## **Aurere Estuary**

## Water Quality Report Card for 2023



### Site description

The Aurere Estuary is a small estuary on the east coast of the Northland peninsula that flows into Doubtless Bay. It is fed by two main tributaries, namely the Aurere Stream and the Parapara Stream. Since January 2018, Northland Regional Council has carried out routine monitoring to assess the health of the estuary and determine its suitability for recreation and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health											
Parameter	Standard	Units	Result for	Status							
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019			
Dissolved Oxygen	Minimum > 4.6	mg/L	7.02	<b>✓</b>	<b>~</b>	<b>✓</b>	✓	✓			
Chlorophyll-a	Median < 0.004	mg/L	0.0019	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>			
Total Nitrogen	Median < 0.22	mg/L	0.215	✓	<b>✓</b>	×	×	<b>~</b>			
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.011	✓	✓	×	×	×			
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0162	<b>✓</b>	<b>~</b>	<b>✓</b>	✓	×			
Total Phosphorus	Median < 0.03	mg/L	0.026	✓	✓	×	×	×			
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.012	✓	✓	×	×	×			
Water Clarity											
Parameter	Standard	Units	Result for			Status		×			
raiametei	Standard	Offics	2023	2023	2022	2021	2020	2019			
Turbidity	Median < 6.9	NTU	10.9	×	×	✓	✓	<b>~</b>			
Recreation											
			Result for			Status					
Parameter	Standard	Units	Result for								
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019			
Parameter  Enterococci	Standard  95th percentile ≤ 200	Units  MPN/100ml		2023	2022	2021	2020	2019 <b>X</b>			
			2023								
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	2023 272 Result for								
Enterococci			<b>2023</b> 272			×					
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	2023 272 Result for	×	×	X	×	×			

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Aurere Estuary for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Brampton Reef**

## Water Quality Report Card for 2023



### Site description

Brampton Reef is an open coast site situated beyond the Veronica Channel in the Bay of Islands. Since May 2017, Northland Regional Council has carried out routine monitoring at this site to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for	Status				
raiailletei	Standard	Offics	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	7	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	✓
Recreation								
Parameter	Standard	Units	Result for			Status		
raiailletei	Standard	Offics	2023	2023	2022	2021	2020	2019
Enterococci	95th percentile ≤ 40	MPN/100ml	10	<b>~</b>	✓	<b>~</b>	<b>✓</b>	✓
Shellfish consumption								
Parameter	Standard	Units	Result for			Status		
raiailletei	Standard	Ullits	2023	2023	2022	2021	2020	2019
Faecal Coliforms	90th percentile ≤ 43	CFU/100ml	15.6	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
raecai Collioitiis	Median ≤ 14	CFU/100ml	0.9	<b>~</b>	<b>✓</b>	<b>~</b>	<b>✓</b>	✓

#### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Brampton Reef for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Burgess Island**

## Water Quality Report Card for 2023



### Site description

Burgess Island is downstream of the Wairoa River in the Kaipara Harbour. In June 2009, Northland Regional Council in conjunction with Auckland Council commenced a monthly water quality monitoring programme in the Kaipara Harbour. Since this time, monthly water quality samples have been collected to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for	Status				
raiametei	Standard	Offics	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	7.02	<b>~</b>	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>
Chlorophyll-a	Median < 0.004	mg/L	0.0074	×	<b>~</b>	<b>✓</b>	×	✓
Total Nitrogen	Median < 0.22	mg/L	0.4	×	×	×	×	×
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.021	✓	✓	<b>✓</b>	×	✓
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0743	×	×	×	×	✓
Total Phosphorus	Median < 0.03	mg/L	0.034	×	×	×	×	<b>✓</b>
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.02	×	×	×	×	×
Water Clarity								
Parameter	Standard	Units	Result for			Status		
			2023	2023	2022	2021	2020	2019
Turbidity	Median < 6.9	NTU	14.85	×	×	×	×	✓
Recreation								
Parameter	Standard	Units	Result for			Status		
Parameter	Standard	Units	Result for 2023	2023	2022	Status 2021	2020	2019
Parameter  Enterococci	Standard  95th percentile ≤ 200	Units MPN/100ml		2023	2022		2020 ✔	2019
			2023			2021		
Enterococci			2023 111 Result for			2021		
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	<b>2023</b> 111			2021		
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	2023 111 Result for	<b>✓</b>	×	2021  Status	✓	✓

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Burgess Island for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Causeway Bridge**

## Water Quality Report Card for 2023



### Site description

Situated along Molesworth Drive, this site is at the lower end of Tara Creek, which is one of the main freshwater inputs into Mangawhai Harbour. Since October 2016, monthly water quality samples have been collected by Northland Regional Council to monitor the ecosystem health of this tidal creek and indicate its suitability for recreational purposes.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for			Status		
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	7.1	<b>~</b>	✓	<b>~</b>	<b>✓</b>	✓
Chlorophyll-a	Median < 0.004	mg/L	0.0023	<b>~</b>	✓	<b>~</b>	<b>✓</b>	✓
Total Nitrogen	Median < 0.6	mg/L	0.38	<b>✓</b>	✓	<b>✓</b>	✓	✓
Total Ammoniacal Nitrogen	Median < 0.043	mg/L	0.014	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	✓
Nitrate-Nitrite Nitrogen	Median < 0.218	mg/L	0.0251	<b>~</b>	✓	<b>~</b>	<b>✓</b>	✓
Total Phosphorus	Median < 0.04	mg/L	0.026	<b>~</b>	✓	<b>~</b>	<b>✓</b>	✓
Dissolved Reactive Phosphorus	Median < 0.021	mg/L	0.0105	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	✓
Water Clarity								
Parameter	Standard	Units	Result for			Status		
ratameter	Standard	Units	2023	2023	2022	2021	2020	2019
Turbidity	Median < 10.8	NTU	9.22	<b>~</b>	✓	<b>~</b>	<b>✓</b>	✓
Recreation								
Parameter	Standard	Units	Result for			Status		
raiailletei	Stanuaru	Ullits	2023	2023	2022	2021	2020	2019
Enterococci	95th percentile ≤ 200	MPN/100ml	570	×	×	×	✓	×

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Causeway Bridge for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## **Doves Bay**

## Water Quality Report Card for 2023



### Site description

Doves Bay is situated towards the entrance of the Kerikeri Inlet, on the east coast of the Northland peninsula. Since May 2008, Northland Regional Council has collected monthly water quality samples at this estuary to assess ecosystem health and the sites suitability for recreation and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for			Status		
ratametei	Standard	Onits	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	7.05	<b>~</b>	✓	✓	✓	<b>~</b>
Chlorophyll-a	Median < 0.004	mg/L	0.0017	<b>~</b>	✓	✓	✓	✓
Total Nitrogen	Median < 0.22	mg/L	0.135	✓	✓	✓	✓	<b>✓</b>
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.005	✓	✓	✓	✓	✓
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0184	✓	✓	✓	✓	✓
Total Phosphorus	Median < 0.03	mg/L	0.01	✓	✓	✓	✓	✓
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.0065	<b>~</b>	✓	✓	✓	<b>✓</b>
Water Clarity								
Parameter	Standard	Units	Result for			Status		
		J	2023	2023	2022	2021	2020	2019
Turbidity	Median < 6.9	NTU	1.98	✓	✓	✓	✓	✓
Recreation								
Parameter	Standard	Units	Result for			Status		
	244.124.2		2023	2023	2022	2021	2020	2019
Enterococci	95th percentile ≤ 200	MPN/100ml	5	✓	✓	✓	✓	✓
Shellfish consumption								
Parameter	Standard	Units	Result for			Status		
			2023	2023	2022	2021	2020	2019
Faecal Coliforms	90th percentile ≤ 43	CFU/100ml	26.4	✓	×	×	✓	✓

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Doves Bay for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## **Five Fathom Channel**

### Water Quality Report Card for 2023



### Site description

Five Fathom Channel is close to the entrance of the Kaipara Harbour on the west coast of the Northland Peninsula. In June 2009, Northland Regional Council in conjunction with Auckland Council commenced a monthly water quality monitoring programme in the Kaipara Harbour. Since this time, monthly water quality samples have been collected to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for			Status		
rarameter	Standard	Omes	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	7.45	<b>✓</b>	✓	<b>✓</b>	✓	✓
Chlorophyll-a	Median < 0.004	mg/L	0.0045	×	✓	<b>~</b>	<b>~</b>	✓
Total Nitrogen	Median < 0.22	mg/L	0.215	✓	×	✓	✓	✓
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.003	✓	✓	✓	✓	✓
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0048	<b>✓</b>	×	✓	<b>✓</b>	<b>✓</b>
Total Phosphorus	Median < 0.03	mg/L	0.019	✓	✓	✓	<b>✓</b>	✓
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.0085	✓	✓	✓	✓	✓
Water Clarity								
Parameter	Standard	Units	Result for			Status		
r didirectel	Standard	Omes	2023	2023	2022	2021	2020	2019
Turbidity	Median < 6.9	NTU	2.87	✓	✓	✓	✓	✓
Recreation								
			Result for			Status		
Parameter	Standard	Units						
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019
Parameter  Enterococci	Standard  95th percentile ≤ 200	Units  MPN/100ml		2023	2022 •⁄	2021	2020	2019
			2023					
Enterococci			7 Result for					
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	<b>2023</b> 7			✓		
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	7 Result for	<b>✓</b>	✓	Status	✓	✓

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Five Fathom Channel for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Hargreaves Basin**

## Water Quality Report Card for 2023



### Site description

The Hargreaves Basin site is in the mid-reaches of the Oruawharo arm of the Kaipara Harbour. In June 2009, Northland Regional Council in conjunction with Auckland Council commenced a monthly water quality monitoring programme in the Kaipara Harbour. Since this time, monthly water quality samples have been collected to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for	Status				
raiametei	Standard	Offics	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	6.68	✓	<b>~</b>	<b>✓</b>	<b>✓</b>	✓
Chlorophyll-a	Median < 0.004	mg/L	0.004	×	×	×	×	✓
Total Nitrogen	Median < 0.22	mg/L	0.305	×	×	×	×	×
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.014	✓	×	×	×	✓
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0072	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>
Total Phosphorus	Median < 0.03	mg/L	0.033	×	×	×	×	×
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.0185	×	×	×	×	×
Water Clarity								
Parameter	Standard	Units	Result for			Status		
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019
Turbidity	Median < 6.9	NTU	10.35	×	×	×	×	×
Recreation								
			D !! C			Status		
Parameter	Standard	Units	Result for					
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019
Parameter  Enterococci	Standard  95th percentile ≤ 200	Units  MPN/100ml	2023	2023	2022	2021	2020	2019
			2023					
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	2023 52 Result for					
Enterococci			<b>2023</b> 52			✓		
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	2023 52 Result for	<b>✓</b>	✓	Status	✓	✓

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Hargreaves Basin for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## Hātea River

## Water Quality Report Card for 2023



### Site description

This site is located in the lower reaches of the Hātea River Channel in the Whangārei Harbour. Since March 2008, Northland Regional Council has been collecting monthly water quality samples at this site to monitor ecosystem health and indicate the sites suitability for recreational purposes.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for			Status			
raiametei	Stanuaru	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6.6	<b>~</b>	✓	✓	✓	✓	
Chlorophyll-a	Median < 0.003	mg/L	0.0029	<b>✓</b>	✓	✓	✓	✓	
Total Nitrogen	Median < 0.86	mg/L	0.325	<b>✓</b>	✓	✓	✓	✓	
Total Ammoniacal Nitrogen	Median < 0.099	mg/L	0.075	<b>✓</b>	✓	✓	✓	✓	
Nitrate-Nitrite Nitrogen	Median < 0.058	mg/L	0.111	×	×	×	×	×	
Total Phosphorus	Median < 0.119	mg/L	0.027	<b>✓</b>	✓	<b>✓</b>	✓	✓	
Dissolved Reactive Phosphorus	Median < 0.092	mg/L	0.0225	✓	✓	✓	✓	✓	
Water Clarity									
Parameter	Standard	Units	Result for	Status					
rarameter	Stanuaru	Units	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 7.5	NTU	6.07	<b>✓</b>	✓	✓	✓	✓	
Recreation									
Parameter	Standard	Units	Result for			Status			
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 500	MPN/100ml	182	<b>~</b>	<b>✓</b>	✓	<b>✓</b>	✓	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Hātea River for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Horeke Estuary**

## Water Quality Report Card for 2023



### Site description

Horeke is in the inner reaches of the Hokianga Harbour on the west coast of the Northland Peninsula. Since January 2021, Northland Regional Council has carried out routine monitoring at Horeke estuary to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for			Status		
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	7.08	✓	✓	✓		
Chlorophyll-a	Median < 0.004	mg/L	0.0055	×	✓	×		
Total Nitrogen	Median < 0.22	mg/L	0.25	×	×	×		
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.007	<b>~</b>	✓	×		
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0101	<b>~</b>	×	×		
Total Phosphorus	Median < 0.03	mg/L	0.021	<b>~</b>	<b>✓</b>	×		
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.01	<b>~</b>	<b>~</b>	✓		
Water Clarity								
Parameter	Standard	Units	Result for			Status		
i didiffecei	Standard	Offics	2023	2023	2022	2021	2020	2019
Turbidity	Median < 6.9	NTU	13.1	×	×	×		
Recreation								
Parameter	Standard	Units	Result for			Status		
, arameter	Standard	Office	2023	2023	2022	2021	2020	2019
Enterococci	95th percentile ≤ 200	MPN/100ml	168	✓	✓	✓		
Shellfish consumption								
Parameter	Standard	Units	Result for			Status		
. 5.5	• • • • • • • • • • • • • • • • • • • •	J	2023	2023	2022	2021	2020	2019
Faecal Coliforms	90th percentile ≤ 43	CFU/100ml	26	✓	×	×		
raccar comorms	Median≤ 14	CFU/100ml	14.5	×	×	×		

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Horeke Estuary for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Insley Street Causeway**

## Water Quality Report Card for 2023



### Site description

Situated along Insley Street, this site is at the lower end of Bob Creek, which is one of the main freshwater inputs into Mangawhai Harbour. Since October 2016, monthly water quality samples have been collected by Northland Regional Council to monitor the ecosystem health of the creek and indicate its suitability for recreational purposes.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for			Status		
raiailletei	Standard	Offics	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	6.8	<b>~</b>	✓	✓	✓	✓
Chlorophyll-a	Median < 0.004	mg/L	0.0018	<b>~</b>	✓	✓	✓	✓
Total Nitrogen	Median < 0.6	mg/L	0.32	<b>✓</b>	✓	✓	✓	✓
Total Ammoniacal Nitrogen	Median < 0.043	mg/L	0.01	<b>✓</b>	✓	✓	✓	✓
Nitrate-Nitrite Nitrogen	Median < 0.218	mg/L	0.0225	<b>✓</b>	✓	✓	✓	✓
Total Phosphorus	Median < 0.04	mg/L	0.025	<b>✓</b>	✓	✓	✓	✓
Dissolved Reactive Phosphorus	Median < 0.021	mg/L	0.0115	<b>✓</b>	✓	✓	✓	✓
Water Clarity								
Parameter	Standard	Units	Result for	Status				
Faranietei	Standard	Units	2023	2023	2022	2021	2020	2019
Turbidity	Median < 10.8	NTU	7.38	<b>~</b>	<b>✓</b>	✓	<b>~</b>	✓
Recreation								
Parameter	Standard	Units	Result for			Status		
ratatiletei	Stanuaru	Ullits	2023	2023	2022	2021	2020	2019
Enterococci	95th percentile ≤ 200	MPN/100ml	859	×	×	<b>✓</b>	×	×

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Insley Street Causeway for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Kaiwaka Point Estuary**

## Water Quality Report Card for 2023



### Site description

Kaiwaka Point is in the upper Whāngārei Harbour, immediately downstream from the Hātea River which contributes freshwater input. Since 2008, Northland Regional Council has carried out routine monitoring at this site to assess the health of the estuary and determine its suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
,			- u.c			Status		
Parameter	Standard	Units	Result for 2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	6.83	<b>✓</b>	<b>~</b>	×	<b>✓</b>	<b>✓</b>
Chlorophyll-a	Median < 0.004	mg/L	0.0024	✓	✓	✓	✓	✓
Total Nitrogen	Median < 0.22	mg/L	0.245	×	×	×	×	<b>✓</b>
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.025	×	<b>✓</b>	✓	×	✓
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0297	✓	<b>✓</b>	✓	×	✓
Total Phosphorus	Median < 0.03	mg/L	0.018	✓	<b>✓</b>	×	✓	✓
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.0146	✓	<b>✓</b>	×	×	×
Water Clarity								
B	Standard.		Result for			Status		
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019
Turbidity	Median < 6.9	NTU	3.99	<b>~</b>	✓	<b>✓</b>	✓	<b>~</b>
Recreation								
Parameter	Standard	Units	Result for			Status		
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019
Enterococci	95th percentile ≤ 200	MPN/100ml	66	<b>✓</b>	<b>~</b>	✓	×	✓
Shellfish consumption								
						Status		
Parameter	Standard	Unite	Result for			Status		
Parameter	Standard	Units	Result for 2023	2023	2022	2021	2020	2019
Parameter Faecal Coliforms	Standard  90th percentile ≤ 43	Units  CFU/100ml		2023	2022		2020	2019

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Kaiwaka Point Estuary for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Kapua Point**

## Water Quality Report Card for 2023



### Site description

Kapua Point is located in the upper reaches of the Arapaoa River arm of the Kaipara Harbour. In June 2009, Northland Regional Council in conjunction with Auckland Council commenced a monthly water quality monitoring programme in the Kaipara Harbour. Since this time, monthly water quality samples have been collected to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
						Status		
Parameter	Standard	Units	Result for 2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	6.76	<b>✓</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>
Chlorophyll-a	Median < 0.004	mg/L	0.0029	<b>✓</b>	<b>~</b>	×	<b>✓</b>	<b>~</b>
Total Nitrogen	Median < 0.22	mg/L	0.245	×	×	✓	×	×
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.003	✓	✓	✓	✓	✓
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0105	✓	✓	✓	✓	<b>✓</b>
Total Phosphorus	Median < 0.03	mg/L	0.029	✓	×	×	×	×
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.021	×	×	×	×	×
Water Clarity								
Downwater	Chandand		Result for			Status		
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019
Turbidity	Median < 6.9	NTU	5.49	<b>✓</b>	✓	✓	×	×
Recreation								
						a		
B	61		Result for			Status		
Parameter	Standard	Units	Result for 2023	2023	2022	2021	2020	2019
Parameter  Enterococci	Standard  95th percentile ≤ 200	Units  MPN/100ml	2023	2023	2022		2020	2019
			2023			2021		
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	2023			2021		
Enterococci			<b>2023</b> 64			2021		
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	2023 64 Result for	<b>V</b>	✓	2021  Status	✓	<b>*</b>

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Kapua Point for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## **Kawakawa River**

### Water Quality Report Card for 2023



### Site description

This site is situated in the lower reaches of the Kawakawa river, which is one of the main freshwater inputs into the Bay of Islands. Since May 2008, Northland Regional Council has been collecting monthly water quality samples at this site to monitor ecosystem health and indicate the sites suitability for recreational purposes.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for			Status		
raidiletei	Standard	Offics	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	6.3	<b>~</b>	✓	✓	✓	✓
Chlorophyll-a	Median < 0.004	mg/L	0.0028	<b>~</b>	×	✓	✓	✓
Total Nitrogen	Median < 0.6	mg/L	0.24	<b>~</b>	✓	✓	✓	✓
Total Ammoniacal Nitrogen	Median < 0.043	mg/L	0.008	<b>~</b>	✓	✓	✓	✓
Nitrate-Nitrite Nitrogen	Median < 0.218	mg/L	0.0445	<b>~</b>	✓	✓	✓	✓
Total Phosphorus	Median < 0.04	mg/L	0.024	<b>~</b>	✓	✓	✓	✓
Dissolved Reactive Phosphorus	Median < 0.021	mg/L	0.0135	<b>~</b>	✓	✓	✓	✓
Water Clarity								
Parameter	Standard	Units	Result for			Status		
ratameter	Standard	Units	2023	2023	2022	2021	2020	2019
Turbidity	Median < 10.8	NTU	6.23	<b>~</b>	<b>~</b>	✓	✓	✓
Recreation								
Parameter	Standard	Units	Result for			Status		
raiailletei	Standard	Oilles	2023	2023	2022	2021	2020	2019
Enterococci	95th percentile ≤ 200	MPN/100ml	489	×	<b>~</b>	<b>~</b>	✓	✓

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Kawakawa River for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## Kerikeri River

## Water Quality Report Card for 2023



### Site description

This site is situated in the lower reaches of the Kerikeri River, which contributes an important freshwater input to the Bay of Islands system. Since May 2008, Northland Regional Council has been collecting monthly water quality samples at this tidal creek to monitor ecosystem health and indicate the sites suitability for recreational purposes.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
ratameter	Stanuaru	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6	<b>✓</b>	✓	<b>~</b>	<b>✓</b>	<b>✓</b>	
Chlorophyll-a	Median < 0.004	mg/L	0.0013	<b>~</b>	✓	<b>~</b>	<b>✓</b>	<b>✓</b>	
Total Nitrogen	Median < 0.6	mg/L	0.53	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	✓	
Total Ammoniacal Nitrogen	Median < 0.043	mg/L	0.023	<b>~</b>	✓	<b>~</b>	<b>✓</b>	✓	
Nitrate-Nitrite Nitrogen	Median < 0.218	mg/L	0.3	×	×	<b>~</b>	×	✓	
Total Phosphorus	Median < 0.04	mg/L	0.013	<b>~</b>	✓	<b>~</b>	<b>✓</b>	✓	
Dissolved Reactive Phosphorus	Median < 0.021	mg/L	0.007	<b>~</b>	✓	<b>✓</b>	<b>✓</b>	✓	
Water Clarity									
Parameter	Standard	Units	Result for			Status			
ratameter	Stanuaru	Units	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 10.8	NTU	3.21	<b>✓</b>	✓	<b>~</b>	<b>✓</b>	✓	
Recreation									
Parameter	Standard	Units	Result for			Status			
raiaineter	Standard Unit	Units	2023	2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 200	MPN/100ml	109	<b>✓</b>	×	×	✓	×	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Kerikeri River for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Kissing Point**

## Water Quality Report Card for 2023



### Site description

Kissing Point is located midway down the Hatea side of the Hātea River Channel in the Whangārei Harbour. Since January 1986, Northland Regional Council has been collecting monthly water quality samples at this site to monitor ecosystem health and indicate the sites suitability for recreational purposes.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6.4	<b>~</b>	✓	✓	✓	<b>✓</b>	
Chlorophyll-a	Median < 0.003	mg/L	0.0037	×	✓	✓	✓	✓	
Total Nitrogen	Median < 0.86	mg/L	0.63	<b>✓</b>	✓	✓	✓	<b>✓</b>	
Total Ammoniacal Nitrogen	Median < 0.099	mg/L	0.16	×	✓	✓	✓	✓	
Nitrate-Nitrite Nitrogen	Median < 0.058	mg/L	0.1925	×	×	×	×	×	
Total Phosphorus	Median < 0.119	mg/L	0.043	<b>~</b>	✓	✓	✓	✓	
Dissolved Reactive Phosphorus	Median < 0.092	mg/L	0.0315	<b>✓</b>	✓	✓	✓	✓	
Water Clarity									
Parameter	Standard	Units	Result for	Status					
raiailletei	Standard	Ullits	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 7.5	NTU	7.1	<b>~</b>	✓	✓	✓	✓	
Recreation									
Parameter	Standard	Units	Result for			Status			
r ai ailletei	Standard	Offics	2023	2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 500	MPN/100ml	490	<b>✓</b>	<b>✓</b>	<b>~</b>	✓	✓	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Kissing Point for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## **Limeburners Creek**

### Water Quality Report Card for 2023



### Site description

This site is situated at the mouth of Limeburners Creek, near the confluence of the Hātea River. Since January 1986, Northland Regional Council has been collecting monthly water quality samples at this site to monitor ecosystem health and indicate the sites suitability for recreational purposes.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for			Status		
raiailletei	Standard	Offics	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	6.4	<b>~</b>	<b>✓</b>	×	×	×
Chlorophyll-a	Median < 0.003	mg/L	0.0038	×	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓
Total Nitrogen	Median < 0.86	mg/L	0.915	×	<b>✓</b>	×	×	<b>✓</b>
Total Ammoniacal Nitrogen	Median < 0.099	mg/L	0.235	×	×	✓	×	<b>✓</b>
Nitrate-Nitrite Nitrogen	Median < 0.058	mg/L	0.3815	×	×	×	×	×
Total Phosphorus	Median < 0.119	mg/L	0.069	<b>~</b>	✓	✓	×	<b>✓</b>
Dissolved Reactive Phosphorus	Median < 0.092	mg/L	0.0525	<b>~</b>	✓	<b>✓</b>	×	<b>✓</b>
Water Clarity								
Parameter	Standard	Units	Result for			Status		
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019
Turbidity	Median < 7.5	NTU	8.32	×	×	×	<b>✓</b>	<b>✓</b>
Recreation								
Parameter	Standard	Units	Result for			Status		
r ai ailletei	Standard	Units	2023	2023	2022	2021	2020	2019
Enterococci	95th percentile ≤ 500	MPN/100ml	494	<b>~</b>	×	✓	×	×

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Limeburners Creek for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

### **Mair Bank**

## Water Quality Report Card for 2023



### Site description

Mair Bank is situated offshore from Marsden Point, just beyond the entrance of the Whangārei Harbour. Since April 1991, Northland Regional Council has carried out routine monitoring at this site to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for					
raidiletei	Standard	Offics	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	7.2	✓	<b>~</b>	<b>✓</b>	<b>✓</b>	✓
Recreation								
Parameter	Standard	Standard Units Result f				Status		
raiametei	Standard	Offics	2023	2023	2022	2021	2020	2019
Enterococci	95th percentile ≤ 40	MPN/100ml	5	<b>~</b>	<b>~</b>	✓	<b>✓</b>	✓
Shellfish consumption								
Parameter	Standard	Units	Result for			Status		
raiametei	Standard	Units	2023	2023	2022	2021	2020	2019
Faecal Coliforms	90th percentile ≤ 43	CFU/100ml	17.3	<b>✓</b>	<b>~</b>	✓	<b>✓</b>	✓
raecai Culliulilis	Median≤ 14	CFU/100ml	0.9	<b>~</b>	<b>✓</b>	✓	✓	✓

#### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Mair Bank for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Mangapai River**

## Water Quality Report Card for 2023



### Site description

The Mangapai River is the in the upper reaches of the Whangārei Harbour. Since January 2013, Northland Regional Council has been collecting monthly water quality samples to monitor the ecosystem health of the river and indicate its suitability for recreational purposes.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for			Status		
raiametei	Standard	Offics	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	5.3	<b>~</b>	✓	×	×	✓
Chlorophyll-a	Median < 0.004	mg/L	0.0027	<b>~</b>	✓	✓	✓	✓
Total Nitrogen	Median < 0.6	mg/L	0.275	<b>~</b>	✓	✓	✓	✓
Total Ammoniacal Nitrogen	Median < 0.043	mg/L	0.006	<b>~</b>	✓	✓	✓	✓
Nitrate-Nitrite Nitrogen	Median < 0.218	mg/L	0.015	<b>~</b>	✓	✓	✓	✓
Total Phosphorus	Median < 0.04	mg/L	0.022	<b>~</b>	✓	×	✓	✓
Dissolved Reactive Phosphorus	Median < 0.021	mg/L	0.0145	<b>~</b>	✓	✓	✓	✓
Water Clarity								
Parameter	Standard	Units	Result for			Status		
raiametei	Standard	Units	2023	2023	2022	2021	2020	2019
Turbidity	Median < 10.8	NTU	9.49	<b>~</b>	✓	✓	✓	✓
Recreation								
Parameter	Standard	Units	Result for			Status		
raidilletei	Stallualu	Ullits	2023	2023	2022	2021	2020	2019
Enterococci	95th percentile ≤ 200	MPN/100ml	95	<b>~</b>	<b>✓</b>	<b>~</b>	<b>~</b>	<b>✓</b>

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Mangapai River for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Mangawhai Boatramp**

## Water Quality Report Card for 2023



### Site description

The Mangawhai boatramp is situated towards the entrance of the Mangawhai Harbour, which is a small estuarine system on the east coast of the Northland peninsula. Since October 2016, Northland Regional Council has carried out routine monitoring to assess ecosystem health of this estuary and determine its suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for			Status			
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	7.19	<b>✓</b>	<b>~</b>	<b>✓</b>	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.0005	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	✓	
Total Nitrogen	Median < 0.22	mg/L	0.105	✓	✓	✓	✓	✓	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.003	✓	✓	✓	✓	✓	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0081	✓	<b>~</b>	✓	<b>✓</b>	<b>✓</b>	
Total Phosphorus	Median < 0.03	mg/L	0.01	✓	✓	✓	<b>✓</b>	✓	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.0085	✓	✓	✓	<b>✓</b>	<b>✓</b>	
Water Clarity									
Parameter	Standard	Units	Result for	Status					
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	2.29	✓	✓	<b>✓</b>	<b>✓</b>	✓	
Recreation									
Parameter	Standard	Units	Result for			Status			
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 200	MPN/100ml	7	✓	✓	✓	✓	✓	
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	7	<b>√</b>	✓	✓	<b>✓</b>	<b>√</b>	
Shellfish consumption			Result for	✓	✓	Status	<b>√</b>	<b>√</b>	
	95th percentile ≤ 200  Standard	MPN/100ml Units		2023	2022	·	2020	2019	
Shellfish consumption			Result for			Status			

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Mangawhai Boatramp for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Mangawhai Heads**

## Water Quality Report Card for 2023



### Site description

Mangawhai Heads is an open coast site on the east coast of the Northland Peninsula. It is a popular beach for recreational purposes including surfing and swimming. Since May 2017, Northland Regional Council has carried out routine monitoring at this site to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for			Status		
raidiffecei	Standard	Offics	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	7.2	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓
Recreation								
Parameter	Standard	Standard Units Result for				Status		
raiametei	Standard	Offics	2023	2023	2022	2021	2020	2019
Enterococci	95th percentile ≤ 40	MPN/100ml	15	<b>~</b>	<b>~</b>	✓	<b>✓</b>	✓
Shellfish consumption								
Parameter	Standard	Units	Result for			Status		
raiametei	Standard	Units	2023	2023	2022	2021	2020	2019
Faecal Coliforms	90th percentile ≤ 43	CFU/100ml	17.5	<b>✓</b>	<b>~</b>	✓	<b>✓</b>	✓
raecai Culliulliis	Median≤ 14	CFU/100ml	0.9	<b>~</b>	<b>✓</b>	✓	✓	✓

#### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Mangawhai Heads for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## **Omapere Estuary**

## Water Quality Report Card for 2023



### Site description

Omapere is located near the entrance of the Hokianga Harbour on the west coast of the Northland Peninsula. Since January 2021, Northland Regional Council has carried out routine monitoring at Omapere to assess the health of the estuary and determine its suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health												
			- u.c			Status						
Parameter	Standard	Units	Result for 2023	2023	2022	2021	2020	2019				
Dissolved Oxygen	Minimum > 4.6	mg/L	7.55	<b>✓</b>	<b>✓</b>	<b>✓</b>						
Chlorophyll-a	Median < 0.004	mg/L	0.001	✓	✓	✓						
otal Nitrogen	Median < 0.22	mg/L	0.11	✓	<b>✓</b>	✓						
otal Ammoniacal Nitrogen	Median < 0.023	mg/L	0.015	✓	<b>✓</b>	✓						
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0155	<b>~</b>	✓	<b>✓</b>						
otal Phosphorus	Median < 0.03	mg/L	0.009	<b>~</b>	<b>✓</b>	<b>✓</b>						
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.0081	<b>✓</b>	<b>✓</b>	✓						
Water Clarity												
Davamatav		I I a i A a	Result for			Status						
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019				
urbidity	Median < 6.9	NTU	2.52	<b>✓</b>	✓	✓						
Recreation												
Parameter	Standard	Units	Result for			Status						
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019				
interococci	95th percentile ≤ 200	MPN/100ml	59	✓	✓	✓						
Shellfish consumption												
Parameter	Standard	Units	Result for			Status						
raiametei	Stallualu	Ullits	2023	2023	2022	2021	2020	2019				
aecal Coliforms	90th percentile ≤ 43	CFU/100ml	3.1	<b>✓</b>	✓	✓						

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Omapere Estuary for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **One Tree Point**

## Water Quality Report Card for 2023



### Site description

One Tree Point is situated towards the entrance of the Whāngārei Harbor and is close to popular shellfish harvesting sites. Since March 2008, Northland Regional Council has carried out routine monitoring at this site to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	7.1	✓	✓	✓	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.0018	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>✓</b>	✓	
Total Nitrogen	Median < 0.22	mg/L	0.105	✓	<b>✓</b>	<b>✓</b>	<b>~</b>	✓	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.003	✓	<b>~</b>	<b>✓</b>	<b>~</b>	✓	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.001	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	
Total Phosphorus	Median < 0.03	mg/L	0.009	✓	<b>✓</b>	<b>✓</b>	<b>~</b>	✓	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.0065	✓	<b>✓</b>	<b>✓</b>	<b>~</b>	✓	
Water Clarity									
Parameter	Standard	Units	Result for	Status					
, arameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	1.64	✓	✓	✓	✓	✓	
Recreation									
Parameter	Standard	Units	Result for			Status			
Parameter	Standard	Units	Result for 2023	2023	2022	Status 2021	2020	2019	
Parameter  Enterococci	Standard  95th percentile ≤ 200	Units MPN/100ml	2023	2023	2022		2020 <b>√</b>	2019	
			2023			2021			
Enterococci			2023 5 Result for			2021			
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	<b>2023</b> 5			2021			
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	2023 5 Result for	✓	✓	2021  Status	✓	✓	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at One Tree Point for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## **Oruawharo River**

### Water Quality Report Card for 2023



### Site description

The Oruawharo River is in the Kaipara Harbour on the west coast of the North Island. In June 2009, Northland Regional Council in conjunction with Auckland Council commenced a monthly water quality monitoring programme of sites in the Kaipara Harbour. Since this time, monthly water quality samples have been collected to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for			Status			
raiametei	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	7.34	✓	✓	<b>✓</b>	<b>✓</b>	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.003	✓	<b>✓</b>	✓	<b>✓</b>	✓	
Total Nitrogen	Median < 0.22	mg/L	0.225	×	×	✓	✓	✓	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.003	✓	✓	✓	✓	✓	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0043	✓	<b>~</b>	✓	<b>✓</b>	✓	
Total Phosphorus	Median < 0.03	mg/L	0.022	✓	✓	×	<b>✓</b>	✓	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.012	✓	✓	×	✓	✓	
Water Clarity									
Parameter	Standard	Units	Result for	Status					
, arameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	4.76	✓	✓	✓	✓	✓	
Recreation									
Parameter	Standard	Units	Result for			Status			
Parameter	Standard	Units	Result for 2023	2023	2022	Status 2021	2020	2019	
Parameter  Enterococci	Standard  95th percentile ≤ 200	Units MPN/100ml	2023	2023	2022		2020 <b>⋄</b> ∕	2019	
			2023			2021			
Enterococci			2023 10 Result for			2021			
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	<b>2023</b> 10			2021			
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	2023 10 Result for	<b>✓</b>	✓	2021	✓	✓	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Oruawharo River for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## **Otaika Creek**

## Water Quality Report Card for 2023



### Site description

This site is located near the upper tidal limit of the Otaika Creek, which is connected to the Whangārei Harbour. Since January 2013, Northland Regional Council has been collecting monthly water quality samples to monitor the ecosystem health of the creek and indicate its suitability for recreational purposes.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for			Status		
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	6.9	<b>~</b>	<b>✓</b>	×	×	×
Chlorophyll-a	Median < 0.004	mg/L	0.0014	<b>~</b>	✓	✓	<b>✓</b>	✓
Total Nitrogen	Median < 0.6	mg/L	1.05	×	×	✓	×	×
Total Ammoniacal Nitrogen	Median < 0.043	mg/L	0.04	<b>~</b>	✓	✓	<b>✓</b>	✓
Nitrate-Nitrite Nitrogen	Median < 0.218	mg/L	0.67	×	×	✓	×	×
Total Phosphorus	Median < 0.04	mg/L	0.031	<b>~</b>	✓	<b>✓</b>	<b>✓</b>	✓
Dissolved Reactive Phosphorus	Median < 0.021	mg/L	0.0115	<b>~</b>	✓	✓	<b>✓</b>	✓
Water Clarity								
Parameter	Standard	Units	Result for			Status		
raiametei	Standard	Offics	2023	2023	2022	2021	2020	2019
Turbidity	Median < 10.8	NTU	12.1	×	✓	<b>✓</b>	✓	✓
Recreation								
Parameter	Standard	Units	Result for			Status		
raiametei	Jianuaru	Oilits	2023	2023	2022	2021	2020	2019
Enterococci	95th percentile ≤ 200	MPN/100ml	1136	×	×	×	×	×

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Otaika Creek for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## **Paihia**

## Water Quality Report Card for 2023



### Site description

Paihia is a popular beach resort in the Bay of Islands, on the east coast of the Northland Peninsula. Since May 2008, Northland Regional Council has carried out routine monitoring to assess ecosystem health and determine the sites suitability for recreation and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6.96	✓	✓	✓	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.0015	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	
Total Nitrogen	Median < 0.22	mg/L	0.16	✓	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.003	✓	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0295	✓	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	
Total Phosphorus	Median < 0.03	mg/L	0.012	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.008	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	
Water Clarity									
Parameter	Standard	Units	Result for			Status			
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	2.68	✓	✓	✓	✓	✓	
Recreation									
			Danille fair			Status			
Parameter	Standard	Units	Result for						
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019	
Parameter  Enterococci	Standard  95th percentile ≤ 200	Units MPN/100ml	2023	2023	2022	2021	2020	2019	
			2023						
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	2023 10 Result for						
Enterococci			<b>2023</b> 10			✓			
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	2023 10 Result for	✓	✓	Status	✓	✓	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Paihia for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Portland Wharf**

## Water Quality Report Card for 2023



### Site description

Portland Wharf is situated in the upper the Whāngārei Harbour. Since March 2008, Northland Regional Council has carried out routine monitoring at this estuary to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6.66	<b>✓</b>	✓	✓	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.0022	<b>~</b>	<b>~</b>	<b>✓</b>	<b>✓</b>	✓	
Total Nitrogen	Median < 0.22	mg/L	0.21	✓	✓	<b>✓</b>	<b>~</b>	✓	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.006	✓	✓	<b>✓</b>	×	✓	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0225	✓	<b>~</b>	<b>✓</b>	<b>~</b>	<b>✓</b>	
Total Phosphorus	Median < 0.03	mg/L	0.017	✓	✓	<b>✓</b>	<b>~</b>	✓	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.0125	✓	✓	<b>✓</b>	<b>~</b>	✓	
Water Clarity									
Parameter	Standard	Units	Result for			Status			
, arameter	Standard	Omes	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	5.32	✓	✓	✓	✓	✓	
Recreation									
Parameter	Standard	Units	Result for			Status			
Parameter	Standard	Units	Result for 2023	2023	2022	Status 2021	2020	2019	
Parameter Enterococci	Standard  95th percentile ≤ 200	Units  MPN/100ml	2023	2023	2022		2020	2019	
			2023			2021			
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	<b>2023</b> 46  Result for			2021			
Enterococci			<b>2023</b> 46			2021			
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	<b>2023</b> 46  Result for	✓	✓	2021  Status	✓	✓	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Portland Wharf for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Rawene Estuary**

## Water Quality Report Card for 2023



### Site description

Rawene is in the middle reaches of the Hokianga Harbour, on the west coast of the Northland Peninsula. Since January 2021, Northland Regional Council has carried out routine monitoring at this site to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for			Status		
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	7.12	✓	✓	✓		
Chlorophyll-a	Median < 0.004	mg/L	0.0047	×	✓	<b>✓</b>		
Total Nitrogen	Median < 0.22	mg/L	0.205	<b>~</b>	×	×		
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.003	<b>~</b>	✓	✓		
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.019	<b>~</b>	✓	×		
Total Phosphorus	Median < 0.03	mg/L	0.022	<b>~</b>	✓	×		
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.0115	✓	✓	✓		
Water Clarity								
Parameter	Standard	Units	Result for			Status		
, arameter	Standard	Offics	2023	2023	2022	2021	2020	2019
Turbidity	Median < 6.9	NTU	10.75	×	×	×		
Recreation								
Parameter	Standard	Units	Result for			Status		
			2023	2023	2022	2021	2020	2019
Enterococci	95th percentile ≤ 200	MPN/100ml	500	×	✓	✓		
Shellfish consumption								
Parameter	Standard	Units	Result for			Status		
	• • • • • • • • • • • • • • • • • • • •	J	2023	2023	2022	2021	2020	2019
Faecal Coliforms	90th percentile ≤ 43	CFU/100ml	27.7	✓	×	×		
raccar comornis	Median≤ 14	CFU/100ml	9.8	<b>V</b>	×	×		

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Rawene Estuary for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## **Ruakaka Estuary**

## Water Quality Report Card for 2023



### Site description

Ruakaka Estuary is a tidal lagoon situated on the east coast of the Northland Peninsula. It is popular for a variety of recreational activities including swimming, bird-watching, fishing, and shellfish gathering. Since May 2017, Northland Regional Council has carried out routine monitoring at this site to assess ecosystem health and determine its suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
raidiletei	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	5.5	<b>✓</b>	✓	✓	✓	<b>~</b>	
Chlorophyll-a	Median < 0.004	mg/L	0.0015	<b>~</b>	<b>~</b>	<b>✓</b>	✓	<b>~</b>	
Total Nitrogen	Median < 0.22	mg/L	0.245	×	×	×	✓	✓	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.005	<b>~</b>	×	×	×	<b>~</b>	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0495	×	<b>~</b>	<b>✓</b>	✓	<b>~</b>	
Total Phosphorus	Median < 0.03	mg/L	0.012	<b>~</b>	<b>✓</b>	×	×	✓	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.012	✓	×	×	<b>✓</b>	✓	
Water Clarity									
Parameter	Standard	Units	Result for			Status			
, arameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	2.85	<b>✓</b>	✓	✓	✓	<b>~</b>	
Recreation									
Parameter	Standard	Units	Result for			Status			
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Entorococci	95th percentile ≤ 200	MPN/100ml	1775	×	×	<b>✓</b>	×	✓	
Enterococci	55th percentile \$ 200	11, 100			**				
Shellfish consumption	93th percentile 3 200	11, 200			**				
Shellfish consumption			Result for			Status			
	Standard	Units	Result for 2023	2023	2022	Status 2021	2020	2019	
Shellfish consumption							2020	2019	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Ruakaka Estuary for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Taipa Estuary at Boat ramp**

### Water Quality Report Card for 2023



### Site description

The Taipa Estuary is a small estuary on the east coast of the Northland peninsula. The estuary receives freshwater from the Oruru River and Paranui Stream. Analysis of land use in the catchment, indicated that 36% of the catchment was covered by high producing exotic grassland, 23% with indigenous forest, 14% with manuka/kanuka scrub and 14% with exotic forest. This estuary is popular for swimming and shellfish harvesting.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
raidiffeee	Standard	Office	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6.46	<b>✓</b>	✓				
Chlorophyll-a	Median < 0.004	mg/L	0.0012	<b>✓</b>	✓				
Total Nitrogen	Median < 0.22	mg/L	0.1	✓	✓				
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.003	✓	✓				
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0053	✓	✓				
Total Phosphorus	Median < 0.03	mg/L	0.009	✓	✓				
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.0075	<b>~</b>	✓				
Water Clarity									
Parameter	Standard	Units	Result for	Status					
, arameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	3.18	<b>✓</b>	✓				
Recreation									
Parameter	Standard	Units	Result for			Status			
			2023	2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 200	MPN/100ml	144	✓	×				
Shellfish consumption									
Parameter	Standard	Units	Result for			Status			
	• • • • • • • • • • • • • • • • • • • •	J	2023	2023	2022	2021	2020	2019	
	90th percentile ≤ 43	CFU/100ml	9.6	<b>✓</b>	×				
Faecal Coliforms	John percentile 3 43	0.0,100		<b>*</b>	**				

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Taipa Estuary at Boat ramp for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

### **Tamaterau**

## Water Quality Report Card for 2023



### Site description

Tamaterau is located in the middle reaches of the Whāngārei harbour. Since 2008, Northland Regional Council has carried out routine monitoring at this site to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6.97	<b>✓</b>	✓	✓	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.0019	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	✓	
Total Nitrogen	Median < 0.22	mg/L	0.145	✓	✓	✓	✓	<b>✓</b>	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.003	✓	✓	✓	✓	<b>✓</b>	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0099	<b>✓</b>	✓	✓	<b>✓</b>	<b>✓</b>	
Total Phosphorus	Median < 0.03	mg/L	0.012	✓	✓	✓	✓	<b>✓</b>	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.009	✓	✓	✓	<b>✓</b>	<b>✓</b>	
Water Clarity									
Parameter	Standard	Units	Result for			Status			
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	2.25	<b>~</b>	✓	✓	<b>✓</b>	✓	
Recreation									
Parameter	Standard	Units	Result for			Status			
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 200	MPN/100ml	17	<b>✓</b>	✓	✓	✓	✓	
Shellfish consumption									
	Standard	Units	Result for			Status			
Shellfish consumption  Parameter	Standard	Units	Result for 2023	2023	2022	Status 2021	2020	2019	
	Standard  90th percentile ≤ 43	Units CFU/100ml		2023	2022 <b>⋄</b>		2020 <b>⋖</b>	2019	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Tamaterau for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Tapu Point**

## Water Quality Report Card for 2023



### Site description

Tapu Point is in the Bay of Islands close to Ōpua. Since May 2008, Northland Regional Council has carried out routine monitoring at this site to assess ecosystem health and determine its suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
raidilletei	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6.83	<b>✓</b>	✓	✓	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.0028	<b>~</b>	×	<b>~</b>	<b>✓</b>	✓	
Total Nitrogen	Median < 0.22	mg/L	0.145	✓	✓	✓	<b>✓</b>	✓	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.003	✓	✓	✓	<b>~</b>	✓	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0069	✓	<b>~</b>	✓	<b>✓</b>	<b>✓</b>	
Total Phosphorus	Median < 0.03	mg/L	0.014	✓	✓	✓	<b>✓</b>	✓	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.01	✓	✓	✓	<b>✓</b>	✓	
Water Clarity									
Parameter	Standard	Units	Result for	Status					
raidiffeee	Standard	Offics	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	4.32	✓	✓	✓	✓	✓	
Recreation									
Parameter	Standard	Units	Result for			Status			
	510	J	2023	2023	2022	2021	2020	2019	
				2023	2022	2021	2020	2013	
Enterococci	95th percentile ≤ 200	MPN/100ml	61	2023	<b>2022 ✓</b>	✓	✓	<b>2013</b> ✓	
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	61						
	95th percentile ≤ 200  Standard	MPN/100ml	Result for						
Shellfish consumption						✓			
Shellfish consumption			Result for	<b>✓</b>	✓	Status	✓	✓	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Tapu Point for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

### Te Haumi

## Water Quality Report Card for 2023



### Site description

Te Haumi Estuary is in the Bay of Islands, to the south-east of Paihia. This site has high ecological significance, with diverse estuarine habitats and well-established shellfish beds. Since May 2008, Northland Regional Council has carried out routine monitoring at this estuary to assess ecosystem health and determine the sites suitability for recreation and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
raiailletei	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6.08	<b>~</b>	✓	✓	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.0017	<b>~</b>	<b>✓</b>	✓	<b>~</b>	<b>~</b>	
Total Nitrogen	Median < 0.22	mg/L	0.135	✓	✓	✓	✓	<b>~</b>	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.003	<b>~</b>	✓	✓	×	<b>~</b>	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0215	<b>✓</b>	✓	✓	<b>✓</b>	<b>~</b>	
Total Phosphorus	Median < 0.03	mg/L	0.012	<b>✓</b>	✓	✓	✓	<b>~</b>	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.0085	✓	<b>✓</b>	✓	✓	<b>~</b>	
Water Clarity									
Parameter	Standard	Units	Result for			Status			
1		J	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	3.63	✓	✓	✓	✓	✓	
Recreation									
Parameter	Standard	Units	Result for			Status			
			2023	2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 200	MPN/100ml	10	✓	✓	✓	✓	✓	
Shellfish consumption									
Shellfish consumption  Parameter	Standard	Units	Result for			Status			
	Standard	Units	Result for 2023	2023	2022	Status 2021	2020	2019	
	Standard  90th percentile ≤ 43	Units  CFU/100ml		2023	2022		2020 <b>⋄</b>	2019	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Te Haumi for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Te Hoanga Point**

## Water Quality Report Card for 2023



### Site description

Te Hoanga Point is located in the Otamatea arm of the Kaipara Harbour. In June 2009, Northland Regional Council in conjunction with Auckland Council commenced a monthly water quality monitoring programme in the Kaipara Harbour. Since this time, monthly water quality samples have been collected to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
			Result for	Status					
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6.88	✓	✓	✓	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.0034	✓	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	
Total Nitrogen	Median < 0.22	mg/L	0.23	×	×	✓	×	<b>✓</b>	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.007	<b>~</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0091	<b>~</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	
Total Phosphorus	Median < 0.03	mg/L	0.026	<b>~</b>	×	×	×	<b>✓</b>	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.0195	×	×	×	×	×	
Water Clarity									
Dovementor	Standard	I I a i A a	Result for			Status		2019	
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	3.89	✓	✓	✓	×	✓	
Recreation									
Parameter	Standard	Units	Result for			Status			
rarameter	Standard	Ullits	2023	2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 200	MPN/100ml	276	×	✓	✓	✓	✓	
Shellfish consumption									
Parameter	Standard	Units	Result for			Status			
raiailietei	Stanuaru	Offics	2023	2023	2022	2021	2020	2019	
Faecal Coliforms	90th percentile ≤ 43	CFU/100ml	24.1	✓	×	✓	✓	✓	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Te Hoanga Point for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# Te Kopua

## Water Quality Report Card for 2023



### Site description

Te Kopua is located towards the lower end of the Arapaoa arm of the Kaipara Harbour. In June 2009, Northland Regional Council in conjunction with Auckland Council commenced a monthly water quality monitoring programme in the Kaipara Harbour. Since this time, monthly water quality samples have been collected to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for			Status			
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	7.04	✓	✓	✓	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.003	<b>✓</b>	<b>~</b>	×	<b>✓</b>	✓	
Total Nitrogen	Median < 0.22	mg/L	0.21	✓	<b>✓</b>	<b>✓</b>	<b>~</b>	✓	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.004	✓	<b>~</b>	<b>✓</b>	<b>~</b>	✓	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0059	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	
Total Phosphorus	Median < 0.03	mg/L	0.027	✓	<b>✓</b>	×	<b>~</b>	×	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.017	×	×	×	×	×	
Water Clarity									
Parameter	Standard	Units	Result for			Status			
, arameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	4.12	✓	✓	✓	×	✓	
Recreation									
Parameter	Standard	Units	Result for			Status			
Parameter	Standard	Units	Result for 2023	2023	2022	Status 2021	2020	2019	
Parameter  Enterococci	Standard  95th percentile ≤ 200	Units  MPN/100ml	2023	2023	2022		2020 <b>⋄</b>	2019	
			2023			2021			
Enterococci			2023 24 Result for			2021			
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	<b>2023</b> 24			2021			
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	2023 24 Result for	✓	✓	2021  Status	✓	✓	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Te Kopua for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## **Tern Point Channel**

### Water Quality Report Card for 2023



### Site description

The Tern Point Channel is situated within the Mangawhai Harbour, which is a small estuarine system on Northland's east coast. Since October 2016, Northland Regional Council has carried out routine monitoring at this site to assess ecosystem health and determine its suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
						Status		
Parameter	Standard	Units	Result for 2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	7.41	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>
Chlorophyll-a	Median < 0.004	mg/L	0.0008	<b>~</b>	✓	✓	✓	✓
Total Nitrogen	Median < 0.22	mg/L	0.2	<b>~</b>	<b>✓</b>	<b>✓</b>	✓	<b>~</b>
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.008	<b>~</b>	<b>✓</b>	✓	✓	<b>✓</b>
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0082	<b>~</b>	✓	✓	✓	✓
Total Phosphorus	Median < 0.03	mg/L	0.016	<b>~</b>	✓	✓	✓	✓
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.011	✓	✓	✓	✓	<b>✓</b>
Water Clarity								
Parameter	Standard	Units	Result for			Status		
raiametei	Stanuaru	Ullits	2023	2023	2022	2021	2020	2019
Turbidity	Median < 6.9	NTU	4.45	<b>~</b>	✓	✓	✓	✓
Recreation								
Parameter	Standard	Units	Result for			Status		
raiametei	Stanuaru	Offics	2023	2023	2022	2021	2020	2019
Enterococci	95th percentile ≤ 200	MPN/100ml	60	<b>~</b>	✓	<b>✓</b>	✓	✓
Shellfish consumption								
Parameter	Standard	Units	Result for			Status		
raiailietei	Stariuaru	Oilles	2023	2023	2022	2021	2020	2019
Faecal Coliforms	90th percentile ≤ 43	CFU/100ml	276	×	×	✓	×	×

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Tern Point Channel for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## **Town Basin**

## Water Quality Report Card for 2023



### Site description

This site is in the upper reaches of the Whangārei Harbour and is the immediate receiving environment for inputs from the Hātea River catchment. Since January 1986, Northland Regional Council has been collecting monthly water quality samples at this site. The resulting data has been used to monitor ecosystem health and indicate the sites suitability for recreational purposes.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
raiametei	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6.2	<b>~</b>	×	×	×	×	
Chlorophyll-a	Median < 0.003	mg/L	0.0031	×	✓	✓	×	✓	
Total Nitrogen	Median < 0.86	mg/L	0.845	<b>~</b>	✓	✓	<b>✓</b>	✓	
Total Ammoniacal Nitrogen	Median < 0.099	mg/L	0.095	<b>~</b>	<b>~</b>	✓	<b>✓</b>	✓	
Nitrate-Nitrite Nitrogen	Median < 0.058	mg/L	0.42	×	×	×	×	×	
Total Phosphorus	Median < 0.119	mg/L	0.038	<b>~</b>	✓	✓	<b>✓</b>	✓	
Dissolved Reactive Phosphorus	Median < 0.092	mg/L	0.028	<b>~</b>	✓	×	✓	✓	
Water Clarity									
Parameter	Standard	Units	Result for			Status			
raiametei	Standard	Units	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 7.5	NTU	5.53	<b>~</b>	✓	✓	✓	✓	
Recreation									
Parameter	Standard	Units	Result for			Status			
rarameter	Standard	Units	2023	2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 500	MPN/100ml	675	×	×	×	×	×	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Town Basin for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## **Wahiwaka Creek**

### Water Quality Report Card for 2023



### Site description

Wahiwaka Creek is located in the upper reaches of the Otamatea channel in the Kaipara Harbour. Since 2009, Northland Regional Council has been collecting monthly water quality samples to monitor ecosystem health and indicate the sites suitability for recreational purposes.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health								
Parameter	Standard	Units	Result for			Status		
raiametei	Standard	Units	2023	2023	2022	2021	2020	2019
Dissolved Oxygen	Minimum > 4.6	mg/L	4.9	<b>~</b>	✓	<b>~</b>	×	<b>✓</b>
Chlorophyll-a	Median < 0.004	mg/L	0.0042	×	×	<b>✓</b>	<b>✓</b>	✓
Total Nitrogen	Median < 0.6	mg/L	0.37	<b>~</b>	✓	<b>✓</b>	✓	✓
Total Ammoniacal Nitrogen	Median < 0.043	mg/L	0.027	<b>~</b>	✓	<b>✓</b>	<b>✓</b>	✓
Nitrate-Nitrite Nitrogen	Median < 0.218	mg/L	0.0565	<b>~</b>	✓	<b>~</b>	✓	✓
Total Phosphorus	Median < 0.04	mg/L	0.055	×	×	×	×	×
Dissolved Reactive Phosphorus	Median < 0.021	mg/L	0.037	×	×	×	×	×
Water Clarity								
Parameter	Standard	Units	Result for			Status		
raiametei	Standard	Units	2023	2023	2022	2021	2020	2019
Turbidity	Median < 10.8	NTU	9.61	<b>~</b>	✓	<b>✓</b>	<b>✓</b>	✓
Recreation								
Parameter	Standard	Units	Result for			Status		
r al allietei	Jianuaru	Offics	2023	2023	2022	2021	2020	2019
Enterococci	95th percentile ≤ 200	MPN/100ml	6432	×	×	×	×	×

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Wahiwaka Creek for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## **Waiaharohia Canal**

### Water Quality Report Card for 2023



### Site description

This site is at the bottom of the Waiarohia River, just upstream of the confluence with the Hātea River. Since March 2008, Northland Regional Council has been collecting monthly water quality samples at this site. The resulting data has been used to monitor ecosystem health and indicate the sites suitability for recreational purposes.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
raiailletei	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6.9	<b>~</b>	✓	×	×	×	
Chlorophyll-a	Median < 0.003	mg/L	0.0031	×	✓	<b>✓</b>	<b>✓</b>	✓	
Total Nitrogen	Median < 0.86	mg/L	0.88	×	×	×	×	✓	
Total Ammoniacal Nitrogen	Median < 0.099	mg/L	0.205	×	×	✓	×	✓	
Nitrate-Nitrite Nitrogen	Median < 0.058	mg/L	0.455	×	×	×	×	×	
Total Phosphorus	Median < 0.119	mg/L	0.057	<b>~</b>	✓	×	<b>✓</b>	<b>✓</b>	
Dissolved Reactive Phosphorus	Median < 0.092	mg/L	0.042	<b>~</b>	✓	×	✓	×	
Water Clarity									
Parameter	Standard	Units	Result for			Status			
raiailletei	Standard	Units	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 7.5	NTU	8.16	×	×	✓	✓	<b>✓</b>	
Recreation									
Parameter	Standard	Units	Result for			Status			
Parameter	Standard	Units	2023	2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 500	MPN/100ml	461	<b>~</b>	×	<b>✓</b>	×	×	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Waiaharohia Canal for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## **Waikare Inlet**

## Water Quality Report Card for 2023



### Site description

The Waikare Inlet is located within the Bay of Islands, on the east coast of the Northland Peninsula. Since May 2008, Northland Regional Council has carried out routine monitoring of this inlet to assess ecosystem health and determine its suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for			Status			
raidiletei	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6.7	<b>✓</b>	✓	<b>✓</b>	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.0024	<b>~</b>	×	<b>~</b>	<b>~</b>	✓	
Total Nitrogen	Median < 0.22	mg/L	0.16	✓	✓	✓	✓	<b>✓</b>	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.003	✓	✓	✓	✓	<b>✓</b>	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0138	✓	<b>~</b>	✓	<b>✓</b>	<b>✓</b>	
Total Phosphorus	Median < 0.03	mg/L	0.017	✓	✓	✓	✓	<b>✓</b>	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.0105	✓	✓	✓	<b>✓</b>	<b>✓</b>	
Water Clarity									
Parameter	Standard	Units	Result for	Status					
r didirectel	Standard	Offics	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	5.85	✓	✓	×	✓	×	
Recreation									
Parameter	Standard	Units	Result for			Status			
		J	2023	2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 200	MPN/100ml	101	✓	✓	✓	✓	<b>~</b>	
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	101	✓	✓	✓	✓	✓	
	95th percentile ≤ 200  Standard	MPN/100ml	Result for	✓	✓	<b>√</b> Status	✓	✓	
Shellfish consumption				2023	2022	·	2020	2019	
Shellfish consumption			Result for			Status			

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Waikare Inlet for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## Wainui Island

## Water Quality Report Card for 2023



### Site description

Wainui Island is in the middle reaches of the Kerikeri Inlet in the Bay of Islands. Since May 2008, Northland Regional Council has carried out routine monitoring to assess the health of the estuary and determine its suitability for recreation and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for			Status			
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6.65	<b>✓</b>	✓	✓	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.0024	<b>~</b>	✓	<b>~</b>	<b>~</b>	✓	
Total Nitrogen	Median < 0.22	mg/L	0.175	✓	✓	✓	×	<b>~</b>	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.003	✓	✓	✓	✓	✓	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0417	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	
Total Phosphorus	Median < 0.03	mg/L	0.014	✓	✓	✓	✓	✓	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.008	✓	✓	✓	✓	✓	
Water Clarity									
Parameter	Standard	Units	Result for						
, arameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	3.64	✓	✓	✓	✓	✓	
Recreation									
			Result for	Status					
Parameter	Standard	Units	2023						
Parameter	Standard	Units		2023	2022	2021	2020	2019	
Parameter  Enterococci	Standard  95th percentile ≤ 200	Units  MPN/100ml	2023	2023	2022 •⁄	2021	2020	2019 •⁄	
			2023						
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	2023 10 Result for						
Enterococci			<b>2023</b> 10			×			
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	2023 10 Result for	<b>✓</b>	✓	X	✓	✓	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Wainui Island for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Waipapa River**

## Water Quality Report Card for 2023



### Site description

This site is situated in the lower reaches of the Waipapa River, which contributes an important freshwater input to the Bay of Islands system. Since May 2008, Northland Regional Council has been collecting monthly water quality samples at this site to monitor ecosystem health and indicate the sites suitability for recreational purposes.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	5.7	<b>~</b>	<b>✓</b>	<b>✓</b>	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.0014	<b>~</b>	✓	<b>✓</b>	<b>✓</b>	✓	
Total Nitrogen	Median < 0.6	mg/L	0.43	<b>~</b>	✓	✓	✓	✓	
Total Ammoniacal Nitrogen	Median < 0.043	mg/L	0.024	<b>~</b>	<b>✓</b>	<b>✓</b>	✓	✓	
Nitrate-Nitrite Nitrogen	Median < 0.218	mg/L	0.247	×	×	<b>✓</b>	✓	✓	
Total Phosphorus	Median < 0.04	mg/L	0.011	<b>~</b>	<b>✓</b>	<b>✓</b>	✓	✓	
Dissolved Reactive Phosphorus	Median < 0.021	mg/L	0.0052	<b>~</b>	✓	✓	✓	✓	
Water Clarity									
Parameter	Standard	Units	Result for			Status			
raiametei	Stanuaru	Units	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 10.8	NTU	3.7	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	
Recreation									
Parameter	Standard	Units	Result for			Status			
raiailietei	Stanuaru	Ullits	2023	2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 200	MPN/100ml	51	<b>~</b>	<b>~</b>	×	✓	✓	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Waipapa River for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# Waipū Cove

## Water Quality Report Card for 2023



### Site description

Waipū Cove is an open coast site on the east coast of the Northland Peninsula. It is a popular beach for recreational purposes including surfing, camping, and swimming. Since November 2017, Northland Regional Council has carried out routine monitoring at this site to assess ecosystem health and determine the sites suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
raianietei	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	7.2	<b>~</b>	<b>✓</b>	✓	<b>✓</b>	✓	
Recreation									
Parameter	Standard	Result for Units	Status						
raiametei	Standard	Offics	2023	2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 40	MPN/100ml	69	×	✓	✓	<b>✓</b>	×	
Shellfish consumption									
Parameter	Standard	Units	Result for			Status			
raiametei	Standard	Units	2023	2023	2022	2021	2020	2019	
Faecal Coliforms	90th percentile ≤ 43	CFU/100ml	17.3	<b>✓</b>	<b>~</b>	✓	<b>✓</b>	✓	
raecai Cultorms	Median≤ 14	CFU/100ml	1.6	<b>~</b>	<b>✓</b>	✓	✓	✓	

#### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Waipū Cove for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# Waipū Estuary

## Water Quality Report Card for 2023



### Site description

The Waipū Estuary is situated on the east coast of the Northland Peninsula. This estuary is renowned as a nesting area for many native shorebird species and has established shellfish populations. Since May 2017, Northland Regional Council has carried out routine monitoring at this estuary to assess ecosystem health and determine its suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for			Status			
, arameter	Standard	Offices	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	7.13	<b>✓</b>	✓	✓	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.001	<b>✓</b>	<b>~</b>	<b>✓</b>	✓	✓	
Total Nitrogen	Median < 0.22	mg/L	0.145	✓	✓	✓	<b>✓</b>	✓	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.016	✓	✓	×	×	✓	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.022	✓	✓	✓	✓	✓	
Total Phosphorus	Median < 0.03	mg/L	0.015	✓	✓	✓	✓	✓	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.01	✓	<b>✓</b>	✓	<b>✓</b>	✓	
Water Clarity									
Parameter	Standard	Units	Result for	Status					
raidiffeee	Standard	Offics	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	3.36	<b>✓</b>	✓	✓	✓	✓	
Recreation									
Parameter	Standard	Units	Result for			Status			
rarameter	Standard	O.mes	2023	2022		2021	2020	2019	
				2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 200	MPN/100ml	5044	<b>X</b>	2022 <b>X</b>	<b>2021 ✓</b>	✓	<b>2013 ✓</b>	
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	5044						
Shellfish consumption			Result for						
	95th percentile ≤ 200  Standard	MPN/100ml Units				✓			
Shellfish consumption			Result for	×	×	Status	✓	✓	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Waipū Estuary for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# Waipū Lagoon

## Water Quality Report Card for 2023



### Site description

The Waipū Lagoon is a shallow lagoon in the southern arm of the Waipū estuary which supports native birds and shellfish beds. Since May 2017, Northland Regional Council has carried out routine monitoring at this site to assess the health of the estuary and determine its suitability for recreational activities and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
rarameter	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	7.15	✓	✓	✓	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.0008	<b>~</b>	<b>~</b>	✓	<b>~</b>	✓	
Total Nitrogen	Median < 0.22	mg/L	0.11	✓	✓	✓	✓	<b>✓</b>	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.003	✓	✓	×	✓	<b>✓</b>	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0033	✓	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	
Total Phosphorus	Median < 0.03	mg/L	0.011	✓	✓	✓	✓	<b>✓</b>	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.009	✓	✓	✓	✓	<b>✓</b>	
Water Clarity									
Parameter	Standard	Units	Result for 2023	Status					
, arameter	Standard	Offics		2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	2.68	✓	✓	✓	✓	✓	
Recreation									
Parameter	Standard	Units	Result for	Status					
			2023						
raiailletei	Standard	Offics	2023	2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 200	MPN/100ml	<b>2023</b> 229	2023	2022	2021	2020	2019	
Enterococci			229 Result for						
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	229			✓			
Enterococci Shellfish consumption	95th percentile ≤ 200	MPN/100ml	229 Result for	×	×	Status	✓	✓	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Waipū Lagoon for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

## **Wairoa River**

## Water Quality Report Card for 2023



### Site description

The Wairoa River site is located between Raupo and Tikinui in the Wairoa arm of the Kaipara Harbour. Since October 2016, monthly water quality samples have been collected at this site by Northland Regional Council to monitor ecosystem health and indicate the sites suitability for recreational purposes.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for	Status					
raiametei	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6.2	<b>~</b>	<b>~</b>	<b>✓</b>	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.0049	×	×	✓	✓	✓	
Total Nitrogen	Median < 0.6	mg/L	0.76	×	×	×	×	<b>~</b>	
Total Ammoniacal Nitrogen	Median < 0.043	mg/L	0.019	<b>~</b>	✓	✓	×	✓	
Nitrate-Nitrite Nitrogen	Median < 0.218	mg/L	0.367	×	×	×	×	×	
Total Phosphorus	Median < 0.04	mg/L	0.064	×	×	×	×	×	
Dissolved Reactive Phosphorus	Median < 0.021	mg/L	0.026	×	×	×	×	×	
Water Clarity									
Parameter	Standard	Units	Result for			Status			
raiametei	Standard	Units	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 10.8	NTU	31.2	×	×	×	×	×	
Recreation									
Parameter	Standard	Units	Result for			Status			
raidilletei	Stallualu	Ullits	2023	2023	2022	2021	2020	2019	
Enterococci	95th percentile ≤ 200	MPN/100ml	81	<b>~</b>	×	<b>~</b>	<b>✓</b>	<b>~</b>	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Wairoa River for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.

# **Waitangi River**

## Water Quality Report Card for 2023



### Site description

The Waitangi Estuary is located within the Bay of Islands, on the east coast of the Northland peninsula. Since May 2008, Northland Regional Council has carried out routine monitoring to assess the health of the estuary and determine its suitability for recreation and shellfish consumption.



Find out more at www.nrc.govt.nz/environment/environmental-data/environmental-data-hub

Ecosystem Health									
Parameter	Standard	Units	Result for			Status			
raiametei	Standard	Offics	2023	2023	2022	2021	2020	2019	
Dissolved Oxygen	Minimum > 4.6	mg/L	6.69	<b>✓</b>	✓	✓	✓	✓	
Chlorophyll-a	Median < 0.004	mg/L	0.0013	<b>✓</b>	✓	✓	✓	✓	
Total Nitrogen	Median < 0.22	mg/L	0.185	✓	×	✓	<b>✓</b>	✓	
Total Ammoniacal Nitrogen	Median < 0.023	mg/L	0.003	✓	✓	<b>✓</b>	✓	✓	
Nitrate-Nitrite Nitrogen	Median < 0.048	mg/L	0.0617	×	×	✓	×	✓	
Total Phosphorus	Median < 0.03	mg/L	0.013	✓	<b>~</b>	<b>✓</b>	<b>~</b>	✓	
Dissolved Reactive Phosphorus	Median < 0.017	mg/L	0.008	✓	<b>~</b>	<b>✓</b>	✓	✓	
Water Clarity									
Parameter	Standard	Units	Result for	Status					
		Omes	2023	2023	2022	2021	2020	2019	
Turbidity	Median < 6.9	NTU	5.62	<b>✓</b>	<b>✓</b>	<b>✓</b>			
			3.02	~	•	•	✓	✓	
Recreation			3.02	•	•	•	*	*	
	Standard	Units	Result for	•	•	Status	*	<b>*</b>	
Recreation  Parameter	Standard	Units		2023	2022		2020	2019	
	Standard  95th percentile ≤ 200	Units MPN/100ml	Result for			Status			
Parameter			Result for 2023	2023	2022	Status 2021	2020	2019	
Parameter Enterococci			Result for 2023 467 Result for	2023	2022	Status 2021	2020	2019	
Parameter  Enterococci  Shellfish consumption	95th percentile ≤ 200	MPN/100ml	Result for <b>2023</b>	2023	2022	Status 2021	2020	2019	
Parameter  Enterococci  Shellfish consumption	95th percentile ≤ 200	MPN/100ml	Result for 2023 467 Result for	2023	2022	Status 2021  Status	2020	2019	

### Disclaimer

This report card provides a snapshot of the water quality and ecological health at Waitangi River for the past 5 years. The median for each calendar year is assessed against the coastal water quality standards outlined in the Regional Plan for Northland. A tick indicates an achieved standard while a cross indicates a not achieved standard.