## IMPOUNDMENTS AND OTHER WATER LEVEL CONTROLS

Thousands of wetland acres are impounded each year in the southeastern United States for purposes such as waterfowl habitat creation, aquaculture, agriculture, flood control, hurricane protection, mosquito control and control of marsh subsidence and erosion. Projects range in size from minor, such as repair of existing embankments, to large-scale marsh management projects where constructing dikes and water control structures may affect thousands of wetland acres. Significant adverse impacts can be avoided or minimized with implementation of the following guidelines:

- a. Proposals to impound previously unimpounded tidal wetlands are not recommended. In addition, proposals to convert one wetlands type to another (i.e. conversion of brackish marsh to fresh marsh or vice versa) are not recommended.
- b. Proposals to repair or replace water control structures will be assessed on a case-by-case basis and may qualify under Nationwide Permit 3. Contact the Galveston District for more information.
- c. Impoundment levees should only be constructed in wetland areas as part of approved water or marsh management plans or to prevent the release of pollutants. Water or marsh management plans should result in the overall benefit to all forms of fish and wildlife resources currently utilizing the area. Management plans that benefit a certain resource type while adversely impacting another type are not recommended.
- d. New water control structures will be assessed separately based on their individual merits and impacts and in relation to the overall water or marsh management plan of which they are a part. In coastal marshes, new water control structures should be designed to ensure adequate ingress and egress of migratory marine fisheries.
- e. Impoundments of rivers, bayous and tributaries are not recommended if they adversely affect the quality, quantity and timing of freshwater flows into estuaries or block migration of fishery and wildlife resources.
- f. Levees should be planned and sited to avoid isolation or segmentation of wetland areas and systems to the maximum extent practicable.
- g. Hurricane and flood protection levees should be located in uplands to the maximum extent practicable. They should be designed, operated and maintained to minimize disruptions of existing hydrologic patterns, and to maximize the interchange of water, beneficial nutrients and aquatic organisms between the enclosed wetlands and those outside the levee system. Borrow material for levee construction should not be taken from wetlands or other sensitive habitats.
- h. A monitoring plan for impoundments should be designed to ensure that the objectives of the management area are met and that non-target resources are not unacceptably impacted (e.g. fisheries, wildlife, vegetation, water quality, etc.). Without monitoring, measurement of positive and negative impacts, recommendations for plan revisions, or plan abandonment cannot be properly evaluated.