

Appendix A Raw Data of Baseline Coral Dive Survey

Table 1: Weather Condition during the Spot Check Dive Survey

| Location (Survey Station) | Date | Weather | Air Temperature (°C) | Water Temperature (°C at 1m depth) | Salinity (ppt) |
|---|-----------------|---------|----------------------|------------------------------------|----------------|
| Western side of the airport island (D1 and D16) | 29 January 2016 | Cloudy | 15 – 17 °C | 16 °C | 28 - 31 |
| Northern and northeastern side of the airport island (D2 to D8) | 29 January 2016 | Cloudy | 16 – 17 °C | 17 – 18 °C | 23 - 31 |
| Sha Chau (D9) | 29 January 2016 | Cloudy | 16 °C | 17 °C | 22 |

Table 2: GPS Location, Distance Surveyed, Maximum Depth, Minimum Depth and Visibility at the Dive Survey Stations

| Survey Station | GPS Location (Starting Point) | Distance surveyed (m) | Maximum Depth (m) | Minimum Depth (m) | Visibility (m) |
|----------------|-------------------------------|-----------------------|-------------------|-------------------|----------------|
| D1 | 22°18.343' N 113°53.725' E | 100 | 2.5 | 1.5 | 0.5 |
| D16 | 22°18.133' N 113°53.859' E | 100 | 4.1 | 1.2 | 0.5 |
| D2 | 22°18.727' N 113°53.746' E | 100 | 2.9 | 1.1 | 0.75 |
| D3 | 22°18.858' N 113°54.136' E | 100 | 2.7 | 1.8 | 0.5 |
| D4 | 22°19.043' N 113°54.716' E | 100 | 3.1 | 1.1 | 0.5 |
| D5 | 22°19.221' N 113°55.303' E | 100 | 3.0 | 1.1 | 0.5 |
| D6 | 22°19.434' N 113°55.808' E | 100 | 3.0 | 1.2 | 1.0 |
| D7 | 22°19.348' N 113°56.144' E | 100 | 3.1 | 1.1 | 0.5 |
| D8 | 22°19.454' N 113°56.695' E | 100 | 2.9 | 1.0 | 0.5 |
| D9 | 22°21.209' N 113°53.148' E | 100 | 3.6 | 1.1 | 1.2 |

Table 3: Raw Data at the Dive Survey Stations

| Parameter | D1 | D16 | D2 | D3 | D4 |
|---|--|---|---|--|---|
| Substratum Type | Artificial sloping seawall; Large rocks & boulders; Silt | Artificial sloping seawall; Large rocks & boulders | Artificial sloping seawall; Large rocks & boulders | Artificial sloping seawall; Large rocks & boulders; Silt | Artificial sloping seawall; Large rocks & boulders |
| Occurrence of hard coral | Nil | Nil | <i>Paracyathus rotundatus</i> <1% | Nil | Nil |
| Occurrence of Gorgonian and details | Nil | <i>Guaiaigorgia</i> sp. (1/10m ² on hard substratum) <5cm - 50% <10cm - 50% >20cm - 0% Partial Mortality = 10% Depth band: 1.2~3.1m | <i>Guaiaigorgia</i> sp. (1/10m ² under rocks) <5cm - 50% <10cm - 35% >20cm - 15% Partial Mortality = 40% Depth band: 1.8~2.1m | <i>Guaiaigorgia</i> sp. (1/5m ² under rocks) <5cm - 90% <10cm - 10% >20cm - 0% Partial Mortality = 10% Most new recruits In groups/patches of ~10m ² Depth band: 1.8~2.5m | <i>Guaiaigorgia</i> sp. (1/3m ² under rocks & crevices) <5cm - 50% <10cm - 40% >20cm - 10% Partial Mortality = 30% Depth band: 1.8~2.5m |
| Occurrence of other soft coral | Nil | Nil | Nil | Nil | Nil |
| Occurrence of other invertebrates and algae | Nil | <i>Thais</i> sp.; <i>Ergalatax contractus</i> ; Rock oysters <i>Saccostrea cucullata</i> ; other gastropod | <i>Perna viridis</i> ; Coralline algae; <i>Ergalatax contractus</i> | <i>Ergalatax contractus</i> | <i>Ergalatax contractus</i> ; other gastropod, algae |
| Remarks | Ghosted net fragment; Ghosted fishing line; Silt average ~0.5cm; Silt is ~ 2cm deep in places on rocks | - | Ghosted net fragments; Plastic rubbish | Plastic rubbish | - |

| Parameter | D5 | D6 | D7 | D8 | D9 |
|---|--|---|--|--|--|
| Substratum Type | Artificial sloping seawall; Large rocks & boulders | Artificial sloping seawall; Large rocks & boulders | Artificial sloping seawall; Large rocks & boulders | Rocky coastline; Vertical seawall section; Small boulders; Sand seabed | Rocky coastline; Large and small boulders; Sand / rubble seabed; Silt; Exposed shore |
| Occurrence of hard coral | Nil | <i>Paracyathus rotundatus</i> <1% | <i>Paracyathus rotundatus</i> <1% | Nil | Nil |
| Occurrence of Gorgonian and details | <i>Guaiagorgia</i> sp. (2m ² under rocks & crevices) <5cm - 30% <10cm - 50% >20cm - 20% Partial Mortality = 20% In groups/patches of ~10m ² Depth band: 1.8~2.5m | <i>Guaiagorgia</i> sp. (1/10m ² under rocks & crevices) <5cm - 80% <10cm - 10% >20cm - 10% Partial Mortality = 30% Depth band: 1.8~2.8m | <i>Guaiagorgia</i> sp. (1m ² under rocks & crevices) <5cm - 20% <10cm - 50% >20cm - 30% Partial Mortality = 30% Depth band: 2.0~2.7m | <i>Guaiagorgia</i> sp. (2m ² on hard substratum) <5cm - 50% <10cm - 30% >20cm - 20% Partial Mortality = 10% Depth band: 2.3~2.7m | <i>Guaiagorgia</i> sp. (3m ² on hard substratum) <5cm - 40% <10cm - 40% >20cm - 20% Partial Mortality = 10% Depth band: 1.4~2.5m |
| Occurrence of other soft coral | Nil | Nil | Nil | Nil | Nil |
| Occurrence of other invertebrates and algae | <i>Phenacovolva brevis</i> ; Coralline algae; other gastropod, algae | <i>Ergalatax contractus</i> | <i>Thais</i> sp.; <i>Ergalatax contractus</i> | <i>Thais</i> sp.; <i>Ergalatax contractus</i> ; <i>Temnopleurus</i> sp. | Algae; Rock oysters <i>Saccostrea cucullata</i> ; other gastropod |
| Remarks | - | - | - | Construction rubbish | Plastic rubbish |