NAVIGATION CHANNELS AND BOAT ACCESS CANALS

Construction and maintenance of navigation channels and boat access canals may cause severe environmental harm if they are not properly sited and designed. In addition to direct habitat losses associated with wetlands and deep water excavation and filling, these activities may significantly modify salinity and water circulation patterns. These changes could greatly modify the distribution and abundance of living marine resources. The following guidelines should be followed:

a. Alignments of channels and access canals should utilize existing channels, canals and other deep water areas to minimize initial and maintenance dredging requirements. All canals and channels should be clearly marked to avoid damage to adjacent bottoms from propwashing.

b. Alignments should avoid sensitive habitats such as bird rookeries, oyster reefs, shorebird feeding areas and areas of submerged or emergent vegetation. In addition, canals and channels should not cut through barrier beaches, barrier islands or other Gulf shoreline protection features.

c. Access channels and canals should be designed to ensure adequate flushing so as not to create low-dissolved oxygen conditions or sumps for heavy metals and other contaminants. Widths of access channels in open water should be minimized to avoid impacts to aquatic bottoms. In canal subdivisions, channels and canals within the development should be no deeper than the parent body of water and should be of a uniform depth or become gradually shallower inland. Residential canals and navigation channels should be aligned with prevailing summer winds to take advantage of wind driven circulation. Dredge depths should be no greater than necessary for navigation but should not exceed -6 feet mean low water unless it can be clearly demonstrated that deeper draft vessels would be utilizing the channel or canal.

d. Permanent dredged material disposal sites should be located in upland areas. Where long-term maintenance is anticipated, disposal sites should be acquired and maintained for the entire project life.

e. Construction techniques (e.g. silt curtains) that minimize turbidity and dispersal of dredged materials into sensitive wetland areas (i.e. submerged grasses and shellfish beds) are encouraged.

f. Channels and access canals should not be constructed in areas known to have high sediment contamination levels. If construction must occur in these areas, specific techniques including the use of silt curtains will be needed to contain suspended contaminants.

g. Propwashing is generally not a recommended dredging method.

h. To ensure adequate circulation, confined and dead-end canals should be avoided by utilizing bridges or culverting that ensures exchange of the entire water column. In general, depths should be minimized, widths maximized and canals oriented towards the prevailing

summer winds to enhance water exchange.