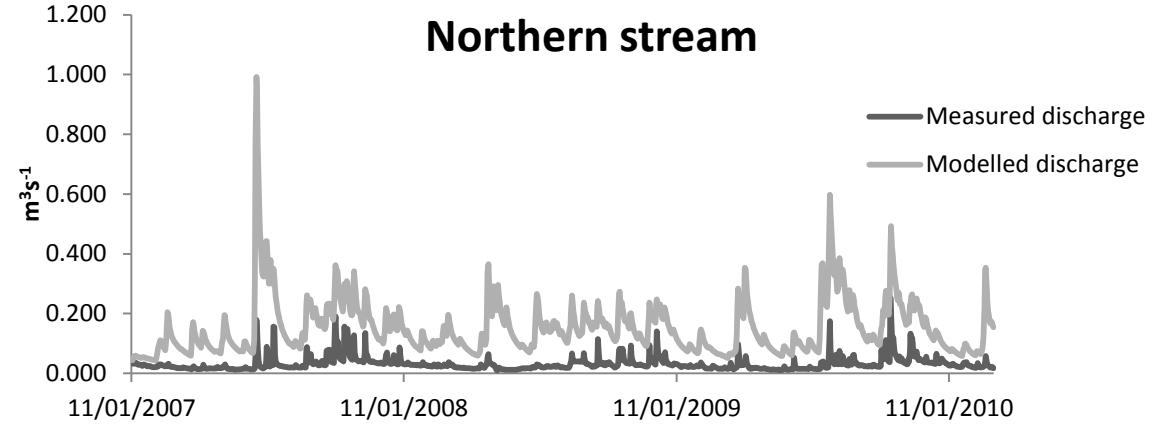
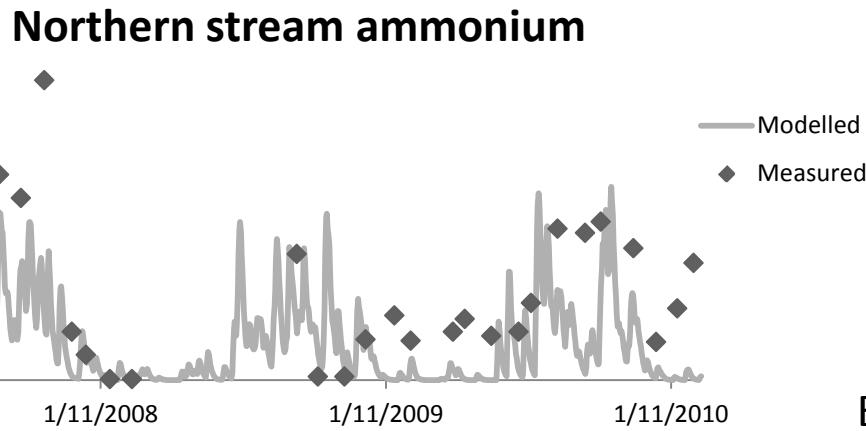


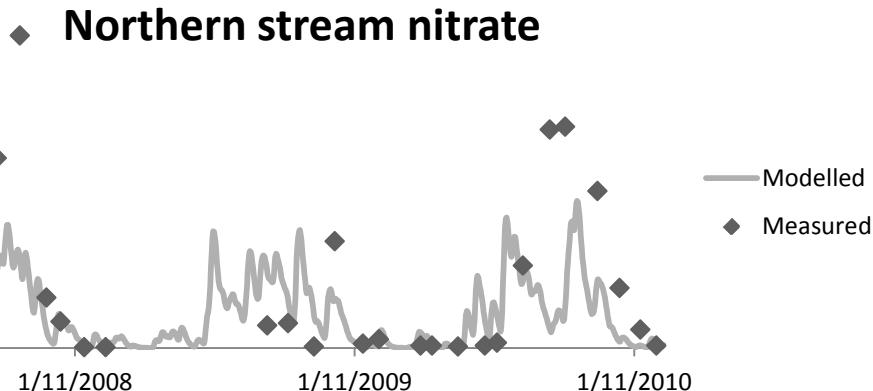
# Current MSc research – Lake Okaro

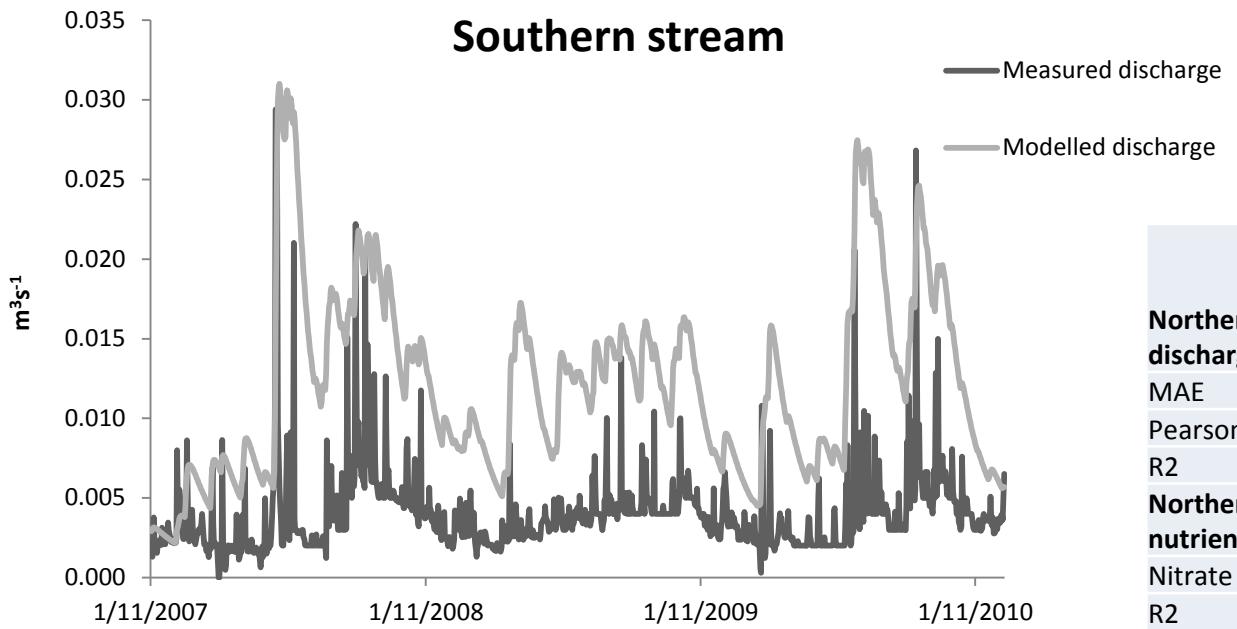


Northern stream discharge statistics	
MAE	0.12
Pearson (R)	0.64
R2	0.41
Northern stream nutrient statistics	
Nitrate ( $\text{NO}_3$ )	
R2	0.63
N-S	0.37
Ammonium ( $\text{NH}_4$ )	
R2	0.61
N-S	0.39



Example only – not quantitative





**Northern stream  
discharge statistics**

MAE	0.01
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Pearson (R)	0.52
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R2	0.27
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**Northern stream  
nutrient statistics**

Nitrate ( $\text{NO}_3$ )	
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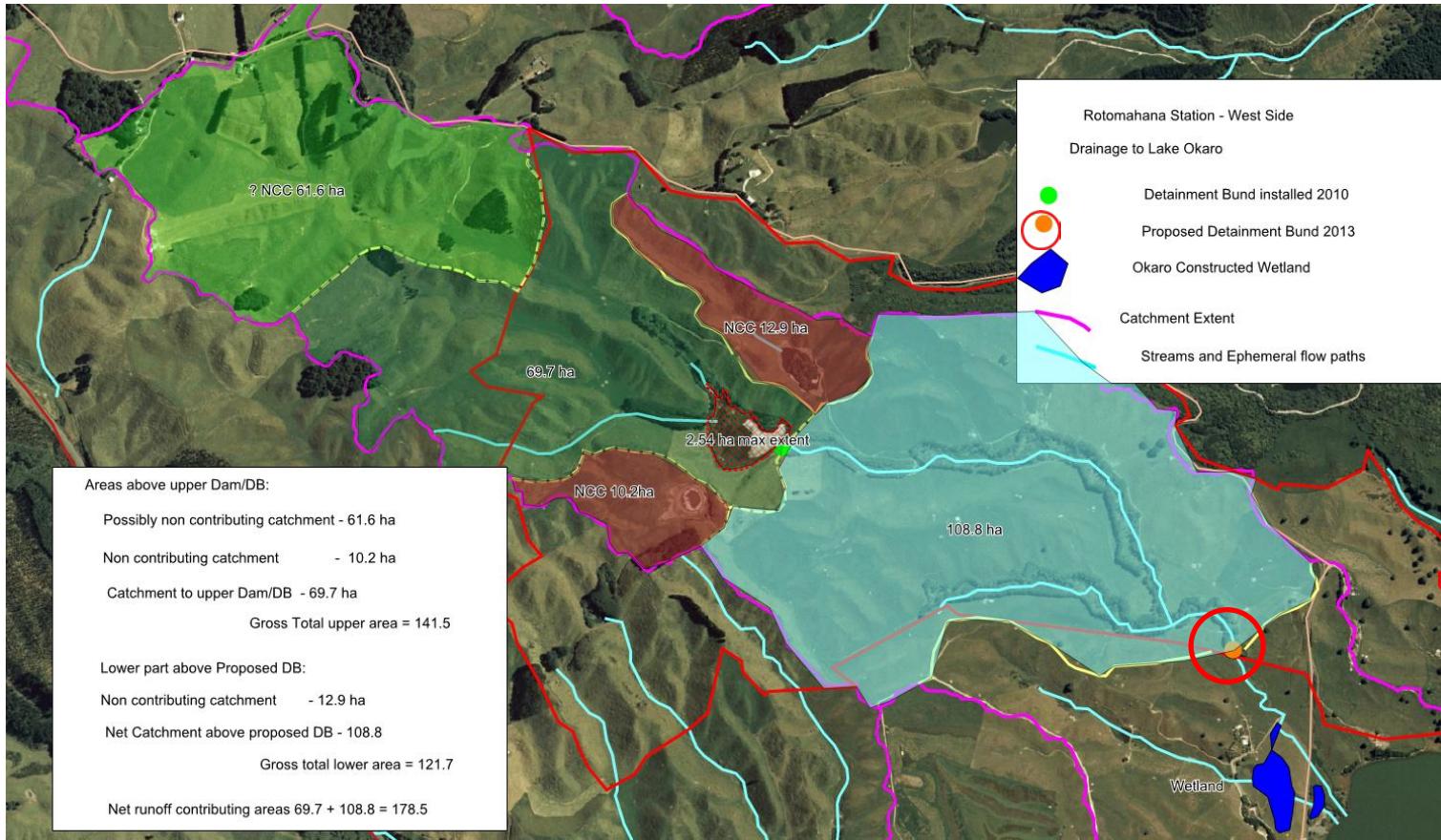
R2	0.89
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N-S	-0.25
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Ammonium ( $\text{NH}_4$ )	
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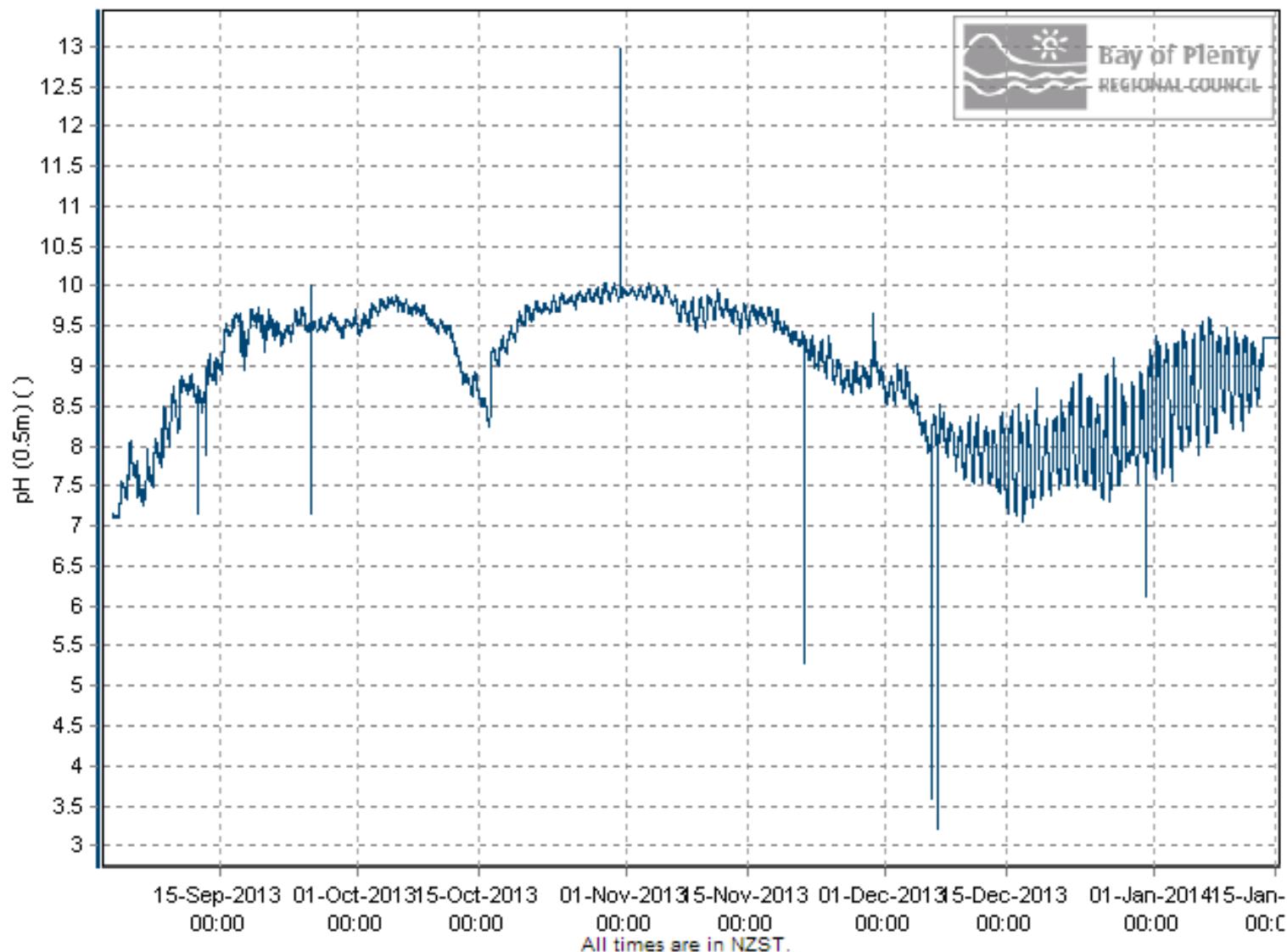
R2	0.24
----	------

N-S	-1.32
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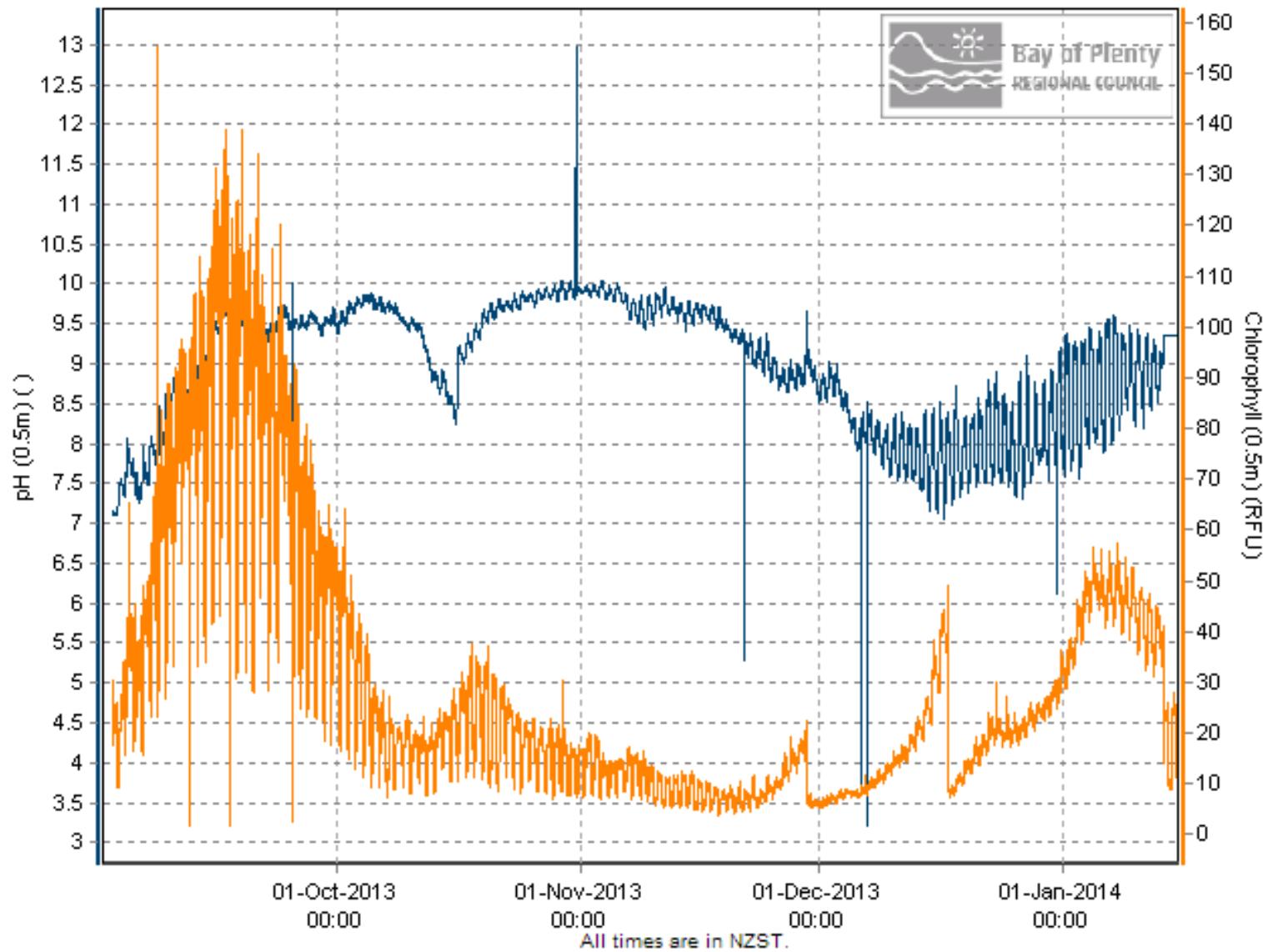


Scenario	Description
1	Input of a new detainment bund
2	Removal of wetland
3	Additional alum dosings
4	Removal of all restoration applications

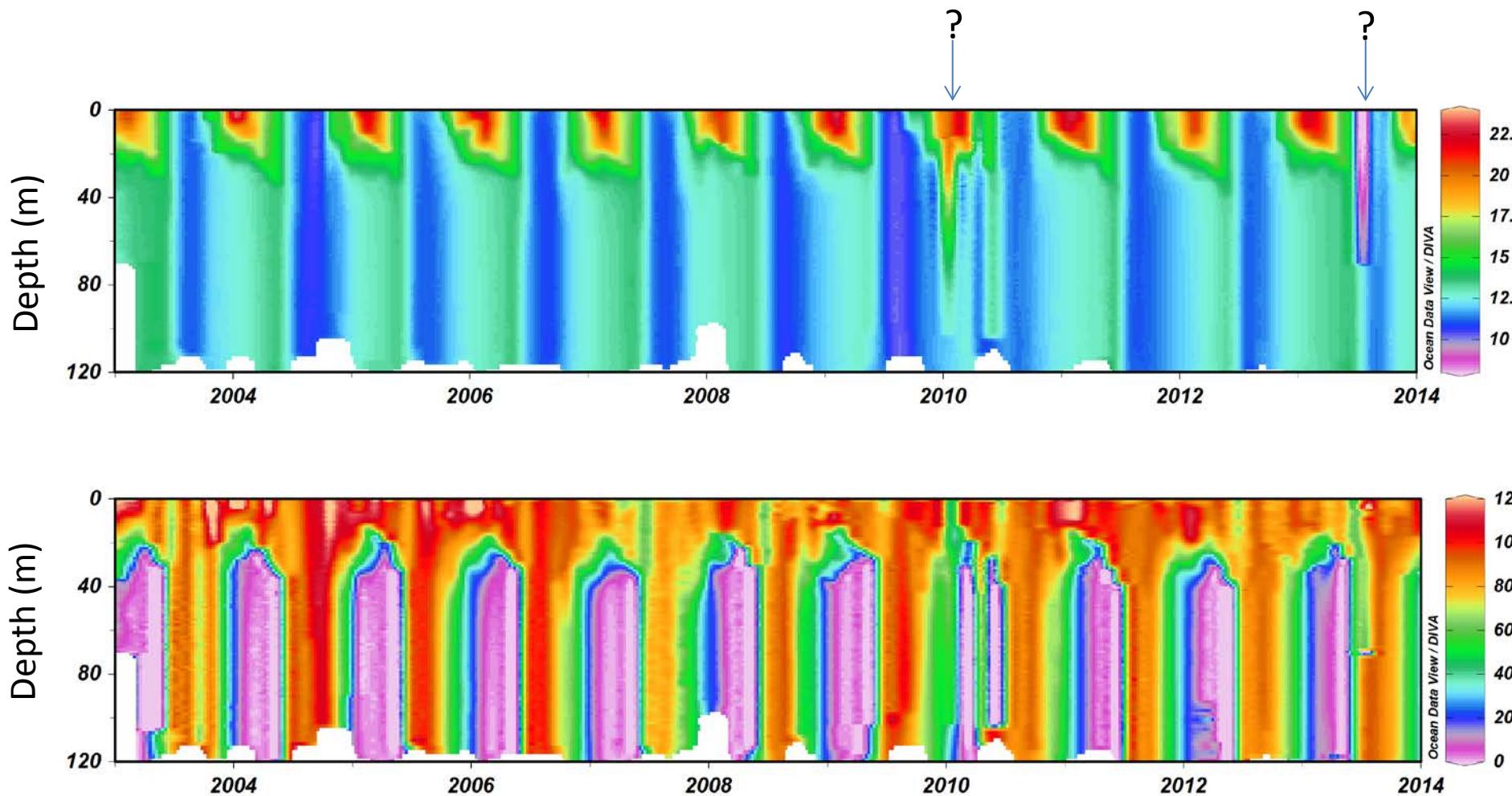
# Okaro buoy: pH



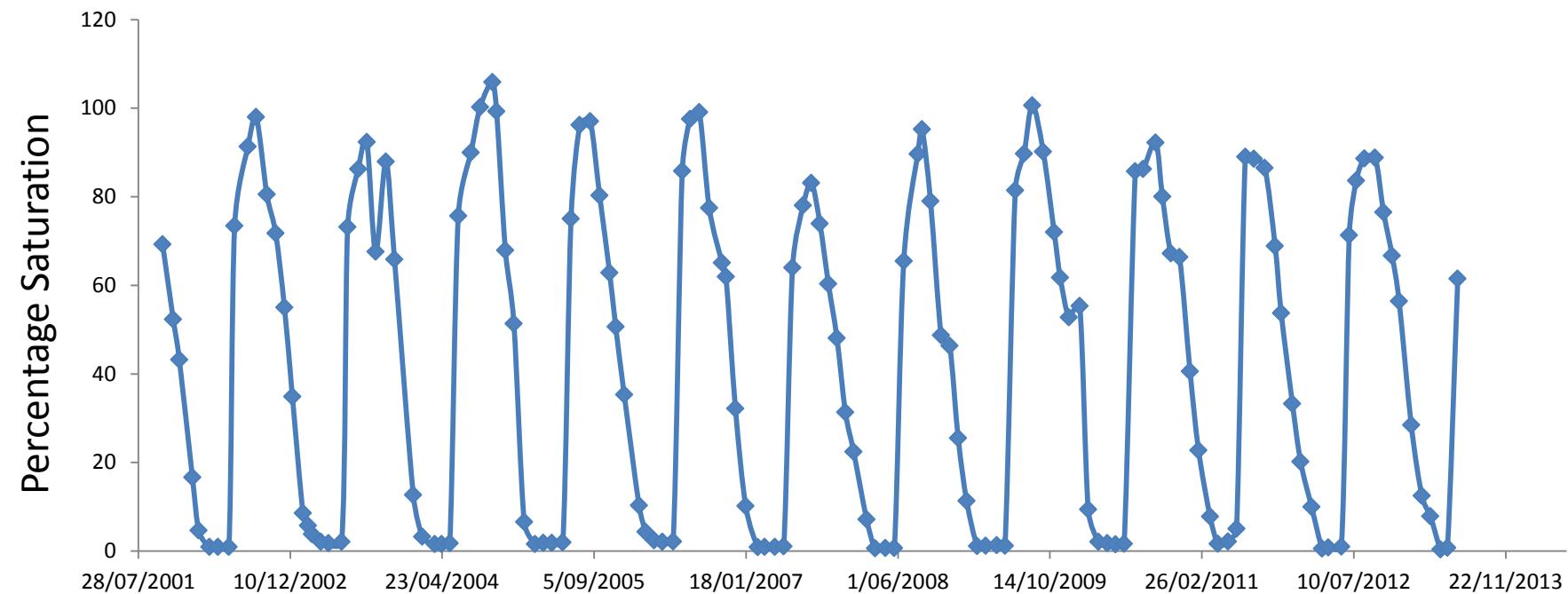
# Okaro buoy: pH and chlorophyll



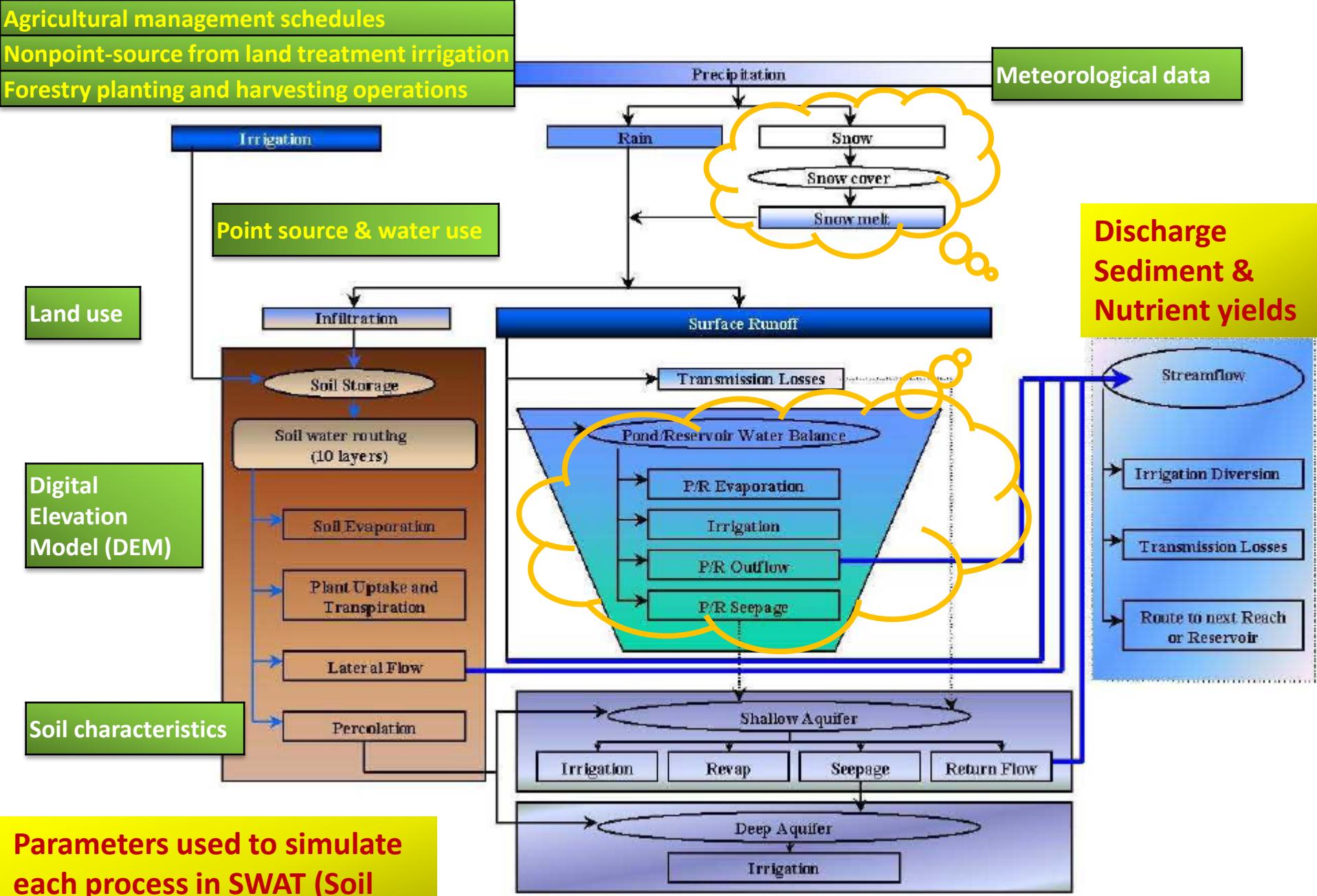
# Temperature and dissolved oxygen at 60 m, Lake Rotoiti



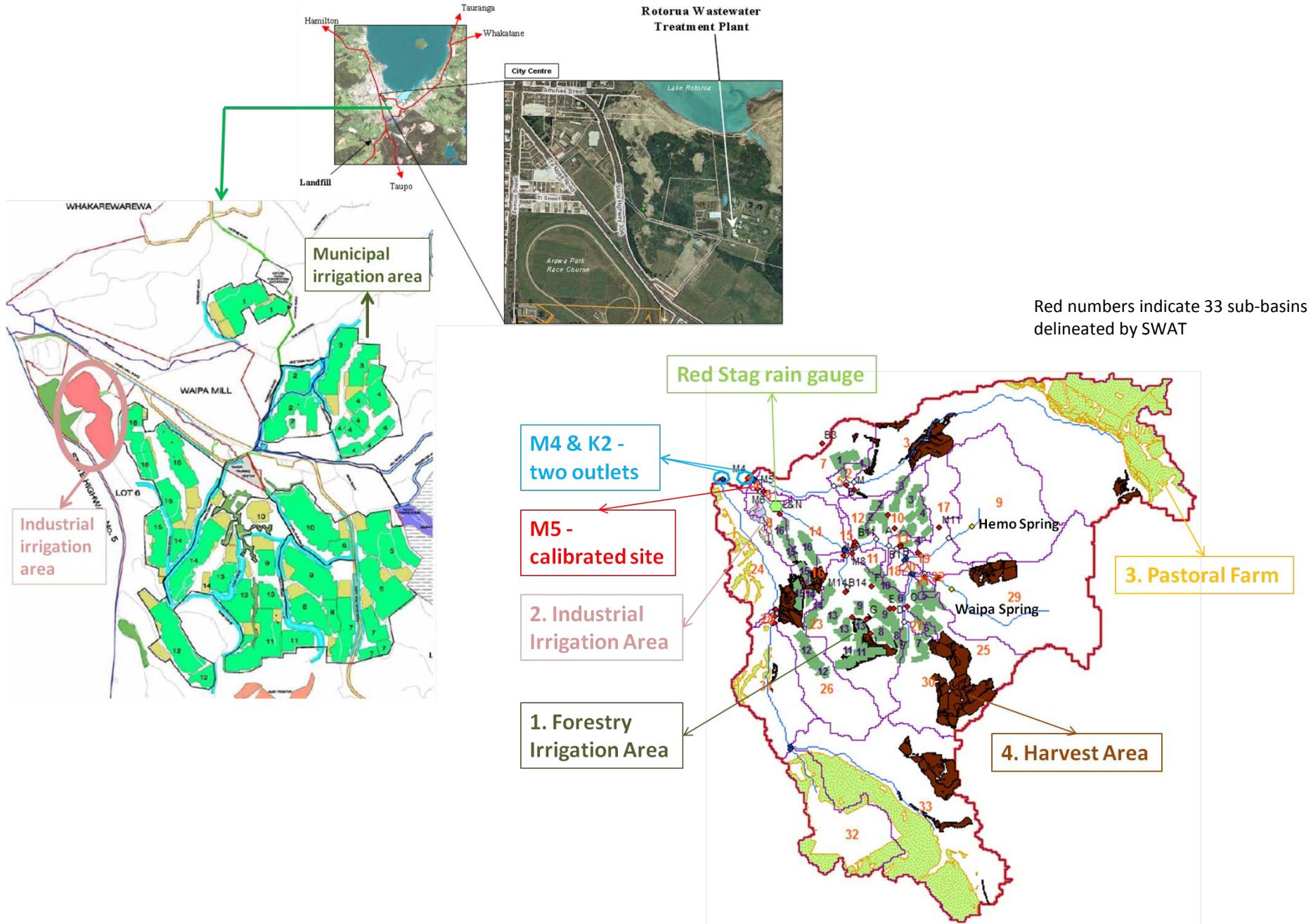
# Dissolved oxygen at 60 m, Lake Rotoiti

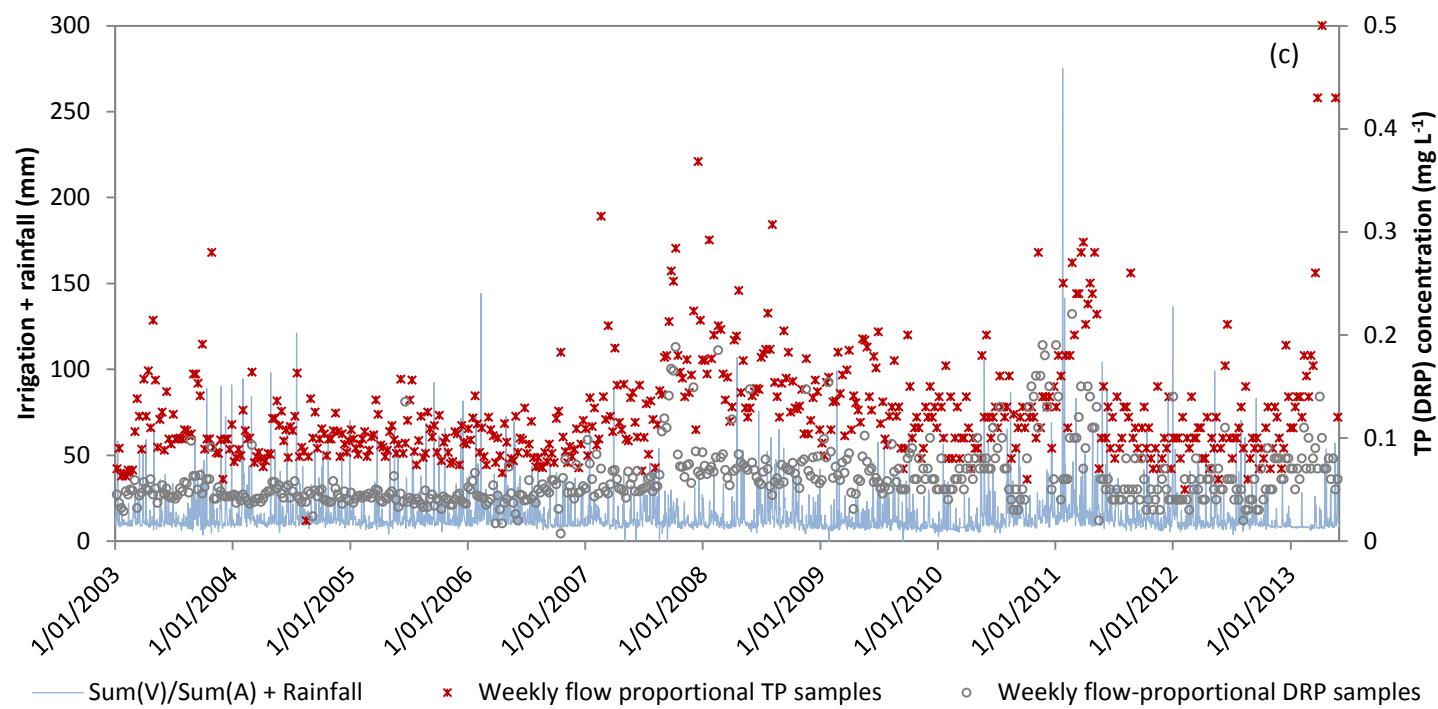
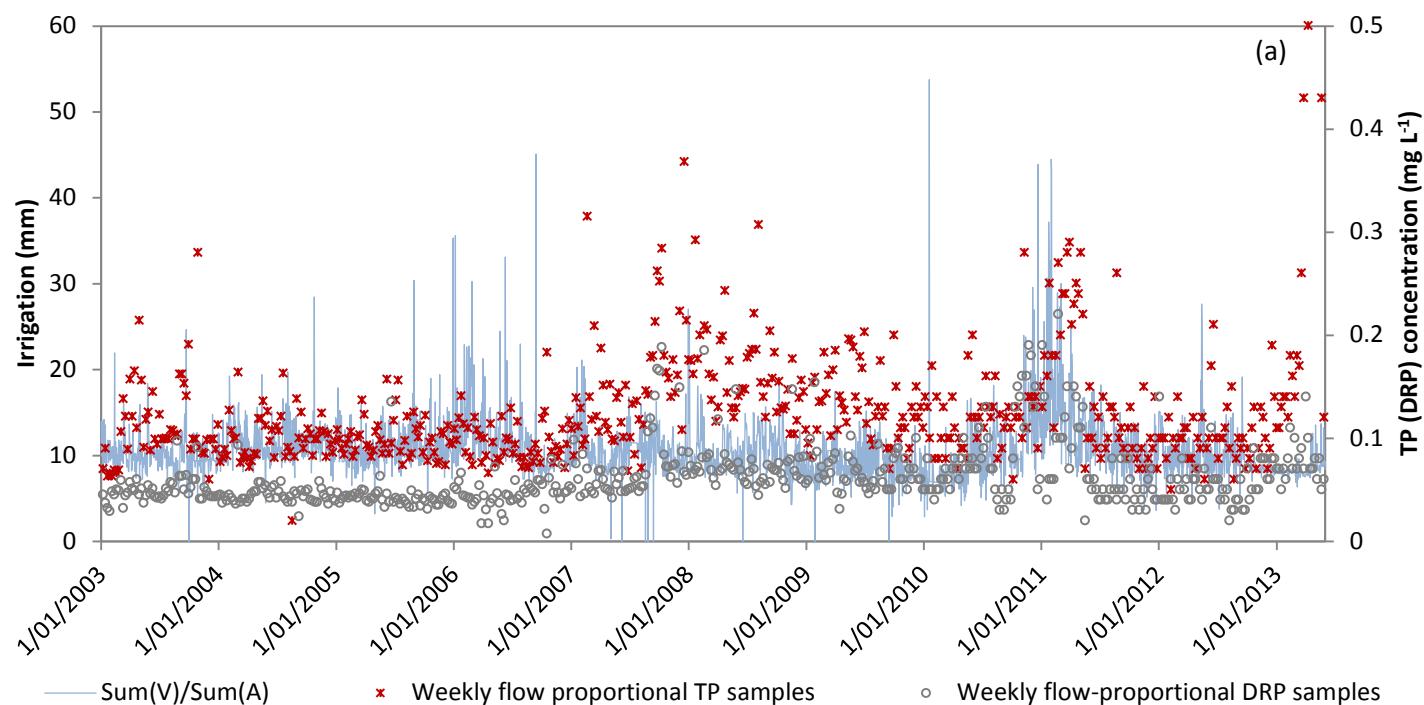


# SWAT Modelling – Puarenga catchment

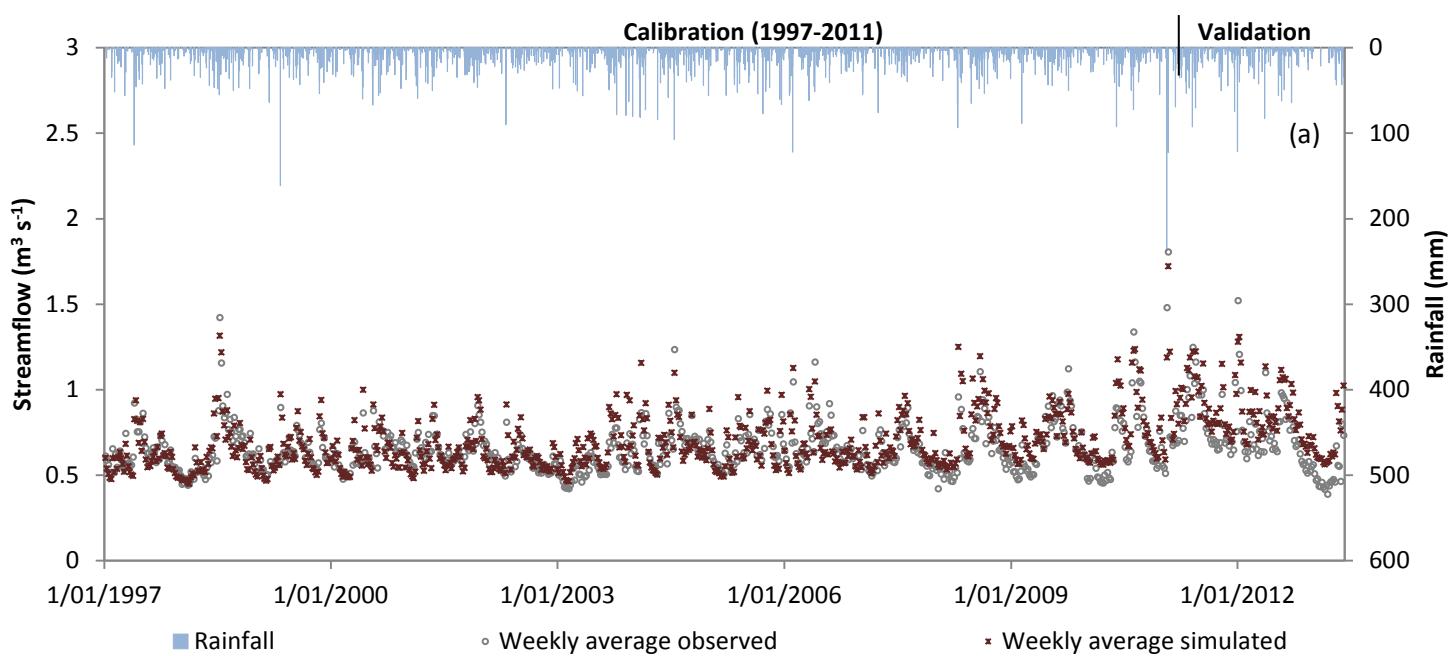


Pathways of water movement in the SWAT model

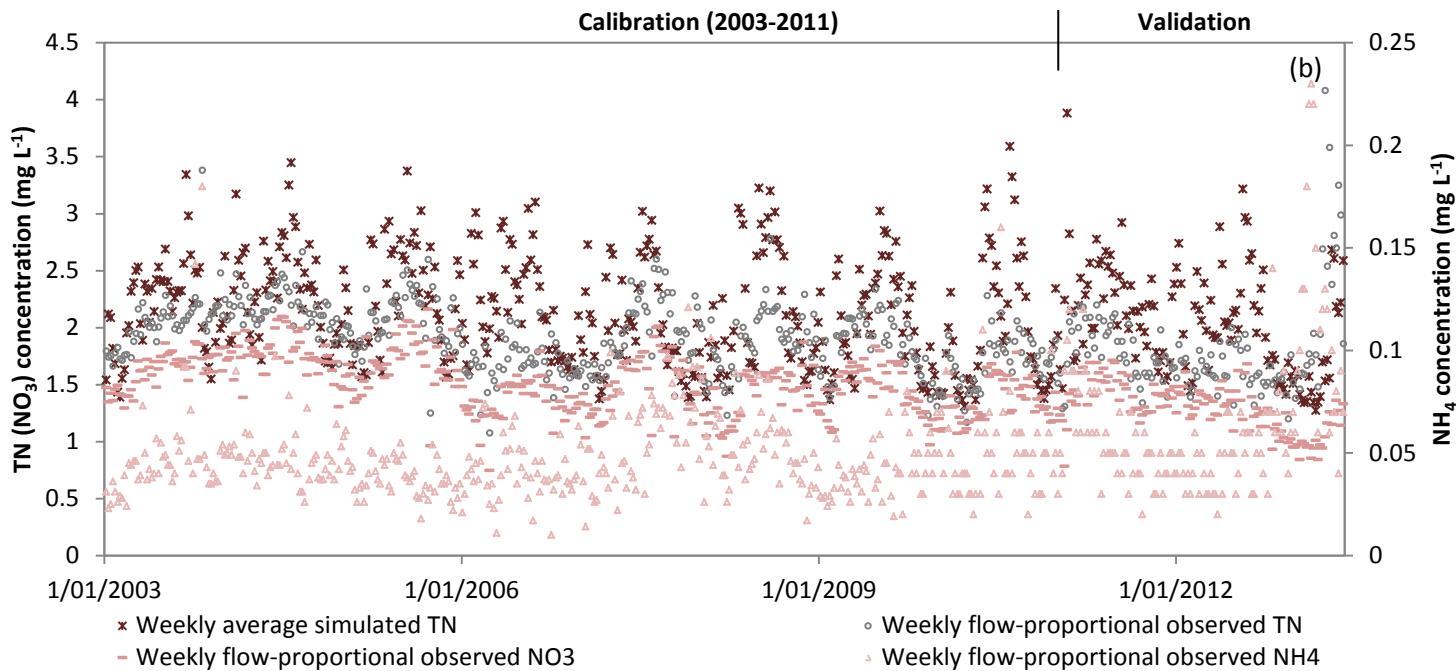




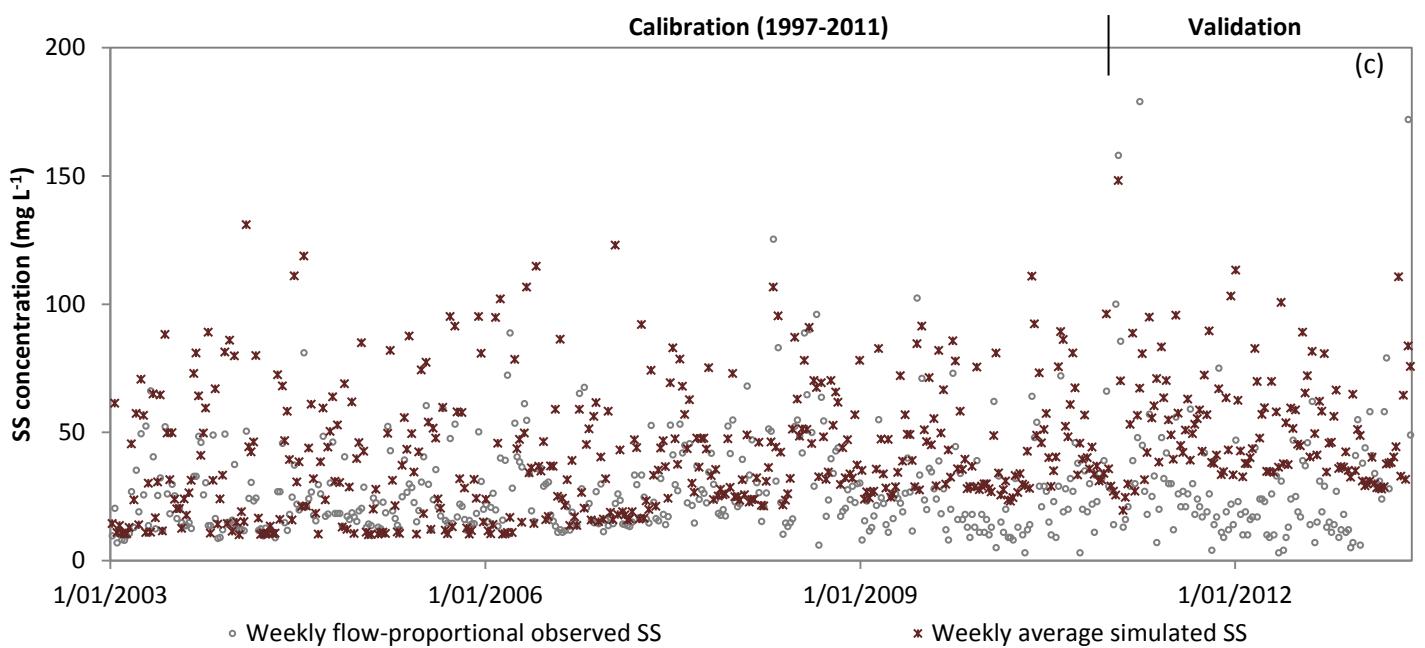
Streamflow	Cali	Vali
R	0.86	0.92
NSE	0.59	0.55



TN	Cali	Vali
R	0.42	0.11
NSE	-1.93	-1.37



SS	Cali	Vali
R	0.57	0.14
NSE	-0.69	0.01



TP	Cali	Vali
R	0.28	-0.22
NSE	0.03	-0.08

