

The Sump Diary

14 April 2010

An uninterrupted water supply is one the most important elements in abalone farming on land. Not only is the quantity of water important, but also the quality in the successful farming of abalone. In our previous newsletters we wrote about the new pipeline that was installed to increase the amount of water to farms, and also to save electricity as a result.

This newsletter is dedicated to the history of Abagold's sump, where our water is pumped from the pristine ocean around Walker Bay. The story starts 16 years back, from the early beginnings of Abagold. We will tell this ongoing story over the next few weeks.

Chapter 1

1994

- Dr Hugo, Abagold's founder, is granted a lease over ground in the New Harbour, Hermanus for the development of an Abalone farm – the farm which is today known as Sea View.
- The location of the proposed sump as well as plans to remove rocks are drawn up.



The area marked for the construction of the sump

1998

- Sea View abalone farm with a 60 tonnes per annum capacity is established, and the Sump is utilised in full.



Constructing the inlet canal to the sump

FOR ALMOST 10 YEARS THE SUMP AND INLET CANAL WOULD REMAIN AS IS, until...

Abagold expands, and having bigger farms needing larger quantities of water, the sump is at risk of being outgrown. Furthermore, at every spring low tide the pumps lose prime, resulting in the farms being left without water, and during high tide the sump would flood. The decision was taken to expand the sump to overcome these problems. This takes us to the next chapter in the diary....

Chapter 2

2004

- "The walls of the new sump are raised." January
- "Changes to the main sump are underway to ensure enough capacity to pump from there." February
- "Permission has to be granted by the land owner before any blasting can take place, necessitating an environmental impact study." March
- "Blasting and widening of the canal leading into the primary sump has commenced. A significant improvement in the water flow into the sump can already be seen, especially at spring low tide. The construction of a barrier wall adjacent to the canal has also started." May
- "The first section of the new wall over the widened canal into the primary sump has been cast." November



Widening of the inlet canal

2005

- “The old bridge over the channel into the sump has now been removed. Drilling into the rock to place explosives has already commenced.” January
- “The last section of the channel is now being widened.” February
- “A net is being constructed to cover the primary sump. This will be to stop any debris from washing into the sump and also to act as a safety measure.” May
- “Work on building up and completing the wall around the sump has commenced.” September



The building team in front of the newly finished wall

2006

- “All debris has been cleared from the sump inlet. We had meetings and reiterated the urgency of opening the inlet to the sump. A gantry crane will be built to pick up and remove rocks.” December



Widening of the canal progressing

2007

- “We have been working continuously on drilling and removing the rock bed at the entrance to the sump. Progress is slow but steady.” January
- “We’ve made contact with a commercial underwater blasting company to assist in deepening and widening the sump inlet. They will visit us early in March to review and discuss the project.” February
- “Quote was received from 2 independent underwater blasting companies to widen and/or deepen the sump.” March
- “The first bag was positioned successfully on May 2nd, 2007. A 2nd bag was placed on top the next day. Just after 5pm, the bag tore and washed down the channel, destroying the kelp catcher. It was decided to try smaller bags instead. On May 23rd, 2007 we placed the first 4 smaller bags into position and tied them together and to the surrounding rocks. These set very well into position and we’ve since continued adding more bags, totalling 10. We’ve drilled and reinforced the set concrete blocks with steel to prevent them from being washed out. May



A bag filled with concrete being positioned

- “The plan to widen the sump has been pulled ahead.” July
- “The weather conditions were excellent and we could drill and install more reinforcement bars into the rock. We installed 2 concrete filled bags and they’ve set well into position.” October
- “We are continuing to widen the sump. The divers are working whenever conditions allow it. Progress thus far is satisfactory.” December



Preparations for the next set of concrete filled bags

The next chapter will feature progress during 2008 and 2009.