

## **BREAKWATERS**

Breakwaters are a protective structure usually built off-shore to protect beaches, bluffs, dunes, or harbor areas from wave action. However, because off-shore breakwaters are costly to build, they are seldom constructed to protect natural features alone, but are generally constructed for navigational purposes also. Breakwaters can be either rigid in construction or floating. The rigid breakwaters, which are usually constructed of riprap or rock, have both beneficial and detrimental effects on a shore. All breakwaters eliminate wave action and thus protect the shore immediately behind them. (For additional discussion, policy, and regulation. see following use activists for Jetties and Groins.)

### **A. Policies**

1. Breakwaters should be designed to have a minimum effect on sand movement and fish life. Any impacts to fish resources should be fully mitigated.
2. Restriction of the public use of surface water as a result of breakwater construction should be considered in granting shoreline permits for construction.

### **B. Regulations**

1. Breakwaters shall not be permitted where public use of a water surface would be severely restricted.
2. Proposals for breakwaters shall gain signatural approval from all shoreline land owners within a one (1) mile radius of a project proposal.
3. Proposed designs for new or expanded breakwaters, jetties, and groins shall be designed by and so certified by a registered civil engineer.
4. The design of new breakwaters and jetties shall incorporate provisions for public access such as sightseeing and public fishing if the County determines such access to be feasible and desirable.
5. Breakwaters shall not be constructed unless positive need has been demonstrated. Applications shall include an evaluation for the need of a breakwater.

6. Breakwaters shall only be allowed to protect water dependent activities and as an integral component of a harbor, marina, or port.

7. Breakwater use limitations in shoreline environments:

NATURAL-Prohibited

CONSERVANCY-Prohibited

RURAL-Prohibited

COMMUNITY-Prohibited

URBAN/INDUSTRIAL-Conditional Use