



Inshore Projects

Inshore projects pertain to all reef projects in the waters of Mobile Bay, Weeks Bay, Pelican Bay, Point Clear, Alabama's estuary system and the Mississippi Sound. Inshore reefs provide important habitat for oysters, and numerous types of fish throughout their life cycle. This plan also calls for funding for five years of scientific research and monitoring of the proposed reef projects to further our understanding of the specific habitats and monitor rates of success.

Alabama Marine Resources Division (AMRD) began its inshore reef program in 1971. Since this time a diverse range of materials, such as roadway material, oyster cultch, bridge pilings, and limestone gravel have been used to increase finfish habitat and promote oyster production. Modern inshore reef development projects range from offering high volume protective habitat for juvenile fish species to the deployment of six foot pyramids for adult red fish, speckled trout, sheepshead and other species.

To date, AMRD has constructed thirty-one (31) inshore reefs, and plans to build an additional eight (8). Of the proposed reefs, two have already been permitted by the Army Corps of Engineers, and the other six are in design. The inshore components of this plan (Figure 1.A) include enhancement of the existing thirty-one reefs (Figure 1.B), construction of eight (8) planned inshore reefs (Figure 1.C), and five years of ongoing scientific research and monitoring. Permitting has already been secured to enhance and refurbish the existing reefs, many of which have deteriorated as years of storm activity and natural degradation have decreased their levels of production.

The total cost of the proposed inshore projects, including five years of scientific research and monitoring is **\$25,037,146**.

Figures and Maps

Figure 1.A Proposed Inshore Reef Zone projects, estimated costs for construction and materials based on 2014 figures, and funding for research and monitoring.

Inshore Reef Project	Cost
Construction of eight (8) new reefs	\$2,869,406
Enhancement of thirty-one (31) existing reefs	\$20,292,740
Monitoring (5 years)	\$625,000
Research (5 years)	\$1,250,000
Total Inshore Plan Budget	\$25,037,146

Figure 1.B.: Enhancement of thirty-one (31) existing inshore reefs

Name, acreage, volume of 6"-8" limestone gabion needed for enhancement, mass of material needed for reefing, estimated cost to sufficiently enhance each existing site.

Existing Reef	Acreage	Cubic Yards of Gabion Stones	Tons of Gabion Stones	Total Cost of Materials and Installation in 2014
Battles Wharf	3.8	4,303	5,551	\$360,815
Bayou Cour	32.4	36,558	47,156	\$3,065,140
Bayou St. John	5.3	5,978	7,712	\$501,280
Bender/Austal	3.3	3,671	4,735	\$307,775
Boykin	5.8	6,528	8,420	\$547,300
Brookley Hole	0.8	897	1,157	\$75,205
Buddy Beiser	3	3,348	4,318	\$280,670
Choctaw Pass	0.5	580	749	\$48,685
Dell Williamson	0.3	338	437	\$28,405
Denton	70.2	79,186	102,141	\$6,639,165
Exxon Mobil 63AB	1	1,128	1,455	\$94,575
Exxon Mobil 76A-76A-Aux	1	1,117	1,440	\$93,600
Exxon Mobil 95E	0.4	395	509	\$33,085
Exxon Mobil: Alex				
Maisel Memorial Reef	1.4	1,579	2,037	\$132,405
Fish River	4.3	4,809	6,203	\$403,195
Fort Morgan Barge	2.1	2,369	3,056	\$198,640
Legacy - Miocene Rig 615#1	0.3	282	364	\$23,660
Legacy - Miocene Rig 615#3	0.3	282	364	\$23,660
Legacy - Miocene Rig 615#4 Expanded	3.7	4,140	5,340	\$347,100

Legacy Resources	0.3	282	364	\$23,660
Mississippi Sound #1	3.4	3,835	4,947	\$321,555
Mississippi Sound #2	18.8	21,178	27,317	\$1,775,605
Mississippi Sound #3	3.7	4,174	5,384	\$349,960
Ono Island	9.3	10,513	13,561	\$881,465
P. Grey Cane, Jr.	6.4	7,188	9,272	\$602,680
Rockpile	14.1	15,905	20,516	\$1,333,540
Ross Point	4.4	4,963	6,402	\$416,130
Shellbank	9.9	11,167	14,405	\$936,325
Shrimpboat	2.3	2,594	3,347	\$217,555
Upper Wreck	1.5	1,659	2,140	\$139,100
Zundel's Landing	1	1,083	1,397	\$90,805
Totals	212.5	239287	308659	\$20,292,740

Figure 1.C.: Construction of eight (8) proposed new inshore reefs

Name, acreage, volume of 6"-8" limestone gabion needed for construction, mass of material needed for reefing, estimated cost to construct each of the proposed sites.

Permitted Reef	Acreage	Cubic Yards of Gabion Stones for 100% Coverage	Tons of Gabion Stones	Total Cost of Materials and Installation in 2014
Point Clear	9.74	10,987	14,172	\$921,161
Weeks Bay	2.6	2,933	3,783	\$245,895
Reefs in Design	Acreage	Cubic Yards of Gabion Stones for 100% Coverage	Tons of Gabion Stones	Total Cost of Materials and Installation in 2014
Arnica Bay	3	3,384	4,365	\$283,725
Mississippi Sound Wreck #1	3	3,384	4,365	\$283,725
Mississippi Sound Wreck #2	3	3,384	4,365	\$283,725
Mobile Bay at Buoy Reef	3	3,384	4,365	\$283,725
Pelican Bay	3	3,384	4,365	\$283,725
Portersville Bay	3	3,384	4,365	\$283,725
Totals	30	34,224	44,145	\$2,869,406

Map 1.D Map of Mobile Bay, depicting the Inshore Reef Zone. Each icon represents the location of an existing inshore artificial reef.

