

**Water Quality of The Brothers Marine Park in Year 2022**

|  | West Brother |        | East Brother |        |
|--|--------------|--------|--------------|--------|
|  | Surface      | Bottom | Surface      | Bottom |
| Water Depth                            | Surface      | Bottom | Surface      | Bottom |
| Air Temperature (°C)                   | 23.63        |        | 23.75        |        |
| Temperature (°C)                       | 23.60        | 23.59  | 23.55        | 23.66  |
| Salinity (‰)                           | 26.63        | 27.99  | 26.51        | 26.91  |
| Dissolved Oxygen (mg/L)                | 7.80         | 6.65   | 6.75         | 6.80   |
| pH                                     | 8.10         | 8.10   | 8.10         | 8.10   |
| Secchi Disc Depth (m)                  | 0.8          |        | 0.8          |        |
| Turbidity (NTU)                        | 2.25         | 2.38   | 2.63         | 2.50   |
| Suspended Solids (mg/L)                | 4.50         | 3.38   | 3.88         | 4.67   |
| 5-Day Biochemical Oxygen Demand (mg/L) | <2           | <2     | <2           | <2     |
| Ammoniacal Nitrogen (mg/L)             | 0.05         | 0.07   | 0.09         | 0.09   |
| Unionized Ammonia (mg/L)               | <0.01        | <0.01  | <0.01        | <0.01  |
| Nitrite Nitrogen (mg/L)                | 0.40         | 0.40   | 0.39         | 0.40   |
| Nitrate Nitrogen (mg/L)                | 0.14         | 0.15   | 0.14         | 0.14   |
| Total Inorganic Nitrogen (mg/L)        | 0.60         | 0.61   | 0.60         | 0.61   |
| Total Kjeldahl Nitrogen (mg/L)         | 0.33         | 0.34   | 0.34         | 0.33   |
| Total Nitrogen (mg/L)                  | 0.86         | 0.86   | 0.86         | 0.85   |
| Orthophosphate Phosphorus (mg/L)       | 0.02         | 0.02   | 0.02         | 0.02   |
| Total Phosphorus (mg/L)                | <0.1         | <0.1   | <0.1         | <0.1   |
| Chlorophyll-a (µg/L)                   | 1.86         | 2.58   | 2.53         | 2.85   |
| <i>E. coli</i> (cfu/100 mL)            | 13           | 13     | 20           | 17     |
| Faecal Coliforms (cfu/100 mL)          | 26           | 27     | 33           | 28     |