



**Technical Analysis of Disposal Sites
for Work on Proposed
New Panama Canal Post-Panamax
Navigation Channel
and Locks**

**Análisis Técnico de sitios de
disposición de materiales para
trabajos de los Canales de
Navegación y Esclusas del Canal
Pospanamax Propuesto**

ACP
Agosto del 2004

Descripción y Resumen
(No existe Resumen Ejecutivo)

Technical Analysis of Disposal Sites for Work on Proposed New Panama Canal Post-Panamax Navigation Channel and Locks



Panama Canal Authority
Department of Engineering and Projects
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1 GENERAL DESCRIPTION OF THE STUDY

The construction of new Post-Panamax locks at the Panama Canal would require improvements to the existing Canal navigation channels and construction of new Post-Panamax locks navigation approach channels, which involve deepening and widening work to guarantee the safe and expedite transit of Post-Panamax vessels through the Canal.

This report covers the technical analysis of disposal site options to accommodate dry and wet excavation material resulting from navigation channel improvement work. The ACP contracted the services of external consultants Moffatt & Nichol (M&N) and Louis Berger Group (LBG), to evaluate the different alternatives for the disposal of excavated and dredged material in Gaillard Cut and the Canal's Pacific entrance. Such studies were completed in March 2004, and may be reviewed by accessing the consultants' final reports delivered to the ACP.¹

The management of dry and wet excavation material in the Canal represents the most critical issue of any excavation and dredging operation because of the environmental implications regarding disposal sites, the limited number of available sites, their limited capacity, the hauling distance, and the large volume of excavated and dredged material.

2 RECOMMENDED DISPOSAL SITES FOR NAVIGATION CHANNEL DREDGING MAINTENANCE

- The following table shows those disposal sites available to accommodate dredging material from future periodical navigation channel maintenance after Canal expansion:

¹ Moffatt&Nichol Engineers, Louis Berger Group, Golder Associates, "Pacific Side Excavation & Dredging Material Disposal Alternatives Evaluation", Final Report, 3 Volumes, March 2004.

Moffatt&Nichol Engineers, Louis Berger Group, Golder Associated, "Feasibility Study of Island Development at the Pacific Entrance of the Panama Canal", Final Report, 4 Volumes, May 2004.

Louis Berger Group, "Environmental Evaluation of Options for the Construction of New Locks and Deepening of the Atlantic and Pacific Entrance to the Panama Canal", August 2004.

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Atlantic area	1	Limon Bay Fan dumping	4.32	
	2	South Limon Bay site	0.40	
	3	Sherman	1.50	Site could be upgraded to increase volume capacity
Gatun Lake & Gaillard Cut	4	Along Gatun Lake navigation channel		Cutter suction dredge discharge material over islands or underwater
	5	Frijoles	6.00	
Pacific area	6	Victoria	0.66	
	7	Rosseau	0.55	
	8	Velasquez	1.30 to 2.29	
	9	Farfan	2.66 to 3.66	Assuming site's existing capacity
	10	Palo Seco	1.02	
	11	Tortolita	0.60	Extension of site boundaries would increase site volume capacity
	12	Tortolita South	1.00	Extension of site boundaries would increase site volume capacity
TOTAL REMAINING CAPACITY			16.05	

Table No. 4. Recommended disposal sites available for future periodical navigation channel dredging maintenance program after Canal Expansion work