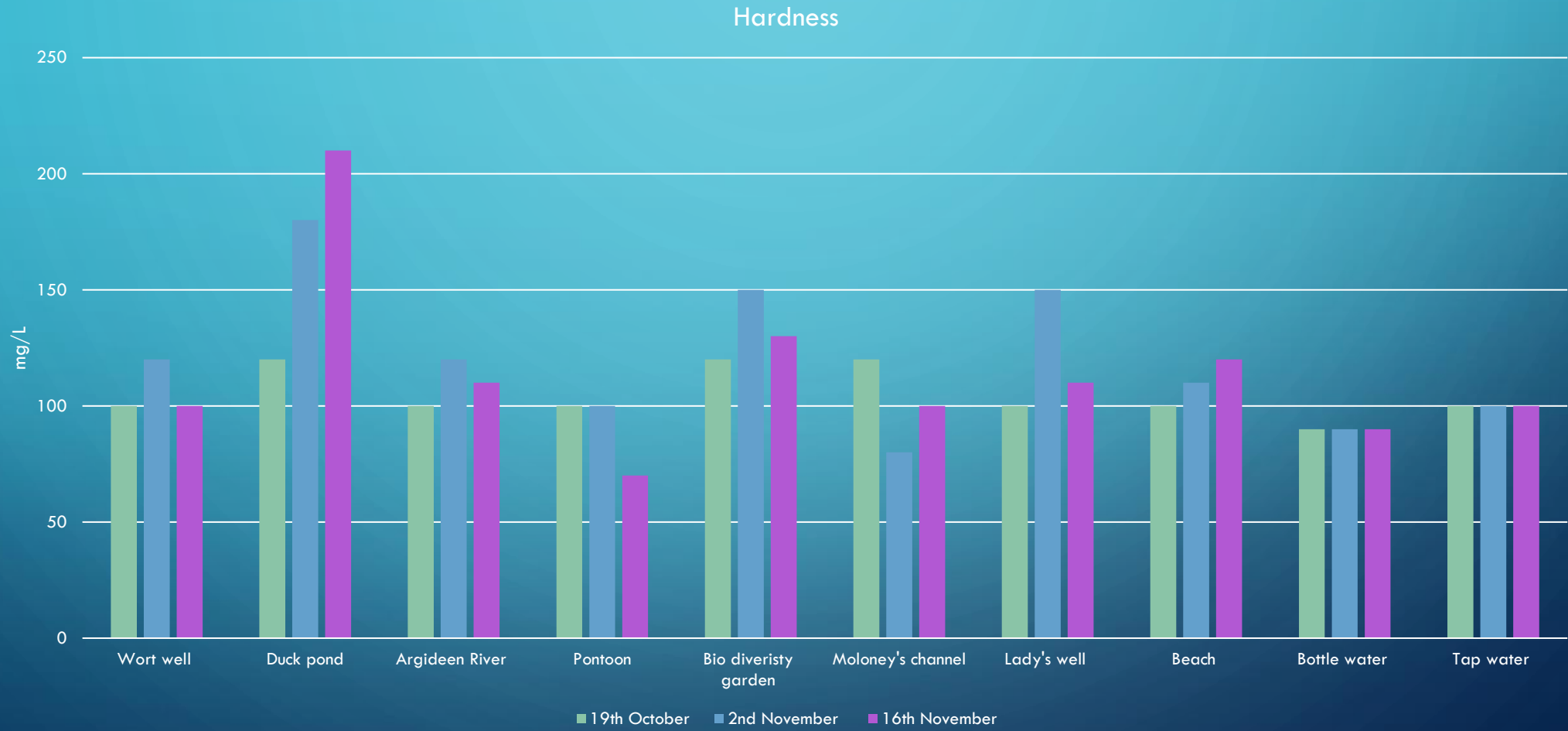




WATER QUALITY IN OUR LOCALITY

RESULTS

HARDNESS

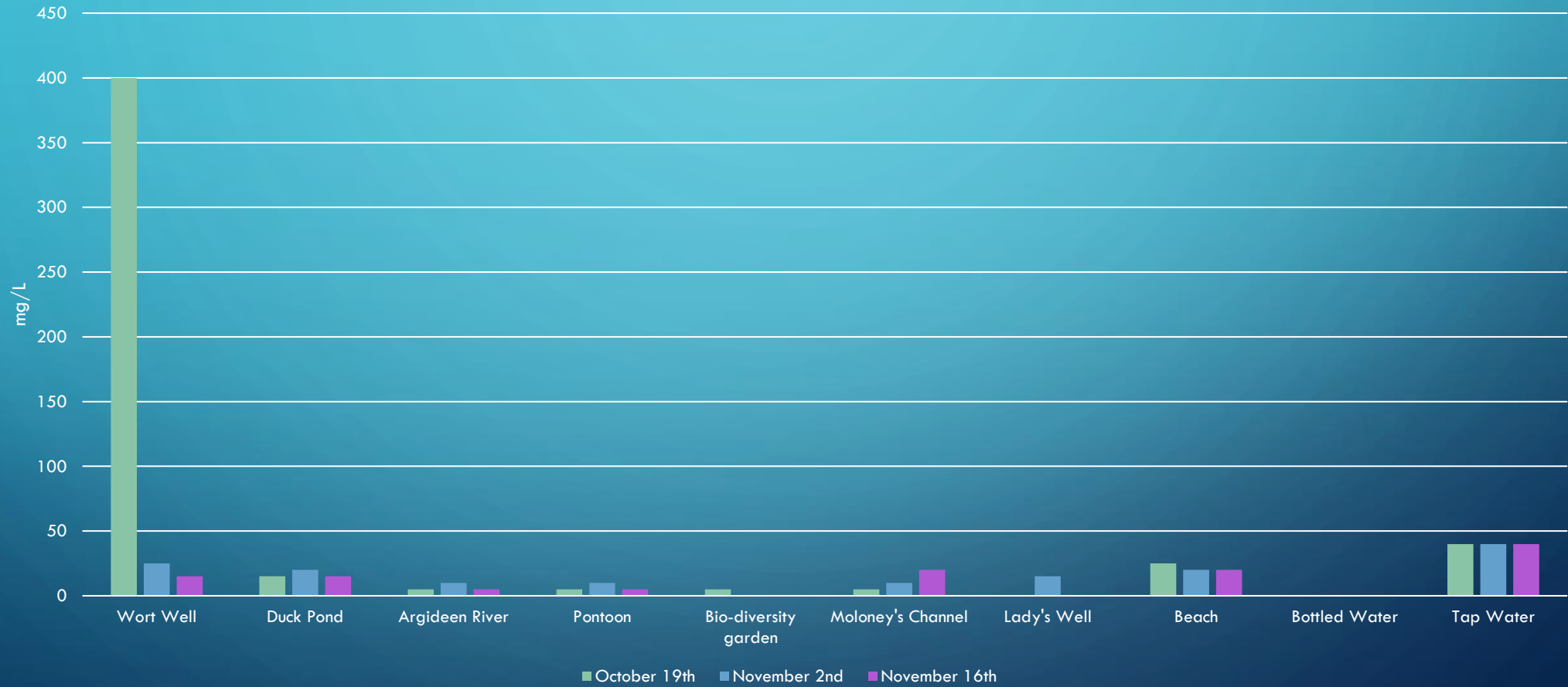


HARDNESS

- **Scale: 0 ----- 425 mg/L**
- Measures the amount of Calcium and Magnesium in the water.
- Average: 120 – 170 mg/L
- Sea water is very hard due to dissolved salt.
- Hard water is cloudy / milky and harder to make suds.
- Most sites had average hardness.
- The highest level of hardness was in the pond after rain.
- The lowest level was in the Pontoon after rain.

NITRATE

Nitrate



NITRATE

- **Scale: 0 ----- 500 mg/L**
- 50mg/L is considered safe.
- Compound formed naturally when **Nitrogen** combines with **Oxygen**.
- Salt or ester of Nitrate acid containing the group NO_3
- Can occur naturally in some foods, but can be added as a preservative to processed meat.
- High levels may cause colon cancer. Can dilate your blood vessels.
- **All samples were found to be in the safe range.**
- **One exception was the Wort Well – this may be due to high tide or large rainfall after a storm.**
- **Bottled water contained no nitrate.**
- **Tap water had a reading of 40 mg/L.**

NITRITE

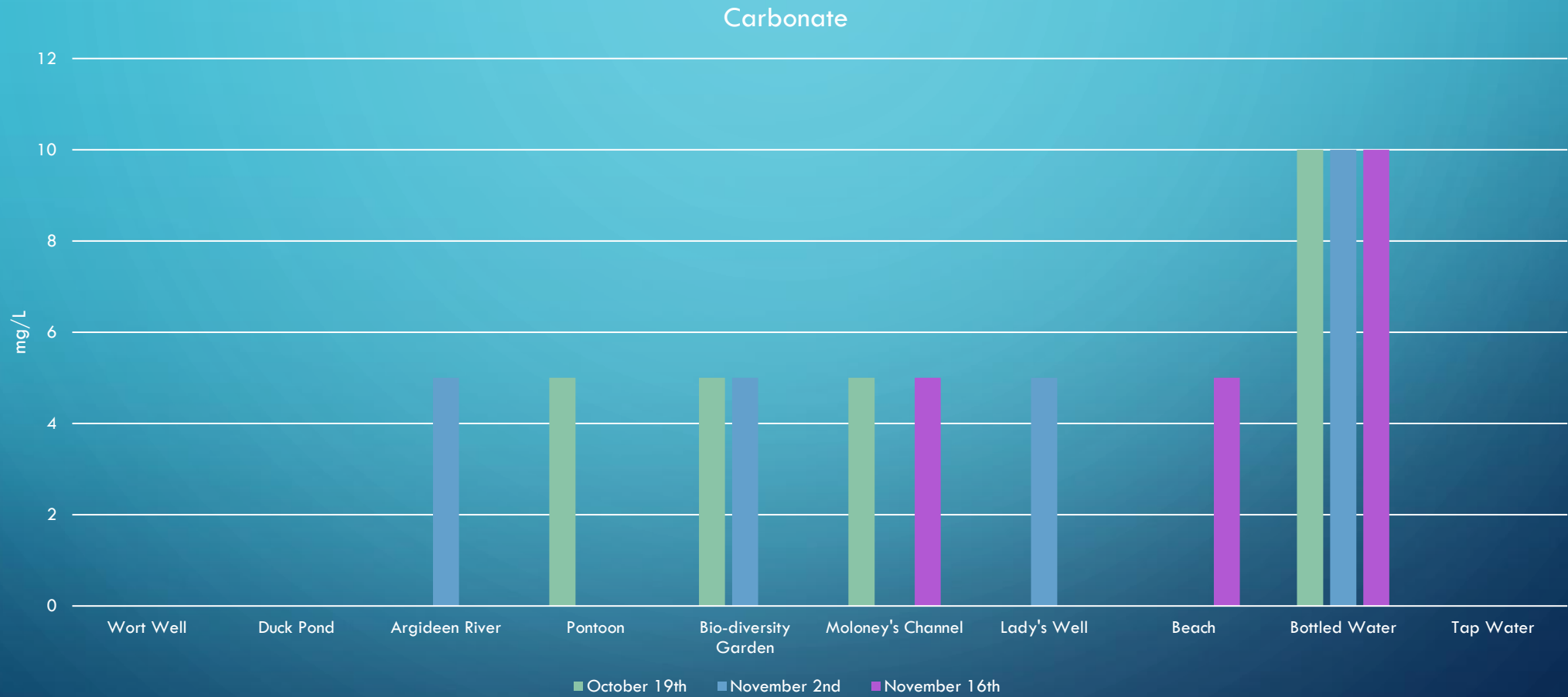
Nitrite



NITRITE

- Levels greater than 80 mg/L could be toxic.
- Pink fresh colour.
- Used as a preservative in food.
- Can come from fertilisers through run-off water and sewage.
- Chemical compound NO_2
- Very little, or no nitrite was found in all samples.
- The first sample from the Wort Well had a high nitrite reading on 60mg/L.

CARBONATE

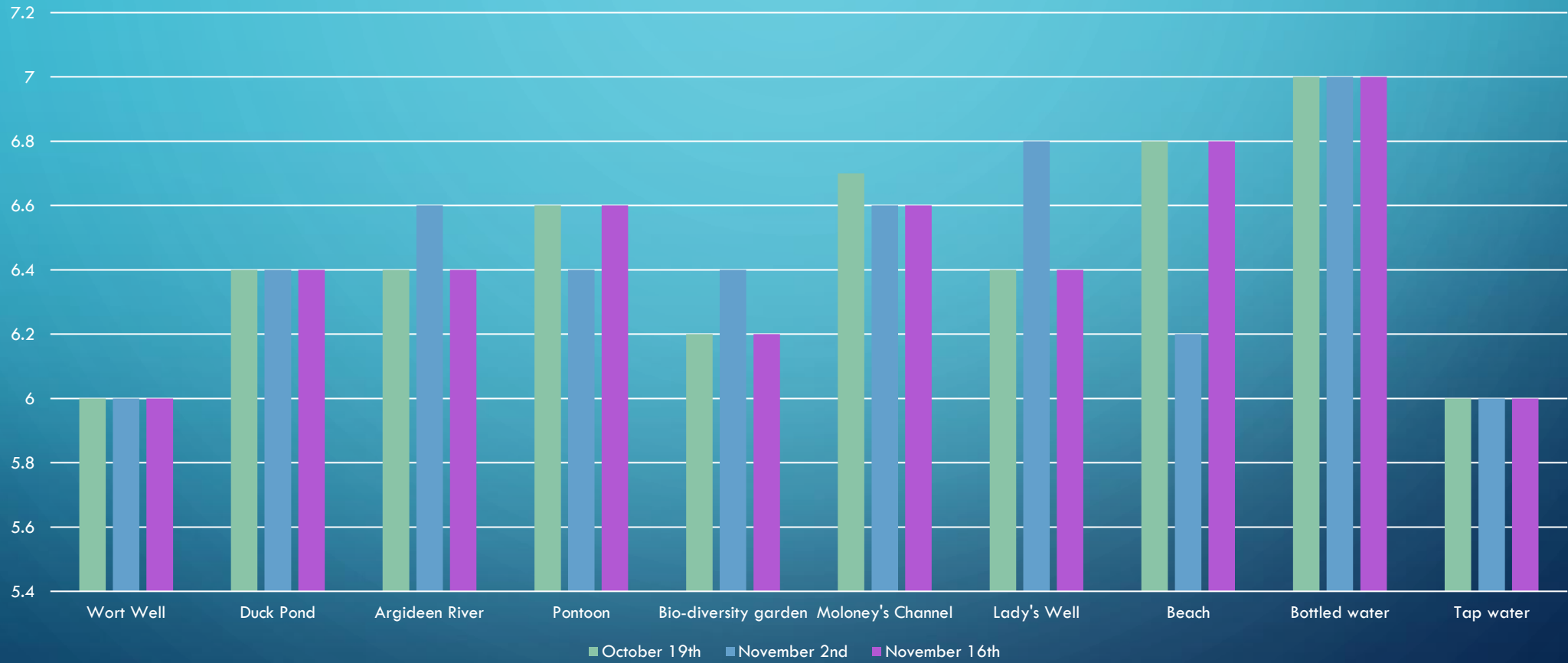


CARBONATE

- **Scale: 0 ----- 240 mg/L**
- Carbonate is not harmful in water.
- The amount of carbonate is related to hardness. The higher the level of carbonate, the harder the water.
- Hard: 201 – 300 mg/L; Moderately hard: 151 – 200 mg/L
- Slightly hard: 100 – 150 mg/L; Soft: less than 100 mg/L
- **Bottled water had a level of 10 mg/L**
- **The Wort well and the Duck pond had no carbonate.**

PH

pH



PH

- RANGE 0 ----- 14
- **Acidic (0 – 6)** – neutral (7) – base (8 – 14)
- The pH level in all sites changed very little.
- At the beach, Maloney's Channel and the Pontoon had slightly lower pH levels at **low tide**.
- Maloney's Channel and the Duck Pond's pH levels slightly increased after rain and storm.