





Monitoring stream habitat health in Te Hakapupu catchment waterways

Toitū Te Hakapupu - The Pleasant River Restoration Project (2021-2025) aims to improve water quality and enhance conservation, cultural and community values throughout Te Hakapupu catchment.

Scientific monitoring has been included as part of the project and this will assess many aspects of water quality. The stream habitat health score is one of these. It gives a broad indication of habitat health based on eight habitat characteristics.

A site will be expertly assessed, with the following factors scored:

- Habitat for aquatic animals
- Water clarity
- Flow types
- Streambank stability and erosion
- Bank vegetation
- Riparian (stream-side) buffers to protect against damage from land management practices
- Shade
- Channel alteration



Image showing erosion of stream bank.

The scores are combined to give a total value. This total value is compared against a range of categories that indicate overall stream habitat health.

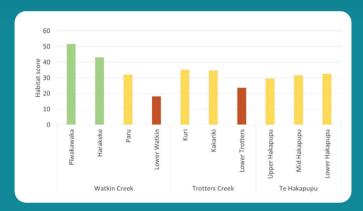
Habitat health score	Category
< 24	Poor
24 - 39	Fair
40 - 55	Good
> 55	Excellent



Ten sites were assessed in the catchment in April and May 2023. The locations of these sites ranged from up in its headwaters to near the coast. Of the ten sites tested, six were in the 'fair' category, two were in the 'poor' category, and two were in the 'good' category.

Both the 'good' scores were from high in the catchment. Here there was more diversity of flow and less channel alteration.

Both the 'low' scores were from sites low in the catchment. Here there was more channel modification, a lack of riparian vegetation, little shade, and high bank erosion.



Habitat scores at ten sites in Te Hakapupu catchment based on data collected in the autumn of 2023.

The habitat scores provide a valuable baseline of habitat health across the catchment. Further scoring throughout the project will begin a trend to see how the scores are changing over time.



The Toitū Te Hakapupu Catchment Management Plan is being developed over the next two years.

It will set objectives for improved land management so there is less pressure on stream habitat to degrade further and better protection of it too, especially from high levels of sediment.

A partnership project by:





In collaboration with:



