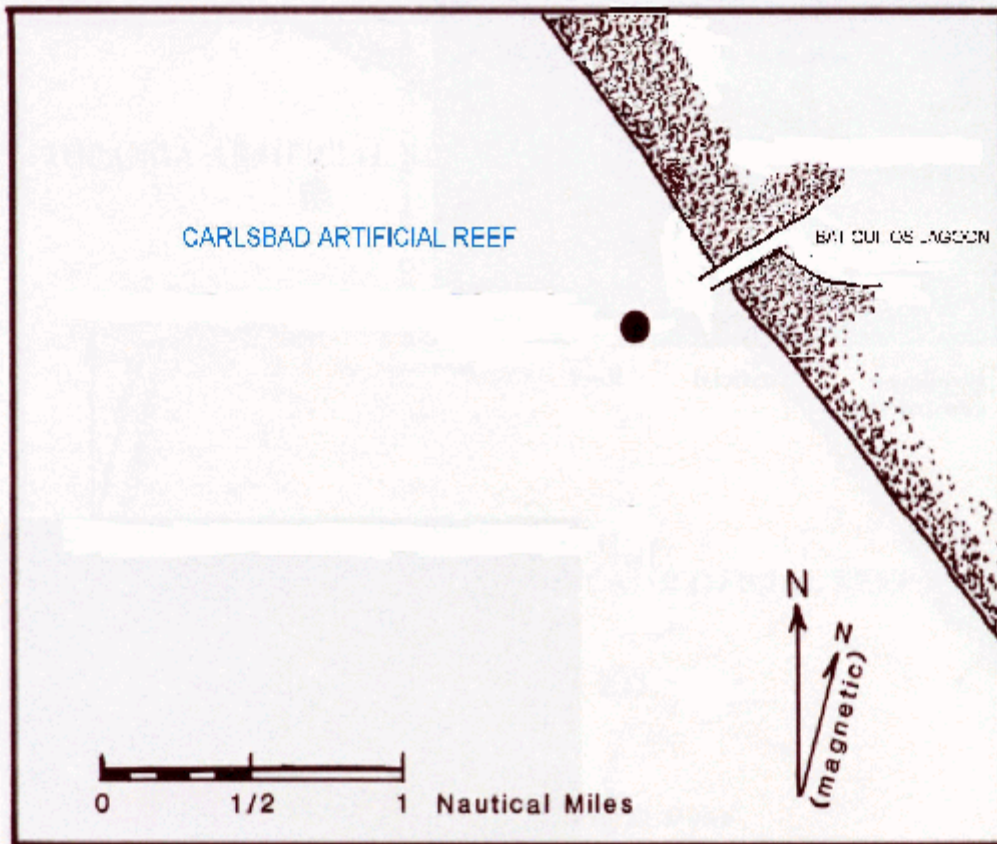


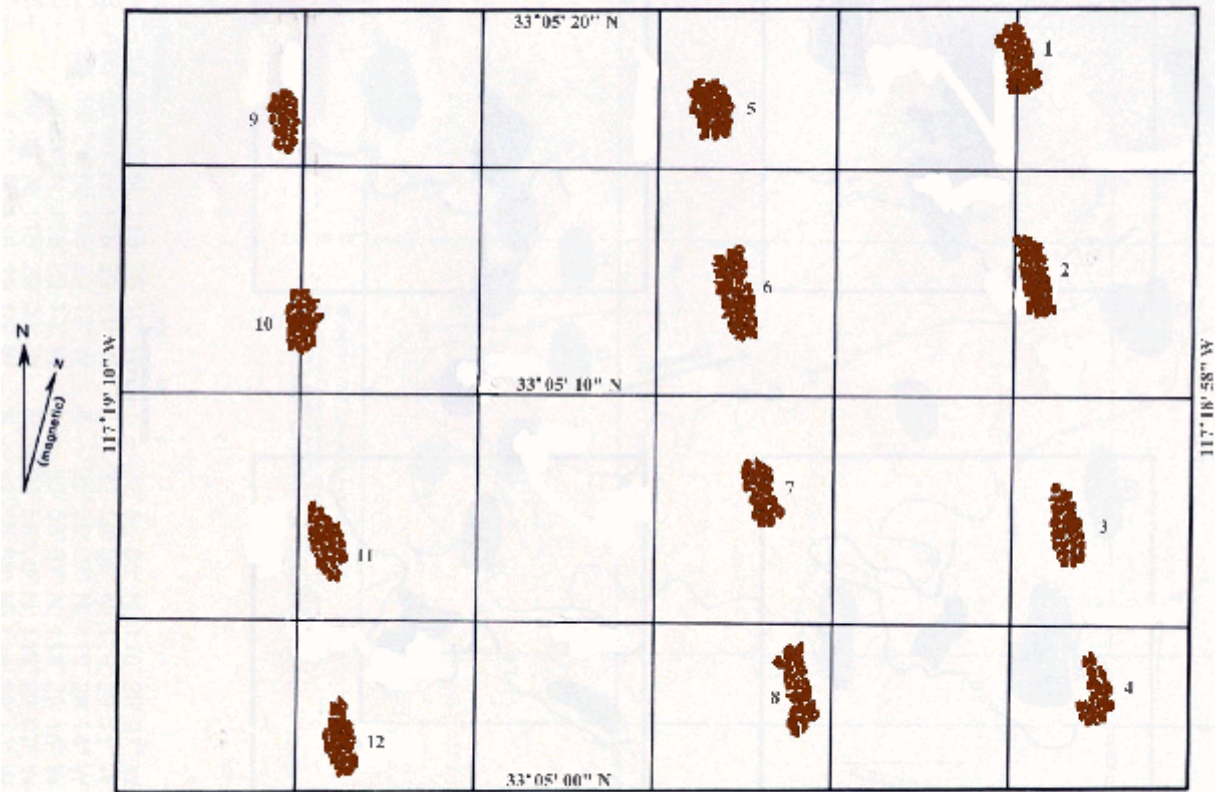
CARLSBAD ARTIFICIAL REEF



| | | |
|---------------------------|--|---------------------------------|
| Center Coordinates | 33° 05' 00" N x 117° 19' 09" W | Depth 33 - 67 ft. (MLLW) |
| Compass Bearing | 160° (mag), 6 N miles from Oceanside Harbor entrance | |
| Year Constructed | 1991 | Area 6 Acres |
| Materials Used | 10,000 tons quarry rock | |

Carlsbad reef was built in anticipation of the opening of the mouth of Batiquitos Lagoon. Coastal estuaries are nursery grounds for some popular sport fish species, such as California halibut and sand bass. Carlsbad reef was designed to be an augmentation to this natural nursery system.

INDEX TO THE LOCATION OF CARLSBAD ARTIFICIAL REEF



Reef Coordinates

| | | |
|----|-----------------|------------------|
| 1 | 33° 05' 19.5" N | 117° 19' 13.1" W |
| 2 | 33° 05' 14.1" N | 117° 19' 11.0" W |
| 3 | 33° 05' 09.8" N | 117° 19' 09.2" W |
| 4 | 33° 05' 03.5" N | 117° 19' 07.3" W |
| 5 | 33° 05' 16.8" N | 117° 19' 14.4" W |
| 6 | 33° 05' 11.4" N | 117° 19' 13.2" W |
| 7 | 33° 05' 05.4" N | 117° 19' 11.4" W |
| 8 | 33° 05' 00.0" N | 117° 19' 09.0" W |
| 9 | 33° 05' 15.6" N | 117° 19' 25.2" W |
| 10 | 33° 05' 10.8" N | 117° 19' 22.8" W |
| 11 | 33° 05' 04.8" N | 117° 19' 20.4" W |
| 12 | 33° 05' 58.2" N | 117° 19' 19.2" W |