Generic Problem 4 - Beach Nourishment Using Sand Dredged from Offshore Dredging

Problem - Stabilization of an eroding beach is being considered by beach nourishment. This comprises the removal of a large quantity of material from an offshore area (the "borrow" area) and placement by pipeline dredge on the beach. A coral reef is present near the borrow area.

Discussion of Natural System - The natural system is experiencing a long-term mild erosional trend.

The Altered System - The completed altered system will include an offshore deepened "borrow" area with the removed material placed on the shore.

Physical Effects - Possible physical effects include local modification of the waves affecting the shoreline due to the deepened borrow area. Additionally, the longevity or "life" of the project may be a matter of concern as it relates to the length of time that the benefits will occur to the area and the associated frequency for maintenance renourishment.

Environmental Effects - In most cases the primary environmental effects are related to the quality of sediment or damage to the reefs by improper handling of equipment such as anchors. In this case quality relates to the grain