**Table S1:** Location and brief description of all of the sample sites examined in this study.

Abbrev.	Stream Name	Location	Description
Reefton ar	ea		
LA	Lankeys Creek	Lat. 42°8.865′, Long. 171°54.083′	Pristine reference stream, just east of Reefton.
MU	Murrays Creek	Lat. 42°7.973', Long. 171°52.952'	Mostly pristine, just east of Reefton. A few small mines present upstream.
DU	Devils Creek	Lat. 42°10.448′, Long. 171°52.646′	Moderately impacted by abandoned Albion mines. At gate to Globe Mine.
GA	Garvey Creek	Lat. 42°9.675′, Long. 171°56.735′	Highly impacted by large mine east of Reefton.
WE	Wellman Creek	Lat. 42°8.865', Long. 171°54.083'	Highly impacted by large mine east of Reefton.
Denniston	area		
DR	Unnamed stream (Denniston Road)	Lat. 41°44.382′, Long. 171°47.592′	Pristine, with naturally low pH from humic and fulvion acids (a brownwater stream).
RU	Rapid Creek	Lat. 41°45.219', Long. 171°46.537'	Pristine, with naturally low pH.
BF	Unnamed stream (Burnetts Face)	Lat. 41°45.573', Long. 171°48.473'	Moderately impacted by abandoned mines.
WM	Unnamed stream (Whareatea mine)	Lat. 41°46.118', Long. 171°47.227'	Moderately impacted by abandoned mines.
SWA	Unnamed stream (Sullivans West adit)	Lat. 41°45.127', Long. 171°46.474'	Highly impacted from abandoned coal mines.
Stockton a	rea		
TW	Twins Creek	Lat. 41°38.317', Long. 171°50.846'	Pristine stream, with near neutral pH, south of Granity.
BR	Bradley Creek	Lat. 41°38.317', Long. 171°51.785'	Pristine Stream, with near neutral pH.
РО	Portal Stream	Lat. 41°38.353', Long. 171°452.271'	Highly impacted by abandoned mine above Millerton.
PT	Packtrack Stream	Lat. 41°38.285', Long. 171°52.452'	Highly impacted by abandoned mines above Millerton.
ОВ	Unnamed stream (Old Bathhouse)	Lat. 41°38.257', Long. 171°52.388'	Highly impacted by abandoned mines above Millerton.
NG	Ngakawau River	Lat. 41°36.627', Long. 171°53.612'	Highly impacted by active and abandoned mines, phas been adjusted with addition of a lime slurry.
Paparoa Ra	anges		·
NMC	Nine Mile Creek (Strongman mine area)	Lat. 42°21.001', Long. 171°17.669'	Highly impacted by abandoned Strongman Mine north of Greymouth. Site has naturally high pH (drains a limestone catchment).