

Memorandum

To: The District Planning Team

From: Melissa Parlane (Asset Management and Capital Delivery Manager)

Date: 5 April 2024

Subject: Private Plan Change 84 (Mangawhai Hills) in respect to water supply.

In response to Private Plan Change 84 Mangawhai Hills Limited (PPC84) I have been asked by the District Planning Team to provide advice on issues associated with the provision of potable water, and in particular:

- The capacity of the Mangawhai Water Supply system and its ability to supply potable water.
- The proposed provisions for the supply of potable water for PPC84.

These statements reflect the current situation and are intended for inclusion in the section 42A report for PPC84.

With respect to the capacity of the Mangawhai Water Supply network and Water Treatment Plant:

- A portion of Mangawhai is served by a small, reticulated network sourced from a bore and reservoir, extending from Fagan Place in Mangawhai Village to the end of Wintle Street.
- Currently, the Kaipara District Council lacks a strategic plan to augment the water supply network or increase the capacity of the Water Treatment Plant in Mangawhai.
- Predominantly, the Mangawhai region relies on private rainwater harvesting for water supply.

With respect to the proposed supply of potable water for PPC84:

- The applicant proposes in its Land Development Report lodged in support of PPC84 (page 12) on-site rainwater harvesting combined with the use of water saving fixtures. I support this approach.
- Concerns have been raised by submitters regarding the resilience of water supply for sites
 with tank supply less than 50m³ storage. I note that during drought conditions water supply
 can become generally constrained, making topping up by water tankers difficult, and costly.
- The applicant proposes in its Area Provisions lodged in support of PPC84 (Appendix 3, DEV1-S15 and table DEV1-2) reasonable standards for calculating minimum water storage size requirements for a range of residential building sizes.
- The proposed matters of discretion (DEV1-S15 (3)(c) include a requirement to assess firefighting water supply, with the associated note aligning with the existing provisions on this matter in the Operative District Plan.
- I believe this proposal adequately addresses water supply needs, particularly considering the
 prevalent use of rainwater harvesting for potable water in Mangawhai and large parts of
 Northland.
- The typical 1000m² site with residential building of 240m² roof area, 4-person household and 50m³ rainwater harvesting storage, is discussed in the Land Development Report lodged in support of PPC84 (page 13). I agree that this provides adequate water resilience.
- Considering the proposed 1,000m² minimum site size, there is more than adequate site space
 to accommodate the required water storage as per the proposed provisions.
 Furthermore, it seems reasonable to allow smaller storage volumes than 50m3 for smaller
 residence in line with table DEV-1-2, as larger volumes could remain underutilised.

5th April 2024

Melissa Parlane Date