

General Information

Information supplied to: Living Water: DOC-Fonterra Partnership
Contact person: Robin Smith (rsmith@doc.govt.nz)
Project's consultant: CAREX - University of Canterbury
Consultant's contact person: Chris Meijer (christopher.meijer@canterbury.ac.nz)
Project name: Powells Road Restoration Resampling - 2 years post baseline

Methodologies

Site selection: Sites were selected by representatives of DOC and Boffa Miskell Ltd in November 2017
Riparian and in-stream habitat was assessed in accordance with:
Protocol 2 (P2) Quantitative Protocol of Harding et al. (2009); and

Habitat: Sediment Assessment Methods 2 and 6 of Clapcott et al. (2001).
The macroinvertebrate community was assessed using Protocols C3 and C4 of Stark et al. (2001).
Macroinvertebrates were processed using a full count with subsample and rare scan method. Entered data is raw and needs to be multiplied up by the

Macroinvertebrates: subsample amount.

Fish: The fish community was assessed using single-pass electric fishing.

Water Quality: Water quality was assessed by Hill Laboratories.

For full methodologies refer to:

Protocol 2 of Harding et al. (2009); Sediment Assessment Methods 2 and 6 of Clapcott et al. (2001)

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Site name	Site location	Waterway name	Easting: upstream extent	Northing: upstream extent	Easting: downstream extent	Northing: downstream extent	Date surveyed: macroinvertebrates & fish	Date surveyed: habitat & water quality
Downstream	Powells Downstream	Powells Road Waterway	1554135.85	5163398.27	1554168.24	5163343.88	27/11/2019	5/12/2019
Treatment	Powells Treatment	Powells Road Waterway	1554037.66	5163545.99	1554062.52	5163512.53	27/11/2019	5/12/2019
Reference	Powells Reference	Powells Road Waterway	1553959.25	5163682.74	1553975.60	5163648.92	27/11/2019	5/12/2019

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Lab No: 2288025
 Date Received: 5-Dec-19
 Date Reported: 10-Dec-19
 Quote No: 102783
 Order No: 667323
 Submitted By: Hayley Devlin
 University of Canterbury
 Private Bag 4800
 Christchurch 8140

Site name		Downstream	Treatment	Reference
Date		5/12/2019	5/12/2019	5/12/2019
Time		9:45	11:30	12:20
Individual Tests				
	Units			
out of scope				
Dissolved Inorganic Nitrogen	g/m-3	7.6	7.7	7.7
Total Nitrogen	g/m-3	7.8	7.9	7.9
Total Kjeldahl Nitrogen (TKN)	g/m-3	0.27	0.17	0.20
out of scope				
Echerichia coli	MPN/100mL	517	613	272
Nutrient Profile				
Total Ammoniacal-N	g/m-3	0.020	0.010	<0.010
Nitrite-N	g/m-3	0.013	0.011	0.011
Nitrate-N	g/m-3	7.5	7.7	7.7
Nitrate-N + Nitrite-N	g/m-3	7.5	7.7	7.7
out of scope				

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