

QUESTION ON NOTICE

No. 1164

asked on Thursday, 6 September 2018

DR M ROBINSON ASKED THE MINISTER FOR NATURAL RESOURCES, MINES AND ENERGY (HON DR A LYNHAM)—

QUESTION:

With reference to water supplies on North Stradbroke Island, including but not limited to, Brown Lake, Herring Lagoon, bore fields and aquifers underpinning these supplies—

Will the Minister provide data for the last 10 years (reported separately by year), on (a) water levels for each of the above and (b) water extraction volumes from North Stradbroke Island?

ANSWER:

The Queensland Government is committed to transitioning North Stradbroke Island (Minjerribah) to a service-based, ecologically focused economy. Protecting the natural and cultural values of the Island is a priority. The Department of Natural Resources, Mines and Energy and Seqwater are working with stakeholders to better understand the island's water resources to ensure sustainability and quality into the future.

- (a) The groundwater levels across North Stradbroke Island fluctuate according to aquifer type (deep or shallow), seasonal conditions, and impacts of local extraction.

Attachment 1 shows shallow aquifer data. The shallow aquifer bores, which are located in the vicinity of Herring Lagoon, are showing gradually declining levels but are still above the historically low levels recorded in 2005–06.

Attachment 2 shows deep aquifer level data. The deep aquifer levels are slowly declining due to climate impacts of drought, but levels are still several meters above the low levels recorded in 2005–06.

Attachment 3 shows surface water flow data for Blue Lake. The data demonstrates that, while the surface water system continues to flow, seasonal variations cause flow fluctuations. The Department of Natural Resources, Mines and Energy will continue to use ongoing data to monitor the situation and prepare appropriate management responses.

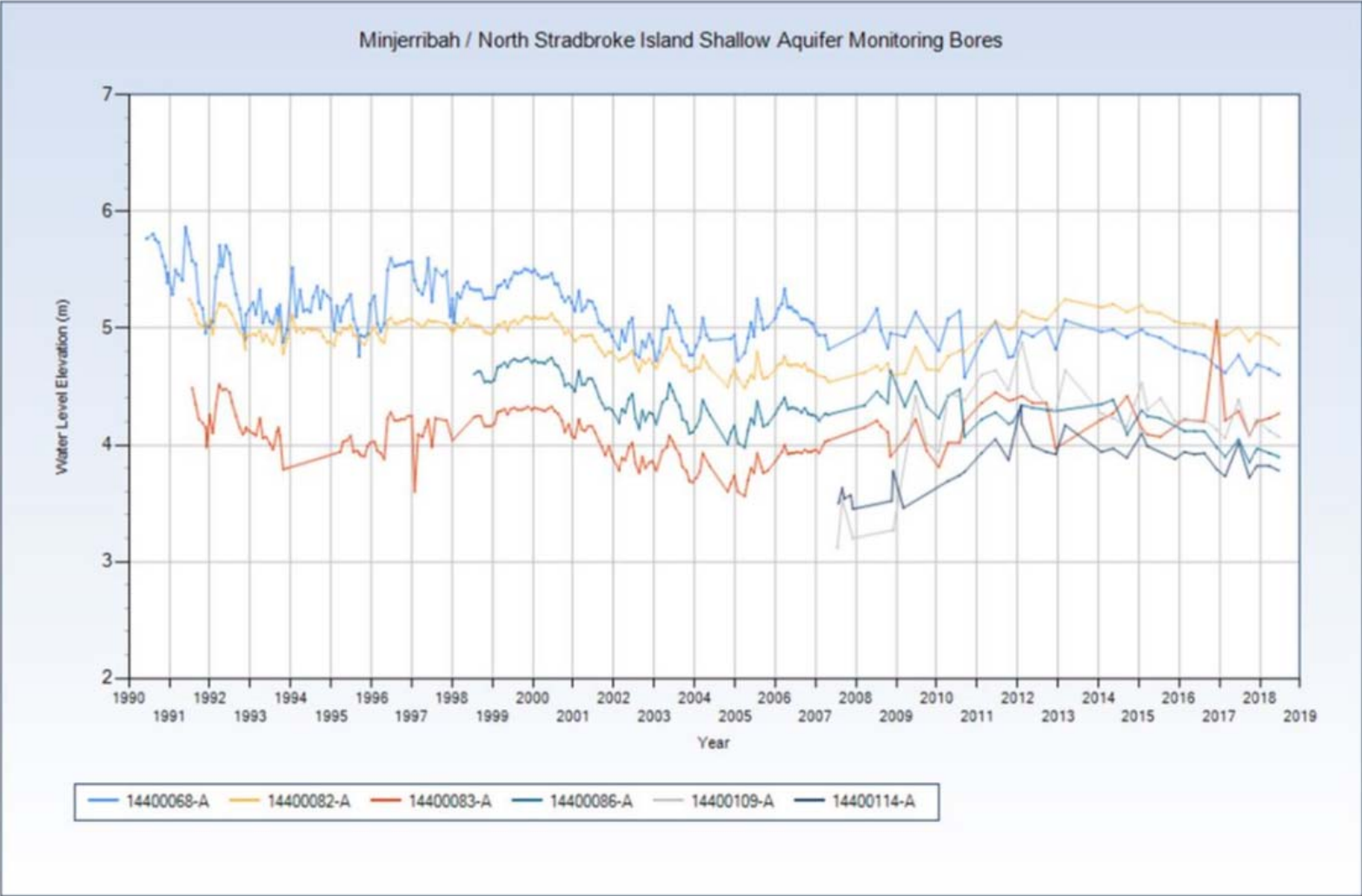
Attachment 4 shows hydrology and rainfall data for Brown Lake which show a direct correlation between monthly rainfall and groundwater (and surface water) levels, both of which are trending downwards.

While Seqwater does not extract water from Blue Lake or Brown Lake on Stradbroke Island, this data is presented to show the relationship between seasonal rainfall and water levels.

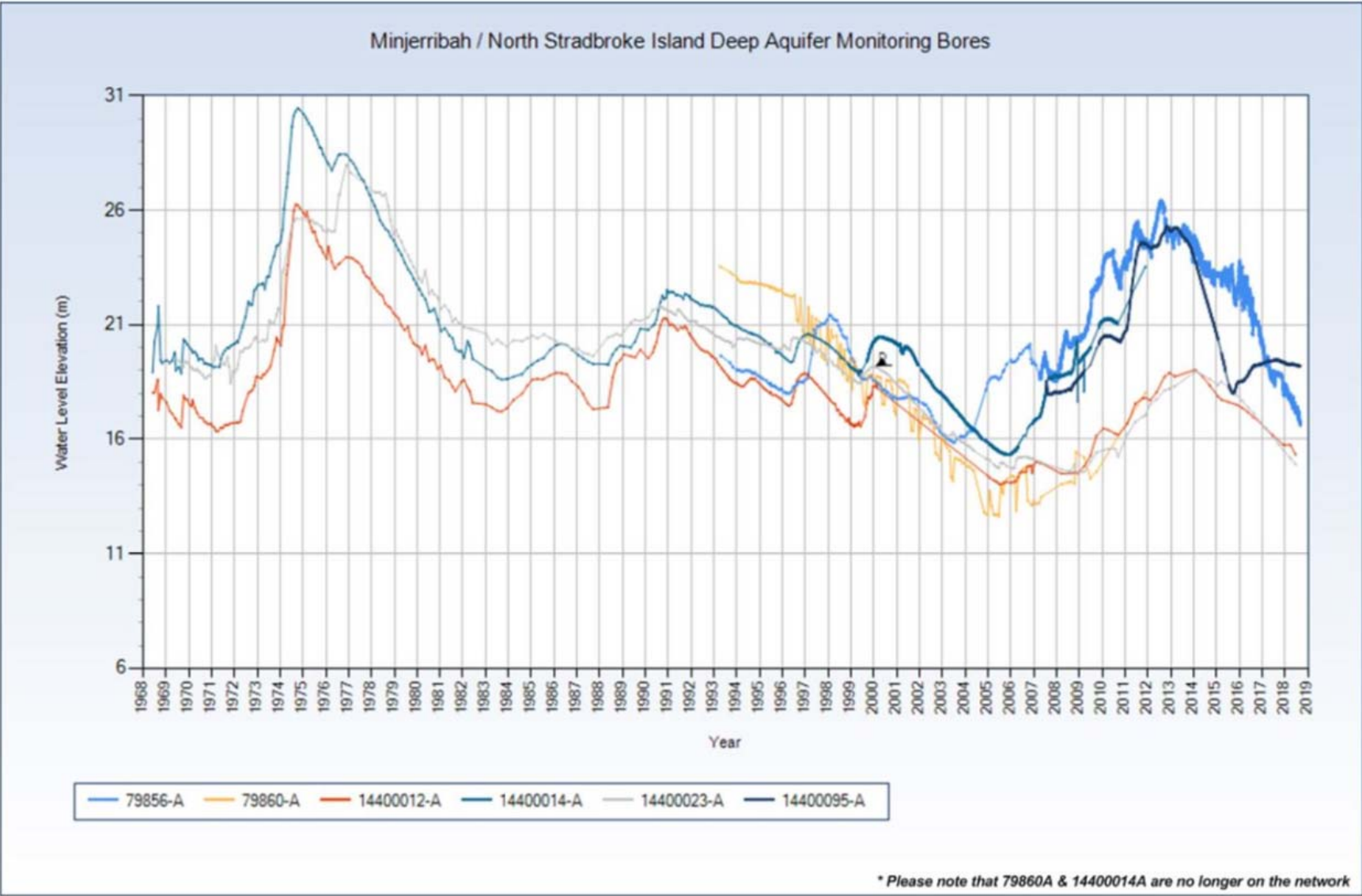
Water information is publicly available on the Queensland Globe website.

- (b) The table in Attachment 5 shows annual water extraction volumes from North Stradbroke Island over the last 10 years.

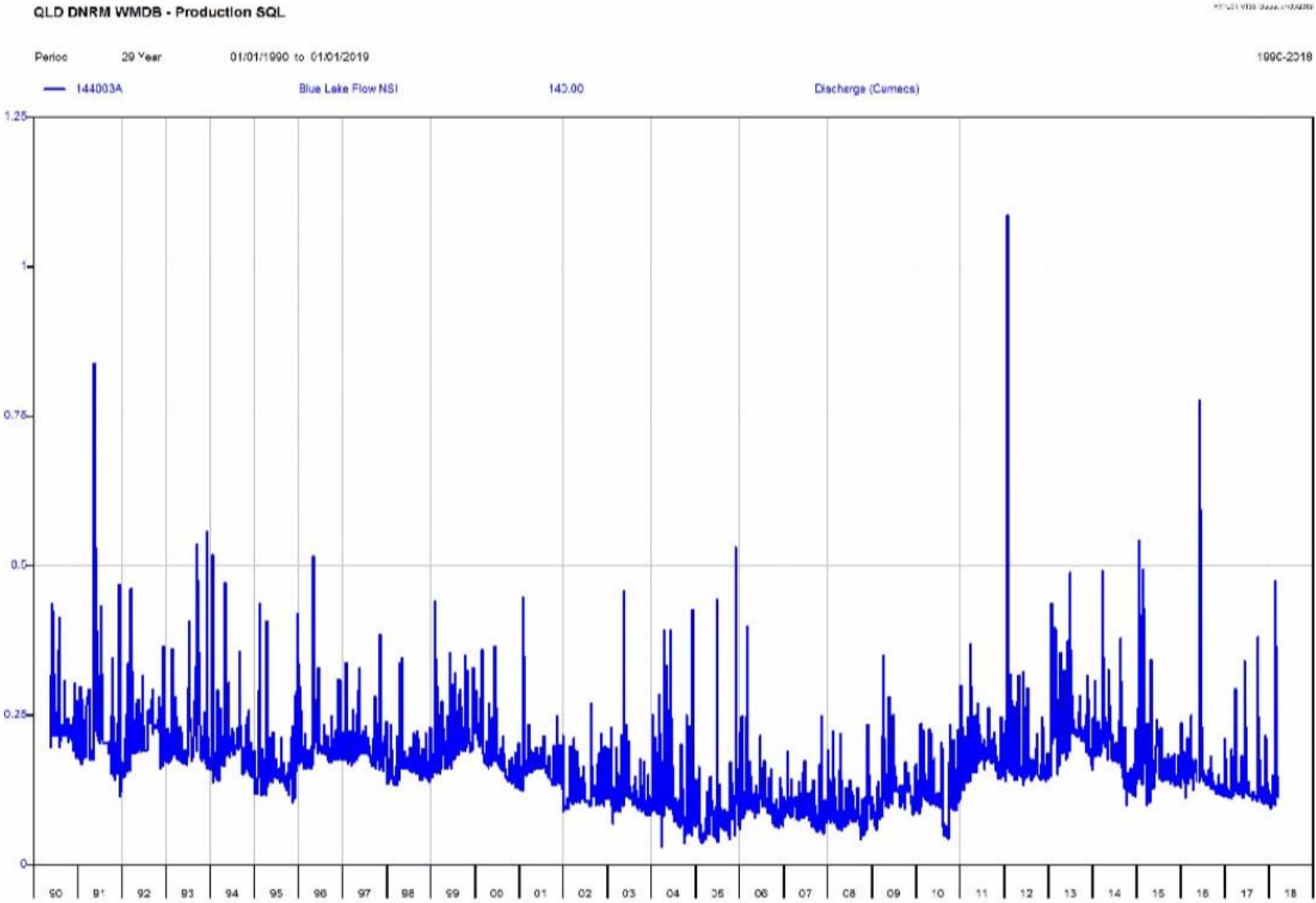
Attachment 1 – North Stradbroke Island Shallow Aquifer Monitoring Bores (Source: Stradbroke Island SW GW Locations, Queensland Government):



Attachment 2 – Stradbroke Island Deep Aquifer Monitoring Bores (Source: Stradbroke Island SW GW Locations, Queensland Government):



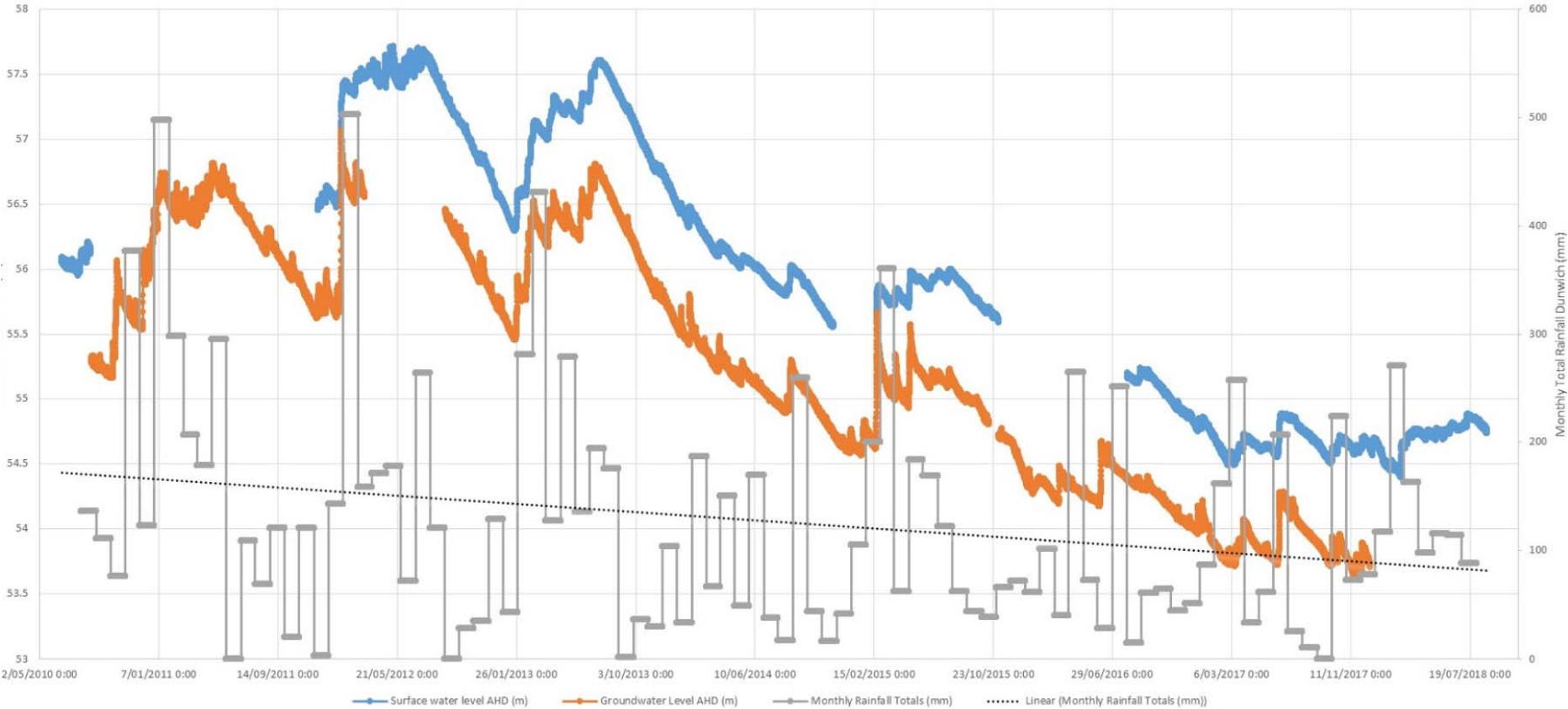
Attachment 3 – Blue Lake Surface Water Levels (Source: Stradbroke Island SW GW Locations, Queensland Government):



** please note, Seqwater does not extract water from Blue Lake*

Attachment 4 – Brown Lake Hydrology and Monthly Rainfall (Source: Queensland Department of Environment and Science)

Brown Lake Hydrology and Monthly Rainfall



** please note, Seqwater does not extract water from Brown Lake*

Attachment 5 – Annual Water Extraction Volumes from North Stradbroke Island (Source: Seqwater)

Year	2008-09	2009-10	2010-11	2011-12	1012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Bores:	6959	7064	6880	6700	6832	6720	7353	7592	6912	7391
Volume extracted (ML)										
Annual entitlement = 8,250ML/yr										
Herring Lagoon:	1243	2346	2254	2366	1087	2131	932	1431	1223	1147
Volume Extracted (ML)										

Seqwater does not extract water from Blue Lake or Brown Lake