

TIDAL STORAGE POND

This is the tidal storage pump, it is the pump that pushes the salt water from the tidal storage area through to the lake.

We have two of these pumps and in the later part of last year we swapped out the pump. The pump that is removed is taken offsite to be reconditioned so it is ready and waiting for the next change over. Assuming there are no unforeseen issues or breakdowns the pump will be swapped over again in September/October ready for our peak summer pumping season.

Prior to the tidal storage pond being designed and installed, water was pumped directly from the Cheetham Creek into lake one. The Developer realised that another solution was required as pumping water in from Cheetham Creek was not enough to keep water levels high enough, especially when the bund was



removed and lake two was opened. This is how the design and installation of the tidal storage pond came about.

In 2008 the pond was constructed and a network of pipe was laid throughout the lake which then became operational in 2008/09.



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The tidal storage pond is filled with each high tide, as water from the bay flows up Skeleton Creek, travels through two sets of culverts into a small section of Cheetham Creek and then into the tidal storage pond. The water supply in the tidal storage pond depends on high and low tides as well as wind direction.

Once the pond is filled the water is pumped through the networks of pipes that are submerged in the lake. Water is pumped from the tidal storage area up through the pipe network with the outermost outlet being in the canal.

There are an additional five outlet locations throughout the lake system, to ensure flow in key locations of the lake. The pump automatically turns on and off as water becomes available in the tidal storage pond, we often pump it dry!

Below: Cheetham Creek





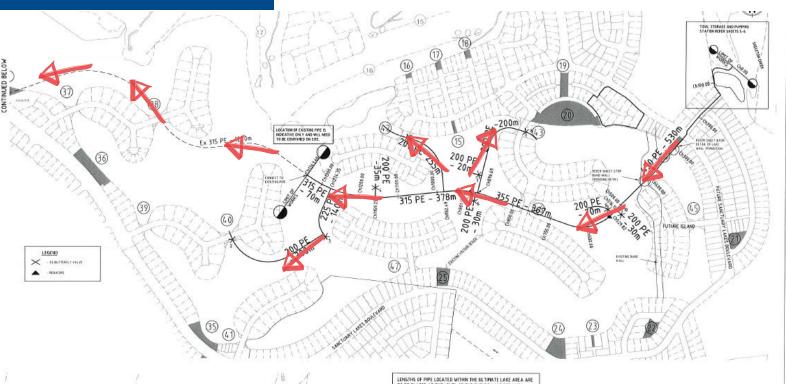
Above: Culverts into Cheetham Creek

Below: Tidal Storage Pond





TIDAL STORAGE POND



As we use this method to top up the lake with salt water from the bay our lake is considered a brackish lake, meaning a mixture of fresh and salt water. We like to keep the salinity levels high as it reduces the amount of algae problems in the lake, however of late the large amount of rain has kept salinity levels low. This is also how the saltwater fish species were introduced into the lake, which are now thriving, including a large amount of pufferfish! More on pufferfish soon!

Based on statistics from the Bureau of Meteorology site data at RAAF Williams and extrapolating this to Sanctuary Lakes the following applies:

Rainfall per square metre of area = 535.4mm Evaporation per square metre of area = 1579.3mm Deficit per square metre of area = 1,043.90mm

Based on the figures above we lose in excess of 1 metre of water per square metre every year, in other words more than half of the water in the lake has to be replaced in a year! In the middle of January we can lose up to 3.74 megalitres of water per day which is the equivalent of 3,740,000 litres of water per day!

Our best estimate of the volume of water that the lake holds is 1,052.85 megalitres, or 1,052,850,000 litres or 1,754,750,000 600ml bottles of coke, which is roughly the volume of Coke that is sold worldwide per day!

Fun fact: Coke sold 25 bottles its first year, but currently sells 1.8 billion bottles per day. On average, over 10,000 soft drinks from Coca-Cola are consumed every second of every day globally.



SANCTUARY LAKES TREES

Here at Sanctuary Lakes we have over 10,000 trees with roughly 5,000 of them being street trees. 95% of the Resort trees are individually irrigated, and all maintained by our hardworking Resort Maintenance Team.

Tree planning is done by taking into consideration local environmental conditions such as soil, salt, wind and the Landscape Master Plan that was created when the original developers took over the estate site and began planning stages.

Signature trees such as the Simons Poplar and the Smooth-barked Apple Myrtle are used on the Boulevard, while stages and bridge abutments can be themed.

The exact location the trees are planted in depends on the streetscape, shape of the tree, the location of crossovers and any other nearby services. This is currently being reviewed as part of our Landscape Masterplan Project.

They are then maintained by the Resort Maintenance Team with Wyndham City Council specifications.

All trees within Sanctuary Lakes are inspected regularly by a professional qualified arborist. Trees that are determined by the arborist as unhealthy or unsafe will be removed.

Wyndham City have previously advised the following with regards to street trees:

- Trees add value to a neighbourhood and to property prices and it is reasonable to expect lot owners to contribute some effort in managing their gardens and house surrounds;
 - Wyndham City do not cut down healthy trees;
- The dropping of leaves, flowers, fruit, seeds or small pieces of deadwood does not provide a basis for removal of an urban tree;
- Residents are responsible for cleaning up leaves, flowers, fruit seeds or small pieces of deadwood that fall onto their property, and;
- Residents should clear their gutters and surrounds of their houses on a regular basis.

The above advice is taken into consideration when our Resort Maintenance team inspect a street tree to determine whether maintenance or removal of the tree is required.



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EUROPEAN WASP NESTS

Did you know it is currently wasp season?

In the last two weeks, two European wasp nests have been found in separate areas of Sanctuary Lakes. Both nests have now been exterminated, however, please be aware that any worker wasps that were out of the nest at the time of extermination, may continue to return to the nest up to 14 days later.

Residents should keep an eye out for any nests on or near properties.

Should you find a wasp nest on your property, we suggest you contact pest control immediately.

Should you find a wasp nest in one of our parks, we ask that you contact our office to advise us of the location, so we are able to cordon off the area and make Wyndham City Council aware. We also ask that residents contact Wyndham City Council directly to make them aware of the location so they are able to arrange for it to be removed.

Places you are most likely to find a wasp nest in the ground are:

- Any concealed site;
- · Holes dug in the ground;
- Around the base of trees or along hedges;
- Within retaining walls;
- In rockeries:
- In rubbish heaps or under disused rubbish (such as old dog houses or pieces of furniture);
- In an uncovered compost heap or grass clippings.

Places you are most likely to find a wasp nest above the ground are:

- In the roof;
- In the wall cavity;
- In sheltered parts of a building.

European wasps are a pest because they are far more aggressive than native wasps. Lack of predators and warmer weather conditions mean that the European wasp is an increasing problem in Australia. This insect likes to live around humans because of the ready supply of food and drink, particularly of the sweet varieties.

Below are some tips on how to prevent wasps around your home:

- Do not leave fallen fruit or food scraps lying around the yard;
- Avoid leaving uneaten pet food or dog bones outside;
- Make sure rubbish bins have tight fitting lids;
- Keep compost covered at all times;
- Keep swimming pools covered when not in use.



WHAT'S ON Around Sanctuary Lakes



Garden Bed Works

Works on Sanctuary Lakes North Boulevard between Bayside Drive and the roundabout at Regatta Beach have now been completed. Tuscan Pebbles have now been spread between the kerb and the timber edging.









2021 Group Exercise Timetable

Sanctuary Lakes Recreation Club

Start Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
6:15am	Yoga	Core Fit	Circuit		Circuit	
8:15am						Pilates
10:30am	Pump			Pump		
11:15am	Pilates			TBT (Tummy, Butts & Thighs)		
5pm - 7:30pm	TKD			TKD		
7:15pm			Box fit			

Updated: January 2021

All Classes are available for Sanctuary Lakes card holders only. \$10 casual visit | \$80 class pass 10 pack

*minimum of 3 participants for classes to go ahead

For more information please contact: 9394 9430 | recclub@sanctuarylakes.net.au





COMMUNITY NOTICEBOARD

To advertise contact: communications@sanctuarylakes.com.au
*conditions apply

We need your help!

You are invited to help us to learn more about leisure activities and bird feeding at Sanctuary Lakes by participating in a research study conducted by SLRS in conjunction with Deakin University and Zoos Victoria.

It is a short survey to help us understand how residents of Sanctuary Lakes and the greater Point Cook area engage in bird feeding at Sanctuary Lakes.

The survey is anonymous and will only take about 10-15 minutes to complete, plus you can go into the draw to win one of 7 \$50 Coles gift cards. To complete the survey, click the link below.

http://m6z.cn/697Ery

This study has received Deakin University ethics approval (reference number: SEBE-2020-67).







