthworks, track creation, vegetation clearance, and weed control. The vegetation currently present on the site is a reflection of this regular disturbance, and is mainly dominated by exotic pest plant species. Many of the exotic species are highly invasive such as tree privet, flowering cherry, and black wattle.
- 14. Two small pockets of indigenous wetland vegetation are present, which have formed on the margins of the constructed pond in the approximate centre of the site.
- 15. Like the vegetation character within the site, some of the stream channels that have been identified have been modified historically (southern tributary, southwestern tributary, and part of the main southern reach; see Plate 1 below). The instream character of the modified channels reflects the history of disturbance, but nevertheless retains some habitat value for indigenous freshwater fauna.

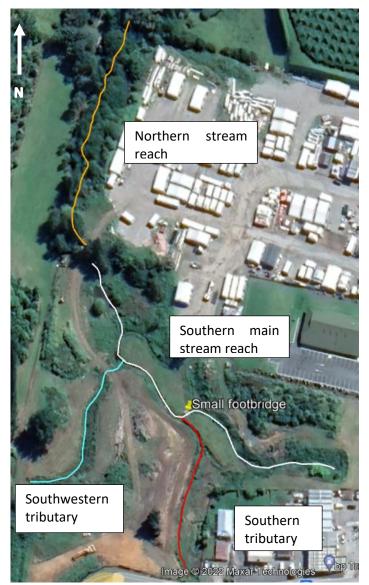


Plate 1. Stream names and approximate locations based on 2 February 2022 Google Earth imagery.

- 16. One stream channel reach (the northern reach; see Plate 1 above) does not appear to have been artificially modified. This area retains good habitat for indigenous freshwater fauna.
- 17. Within the site, the presence of a 'pipe sock' downstream of the stormwater pond is likely to restrict access to the southern stream reaches for fish species that have poor climbing ability.
- 18. The possibility of whether barriers to fish passage are present downstream of the Te Puna Springs site has not yet been investigated. Barriers to fish passage could be present anywhere there is a culvert or other barrier. These are often present where a road or access track across the stream.

THE PROPOSED ACTIVITY

- 19. The purpose of the plan change is to rezone the site from a partial 'Rural' and partial 'Commercial' zoning, to a new scheduled site provision within the Commercial Zone title "Te Puna Springs". The rezoning as a scheduled site would enable the development of a plan which includes provision for community, commercial, and environmental benefit.
- 20. The proposed Structure Plan proposes a new definition and new assessment criteria as well as rules and performance standards that relate to the site.
- 21. The proposed stormwater detention facility would aim to recreate and enhance any wetland vegetation lost through earthworks required for the development.
- 22. The proposed revised Structure Plan has been significantly amended to include input from various project specialists and to address matters raised in submissions.

SUBMISSIONS

- 23. Several submissions were received which requested consideration and/or assessment of ecological matters. These submissions were from the following parties:
 - a. DC Kirk Family Trust
 - b. Royal Forest and Bird Protection Society of New Zealand
 - c. T & M Cooney
 - d. Te Puna Memorial Hall Committee
 - e. Te Puna Heartlands
 - f. Bay of Plenty Regional Council
- 24. All of the submissions on ecological matters covered seven key considerations/concerns: watercourse designation, identification and protection of stream and wetland values, avoiding loss of stream and wetland extent and values, protection and ecological enhancement of wetland, spring, and stream habitats, incremental water quality degradation, loss of avifauna habitat, and downstream effects on natural values.

RESPONSES TO SUBMISSIONS

- 25. As a result of consultation and the submissions received, the applicant commissioned Wildlands to identify the current and potential future ecological values within the site with particular reference to the values contained within the watercourses on the site.
- 26. Following provision of the May 2022 Wildlands report, the layout of the Structure Plan was revised so that:
 - None of the waterways or the spring/puna on site would be piped beneath commercial surfaces.
 - b. The current flow-paths of the waterways would not be modified, and the margins of the waterways and puna would be protected by increasing set-back distances to development pads.
 - The current flow-paths would be incorporated into the stormwater detention pond design.
 - d. The ecological values of the waterways would be enhanced by provision for riparian margin buffer zones along the entirety of each waterway length within the site.

DISTRICT COUNCIL PLANNER'S REPORT

- 27. I have read the Council's Planner's Report (A. Price, File No. A4524920), and concur with the recommendations that:
 - a. Option 3 proposal relating to the revised Structure Plan map be accepted.
 - Option 2 of the Freshwater and Ecology approach be accepted. However, see Paragraph
 29a. below for additional considerations.
 - Option 2 of the amended Stormwater approach be accepted. However, see Paragraph
 29b. below for additional considerations.
- 28. Although I accept, in principle, the planner's recommendation for Topic 11: Freshwater and Ecology, it should be noted here however, that the summary contains an error in the application of ecological value of the current state of waterways and corridors within the site. The planner's report states that "...the existing stream corridors have low-very low ecological significance but

have potential for ecological enhancement." Whilst the ecological corridors and waterways do have high potential for enhancement, the ecological values of the waterways were considered to be moderate, and only the riparian margin habitat of the modified watercourses was considered to be low.

- 29. In addition to the recommendations in the District Council Planner's report noted above, I recommend that the following provisions should be included within the rules and provisions for the Structure Plan:
 - a. As outlined in the evidence of Aaron Collier I would support the adoption of a further rule in Appendix 7, Section 8 of the District plan which implements the recommendations of my report. This provision would require the following:

8.3 Riparian Margins

- i. At the time of building or subdivision consent (whichever occurs first) restoration and enhancement of the riparian margins shall be undertaken as part of stormwater management improvements in accordance with the Wildlands Ecological report dated May 2022 (or other similar report prepared by a Suitably Qualified Expert). This restoration and enhancement shall be based on a plan approved by Council and shall include the following:
 - Buffer planting
 - Fish passage
 - A stream enhancement plan
- b. That the design of the stormwater ponds and conveyance structures to the stormwater ponds be undertaken in consultation with a suitably qualified and experienced ecologist.
- 30. The provision outlined in Paragraph 29b. above is suggested to ensure that the final stormwater design incorporates elements that will result in runoff/outflow that will meet freshwater quality concerns on downstream receiving environments raised by submitters such as Bay of Plenty Regional Council.

CONCLUSION

31. In conclusion, I support the overall plan change in accordance with the revised Structure Plan and recommendations in District Council Planner's report with minor amendments.

32. I am of the view that, with appropriate restoration and enhancement designed by a suitably qualified and experienced ecologist, the provisions for protection and enhancement of the stream, wetland habitats, and riparian margins of the site contained within the Structure Plan will significantly enhance the ecological, indigenous biodiversity, and amenity values of the site.

Fiona Wilcox
Principal Ecologist
Wildland Consultants Limited