

TABLE 2. Summary of the Results of the Photographic Quadrat Survey for Stations BP-1 Through BP-4, Barbers Point Ocean Outfall, 'Ewa Beach, O'ahu, Hawai'i, February 1995

|  |  | Percent Cover        |       |        |        |        |
|--|--|----------------------|-------|--------|--------|--------|
|  |  | Photographic Quadrat |       |        |        |        |
|  |  | AAA3                 | ACC1  | AAB3   | ACC2   | AAC3   |
|  |  | (0 m)                | (5 m) | (10 m) | (15 m) | (20 m) |

|                             |      |      |      |      |      |  |
|-----------------------------|------|------|------|------|------|--|
| Algae                       |      |      |      |      |      |  |
| <i>Porolithon onkodes</i>   | 2.0  | 4.2  |      |      | 0.1  |  |
|                             |      |      |      |      |      |  |
| Sponges                     |      |      |      |      |      |  |
| <i>Chondrosia chucalla</i>  |      |      |      | 0.1  | 0.3  |  |
|                             |      |      |      |      |      |  |
| Soft Corals                 |      |      |      |      |      |  |
| <i>Anthelia edmondsoni</i>  |      |      |      | 0.3  | 0.6  |  |
|                             |      |      |      |      |      |  |
| Corals                      |      |      |      |      |      |  |
| <i>Porites lobata</i>       | 56.0 | 43.4 |      | 0.1  | 23.2 |  |
| <i>Porites compressa</i>    | 2.0  | 0.3  |      |      |      |  |
|                             |      |      |      |      |      |  |
| Sand                        |      |      | 5.6  | 1.1  |      |  |
| Rubble                      |      |      | 73.1 | 94.1 | 35.3 |  |
| Hard Substratum             | 40.0 | 52.1 | 21.3 | 4.3  | 40.5 |  |
|                             |      |      |      |      |      |  |
| Mean Coral Coverage = 25.0% |      |      |      |      |      |  |

|  |  | Percent Cover        |       |        |        |        |
|--|--|----------------------|-------|--------|--------|--------|
|  |  | Photographic Quadrat |       |        |        |        |
|  |  | ABA3                 | ACA1  | ABB3   | ACA2   | ABC3   |
|  |  | (0 m)                | (5 m) | (10 m) | (15 m) | (20 m) |

|                              |      |     |     |      |      |  |
|------------------------------|------|-----|-----|------|------|--|
| Algae                        |      |     |     |      |      |  |
| <i>Porolithon onkodes</i>    | 1.1  |     |     | 1.4  | 1.4  |  |
|                              |      |     |     |      |      |  |
| Sponges                      |      |     |     |      |      |  |
| <i>Spirastrella coccinea</i> |      |     | 0.1 |      |      |  |
| <i>Chondrosia chucalla</i>   | 0.3  | 0.7 | 0.1 | 1.4  |      |  |
|                              |      |     |     |      |      |  |
| Corals                       |      |     |     |      |      |  |
| <i>Porites lobata</i>        | 25.5 | 8.1 | 8.4 | 15.7 | 50.4 |  |
| <i>Porites compressa</i>     | 6.7  |     | 1.4 | 2.0  | 3.4  |  |
| <i>Pocillopora meandrina</i> |      | 0.3 |     |      | 0.8  |  |
| <i>Montipora patula</i>      |      | 0.3 | 0.4 |      |      |  |
|                              |      |     |     |      |      |  |

|                             |      |      |      |      |      |
|-----------------------------|------|------|------|------|------|
| Sand                        |      |      | 0.3  | 0.6  |      |
| Rubble                      | 4.5  | 33.6 | 7.0  | 13.7 |      |
| Hard Substratum             | 61.9 | 57.0 | 82.2 | 66.5 | 44.0 |
|                             |      |      |      |      |      |
| Mean Coral Coverage = 24.6% |      |      |      |      |      |

TABLE 2—Continued

|  |  | Percent Cover        |       |        |        |        |
|--|--|----------------------|-------|--------|--------|--------|
|  |  | Photographic Quadrat |       |        |        |        |
|  |  | BAA3                 | BCC1  | BAB3   | BCC2   | BAC3   |
|  |  | (0 m)                | (5 m) | (10 m) | (15 m) | (20 m) |

|                                |      |      |      |      |      |  |
|--------------------------------|------|------|------|------|------|--|
| Algae                          |      |      |      |      |      |  |
| <i>Asparagopsis taxiformis</i> |      |      |      |      | 14.8 |  |
|                                |      |      |      |      |      |  |
| Sponges                        |      |      |      |      |      |  |
| <i>Spirastrella coccinea</i>   |      | 0.1  | 0.3  |      |      |  |
| <i>Chondrosia chucalla</i>     | 0.6  |      | 0.3  | 2.0  | 0.1  |  |
|                                |      |      |      |      |      |  |
| Corals                         |      |      |      |      |      |  |
| <i>Porites lobata</i>          | 0.6  |      |      | 1.4  | 0.6  |  |
| <i>Pocillopora meandrina</i>   |      |      | 0.3  | 1.7  |      |  |
|                                |      |      |      |      |      |  |
| Sand                           | 3.6  | 19.0 | 27.2 | 5.6  | 18.5 |  |
| Hard Substratum                | 95.2 | 80.8 | 72.0 | 74.5 | 80.8 |  |
|                                |      |      |      |      |      |  |
| Mean Coral Coverage = 0.9%     |      |      |      |      |      |  |

|  |  | Percent Cover        |       |        |        |        |
|--|--|----------------------|-------|--------|--------|--------|
|  |  | Photographic Quadrat |       |        |        |        |
|  |  | BBA3                 | BCA1  | BBB3   | BCA2   | BBC3   |
|  |  | (0 m)                | (5 m) | (10 m) | (15 m) | (20 m) |

|                              |      |      |      |      |      |     |
|------------------------------|------|------|------|------|------|-----|
| Sponges                      |      |      |      |      |      |     |
| <i>Spirastrella coccinea</i> | 0.1  |      |      |      |      | 0.1 |
| <i>Chondrosia chucalla</i>   | 0.1  | 0.1  |      | 0.6  | 0.3  |     |
|                              |      |      |      |      |      |     |
| Soft Corals                  |      |      |      |      |      |     |
| <i>Anthelia edmondsoni</i>   |      |      |      |      | 0.1  |     |
|                              |      |      |      |      |      |     |
| Corals                       |      |      |      |      |      |     |
| <i>Porites lobata</i>        | 0.6  | 3.1  | 0.3  |      | 0.1  |     |
| <i>Pocillopora meandrina</i> |      | 0.3  |      |      |      |     |
|                              |      |      |      |      |      |     |
| Sand                         | 53.5 | 12.0 | 26.3 | 12.3 | 5.8  |     |
| Hard Substratum              | 45.6 | 84.4 | 73.4 | 87.1 | 93.6 |     |
|                              |      |      |      |      |      |     |
| Mean Coral Coverage = 0.9%   |      |      |      |      |      |     |



TABLE 2—Continued

|  |  | Percent Cover        |       |        |        |        |
|--|--|----------------------|-------|--------|--------|--------|
|  |  | Photographic Quadrat |       |        |        |        |
|  |  | CAA3                 | CCC1  | CAB3   | CCC2   | CAC3   |
|  |  | (0 m)                | (5 m) | (10 m) | (15 m) | (20 m) |

|                              |      |      |      |      |     |      |
|------------------------------|------|------|------|------|-----|------|
| Algae                        |      |      |      |      |     |      |
| <i>Porolithon onkodes</i>    | 0.3  |      |      |      |     |      |
|                              |      |      |      |      |     |      |
| Sponges                      |      |      |      |      |     |      |
| <i>Spirastrella coccinea</i> | 0.1  |      |      |      | 0.3 |      |
| <i>Chondrosia chucalla</i>   | 0.3  |      |      | 0.3  | 4.5 | 0.1  |
|                              |      |      |      |      |     |      |
| Soft Corals                  |      |      |      |      |     |      |
| <i>Anthelia edmondsoni</i>   | 0.1  |      |      |      |     |      |
|                              |      |      |      |      |     |      |
| Corals                       |      |      |      |      |     |      |
| <i>Porites lobata</i>        | 0.5  |      |      |      | 2.8 |      |
| <i>Porites compressa</i>     |      |      |      |      | 0.3 |      |
| <i>Pocillopora meandrina</i> |      |      |      |      | 1.1 |      |
|                              |      |      |      |      |     |      |
| Sand                         | 0.8  | 5.9  | 0.8  |      |     | 5.3  |
| Rubble                       | 82.2 | 46.8 | 98.9 | 75.4 |     | 59.0 |
| Hard Substratum              | 16.5 | 46.8 |      | 15.7 |     | 35.6 |
|                              |      |      |      |      |     |      |
| Mean Coral Coverage = 0.9%   |      |      |      |      |     |      |

|  |  | Percent Cover        |       |        |        |        |
|--|--|----------------------|-------|--------|--------|--------|
|  |  | Photographic Quadrat |       |        |        |        |
|  |  | CBA3                 | CCA1  | CBB3   | CCA2   | CBC3   |
|  |  | (0 m)                | (5 m) | (10 m) | (15 m) | (20 m) |

|                              |      |     |     |      |  |     |
|------------------------------|------|-----|-----|------|--|-----|
| Algae                        |      |     |     |      |  |     |
| <i>Porolithon onkodes</i>    | 0.6  |     |     |      |  |     |
|                              |      |     |     |      |  |     |
| Sponges                      |      |     |     |      |  |     |
| <i>Spirastrella coccinea</i> | 0.4  | 0.3 | 0.1 | 0.7  |  | 0.8 |
| <i>Chondrosia chucalla</i>   | 0.1  | 0.6 | 0.1 |      |  | 0.1 |
|                              |      |     |     |      |  |     |
| Corals                       |      |     |     |      |  |     |
| <i>Porites lobata</i>        | 11.2 | 7.8 | 0.1 | 18.5 |  |     |
| <i>Porites compressa</i>     |      |     |     | 1.4  |  |     |
| <i>Pocillopora meandrina</i> |      |     |     | 0.6  |  |     |
| <i>Montipora patula</i>      |      |     |     | 0.3  |  |     |

|                            |      |      |      |      |      |
|----------------------------|------|------|------|------|------|
|                            |      |      |      |      |      |
| Sand                       |      |      | 0.8  |      | 0.6  |
| Rubble                     | 34.5 | 59.4 | 98.9 | 31.4 | 21.0 |
| Hard Substratum            | 53.2 | 31.9 |      | 47.2 | 77.4 |
|                            |      |      |      |      |      |
| Mean Coral Coverage = 8.0% |      |      |      |      |      |

TABLE 2—Continued

|  |  | Percent Cover        |       |        |        |        |
|--|--|----------------------|-------|--------|--------|--------|
|  |  | Photographic Quadrat |       |        |        |        |
|  |  | EAA1                 | EAA2  | EAA3   | EAA4   | EBA1   |
|  |  | (0 m)                | (5 m) | (10 m) | (15 m) | (20 m) |

|                              |      |      |      |      |     |      |
|------------------------------|------|------|------|------|-----|------|
| Algae                        |      |      |      |      |     |      |
| <i>Porolithon onkodes</i>    |      |      |      | 0.6  |     | 1.4  |
|                              |      |      |      |      |     |      |
| Sponges                      |      |      |      |      |     |      |
| <i>Spirastrella coccinea</i> | 0.3  |      |      |      | 0.8 | 0.3  |
|                              |      |      |      |      |     |      |
| Corals                       |      |      |      |      |     |      |
| <i>Porites lobata</i>        | 1.7  | 27.4 | 22.4 |      |     | 23.8 |
|                              |      |      |      |      |     |      |
| Rubble                       | 39.5 | 11.2 | 18.8 |      |     | 18.8 |
| Hard Substratum              | 58.5 | 61.3 | 58.3 | 75.4 |     | 79.6 |
|                              |      |      |      |      |     |      |
| Mean Coral Coverage = 15.1%  |      |      |      |      |     |      |

|  |  | Percent Cover        |       |        |        |        |
|--|--|----------------------|-------|--------|--------|--------|
|  |  | Photographic Quadrat |       |        |        |        |
|  |  | ECA1                 | ECA2  | ECA3   | EAC4   | EEA1   |
|  |  | (0 m)                | (5 m) | (10 m) | (15 m) | (20 m) |

|                              |      |      |      |      |     |      |
|------------------------------|------|------|------|------|-----|------|
| Sponges                      |      |      |      |      |     |      |
| <i>Spirastrella coccinea</i> |      |      |      |      |     | 0.1  |
| <i>Chondrosia chucalla</i>   |      | 0.3  |      |      | 0.1 | 0.6  |
|                              |      |      |      |      |     |      |
| Soft Corals                  |      |      |      |      |     |      |
| <i>Anthelia edmondsoni</i>   |      | 0.1  |      |      |     |      |
|                              |      |      |      |      |     |      |
| Corals                       |      |      |      |      |     |      |
| <i>Porites lobata</i>        | 0.6  | 0.1  | 1.4  | 1.7  |     | 0.6  |
| <i>Pocillopora meandrina</i> | 13.7 |      | 1.4  |      |     |      |
|                              |      |      |      |      |     |      |
| Sand                         | 0.8  | 3.4  | 0.8  | 0.8  |     | 1.4  |
| Hard Substratum              | 84.9 | 96.1 | 96.4 | 97.3 |     | 97.3 |
|                              |      |      |      |      |     |      |
| Mean Coral Coverage = 3.9%   |      |      |      |      |     |      |

NOTE: Presented in the body of the table are the percent cover of species and substrate types for each transect. Data for all stations are based on one 0.67-m<sup>2</sup> photo-quadrat at each 5-m stop (i.e., at the 0 m, 5 m, 10 m, 15 m, and 20 m points along the transect).

