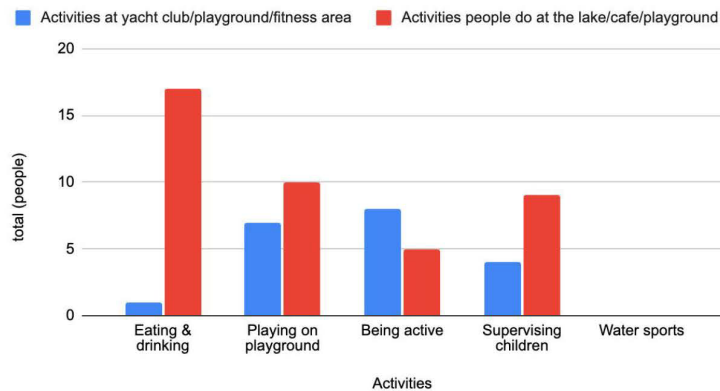


Achieved

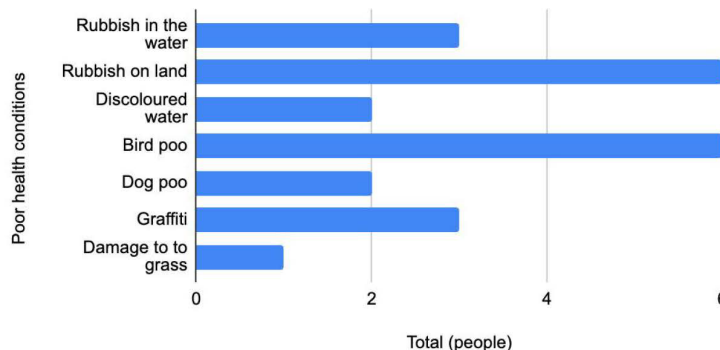
NZQA Intended for teacher use only

Activities observed at lake Rotoroa/Hamilton

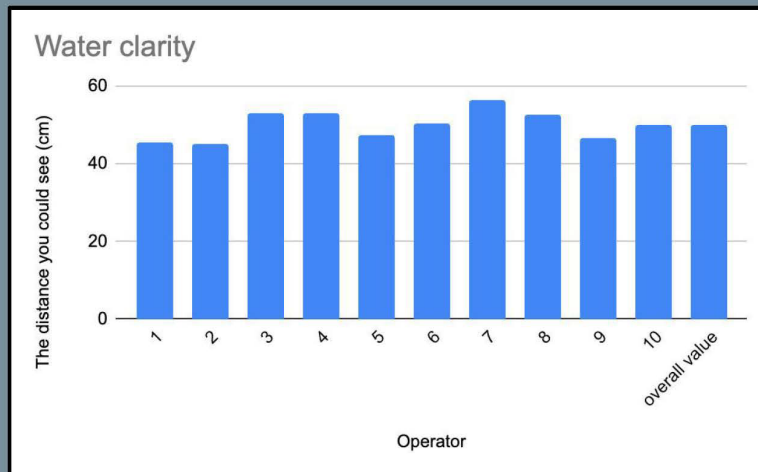


This graph is showing me the activities that people at the lake are doing. Not only around the yacht club, but also at the cafe area and the playground there. It shows me how many people like to visit the lake and participate in different activities showing the usage of the lake. This links back to the water conditions because, at the cafe verandah area there's quite a lot of people eating and drinking which could explain the rubbish found around the lake.

Poor health conditions at the lake



This graph shows me the poor health conditions at the lake. There is quite a lot of rubbish on land and bird poo. These both could be causing the water to have poor quality. This graph gives me a clearer indication of what the different things could be making the water quality the way it is.



The water clarity bar graph shows me that you can see over a average, 50 centimetres through the lakes water. The water clarity is not good because you need to be able to see what is underneath you in the water, and without knowing that, it could be really dangerous. This links back to the water quality because its not only dangerous for humans but also for the wild life living in the lake.

This here is a drainage pipe. This is definitely a main cause on to why the water clarity isn't good, and also a clear problem to the poor health conditions at the lake. For example this is most definitely a cause of the smell, the rubbish and murky water in and at the lake.

This is also murky and discoloured water. This is another clear indication on why the lakes water quality is very poor.

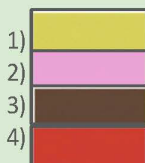




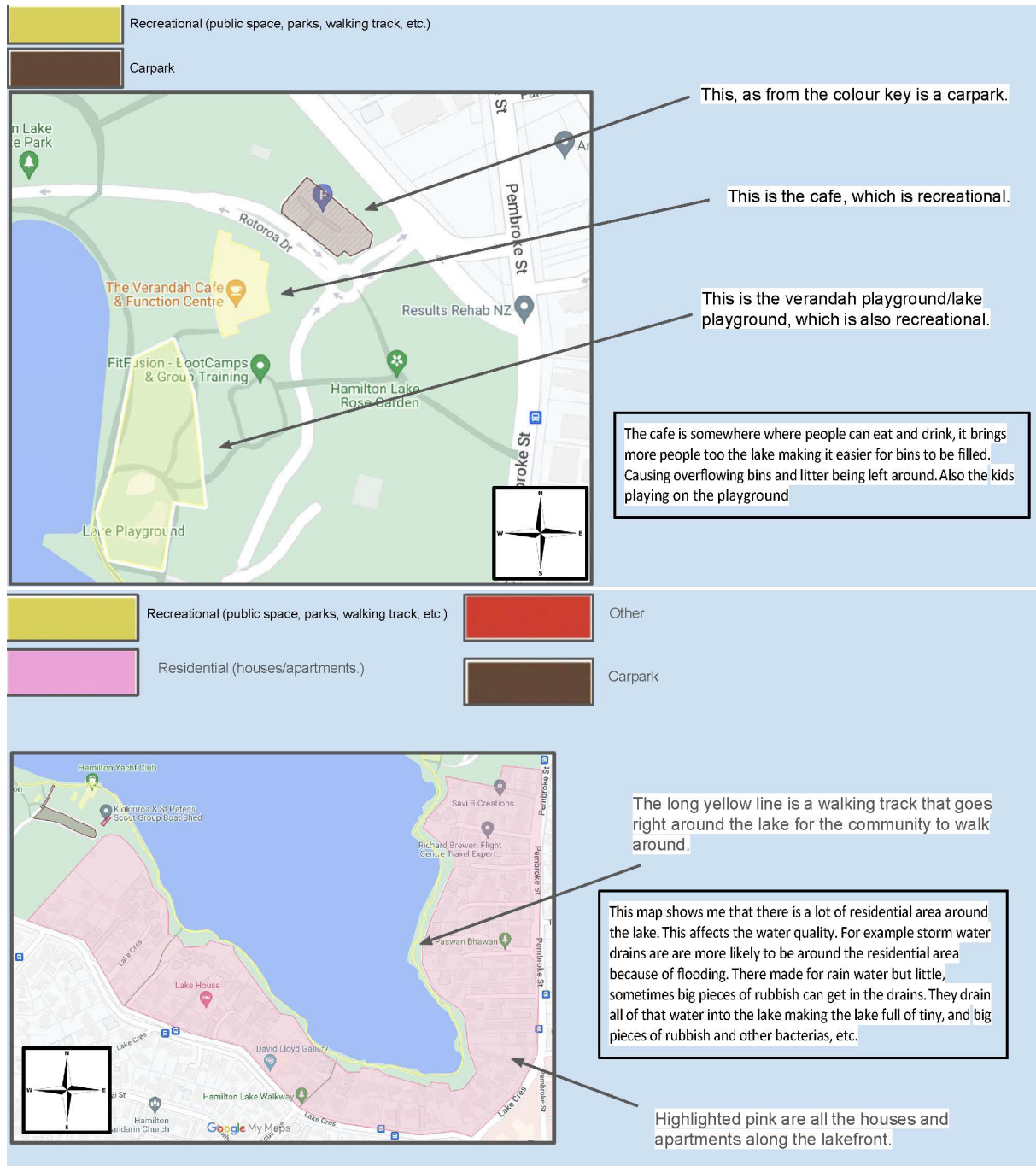
Here are two examples of the lakes poor health conditions. The arrows are pointing at the two pieces of rubbish on lake premises. This is definitely a problem, it affects the waters health because rubbish in water is an indication of pollution. This is not good for the wildlife in and around the lake. The creatures could intake this litter and end up trapped, or dead. Animal feces are not good to have in the water, it would make the e-coli and bacteria in the water rise making it worse for the water life.

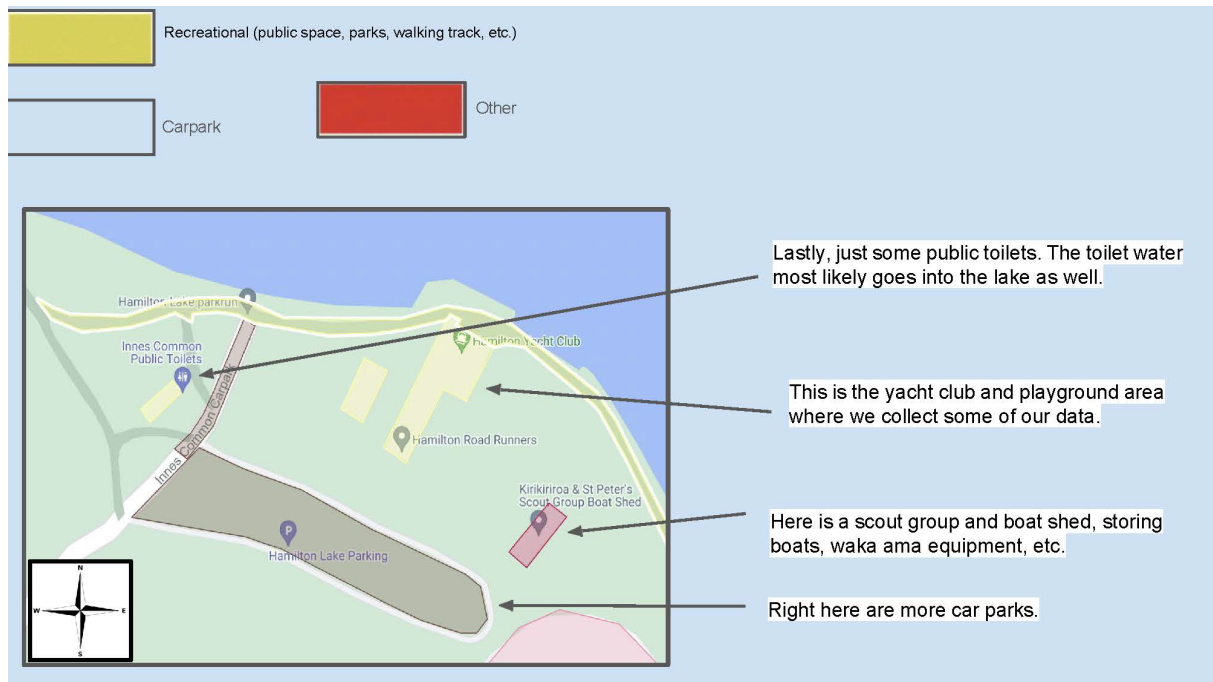
MAP SHOWING

- 1) RECREATIONAL (public space, parks, walking track, etc.)
- 2) RESIDENTIAL (houses/apartments.)
- 3) CARPARK
- 4) OTHER



The map is a clear look on what the land use is around the lake and how it could affect the water quality.





Limitations

Firstly we took data from only one day around the times where people would be at school or work. For example if we went back on a Saturday or Sunday it would be different. Maybe not the lakes water, but there would be more people around walking, playing on the playground, doing activities, and at the cafe. This limits my understanding of the lakes health of the environment and the lake because, the environment and lake could be a lot different on a weekend day. For example the people effect the rubbish in bins and on the floor. But also the lakes water can change if it were to be the winter and there had been a storm the lakes water would be different, and there would probably be more rubbish around the area.

strengths

we collected data to make graphs which made it easier to understand the concept of what we were trying to find out, (the health of the lake) and what the reasons could be. We also interviewed people at the lake which helped us understand why people come to the lake. The annotated photos helps to see what it actually looks like at the lake.

conclusion

- In conclusion Seems like there are quite a few problems impacting the well-being of Hamilton Lake and its environment. The water clarity issues shown in my graph (could only see 50cm through the water). Presence of rubbish as can be shown in my photos that there is rubbish in and around the lake, stormwater pipes flowing into the lake as you can also see in my photos that the pipes are leading into the lake from the stormwater drains, and the abundance of litter and animal waste all play a role in the lake's poor condition as shown in my graph that there was a large amount of rubbish on land and bird poo. Additionally, the graffiti and untidiness in the area don't help. It'll take a lot of effort to clean up the surroundings and restore the lake to a healthier state.