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Carmen Gonzalez

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ESSAY

ENVIRONMENTAL IMPACT ASSESSMENT IN POST-COLONIAL SOCIETIES: REFLECTIONS ON THE PROPOSED EXPANSION OF THE PANAMA CANAL

*Carmen G. Gonzalez**

Vamos a hacer de estas instalaciones recuperadas (Canal de Panamá) y de esos kilómetros cuadrados (áreas de la Antigua Zona del Canal), el uso más colectivo posible. Y cuando digo el uso más colectivo, les estoy manifestando aquel uso en el que la mayor parte del pueblo panameño pueda disfrutar del esfuerzo de su lucha.¹

Panama's destiny has been shaped by its geographic location at the crossroads of international trade.² Lacking

*Associate Professor, Seattle University School of Law. I would like to thank Daniel Suman, Frank Valdes and Colin Crawford for organizing an enlightening one week seminar in Panama during which the Canal expansion and many other topics were explored. I am especially grateful to the many Panamanian scholars, government officials and non-governmental organization representatives who took the time to meet with us and to share their thoughts and insights.

¹ President Omar Torrijos, Speech before the Panamanian National Assembly, August 19, 1977, (quoted in Marco A. Gandásegui, *Los Retos Que Enfrentan el País y el Canal de Panamá*, 113 TAREAS 39 (2003), available at <http://bibliotecavirtual.clacso.org.ar/ar/libros/tar113/marco.rtf>.) ("We are going to make the most collective use possible of these recovered installations (the Panama Canal) and of these square kilometers (the former Canal Zone). And when I say the most collective use possible, I mean the use which permits the majority of Panamanians to reap the rewards of their struggle.").

² See WALTER LAFEVER, *THE PANAMA CANAL: THE CRISIS IN HISTORICAL PERSPECTIVE* 3 (1989).

mineral wealth or extensive arable lands, the country has prospered or declined based on the use made by others of the country's major resource—the Panama Canal.³ The Panama Canal is a potent symbol of Panamanian identity, a reminder of Panama's lengthy colonial history, and an important generator of income for the modern Panamanian nation.⁴

On December 31, 1999, the United States officially transferred the Panama Canal to the Panamanian government.⁵ This transfer was the culmination of a lengthy struggle for Panamanian sovereignty and self-determination.⁶ With the departure of the United States, Panamanians would finally have the opportunity to shape their economic and political destiny subject to the constraints imposed by the global economic order.

The transfer, however, was not a panacea. Even after the colonial power departed, the institutional and ideological vestiges of colonialism were not easily eradicated.⁷ Commentators wondered whether the Panamanian government would operate the Canal in the interests of the Panamanian people—as President Omar Torrijos had hoped—or whether the Canal would be managed just as the United States had managed it.⁸ This question took on particular urgency when the Panamanian government proposed to expand the Panama Canal in order to increase the Canal's competitiveness and efficiency.⁹

³ *See id.*

⁴ *See id.* at 222-23.

⁵ *See* JOHN LINDSAY-POLAND, *EMPERORS IN THE JUNGLE: THE HIDDEN HISTORY OF THE U.S. IN PANAMA* 172 (2003).

⁶ *See generally* LAFEBER, *supra* note 2, at 63-102, 222-23.

⁷ *See* MAHMUD MAMDANI, *CITIZEN AND SUBJECT: CONTEMPORARY AFRICA AND THE LEGACY OF LATE COLONIALISM* 286 (1996) (observing that the post-colonial state often reproduces key elements of the colonial state).

⁸ *See* LINDSAY-POLAND, *supra* note 5, at 190.

⁹ *See* Panama Canal Authority, *Proposal for the Expansion of the Panama Canal: Third Set of Locks*, Apr. 24, 2006,

On April 24, 2006, six years after the transfer, Panamanian authorities announced a \$5.25 billion plan to expand the Canal by constructing a third set of locks.¹⁰ In accordance with Panamanian law, the expansion proposal was submitted to a popular referendum on October 22, 2006 and was overwhelmingly approved.¹¹ However, the referendum was plagued with procedural irregularities that raised questions about the legitimacy of the pro-expansion outcome—including the absence of a comprehensive assessment of the environmental and socioeconomic impacts of the controversial project.¹²

This article will examine the expansion of the Panama Canal as a case study on two distinct but interrelated challenges faced by post-colonial societies. The first is how to develop natural resources in forward-looking ways consistent with long-term national self-interest despite the tendency of colonial practices and institutions to persist long after the colonial power has departed. The second is how to use environmental impact assessment law as a tool to enhance public and governmental decision-making in the development planning process.

The article is divided into three parts. Part I introduces the Canal expansion case study and describes the controversial referendum. Part II discusses the role of environmental impact assessment in development planning, explains the Panamanian laws and regulations applicable to

<http://www.pancanal.com/eng/plan/documentos/propuesta/acp-expansion-proposal.pdf>.

¹⁰ See *id.*

¹¹ See Marc Lacey, *Panamanians Vote Overwhelmingly to Expand Canal*, N.Y. TIMES, Oct. 23, 2006, at A3.

¹² See NotiCen: Central American & Caribbean Affairs, *Panama Canal Expansion Approved in Heavily Criticized Referendum*, Oct. 26, 2006; Eric Jackson, *Environmental Defense of Torrijos-Alemán Zubieta Plan Collapses*, The Panama News, Sep. 17 – Oct. 7, 2006, Vol. 12, Num. 18 at

http://www.thepanamanews.com/pn/v_12/issue_18/news_01.html.

environmental impact assessment, and analyzes and critiques the application of this legal framework to the proposed expansion of the Panama Canal. Part III examines the ways in which the colonial legacy distorts the development planning process and discusses strategies that might be deployed to resist the re-imposition of colonial practices and institutions. Drawing upon the Canal expansion case study, Part III recommends specific amendments to Panama's environmental impact assessment laws and regulations designed to enhance governmental decision-making and to promote public participation in the development planning process.

I. The Panama Canal Expansion Project: Introduction to the Case Study

In order to examine the multi-layered controversy over the expansion of the Panama Canal, it is essential to place the dispute in historical context. This Part presents a brief history of the Panama Canal, summarizes the arguments for and against the expansion project, and discusses the highly contentious referendum.

A. Brief History of the Panama Canal

From the earliest days of Spanish colonial rule until the present, Panama has played a pivotal role in international trade.¹³ During the Spanish empire, Spanish ships arrived in the Caribbean port of Portobelo, where their goods were unloaded and hauled by mule across the isthmus to Panama City for distribution to the Spanish colonies on the Pacific Coast—from San Francisco in the north to Santiago in the south.¹⁴ Likewise, Peruvian silver was

¹³ See LAFEBER, *supra* note 2, at 3.

¹⁴ See INSTITUTO DEL TERCER MUNDO, *GUIA DEL MUNDO: EL MUNDO DESDE EL SUR* 453 (2001) [hereinafter *Instituto*].

transported across the isthmus from Panama City to the Caribbean coast for shipment to Seville.¹⁵

In 1821, Panama declared its independence from Spain and joined the Republic of Gran Colombia (a union of Venezuela, Colombia and Ecuador).¹⁶ When this entity was dissolved in 1830, Panama became part of Colombia.¹⁷

As the U.S. economy expanded in the 1820s, U.S. businessmen began to eye Panama as a possible location for a canal between the Atlantic and Pacific Oceans.¹⁸ U.S. interest in Panama intensified with the discovery of gold in California in the 1840s.¹⁹ Because the U.S. transcontinental railroad would not be completed until 1869, U.S. financiers constructed a railroad between Panama City (on the Pacific Ocean) and the city of Colón (on the Atlantic Ocean) between 1851 and 1855 to facilitate the movement of people and goods to and from California.²⁰ In its fourteen years of operation, the railroad carried 600,000 passengers and \$750 million in gold bullion between the Atlantic and Pacific coasts.²¹

The first attempt to construct a canal across Panama was undertaken by the French between 1880 and 1889.²² Ferdinand de Lesseps, the famed architect of the Suez Canal, attempted to construct a sea-level canal based on the Suez model.²³ De Lesseps abandoned the effort in 1889

¹⁵ See JOHN MAJOR, PRIZE POSSESSION: THE UNITED STATES AND THE PANAMA CANAL 1903-1979, 9 (1993).

¹⁶ See U.S. CENTRAL INTELLIGENCE AGENCY (CIA), THE WORLD FACTBOOK: PANAMA, *available at* <https://www.cia.gov/library/publications/the-world-factbook/geos/pm.html>.

¹⁷ See *id.*

¹⁸ See LAFEVER, *supra* note 2, at 7-8.

¹⁹ See *id.* at 10.

²⁰ See *id.*

²¹ See *id.*

²² See LINDSAY-POLAND, *supra* note 5, at 77.

²³ See *id.*

when disease, financial mismanagement, and construction setbacks doomed his project to failure.²⁴

The project was taken up by the United States, which convinced the Colombian ambassador in Washington, DC to sign a treaty giving the U.S. a 99-year lease on a six-mile wide canal zone in exchange for a \$10 million fee and annual payments of \$250,000.²⁵ Hoping for a better deal, the Colombian senate unanimously rejected the treaty. The United States supported Panama's November 1903 Declaration of Independence from Colombia and dispatched the marines to prevent Colombian troops from repressing the Panamanian revolt.²⁶

Contrary to popular mythology, Panama's bid for independence was the product of a lengthy struggle against Colombia. It was not simply engineered by the United States at the last minute in order to construct the Canal.²⁷ Panamanians had rebelled against Colombia in 1830 and 1831, and perhaps fifty times between 1840 and 1903.²⁸ These rebellions were nurtured by a nationalist ideology driven by the "geographical myth" that Panama was predestined to control one of the world's greatest trade routes.²⁹ This ideology also had a powerful anti-imperialist element, which was directed initially against Colombia and would later be directed against the United States.³⁰

U.S. support for Panamanian independence came at a great price. In exchange for a \$10 million fee and a \$250,000 annual annuity, the Panamanian government was forced to sign the egregiously one-sided Hay-Bunau Varilla Treaty (negotiated on Panama's behalf by the French entrepreneur Philippe Bunau Varilla), which gave the United

²⁴ See *id.*; LAFEBER, *supra* note 2, at 11.

²⁵ See LAFEBER, *supra* note 2, at 18.

²⁶ See *Instituto*, *supra* note 14.

²⁷ See LAFEBER, *supra* note 2, at 19-20.

²⁸ See *id.* at 20.

²⁹ See *id.*

³⁰ See *id.* at 20-21.

States perpetual authority over a ten-mile wide canal zone³¹ and the right to intervene in Panama to maintain public order “in case the Republic of Panama should not be, in the judgment of the United States, able to maintain such order.”³² Panama surrendered sovereign control of the Canal Zone, and granted the United States the authority to operate the Canal Zone “as if it were the sovereign of the territory.”³³ The treaty also gave the United States the perpetual right to use Panama’s rivers, lakes and streams for Canal-related purposes and to use, occupy and control any lands outside the Canal Zone needed for the construction, operation or protection of the Canal.³⁴ Finally, the treaty required Panama to permit free immigration to the Canal Zone by workers (and their families) of every nationality and prohibited Panama from subjecting them to military service.³⁵

The influence of the United States in Panama extended far beyond the Canal Zone. In order to ensure that the Canal construction would not be disrupted by social unrest, the United States supported an elite white oligarchy, crippled the opposition political party, disbanded the army, and assumed responsibility for protecting the oligarchy against both internal and external enemies.³⁶ Using defense of the Panama Canal as a pretext, the United States intervened militarily in Panama in 1912, 1915, 1918, and 1925 to repress riots and demonstrations.³⁷ The U.S. condoned widespread election fraud in the name of political stabil-

³¹ See The Convention Between the United States and Panama for the Construction of a Ship Canal to Connect the Waters of the Atlantic and Pacific Oceans (1903) at arts. II, XXIV, *available at* <http://www.fordham.edu/halsall/mod/1903panama.html> [hereinafter, *Hay-Bunau Varilla Convention*]; LAFEBER, *supra* note 2, at 28-33 (describing the events that led to the treaty).

³² *Hay-Bunau Varilla Convention*, *supra* note 31, at art. VII.

³³ *Id.* at art. III.

³⁴ See *id.* at art. II, IV.

³⁵ See *id.* at art. XXII.

³⁶ See LAFEBER, *supra* note 2, at 40.

³⁷ See *id.* at 56-58.

ity—thereby thwarting Panama's political development.³⁸ Finally, the United States dictated Panama's foreign policy and dominated Panama economically.³⁹ In effect, Panama became a U.S. colony.⁴⁰

The Panama Canal was officially opened on August 15, 1914, and generated huge savings for the U.S. shipping industry.⁴¹ In addition to reducing by the trip between New York and San Francisco nearly 8000 miles, the Canal charged very modest tolls.⁴² Indeed, the United States did not increase tolls between 1914 and 1973 in order to subsidize American shipping companies.⁴³

The United States maintained a powerful military presence in Panama, with fourteen military bases and an average of 7400 troops between the two world wars.⁴⁴ By 1943, 63,000 troops were stationed in Panama.⁴⁵ During the Cold War, Panama was the site of the U.S. Southern Command, the command center for U.S. military activities in Central America and South America.⁴⁶ In 1946, the School of the Americas was established in the Canal Zone.⁴⁷ Between 1950 and 1986, the School of the Americas would train over 57,000 Latin American army and police officers in counter-insurgency operations.⁴⁸

After a period of prosperity during the Second World War, the Panamanian economy suffered a severe decline, and was in a state of crisis by 1960.⁴⁹ The country depended on two major sources of revenue. The first was

³⁸ See *id.* at 54-55.

³⁹ See *id.* at 58-61.

⁴⁰ See *id.* at 52-54.

⁴¹ See *Instituto, supra* note 14, at 453.

⁴² See LAFEBER, *supra* note 2, at 48.

⁴³ See *id.*

⁴⁴ See LINDSAY-POLAND, *supra* note 5, at 190.

⁴⁵ See *id.* at 45.

⁴⁶ See *id.* at 106.

⁴⁷ See *id.*

⁴⁸ See *id.*

⁴⁹ See LAFEBER, *supra* note 2, at 102.

banana production, which was controlled by United Fruit; the second was the North American military-industrial complex in the Canal Zone, which employed Panamanian workers and purchased goods from Panamanian merchants.⁵⁰ The presence of the Canal Zone created two distinct worlds within a small geographic area: the prosperous, air-conditioned First World dominated by the United States, and the steamy, slum-ridden, poverty-stricken Third World ruled by an entrenched and corrupt oligarchy (with U.S. support).⁵¹ As discussed in Part III of this article, this image of the two Panamas would have a subtle but powerful impact on the management of the Panama Canal after the transition to Panamanian control.

The 1930s, 1940s and 1950s were characterized by rising nationalism in Panama as the middle class rebelled against the oligarchy and demanded better terms in the relationship between Panama and the United States.⁵² In 1958, Panamanian university students entered the Canal Zone to plant Panamanian flags at strategic locations, but the flags were promptly removed by Canal police.⁵³ Later that month several students were shot as they participated in demonstrations demanding Panamanian sovereignty over the Canal.⁵⁴ The following year, Panamanian university students again marched into the Canal Zone to plant Panamanian flags.⁵⁵ When one student was arrested and others were repelled by Canal police and by U.S. troops with fixed bayonets, rioting broke out in Panama City.⁵⁶ The riots did not stop until the Panamanian National Guard was called in to restore order.⁵⁷ In response to the political turmoil, Pres-

⁵⁰ *See id.*

⁵¹ *See id.* at 83-84, 101-05, 118-19.

⁵² *See* LAFEBER, *supra* note 2, at 63-98.

⁵³ *See id.* at 98-99.

⁵⁴ *See id.* at 99.

⁵⁵ *See id.* at 100.

⁵⁶ *See id.*

⁵⁷ *See id.*

ident Eisenhower sent his brother Milton on a fact-finding mission to Panama, where one Panamanian official explained the situation as follows:

You in the United States inherited vast mineral wealth Africa was given gold and diamonds. The Middle East is rich in oil. God gave Panama nothing but a waterway. We must make a living from our own resources as others have from theirs.⁵⁸

The deadliest riots took place in 1964 after several hundred Panamanian university students marched peacefully into the Canal Zone to demand that the Panamanian flag be exhibited alongside the U.S. flag at Balboa High School.⁵⁹ When four to five hundred waiting North Americans confronted the students, violence broke out, and the Panamanian flag was torn.⁶⁰ As rumors of the confrontation swept Panama City, as many as 30,000 Panamanians marched into the streets, congregating in the area near the Canal Zone.⁶¹ U.S. troops took up battle positions and exchanged gunfire with snipers.⁶² Mobs of irate Panamanians responded by ransacking and setting fire to U.S. businesses in Panama City, overturning and burning automobiles with Canal Zone license plates, and besieging the U.S. Embassy.⁶³ The violence quickly spread into Colón and the interior of the country.⁶⁴ During four days of rioting, twenty-four Panamanians and four U.S. soldiers

⁵⁸ *Id.* at 99 (omission in original).

⁵⁹ *See id.* at 108.

⁶⁰ *See id.*; LUIS MURILLO, THE NORIEGA MESS: THE DRUGS, THE CANAL AND WHY AMERICA INVADED 214 (1995).

⁶¹ *See* LAFEBER, *supra* note 2, at 108.

⁶² *See id.*

⁶³ *See id.* at 109; MURILLO, *supra* note 60, at 215.

⁶⁴ *See* LAFEBER, *supra* note 2, at 109.

lost their lives.⁶⁵ Over two hundred Panamanians and eighty-five North Americans were wounded.⁶⁶

Panamanians increasingly demanded complete sovereignty over the Canal.⁶⁷ When General Omar Torrijos assumed control of the Panamanian government in 1968, the struggle to wrest control of the Canal from the United States was elevated to the international stage.⁶⁸ Torrijos sought and obtained support for his cause from other Latin American countries and the Non-Aligned Movement.⁶⁹ He shrewdly persuaded the United Nations Security Council to hold its March 1973 meeting in Panama instead of New York City, and used the meeting to focus world attention on the canal issue.⁷⁰ Delegates were given the opportunity to see for themselves the stark contrast between the manicured lawns and air-conditioned bungalows of the Canal Zone, and the wretched slums across the street.⁷¹

When Jimmy Carter was elected President of the United States, he made the Canal question one of his top diplomatic priorities.⁷² After difficult negotiations and an arduous battle to obtain U.S. Senate approval, the Panama Canal Treaty of 1977 (the "Panama Canal Treaty") and the

⁶⁵ *See id.*

⁶⁶ *See id.*

⁶⁷ *See Instituto, supra* note 14, at 454.

⁶⁸ *See id.*

⁶⁹ *See id.*

⁷⁰ *See* LAFEBER, *supra* note 2, at 142.

⁷¹ *See id.*

⁷² *See id.* at 150. Carter was determined to negotiate a successful Canal treaty for several reasons. First, he wanted to demonstrate that the United States could work constructively with developing countries and thereby outmaneuver the Soviet Union. Second, he believed that the Canal's strategic significance had declined while its potential to ignite conflict with Panama had increased. Third, he regarded Torrijos as an ideal negotiating partner ("reasonable and able to control his own people"), and did not want to jeopardize Torrijos' position in Panama. Finally, he viewed the negotiation and ratification of a Canal treaty as the litmus test of his ability to manage foreign affairs. *See id.* at 158.

Treaty Concerning the Permanent Neutrality and Operation of the Canal (the "Neutrality Treaty") were ratified by the U.S. Senate on April 18, 1978.⁷³ Torrijos had obtained a Canal treaty, but on terms far less favorable than he had hoped.⁷⁴ The Canal would not be handed over to Panama until the year 2000.⁷⁵ Moreover, the U.S. Senate had added a condition during the ratification process that permitted the United States to intervene militarily in Panama to reopen the Canal if the Canal were closed for any reason even after the year 2000.⁷⁶

On December 31, 1999, Panamanian president Mireya Moscoso accepted the formal transfer of the Canal to the Panamanian nation at a ceremony on the steps of the Canal administration building.⁷⁷ At the time of the transfer, nearly forty percent of Panamanians lived below the poverty line,⁷⁸ and Panama had the second most unequal distribution of income in Latin America (after Brazil).⁷⁹ One commentator rightfully queried whether the future of the Canal would be determined by the needs of international maritime interests or by the needs of the majority of Panamanians.⁸⁰ In order to formulate a preliminary answer to this question, it is useful to consider the Canal's physical

⁷³ See *id.* at 113-15, 145, 148, 159, 178-79, 182. The transfer of the Canal to Panama was so controversial in the United States that the vote in the Senate was 68-32 in favor of ratification—barely satisfying the requisite two-thirds majority. *Id.* at 182. See also Panama Canal Treaty, U.S. – C.Z., Sept. 7, 1977, 33 U.S.T. 47; Treaty Concerning the Permanent Neutrality and Operation of the Panama Canal, U.S.—C.Z., Sept. 7, 1977, 33 U.S.T. 11 [hereinafter *Neutrality Treaty*].

⁷⁴ See LAFEBER, *supra* note 2 at 186.

⁷⁵ See Panama Canal Treaty, *supra* note 73, arts. II(2), XIII(1).

⁷⁶ See LAFEBER, *supra* note 2, at 178-81.

⁷⁷ See LINDSAY-POLAND, *supra* note 5, at 172.

⁷⁸ See THE WORLD FACTBOOK, *supra* note 16 (estimating the population below the poverty rate in 1999 at 37 percent).

⁷⁹ See LINDSAY-POLAND, *supra* note 5, at 176.

⁸⁰ See *id.* at 184.

characteristics and the contentious debate on whether or not to expand the Canal.

B. The Canal Expansion Proposal and Its Critics

The Panama Canal stretches fifty miles, connecting the Atlantic and Pacific Oceans through numerous artificial channels, three lakes, and a series of locks.⁸¹ Every year 14,000 vessels pass through the Canal, accounting for approximately five percent of the world's trade.⁸² Panamanian authorities predict that the Panama Canal will reach its maximum capacity between 2009 and 2012, and will be incapable of handling increased ship traffic without a decline in the quality of service.⁸³ Ships attempting to traverse the Canal are already experiencing significant delays, and these delays are predicted to worsen as trade volumes continue to expand.⁸⁴

Additionally, the Panama Canal can only handle so-called Panamex ships—vessels specifically designed to fit through the Canal's existing locks and capable of carrying up to 5000 containers.⁸⁵ However, with the expansion of

⁸¹ See *Global Market Brief: The Panama Canal Expansion*, Oct. 26, 2006, http://www.stratfor.com/global_market_brief_panaama_canal_expansion.

⁸² See Larry Luxner, *As Panama Plans Canal Expansion, Neighboring Countries Eye Alternatives*, WASHINGTON DIPLOMAT, Mar. 2007, available at http://www.washdiplomat.com/March%202007/a7_03_07.html

⁸³ See *Proposal for the Expansion of the Panama Canal*, *supra* note 9, at 34.

⁸⁴ See *id.* at 36.

⁸⁵ See *Global Market Brief*, *supra* note 81; Lorne Matalon, *Panama Canal Expansion Spurs Environmental Debate*, NATIONAL GEOGRAPHIC, June 27, 2007, <http://news.nationalgeographic.com/news/2007/06/070627-panama-canal.html>; *Panama Approves Canal Expansion*, BBC NEWS, July 15, 2006, <http://news.bbc.co.uk/1/hi/world/americas/5182472.stm>.

trade between Asia and the Americas, an increasing percentage of the world's cargo is being transported on post-Panamex vessels capable of carrying up to 12,000 containers.⁸⁶ Unable to traverse the Panama Canal, these post-Panamex vessels currently unload goods from Asia at ports on the U.S. West Coast for road or rail transport to the eastern United States, or travel through the Suez Canal.⁸⁷ While only approximately one hundred vessels (or ten percent of all shipping fleets) currently exceed the capacity of the Panama Canal, it is anticipated that the number of post-Panamex ships will continue to grow.⁸⁸

In light of anticipated increases in trade volume and ship size, Panamanian authorities proposed to expand the Panama Canal in order to strengthen the Canal's competitive position vis-à-vis alternative routes and in order to increase the efficiency of the Canal's operations.⁸⁹ The expansion project, estimated to cost \$5.25 million, consists of adding a third lane to the Panama Canal, constructing new lock facilities on both the Atlantic and Pacific sides, and widening and deepening existing navigation channels.⁹⁰ Panamanian authorities contend that the project will pay for itself through toll increases, will generate ten million dollars in additional toll revenues through 2025, will employ 6500 to 7000 additional workers during the peak construction years, and will produce an economic boom in Panama that will generate an additional 250,000 jobs by 2025.⁹¹

⁸⁶ See *Global Market Brief*, *supra* note 81; Matalon, *supra* note 85; BBC NEWS, *supra* note 85.

⁸⁷ See Gary Corbin, *Panama Canal Expansion and the Global Economy*, GLOBAL ENVISION, Nov. 20, 2006, <http://globalenvision.org/library/3/1339>.

⁸⁸ See *id.*; *Global Market Brief*, *supra* note 81.

⁸⁹ See *Proposal for the Expansion of the Panama Canal*, *supra* note 9, at 31, 39-40.

⁹⁰ See *id.* at 3-5, 10.

⁹¹ See *id.* at 57, 61, 66-68.

Critics of the project paint a far gloomier picture. First, they disagree with the government's claim that the Canal will shortly reach full capacity and question the need for the project.⁹² Second, they contend that the government has underestimated the cost of the project and has overestimated the project's future revenues.⁹³ Third, they predict that the project will result in a net economic loss and that the Panamanian elite will siphon off the project's benefits while imposing an enormous financial burden on the Panamanian nation.⁹⁴ Fourth, they contend that the project will squander resources needed for health, education, transportation, and other national priorities.⁹⁵ Finally, the project's opponents predict an ecological disaster that could result in deforestation, loss of biological diversity, and salinization of the water supply of the Panama City metropolitan area.⁹⁶ These arguments are explored in greater detail in Part II, Section D of this article. They are mentioned here to underscore the controversy surrounding the expansion proposal and lay the groundwork for the discussion of the referendum.

C. The Panama Canal Authority and the Canal Expansion Referendum

The referendum on the proposed expansion of the Panama Canal must be understood in the context of the unique constitutional status of the governmental entity responsible for the Canal's operation and management. In

⁹² See Roberto N. Méndez, *Por Qué Panamá Debe Decir "No" a la Propuesta del Tercer Juego de Esclusas*, 124 TAREAS (Sept.-Dec. 2006), available at <http://bibliotecavirtual.clacso.org.ar/libros/panama/cela/tareas/tar124/06mendez.pdf>.

⁹³ See *id.*

⁹⁴ See *id.*

⁹⁵ See *id.*

⁹⁶ See *Panama Canal Expansion Approved in Heavily Criticized Referendum*, *supra* note 12.

recognition of the important economic role of the Panama Canal and of the Canal's significance as a symbol of Panamanian nationhood, the Panamanian Constitution declares the Panama Canal the "inalienable patrimony of the Panamanian nation,"⁹⁷ and creates an autonomous institution, the Panama Canal Authority (Autoridad del Canal de Panamá, or ACP), to "operate the Canal in a manner that is safe continuous, efficient and profitable."⁹⁸ The ACP is autonomous in at least three distinct ways. First, the ACP's administrators are insulated from partisan politics by the constitutional requirement that the first board members be appointed to staggered terms.⁹⁹ Second, while the ACP makes annual payments to the Panamanian national treasury based on Canal revenues, the ACP's budget is separate from the national budget.¹⁰⁰ Third, the ACP's employees are subject to a merit-based employment regime similar to the regime in place prior to the transfer of the Canal from the United States to Panama.¹⁰¹ The administrative structure and specific responsibilities of the ACP are detailed in the Organic Law of the Panama Canal Authority, National Assembly Law No. 19 (the Organic Law).¹⁰²

The Panamanian Constitution makes the ACP accountable to the Panamanian electorate by requiring a referendum before certain major changes to Canal operations are undertaken.¹⁰³ Under article 325 of the Panamanian

⁹⁷ See Constitución Política de la República de Panamá art. 315 (2004), <http://www.epasa.com/constitucion/constitucion.pdf>.

⁹⁸ See *id.* at art. 316.

⁹⁹ See *id.* at art. 318; see also PANAMA CANAL AUTHORITY, *ACP Overview*, <http://www.pancanal.com/eng/general/acp-overview.htm>.

¹⁰⁰ See Constitución Política de la República de Panamá, arts. 320-21 (2004).

¹⁰¹ See *id.* at art. 322.

¹⁰² See Organic Law of the Panama Canal Authority, Panama National Assembly Law No. 19, (June 11, 1997), <http://www.pancanal.com/eng/legal/law/law.pdf>.

¹⁰³ See Constitución Política de la República de Panamá, *supra* note 97, at art. 325.

Constitution, any proposal for the construction of a third set of locks or a sea-level canal on the existing route must be approved by the executive branch and then submitted to the National Assembly for approval or rejection.¹⁰⁴ If approved, the proposal must be submitted to a popular referendum no earlier than three months after the proposal's approval by the National Assembly.¹⁰⁵

On April 24, 2006, the ACP's Board of Directors presented its proposal to Panamanian President Martin Torrijos for the construction of a third set of locks.¹⁰⁶ A few months later, President Torrijos and the Cabinet Council of Panama approved the proposal and submitted it to the National Assembly.¹⁰⁷ In July 2006, the National Assembly unanimously endorsed the expansion proposal and, pursuant to the Panamanian Constitution, passed a law mandating that a referendum be conducted at least ninety days after the National Assembly's approval of the proposal.¹⁰⁸

The referendum took place on October 22, 2006, and nearly eighty percent of the voters supported the proposed Canal expansion.¹⁰⁹ On November 1, 2006, Panama's Electoral Tribunal published a resolution

¹⁰⁴ *See id.*

¹⁰⁵ *See id.*

¹⁰⁶ Proposal for Expansion of the Panama Canal, *supra* note 9, at 1.

¹⁰⁷ *President Martín Torrijos Approves Panama Canal Expansion Proposal and Submits it to the National Assembly*, PANAMA CANAL AUTHORITY, June 27, 2006, <http://www.pancanal.com/eng/plan/documentos/propuesta/acp-expansion-natl-assembly.pdf>.

¹⁰⁸ *See Panama Canal Expansion Takes Major Step Forward: National Assembly Unanimously Approves Expansion Proposal, Passes Law Mandating Referendum*, PANAMA CANAL AUTHORITY, July 17, 2006, available at

<http://www.pancanal.com/eng/plan/documentos/propuesta/acp-expansion-referendum.pdf>; National Assembly Law No. 28, arts. 1, 7-8 (July 17, 2006), <http://www.pancanal.com/eng/plan/documentos/referencia/acp-plan-ref-ley-28.pdf>.

¹⁰⁹ *See Lacey, supra* note 11.

announcing the “Sí” victory in the referendum and authorizing the ACP to execute the proposal for the construction of a third set of locks in the Panama Canal.¹¹⁰ Curiously, this was one of Panama’s lowest voter turnouts ever.¹¹¹ Since only about forty percent of eligible voters showed up at the polls, only thirty percent of the electorate actually approved the Canal expansion.¹¹²

The ostensible purpose of a referendum on the construction of the third set of locks is to ensure that the Panamanian people have a say in the management of a resource that is an important symbol of the Panamanian sovereignty and an essential source of national revenue. The low voter turnout raises questions about the ACP’s popular mandate to expand the Canal. Even more disturbing are the allegations of impropriety with respect to how the referendum was carried out. These concerns are two-fold. First, the public was not provided with the necessary information to make an informed decision about the environmental and socioeconomic impacts of the proposed Canal expansion. Second, the referendum process was fraught with procedural irregularities designed to favor the proponents of the Canal expansion and to silence the opposition. These irregularities are discussed in Part II below in the context of the applicable legal requirements regarding environmental impact assessment.

II. Environmental Impact Assessment and the Referendum Process

Environmental Impact Assessment (hereinafter “EIA”) is an evaluation of the environmental consequences of proposed projects, activities and programs in order to

¹¹⁰ See Boletín del Tribunal Electoral, Resolución 387 (Nov. 1, 2006) (on file with the author).

¹¹¹ See Lacey *supra* note 11.

¹¹² See *id.*

integrate environmental protection into development planning.¹¹³ Because a project or activity might also have significant social and economic consequences, social impact analysis (SIA) is often part of the EIA process.¹¹⁴ The following sections discuss the basic principles of EIA, examine Panama's EIA legislation, and utilize this information to analyze and critique the procedural irregularities that marred the referendum process.

A. Environmental Impact Assessment: Origins and Basic Principles

EIA emerged as a regulatory tool in the early 1970s with the passage of the National Environmental Policy Act (NEPA) in the United States,¹¹⁵ and was subsequently adopted by both high and low-income countries and by international aid and financial institutions.¹¹⁶ Currently, over 150 countries have domestic EIA legislation.¹¹⁷ EIA requirements are so pervasive that some would argue that the duty to assess environmental impacts has become a fundamental principle of international law.¹¹⁸

The primary objectives of the EIA process are two-fold. First, the EIA process is designed to ensure that the possible impacts of a proposed project are fully identified

¹¹³ See DAVID HUNTER ET AL., INTERNATIONAL ENVIRONMENTAL LAW AND POLICY 531 (2007).

¹¹⁴ See UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE (UNECE), POLICIES AND SYSTEMS OF ENVIRONMENTAL IMPACT ASSESSMENT 21-22 (1991).

¹¹⁵ See National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4321-46 (2001). The NEPA regulations are set forth at 40 C.F.R. §§ 1500.1-1517.7 (1985).

¹¹⁶ See ENVIRONMENTAL ASSESSMENT IN DEVELOPING AND TRANSITIONAL COUNTRIES: PRINCIPLES METHODS, AND PRACTICE 3 (Norman Lee & Clive George, eds. 2000).

¹¹⁷ See HUNTER ET AL., *supra* note 113, at 533.

¹¹⁸ See *id.*

and analyzed *before* a decision is made.¹¹⁹ Second, the EIA process is a tool to inform the public about the proposed project and to solicit meaningful public input on the project's potential costs and benefits.¹²⁰

One key aspect of the EIA process is the identification of alternatives to the proposed project.¹²¹ In the absence of alternatives, the EIA becomes a post-hoc justification for a decision that has already been made.¹²² Instead of evaluating only one course of action, the EIA should consider alternative ways of achieving a particular goal so that the decision-maker may select the alternative that minimizes environmental, social and economic costs.¹²³ As explained in the following sections, Panama's EIA legislation incorporates some but not all of these established EIA principles.

B. Environmental Impact Assessment: Panama's Legal Framework

Under the Panamanian Constitution and under the ACP's Organic Law, the ACP is responsible for the conservation of the Canal's water resources.¹²⁴ The ACP must protect the water resources of the Canal in order to operate the Canal and to supply drinking water to the communities

¹¹⁹ See *id.* at 531.

¹²⁰ See *id.* at 531-34.

¹²¹ See WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW 957-63 (1994); WILLIAM A. TILLEMANN, *Public Participation in the Environmental Impact Assessment Process: A Comparative Study of Impact Assessment in Canada, the United States and the European Community*, 33 COLUM. J. TRANSNAT'L L. 337, 384-393 (1995); UNECE, *supra* note 114, at 15; WORLD BANK, THE IMPACT OF ENVIRONMENTAL ASSESSMENT: A REVIEW OF WORLD BANK EXPERIENCE, World Bank Technical Paper No. 363 at 30-34 (1997).

¹²² See UNECE, *supra* note 114, at 15.

¹²³ See *id.*

¹²⁴ See CONSTITUCIÓN POLÍTICA DE LA REPÚBLICA DE PANAMÁ, *supra* note 97, art. 316; ORGANIC LAW, *supra* note 102, at arts. 120-21.

surrounding the Canal.¹²⁵ These communities comprise approximately sixty percent of Panama's population and include the nation's capital, Panama City.¹²⁶ The ACP, *in consultation with other government authorities*, must protect the environment in the Canal watershed, and must assess the environmental impact of projects and activities that may significantly impact the Canal watershed.¹²⁷

According to the regulations promulgated by the ACP pursuant to the Organic Law, the ACP is responsible for reviewing and approving EIAs for its own projects as well as for projects conducted by third parties in the Canal watershed; these EIAs must be performed in accordance with the ACP manual developed for this purpose.¹²⁸ However, the ACP's regulations subject projects referenced in article 325 of the Panamanian Constitution (such as the construction of a third set of locks) to the EIA requirements of the National Environmental Authority (Autoridad Na-

¹²⁵ See ORGANIC LAW, *supra* note 102, art. 120.

¹²⁶ Presentation by Roy Phillipps, ACP attorney, during meeting with ACP staff in the ACP office in the former Canal Zone, Dec. 13, 2007 (notes on file with the author); See also, Juan Luis Batista, *Panamá y Colón: ¿Una Sola Ciudad?*, LA PRENSA, Feb. 7, 2000 (explaining that approximately half of Panama's population resides in the area surrounding the Panama Canal).

¹²⁷ See ORGANIC LAW, *supra* note 102, arts. 121 (1), (5).

¹²⁸ See ACUERDO NO. 116, arts. 5, 7, 14, and 37-42 (July 27, 2006), <http://www.pancanal.com/esp/legal/reglamentos/acuerdo116.pdf>. At the conclusion of a meeting at the ACP's offices in the former Canal Zone on December 13, 2007, the ACP staff provided the author with a copy of the Manual Técnico de Evaluación Ambiental (2006) prepared by the ACP and with ANAM's Manual Operativo de Evaluación de Impacto Ambiental (Resolución No. AG-0292-01) (Dec. 9, 2001). The ACP staff also provided the author with the Environmental Evaluation Manual (January 1999) prepared for the Panama Canal Commission (the ACP's predecessor) by the U.S. Army Corps of Engineers, Mobile District. These EIA manuals do not appear to be available on the ACP website despite the availability of voluminous background materials on the Canal as well as the statutes and regulations applicable to the ACP. See <http://www.pancanal.com> (last visited on March 3, 2008).

cional del Ambiente, or ANAM) and to the approval of both ANAM and the ACP.¹²⁹ Because the ACP's own regulations subject the Panama Canal expansion project to ANAM's procedural and substantive EIA requirements, it is useful to examine the source and scope of ANAM's regulatory authority.

ANAM was created by Law No. 41, the general environmental law for the Republic of Panama, which was enacted by the National Assembly on July 1, 1998.¹³⁰ Law No. 41 grants ANAM the authority to enforce Panama's environmental laws, regulations, and national environmental policy.¹³¹ Among ANAM's obligations are the evaluation of EIAs and the promotion of public participation in the enforcement of environmental legislation and in the development and implementation of environmental policies, strategies, and programs.¹³²

Law No. 41 requires the preparation of an EIA prior to the commencement of any activity, work, or project in Panama that may generate environmental risks, *including projects to be conducted in the Canal watershed*, and designates ANAM as the regulatory entity responsible for EIA review and approval.¹³³ The EIA evaluation process consists of three steps: the submission of the EIA to ANAM; the evaluation of the EIA and its approval or rejection by ANAM; and, if the project is approved, the supervision and evaluation of the project's execution by the designated environmental authority.¹³⁴ ANAM is responsible for public consultation on the EIA, and must provide a public

¹²⁹ See *id.*, art. 40.

¹³⁰ See Ley General de Ambiente de la República de Panamá, No. 41, art. 5 (July 1, 1998), available at http://www/asamblea.gob.pa/NORMAS/1980/1983_018_0598.PDF.

¹³¹ See *id.*

¹³² See *id.*, at art. 7 (10), (11).

¹³³ See *id.*, at art. 23.

¹³⁴ See *id.* at art. 24.

comment period.¹³⁵ If the project proponent fails to submit an EIA or submits an inadequate EIA, ANAM may enjoin the implementation of the project or impose sanctions.¹³⁶ Pursuant to Law No. 41, ANAM has promulgated regulations detailing the EIA requirements and has produced an EIA manual.¹³⁷

The ACP's Organic Law, which was promulgated one year after Law No. 41, is silent on the relationship between the authority of ANAM and the ACP with respect to the approval of Canal-related EIAs.¹³⁸ However, the Organic Law does require the ACP to protect the Canal watershed "in coordination with competent authorities,"¹³⁹ and authorizes the ACP to promulgate EIA regulations "taking into account the general provisions in force in Panama."¹⁴⁰ Far from displacing ANAM's authority over Canal-related EIAs, the language of the Organic Law appears to defer to pre-existing environmental legislation.

Notwithstanding the Organic Law's apparent deference to ANAM's regulatory authority under Law No. 41, the ACP promulgated regulations on July 27, 2006 (five weeks before the referendum) that make the ACP the sole arbiter of *all* EIAs for Canal-related projects except major construction projects contemplated by article 325 of the Panamanian Constitution (such as the construction of the third set of locks).¹⁴¹ Because the ACP did carve out a

¹³⁵ See *id.* at art. 27.

¹³⁶ See *id.* at art. 30.

¹³⁷ ANAM's EIA regulations are set forth in EXECUTIVE DECREE NO. 209 (Sept. 5, 2006) (on file with the author). ANAM's EIA manual, which was supplied to the author by the ACP staff, is contained in RESOLUCIÓN NO. AG-0292-01 (Dec. 9, 2001) (on file with the author) *available at* www.asamblea.gob.pa/legispan/PDF_NORMAS/2000/2001/2001_303_3913.PDF.

¹³⁸ See *generally*, Organic Law, *supra* note 102.

¹³⁹ See *id.*, at art. 121(1).

¹⁴⁰ See *id.*, at art. 121(5).

¹⁴¹ See Acuerdo 116, *supra* note 128, at arts. 5, 7, 40.

narrow exception for Article 325 projects, there is no question that the proposed expansion of the Panama Canal is subject to the EIA requirements and approvals of both the ACP and ANAM.¹⁴²

ANAM's EIA manual unequivocally recognizes that environmental impact assessment is a tool for enhancing and informing decision-making by government agencies and by the public—rather than a post-hoc rationalization for previously approved projects.¹⁴³ Similarly, while the ACP's EIA manual emphasizes the technical rather than policy aspects of environmental impact assessment, the EIA manual prepared by the U.S. Army Corps of Engineers for the Panama Canal Commission (the ACP's predecessor), which is used as a reference by the ACP, explains that the fundamental purpose of the EIA process is to enhance decision-making by government agencies and by the public by providing information about the environmental impact of proposed actions.¹⁴⁴ The ANAM EIA manual points out that EIAs should be conducted at the earliest possible stage of the contemplated project or action.¹⁴⁵ The Panama Canal Commission EIA manual emphasizes that the methodology utilized should “bring together the results of all environmental studies conducted to allow preparation of a single consolidated document describing the considered action's total im-

¹⁴² See *id.*, art. 40; Constitución Política, *supra* note 97, at art. 325.

¹⁴³ See ANAM, Manual Operativo de Evaluación de Impacto Ambiental (RESOLUCIÓN NO. AG-0292-01) (Dec. 9, 2001) § 1.1.2, at 10 (on file with the author).

¹⁴⁴ See U.S. ARMY CORPS OF ENGINEERS (USACE), ENVIRONMENTAL ENVIRONMENTAL EVALUATION MANUAL at 28 (Jan. 1999) (on file with the author). ACP attorney Roy Phillipps informed the author that the USCACE manual has been superseded by the ACP's EIA manual and is currently used only as a reference. See March 28, 2008 e-mail correspondence between Roy Phillipps and the author (on file with the author).

¹⁴⁵ See ANAM, Manual Operativo de Evaluación de Impacto Ambiental, *supra* note 143, at 4, 10.

pacts.”¹⁴⁶ Both the ANAM and Panama Canal Commission EIA manuals discuss the importance of evaluating alternatives to the proposed action and of analyzing environmental and socioeconomic impacts in an integrated manner.¹⁴⁷

C. Subversion of the Referendum Process through Environmental Non-Compliance

In light of the foregoing language in the ANAM EIA manual and in light of Law No. 41’s prohibition on the commencement of projects or activities in the absence of an EIA, one would expect that a comprehensive EIA on a project as significant as the Panama Canal expansion would be completed and submitted for public comment and for ANAM and ACP approval prior to a national referendum. In the absence of a completed EIA, it would be difficult for Panamanian voters to fully assess the costs and benefits of the proposed Canal expansion.

Regrettably, the referendum took place *before* an EIA for the Canal expansion was produced and in the face of conflicting claims about the authority of ANAM to review and approve EIAs for Canal-related projects. The comprehensive Environmental Impact Study for the construction of the third set of locks was not completed until July of 2007 (nine months after the referendum),¹⁴⁸ and was not approved by ANAM until November of that same year.¹⁴⁹ While the ACP prepared several environmental

¹⁴⁶ See USACE, Environmental Evaluation Manual, *supra* note 144, at 28.

¹⁴⁷ See *id.* at 3-4, 190-97; ANAM, Manual Operativo de Evaluación de Impacto Ambiental, *supra* note 143, at 4.

¹⁴⁸ See Panama Canal Authority, Environmental Impact Study (EIS) for the Panama Canal Project—Third Set of Locks (2007), <http://www.pancanal.com/eng/expansion/eisa/index.html>.

¹⁴⁹ See Panama Canal Authority, <http://www.pancanal.com/esp/ampliacion/eisa/> (last visited March 2, 2008) (listing the EIAs prepared by ACP and the dates of ANAM

and socioeconomic impact evaluations prior to the referendum and presented these to the public in various fora,¹⁵⁰ these piecemeal assessments fell short of the comprehensive study recommended by the Panama Canal Commission EIA manual, and were not reviewed and approved by ANAM.¹⁵¹

In the weeks preceding the referendum, Panamanian citizens and non-governmental organizations (NGOs) began to criticize the “Sí” campaign (the government’s campaign in favor of the Canal expansion) for proposing to expand the Panama Canal without first having performed an EIA and for side-stepping ANAM’s regulatory authority.¹⁵² In response, ANAM director Ligia Castro de Doens announced that a review of an EIA by ANAM would only be necessary if the ballot proposal was approved.¹⁵³ Furthermore, the ACP declared that, pursuant to the ACP’s rule making power under the 1999 Organic Law, “to de-

approval and explaining that ANAM approved the Environmental Impact Study for the Third Set of Locks on November 9, 2007 pursuant to Resolución DIEORA 632-2007). It appears that the construction-related EIAs produced by the ACP *after* the referendum were all approved by ANAM.

¹⁵⁰ Presentation by Hortensia Broce, ACP official, during meeting with ACP staff in the ACP office in the former Canal Zone, Dec. 13, 2007 (notes on file with the author).

¹⁵¹ See Panama Canal Authority, *Estudios Complementarios*, <http://www.pancanal.com/esp/ampliacion/esia/complementarios/index.html> (providing links to these earlier studies); Manuel Zárate, *El Canal, El Ambiente y el Proyecto de Ampliación*, 124 TAREAS (Sept.-Dec. 2006), available at <http://bibliotecavirtual.clacso.org.ar/ar/libros/panama/cela/tareas/tar124/04zarate.pdf> (discussing the inadequacy of the fragmented environmental studies).

¹⁵² See Eric Jackson, *supra* note 12; *Asociación Ecologista Panameña y Asociación de Derecho Ambiental, En peligro la vida y el ambiente de los panameños*, 124 TAREAS (Sept.-Dec. 2006), available at <http://bibliotecavirtual.clacso.org.ar/ar/libros/panama/cela/tareas/tar124/10guevara.pdf>.

¹⁵³ See Jackson, *supra* note 12.

velop projects in the area that can affect the environment [and] to approve environmental impact studies that are required for authority projects . . . are functions of the [ACP] administrator."¹⁵⁴ In other words, the ACP took the position that ANAM's review of EIAs, as required by Law No. 41, did not apply to the ACP, and that if the referendum passed, the ACP would be authorized to approve its own EIA.¹⁵⁵

The positions taken by ANAM and by the ACP in connection with the EIA for the Canal expansion generated controversy in Panama. Former ANAM director Gonzalo Menéndez argued that the Organic Law did not give the ACP the power to usurp Panama's environmental legislation.¹⁵⁶ Mr. Menéndez alleged that the ACP "attempt[s] with unnatural and absurd legalisms to make us believe that there is no conflict of interest if the ACP does an environmental impact study and the same ACP approves it."¹⁵⁷

In short, the referendum process was abused. The Panamanian electorate was asked to approve an extremely expensive and controversial project in the absence of comprehensive information about the potential environmental and socioeconomic impacts and on the basis of piecemeal ACP studies that were not reviewed and approved in advance by ANAM.

D. Manipulation of the Referendum Process to Suppress the "No" Vote

In addition to the absence of a comprehensive EIA for the proposed Canal expansion project, the referendum was marred by procedural irregularities designed to favor the "Sí" campaign and silence the opposition.

¹⁵⁴ *See id.*

¹⁵⁵ *See id.*

¹⁵⁶ *See id.*

¹⁵⁷ *See id.*

First, the government's handling of the proposed Canal expansion lacked transparency. According to former Canal administrator Fernando Manfredo, the Panamanian public was kept in the dark during the nearly ten years that the ACP developed its studies and proposals regarding the future of the Canal.¹⁵⁸ By contrast, other interested parties, including shipping companies, the international community, the Panamanian construction industry, and the Panamanian association of engineers and architects, were consulted and informed.¹⁵⁹

When the Canal expansion proposal finally saw the light of day, the public was given only a few months to read, digest and analyze 55,000 pages of studies and supporting documents far too technical for the average lay person to understand.¹⁶⁰ To add insult to injury, the ACP's studies were initially available only in English.¹⁶¹ As Professor Miguel Antonio Bernal from the University of Panama pointed out, English is not the official language of Panama.¹⁶² Professor Bernal condemned the ACP for placing the burden on Panamanian citizens to translate the ACP's studies into Spanish.¹⁶³

Second, the government was accused of using public funds to promote the "Sí" campaign by taking over the airwaves and saturating radio and television broadcasts with pro-expansion propaganda.¹⁶⁴ Much of this propa-

¹⁵⁸ See Fernando Manfredo, *Canal de Panamá: El Proyecto del Tercer Juego de Esclusas*, 124 TAREAS (Sept.-Dec. 2006), available at http://bibliotecavirtual.clacso.org.ar/ar/libros/panama/cela/tareas/tar124/02_manfredo.pdf.

¹⁵⁹ See *id.*

¹⁶⁰ See *id.*; NotiCen, *supra* note 12.

¹⁶¹ Miguel Antonio Bernal, *The Right to Information*, The Panama News, May 7-20, 2006, Vol. 12, Num. 9 at http://www.thepanamanews.com/pn/v_12/issue_09/opinion_02.html.

¹⁶² See *id.*

¹⁶³ See *id.*

¹⁶⁴ See NotiCen, *supra* note 12.

ganda was intended to manipulate nationalist sentiment.¹⁶⁵ For example, on April 25, 2006, in an event marked by patriotic pomp and circumstance, President Torrijos endorsed the ACP's proposal and proclaimed that the Canal expansion would elevate Panama to the status of a First World nation.¹⁶⁶ The ceremony concluded with all of the participants standing and proudly singing the national anthem.¹⁶⁷ As if to discourage the public from reading the 55,000 pages of Canal-related documents, the ACP deputized sixty functionaries to explain in simple terms all of the Canal expansion's benefits.¹⁶⁸ The ACP reportedly hired a global public relations firm to disparage anti-expansion research projects and marginalize the grassroots "No" campaign.¹⁶⁹ According to the Frente Nacional por la Defensa de los Derechos Económicos y Sociales (FRENADESO), an umbrella organization of groups opposed to the Canal expansion, the cost of the "Sí" campaign was a staggering \$1.8 billion.¹⁷⁰

Third, the government allegedly used public funds to purchase votes from vulnerable segments of the population. President Torrijos purportedly gave indigent families a bi-monthly payment of \$35 and informed them that this assistance could only be sustained in the future if the "Sí" vote were to prevail.¹⁷¹ Similarly, President Torrijos raised eyebrows when he gave every representative of the country's *corregimientos* (the smallest level of local govern-

¹⁶⁵ See Manfredo, *supra* note 158.

¹⁶⁶ See *id.*

¹⁶⁷ See *id.*

¹⁶⁸ See *id.*

¹⁶⁹ See Danielle Ryan, *PR Pushing Through the Panama Canal Expansion*, Council on Hemispheric Affairs, Oct. 20, 2006, <http://www.scoop.co.nz/stories/HL0610/S00338.html>.

¹⁷⁰ See NotiCen, *supra* note 12.

¹⁷¹ See Eric Jackson, *On the Campaign Trail for the Canal Expansion Referendum*, The Panama News, June 4-17, 2006, Vol. 12, Num. 11, http://www.thepanamanews.com/pn/v_12/issue_11/business_02.html.

ment) \$80,000 for social projects in the midst of the pro-expansion campaign.¹⁷²

Fourth, the media collaborated with the “Sí” campaign by suppressing reports unfavorable to the expansion project during the referendum. For example, newspaper columnist Maribel Cuervo de Paredes alleged that she was fired from *La Prensa* (a major Panamanian newspaper) after 15 years of service for writing against the Canal expansion.¹⁷³ According to Cuervo de Paredes,

[t]he media have suppressed all the points and arguments of the proponents of the “No” [campaign]. And the reason is very simple. The owners of the media in Panama are owners of important businesses or form part of the law firms that litigate or provide services to the shipping companies or who [sic] represent firms or companies that provide services or sell products to the ACP. It's a matter of money.¹⁷⁴

When the Catholic Church demanded a fair debate over the proposed expansion project, *La Prensa* gave twice as much coverage to expansion proponents than to the Catholic bishops and no coverage to the views of the expansion opponents.¹⁷⁵ In some instances, newspaper reporters were, themselves, compromised by association with

¹⁷² See NotiCen, *supra* note 12.

¹⁷³ See *id.* Cuervo de Paredes claims that she was informed by her publisher that her column would be cancelled because her views were supposedly not “objective.” See Ashley Dalman, *Expanding the Panama Canal: A Wider Canal or More Governmental Payola?* Council on Hemispheric Affairs, Aug. 8, 2006, <http://www.coha.org/2006/08/08/expanding-the-panama-canal-a-wider-canal-or-more-government-payola/>.

¹⁷⁴ See NotiCen, *supra* note 12.

¹⁷⁵ See Dalman, *supra* note 173.

the “Sí” campaign. For example, the president of the Colegio de Periodistas (the journalists’ trade association) was the owner of the firm hired by the civic associations that supported the “Sí” campaign in the referendum.¹⁷⁶

Sixth, opponents of the Canal expansion were allegedly arrested, beaten, or otherwise intimidated in order to suppress the “No” vote. For example, anti-expansion campaigners were reportedly arrested in Chiriquí and in Panama City; subjected to detention and physical abuse in Coclé, Santiago de Veraguas, and Arraiján; and maimed in Chitré for passing out “No” campaign literature.¹⁷⁷ There is also evidence that employees of Constructora Urbana S.A. (CUSA), a construction company owned by ACP administrator Alberto Alemán Zubieta, were paid to become members of the pro-expansion “Obreros de la Construcción por el Sí,” an ad hoc organization created to give the impression that workers supported the Canal expansion.¹⁷⁸

Finally, the voting process itself was full of irregularities. On the day of the referendum, former Panamanian President Guillermo Endara, who dressed in red from head to toe to show his opposition to the expansion, complained that polling place workers wore “Sí” clothing and handed out cards with directions on where and how to vote—with propaganda supporting the “Sí” campaign printed on the opposite side.¹⁷⁹

E. Why the Canal Expansion Was Controversial

The subversion of the referendum process is unfortunate because the Canal expansion proposal was contro-

¹⁷⁶ See NotiCen, *supra* note 12.

¹⁷⁷ *Id.*

¹⁷⁸ See *id.*

¹⁷⁹ PanaGal, *Expansion of Panama Canal is Approved*, Sept. 4, 2007, <http://www.panamaexpertos.com/expansion-of-panama-canal-is-approved>.

versial and merited thoughtful public debate and analysis. While this article will not attempt to resolve the substantive controversy over the Canal expansion project, this section discusses the concerns expressed by the expansion project's critics in order to highlight the numerous environmental and socioeconomic impacts that should have been analyzed in painstaking detail in a comprehensive EIA prior to the referendum.

1. Environmental Concerns

The major environmental concerns voiced by the opponents of the Panama Canal expansion include salinization of the drinking water supply, the potential migration of species between the Atlantic and Pacific oceans, and deforestation.

At first glance, the proposed expansion project appears to be environmentally benign. All of the construction will take place in areas that were previously dredged, filled, and deforested during the initial Canal construction and during the aborted effort in the 1930s to begin work on a third set of locks.¹⁸⁰ The project will recycle sixty percent of the water it uses, which means that the new locks will use seven percent less water than the old locks.¹⁸¹

However, on closer inspection, studies performed by the ACP's own environmental consultants raise serious questions about the possible salinization of the drinking water upon which the Panama City metropolitan area relies.¹⁸² Miraflores, Gatún, and Alajuela are the three freshwater lakes used to fill the Canal's locks and to supply

¹⁸⁰ See Panama Canal Authority, *Proposal for the Expansion of the Panama Canal*, *supra* note 9, at 14, 24.

¹⁸¹ See *id.* at 46-47; Matalon, *supra* note 85.

¹⁸² See Ariel Rodríguez Vargas, *Impacto de la Ampliación en Los Lagos Gatún y Miraflores*, 124 TAREAS (Sept.-Dec. 2006), available at <http://bibliotecavirtual.clacso.org.ar/ar/libros/panama/cela/tareas/tar124/09vargas.pdf>.

drinking water to the neighboring population.¹⁸³ The environmental studies commissioned by the ACP suggest that the salinization of these lakes is already taking place and that the water recycling operations of the new locks will likely accelerate the intrusion of saltwater into the lakes.¹⁸⁴ In addition, underwater blasting and dredging associated with the construction project may contaminate the water supply.¹⁸⁵ According to the project's critics, the public documents prepared by the ACP prior to the referendum are misleading because they reassure the public that water quality will not be impaired by the construction of a third set of locks and do not address the considerable evidence to the contrary.¹⁸⁶

A second concern articulated by environmentalists is that the new locks will facilitate the passage of species from one ocean to the other, potentially damaging Caribbean coral reefs and other ecosystems.¹⁸⁷ As Greenpeace observes, "[t]he creation of artificial corridors that allow migration of species from previously separate habitats is of great concern because it is highly likely to have unpredictable and potentially catastrophic consequences on the finely balanced web of life in each habitat."¹⁸⁸ Scientists have identified a number of exotic species transported into the

¹⁸³ See *id.*

¹⁸⁴ See *id.*; Jackson, *supra* note 12.

¹⁸⁵ See Matthew Parker, *Changing Course*, THE GUARDIAN (Feb. 28, 2007).

¹⁸⁶ See Rodríguez Vargas, *supra* note 182; Jackson, *supra* note 12. For example, the ACP's *Proposal for the Expansion of the Panama Canal* states that "[e]ven when operating at maximum capacity, the third set of locks, equipped with water reutilization basins, will not affect the water quality of Gatún and Alajuela lakes or that of their tributaries. These lakes will keep their tropical fresh water quality with stable ecosystems, and the water will be kept to well within appropriate quality levels and standards in order that they can be made potable and used by the population." Panama Canal Authority, *supra* note 9, at 51.

¹⁸⁷ See NotiCen, *supra* note 12.

¹⁸⁸ See Parker, *supra* note 185.

waters of the Canal during the Canal's initial construction and subsequent operation, but there is a dearth of research on the effects of these species upon native ecosystems.¹⁸⁹

Finally, the construction of a third set of locks will result in the fragmentation and destruction of approximately 490 hectares of forests.¹⁹⁰ The deforestation is anticipated to produce ecosystem disruptions and loss of biological diversity.¹⁹¹ Among the forests potentially affected are the mangrove forests currently providing important ecosystem services in the form of flood control by absorbing billions of liters of water in their complex root systems.¹⁹² The destruction of these forests may increase the risk of urban flooding during the rainy season, particularly in the city of Colón.¹⁹³

2. Socioeconomic Concerns

The socioeconomic concerns articulated by the project's critics are complex and voluminous and are discussed only briefly below.

First, critics of the Canal expansion dispute the ACP's claim that the expansion is needed in order to maintain the Canal's competitiveness, question the economic feasibility of the project, and assert that project costs will exceed project revenues.¹⁹⁴ Numerous commentators have observed that the ACP's \$5.25 billion cost estimate is grossly understated and that the real cost of the Canal ex-

¹⁸⁹ See Andrea Gawrylewski, *Opening Pandora's Locks*, 21 THE SCIENTIST 47, 52-53, Oct. 1, 2007.

¹⁹⁰ See Fernando Manfredo, *Canal de Panamá y Medio Ambiente*, 126 TAREAS 103, 103-06 (May-Aug. 2007).

¹⁹¹ See *id.*

¹⁹² See Gawrylewski, *supra* note 189, at 47-48.

¹⁹³ See *id.*

¹⁹⁴ See Méndez, *supra* note 92.

pansion is likely to exceed \$10 billion.¹⁹⁵ Project critics dispute the ACP's assertion that these costs can be recovered through toll increases without undermining the competitiveness of the Panama Canal vis-à-vis alternative routes.¹⁹⁶ These critics point out that the ACP's ability to increase tolls is constrained by competition from the Suez Canal and from the U.S. overland route.¹⁹⁷ Furthermore, if global warming opens up an Arctic route (the coveted Northwest passage)—a much shorter path than the Panama Canal for trade between Europe and Asia and between the U.S. East Coast and Asia—then the Panama Canal may have to reduce tolls in order to remain competitive.¹⁹⁸

¹⁹⁵ See *id.*; Luxner, *supra* note 82; Tomás Drohan Ruiz, *El Verdadero Costo de la Ampliación del Canal de Panamá*, 124 TAREAS (Sept.-Dec. 2006), available at <http://bibliotecavirtual.clacso.org.ar/ar/libros/panama/cela/tareas/tar124/05ruiz.pdf>.

¹⁹⁶ See Roberto N. Méndez, *Viabilidad Financiera de un Tercer Juego de Esclusas*, 126 TAREAS 89, 95-96 (May-Aug. 2007); Fernando Manfredo, *Los Estudios Sobre la Ampliación del Canal de Panamá*, 123 TAREAS (May-Aug. 2006), available at <http://bibliotecavirtual.clacso.org.ar/ar/libros/panama/cela/tareas/tar123/04manfredo.pdf>.

¹⁹⁷ See Manfredo, *supra* note 158.

¹⁹⁸ See *id.*; Corbin, *supra* note 87; Scott Borgerson, *The Scramble for the Arctic*, 87 FOREIGN AFFAIRS 63, 68-71 (2008). As a consequence of global warming, the Arctic ice cap has been melting at a far more rapid rate than had been projected by almost all of the computer-generated simulations. See Andrew C. Revkin, *The Arctic's Alarming Sea Change: Dwindling Ice Cap Concerns Scientists But Heartens Traders*, INT'L HERALD TRIBUNE, Oct. 3, 2007, at 5. The thinning of the Arctic ice cap increases the feasibility of the Northwest Passage as a shorter route than the Panama Canal between the Atlantic and Pacific Oceans – both during the summer months (for normal ships) and year-round (for ships equipped with ice breakers). See Robert Wade, *A Warmer Arctic Needs Shipping Rules*, FINANCIAL TIMES (Asia Edition), Jan. 16, 2008, at 11; Saran Somanthan, Peter C. Flynn & Jozef K. Szymanski, *Feasibility of a Sea Route Through the Canadian Arctic*, 9 MARITIME ECONOMICS AND LOGISTICS 324 (2007). Some experts believe that a tipping point has already been reached and that increasingly faster melting will make the Northwest Passage a viable alterna-

These critics also question the ACP's assertion that the Canal will shortly reach maximum capacity, and cite numerous studies predicting a far lower annual increase in trade volumes than projected by the ACP.¹⁹⁹ In short, the project opponents argue that the Canal expansion is of dubious economic value and that the government's limited resources should be invested in more worthwhile undertakings.²⁰⁰

Second, project critics caution that the Canal expansion may impose serious financial burdens on Panama.²⁰¹ If the expansion project's costs cannot be recovered through toll increases and through increased trade volumes, Panamanian taxpayers may wind up footing the bill.²⁰² Although the ACP claims that the expansion project is self-financing, the ACP acknowledges that it will have to obtain an additional \$500 million per year in the financial markets in order to cover expansion project requirements.²⁰³ The ACP asserts that the Panamanian government will not have to endorse or guarantee these loans because the Panamanian Constitution makes the ACP financially independent from the rest of the government.²⁰⁴ Project critics point out that it is unclear whether lenders will provide loans to the ACP without an explicit guarantee from the Panamanian government.²⁰⁵ If a government guarantee is required, then the Canal expansion could double the national debt and reduce the government's ability to promote economic development and provide for the basic needs of the popula-

tive route for much of the year as early as 2015—even for ships that are not equipped with icebreakers. *See* Wade, *supra* note 198, at 11.

¹⁹⁹ *See* Méndez, *supra* note 92.

²⁰⁰ *See* Méndez, *supra* note 196, at 100.

²⁰¹ *See* Manfredo, *supra* note 158, at 15.

²⁰² *See id.*

²⁰³ *See* Panama Canal Authority, *supra* note 9, at 61-62.

²⁰⁴ *See id.* at 63-64.

²⁰⁵ *See* Manfredo, *supra* note 158.

tion.²⁰⁶ Moreover, the ACP's investment of Canal revenues in the expansion project represents a diversion of funds that could have been earmarked for more socially productive purposes.²⁰⁷

Third, project opponents dispute the ACP's claims that the expansion project will generate jobs and other economic benefits for Panama.²⁰⁸ They point out that the estimated 7,000 new jobs generated during the peak construction period are temporary jobs of a relatively short duration²⁰⁹ and few Panamanians are qualified for these highly skilled positions.²¹⁰ While the ACP claims that public and private entities will institute training programs to ensure that the labor force is primarily Panamanian, the project's critics question how such training programs will be financed.²¹¹ The project opponents reject as completely unsubstantiated the ACP's claim that the Canal expansion will produce an economic boom in Panama that will generate over 200,000 additional jobs in the long run.²¹² These critics maintain that only a small fraction of the funds invested in the Canal expansion will remain in Panama, and that most of the money will be used to hire foreign contractors and consultants and to import equipment, technology and materials.²¹³

²⁰⁶ See *id.*; Manfredo, *supra* note 196.

²⁰⁷ See Manfredo, *supra* note 158.

²⁰⁸ See *id.*

²⁰⁹ See *id.*

²¹⁰ See Corbin, *supra* note 87.

²¹¹ See Panama Canal Authority, Proposal for the Expansion of the Panama Canal, *supra* note 9, at 67-68 (discussing the training programs); Manfredo, Canal de Panamá: El Proyecto, *supra* note 158 (questioning how the training programs will be financed).

²¹² See Manfredo, *supra* note 158.

²¹³ See Jorge E. Illueca et al., *Algunos Mitos En Torno a la Ampliación del Canal*, 124 TAREAS, Sept.-Dec. 2006, available at <http://bibliotecavirtual.clacso.org.ar/ar/libros/panama/cela/tareas/tar124/08illueca.pdf>; Manfredo, *Los Estudios Sobre la Ampliación*, *supra* note 196.

Fourth, the project critics highlight the potentially negative impact of the Canal expansion on the Panama City metropolitan area. They assert that the Canal expansion project will enlarge the population of the metropolitan region, as rural migrants and foreign workers converge on the area in search of Canal-related employment.²¹⁴ Because the vast majority of migrants will not find jobs, this migration will increase urban poverty and unemployment, swell the ranks of those working in the informal sector, strain public services (including the police and the judiciary), place additional demands on the urban housing stock, and generate additional shanty towns.²¹⁵

Fifth, project critics contend that the real beneficiaries of the Canal expansion will be the friends and relatives of government officials who will profit handsomely from Canal-related contracts.²¹⁶ These critics point out that ACP directors and administrators have blatant conflicts of interests because they own shares or have other commercial ties with the construction companies, banks, and law firms that stand to gain from this project.²¹⁷ These concerns were reinforced when the first company awarded a construction contract proved to be closely associated with the current ACP administrator.²¹⁸ On July 6, 2007, the ACP announced that Constructora Urbana S.A. (CUSA), which is owned by the family of ACP administrator Alberto Alemán Zubieta, had been awarded the contract for the excavation of the Pacific entrance for the new set of locks.²¹⁹

Sixth, the project opponents maintain that the billions of dollars allocated for the Canal expansion should

²¹⁴ See Manfredo, *supra* note 158.

²¹⁵ See *id.*

²¹⁶ See Méndez, *Por Qué Panamá Debe Decir "No," supra* note 92; *Doubts Over Transparency of Canal Tender*, Caribbean and Central American Report, July 19, 2007.

²¹⁷ See Méndez, *Por Qué Panamá Debe Decir "No," supra* note 92.

²¹⁸ See Caribbean and Central American Report, *supra* note 216.

²¹⁹ See *id.*

instead be directed toward health, education, transportation and other national priorities.²²⁰ These critics point out that Panama currently has one of the most unequal distributions of wealth in Latin America.²²¹ According to the World Bank, nearly forty percent of Panama's population lives in poverty.²²² While the wealthiest 20 percent of the population receives 60.3 percent of the country's wealth, the poorest 20 percent receives only 2.5 percent.²²³

Finally, several critics of the Canal expansion project have emphasized the need to integrate the Panama Canal into the country's development strategy, rather than dealing with it as a separable entity.²²⁴ These critics point out that it is necessary to develop a national development plan that will utilize the Canal to stimulate other sectors of the economy,²²⁵ and that will include a strong social justice component designed to strengthen the provision of essential services, such as health, education, transportation, housing, and environmental protection.²²⁶

E. The Post-Referendum Environmental Impact Assessment

Nine months after the referendum, the ACP prepared a comprehensive EIA for the Canal expansion project that encompassed both environmental and socioeconomic impacts.²²⁷ Critics of the project lambasted the EIA for

²²⁰ See Méndez, *supra* note 92.

²²¹ See Zárate, *supra* note 151.

²²² See World Bank, *Interim Strategy Note For The Republic Of Panama FY 2006-2007*, Report No. 32887-PA (Aug. 30, 2005) at 7.

²²³ See World Bank, *WORLD DEVELOPMENT INDICATORS 2006*, Table 2.8 (2006), available at http://devdata.worldbank.org/wdi2006/contents/Table2_8.htm.

²²⁴ See Gandásegui, *supra* note 1; *supra* note 92; Zárate, *supra* note 151.

²²⁵ See Gandásegui, *supra* note 1.

²²⁶ See Méndez, *supra* note 92.

²²⁷ See Panama Canal Authority, *supra* note 148.

failing to fully address one of the most devastating potential consequences of the project: the salinization of the water supply of the Panama City metropolitan area.²²⁸ Nevertheless, the EIA was approved by ANAM on November 9, 2007.²²⁹ While a substantive analysis of the environmental and socioeconomic concerns addressed in the EIA is beyond the scope of this paper, one significant procedural defect must be noted.

Contrary to the EIA principles discussed in Part II (A), the EIA did not analyze alternatives to the proposed Canal expansion,²³⁰ presumably because the outcome of the referendum rendered such an analysis moot. It has long been recognized that the analysis of alternatives is at the very heart of the EIA process.²³¹ This analysis compares several means of achieving the project objective (including the option of not proceeding at all—the no action alternative) so as to enable the decision-maker to select the most

²²⁸ See Ariel R. Rodríguez Vargas, *Intrusión Salina en el Canal de Panamá*, BURICA PRESS, Sept. 24, 2007, available at burica.wordpress.com/2007/09/24/intrusion-salina-en-el-canal-de-panama/ (translating the conclusions of the leading scientific studies regarding salinization and making policy recommendations); Ariel R. Rodríguez Vargas, *Cuestionan EIA y Foro Público de la ACP Sobre Ampliación*, BURICA PRESS, Sept. 8, 2007, available at burica.wordpress.com/2007/09/08/cuestionan-eia-y-foro-publico-de-la-acp-sobre-ampliacion/; Ariel R. Rodríguez Vargas, *Estudio de Impacto Ambiental de la Ampliación del Canal de Panamá vs Calidad y Cantidad de Agua Dulce de Los Lagos*, BURICA PRESS, Aug. 28, 2007, available at burica.wordpress.com/2007/08/28/ampliacion-del-canal-de-panama-vs-calidad-y-cantidad-de-agua-dulce/.

²²⁹ See Panama Canal Authority, <http://www.pancanal.com/esp/ampliacion/eisa/> (last visited Mar. 2, 2008) (explaining that ANAM approved the Environmental Impact Study for the Third Locks on Nov. 2, 2007, pursuant to Resolución DIERO 632-2007).

²³⁰ See Panama Canal Authority, *supra* note 148.

²³¹ See Tilleman, *supra* note 121, at 384-93; RODGERS, *supra* note 121, at 957-63; UNECE, *supra* note 114, at 15.

promising alternative.²³² Under ordinary circumstances, one would expect the EIA for the Canal expansion project to compare the costs and benefits of the proposed action with several alternatives, including the no action alternative—the option of not proceeding at all.²³³

Regrettably, the subversion of the EIA process and the subversion of the referendum process proved to be mutually reinforcing. In other words, the ACP's failure to prepare a comprehensive EIA prior to the referendum impoverished the public debate over the proposed Canal expansion and arguably facilitated the victory of the "Sí" campaign. The victory of the "Sí" campaign, in turn, impoverished the EIA process by excluding alternatives to the contemplated action from ANAM and ACP's consideration. As a result, the EIA process was reduced to an empty ritual, a technical justification for a decision made at the highest levels of government and subsequently "approved" in a "democratic" referendum rather than a tool to inform and enhance public and governmental decision-making over Panama's single most important resource.

²³² See UNECE, *supra* note 114, at 15.

²³³ See Tilleman, *supra* note 121, at 384-93; Rodgers, *supra* note 121, at 957-63, UNECE, *supra* note 114, at 15. Under U.S. law, for example, the regulations promulgated pursuant to NEPA specify how the analysis of alternatives is to be conducted and provide criteria for the analysis of the no-action alternative. See 40 C.F.R. § 1502.14 (1978) (outlining the requirements for the analysis of alternatives, including the no-action alternative); 40 C.F.R. § 6.203 (2007) (providing additional guidance on the preparation and evaluation of the no-action alternative). Consistent with U.S. and international EIA practice, the EIA manual prepared for the Panama Canal Commission (the ACP's predecessor) explicitly required the analysis of the no-action scenario and the development and analysis of alternatives to the proposed action. See USACE, *supra* note 144, at 2-4.

III. Reflections on the Colonial Legacy

While the Canal expansion project is currently in the construction phase, the case study nevertheless holds valuable lessons for Panama and for other post-colonial societies blessed (or cursed) with valuable natural resources. Wittingly or unwittingly, colonial institutions and practices persist long after the departure of the colonial power and distort economic development and governmental decision-making. This section identifies specific aspects of the colonial legacy that continue to affect the operation of the Canal and concludes with several suggestions designed to mitigate the colonial legacy by enhancing public participation in the development planning process.

A. The Economic Enclave Problem

The Panama Canal historically functioned as an economic enclave analogous in some respects to the oil, mining, and agricultural enclaves operated by transnational corporations throughout the Americas.²³⁴ Enclaves, by definition, extract wealth from a particular sector of the economy without developing significant linkages to other sectors and without incorporating large segments of the domestic labor force.²³⁵ Just as countries dependent on

²³⁴ See Zárate, *supra* note 151; Castro, *supra* note 5, at 208; Julio Yao, *¿Es el Canal Patrimonio Inalienable de la Nación o Propiedad de la ACP?* 124 TAREAS (Sept.-Dec. 2006), available at <http://bibliotecavirtual.clacso.org.ar/ar/libros/panama/cela/tareas/tar124/03yao.pdf>. The Canal Zone differed from traditional economic enclaves in two important respects. First, the Canal Zone was operated directly by the U.S. government rather than by private capital. Second, instead of exploiting the local labor force, the Canal Zone applied U.S. labor standards and paid salaries much higher than prevailing local wages. See Castro at 208.

²³⁵ See Macartan Humphreys, Jeffrey D. Sachs & Joseph E. Stiglitz, *Introduction: What is the Problem with Natural Resource Wealth?*

natural resource extraction derive a substantial portion of national revenues from extractive industries, Panama, after the transfer of the Canal, would also derive a significant share of its national income from the operation of the Canal.²³⁶ The Panama Canal is currently Panama's single largest generator of foreign capital but does not represent a major source of employment for Panama's largely unskilled workforce²³⁷ and does not represent an integral part of a multi-sector development strategy.²³⁸

As the literature on enclave economies points out, countries that specialize in natural resource exploitation often perform worse economically than countries with fewer resources.²³⁹ One of the reasons for this poor economic performance is failure to invest in other economic sectors or in the human capital necessary to develop other areas of the economy.²⁴⁰ Education, for example, is frequently neglected because the production of current income does not require a highly diversified and skilled workforce.²⁴¹

One lesson for Panama from the experience of more traditional enclave economies is the importance of integrating the Canal into the government's long-term development planning. As several Panamanian observers have noted, the ACP currently operates as a "parallel republic" whose primary mission is the efficient administra-

ESCAPING THE RESOURCE CURSE 4 (Macartan Humphreys et al., eds. 2007).

²³⁶ The Canal currently accounts for approximately 20 percent of Panama's gross domestic product and a significant share of the country's national budget. See Andrew Beatty, *Panama Canal Authority Sees Revenue Growth in 2008*, REUTERS (Feb. 19, 2008), available at <http://www.reuters.com/> (search "Andrew Beatty revenue growth 2008.")

²³⁷ See Corbin, *supra* note 87.

²³⁸ See Zárate, *supra* note 151; Yao, *supra* note 234.

²³⁹ See Humphreys, *supra* note 235, at 1.

²⁴⁰ See *id.* at 10, 12.

²⁴¹ See *id.* at 10.

tion of the Canal.²⁴² In order to relieve poverty, generate employment, and develop other sectors of the economy, it is essential to integrate the operation of the Canal into a multi-faceted development strategy designed to diversify Panama's economic base and to provide jobs, housing, education, and basic social services.

B. Corruption and Lack of Government Accountability

A second feature of natural resource enclaves is corruption and lack of government accountability. Enclave economies are frequently characterized by high levels of corruption because those who control the country's wealth-producing assets can use this wealth to remain in office.²⁴³ Enclave economies also tend to have weak, unaccountable governments because they rely on external income sources to fill the national coffers and are relatively less dependent on the good will of taxpayers.²⁴⁴ Indeed, citizens often become politically passive and do not monitor government expenditures or actively participate in government decision-making.²⁴⁵

As explained in Part I (C), the Panamanian Constitution attempts to address the problem of corruption by insulating the ACP from partisan political pressure. The Constitution makes the ACP an autonomous legal entity whose budget is separate from the national budget, whose directors are appointed to staggered terms, and whose employees are civil servants selected on the basis of merit-based criteria.

²⁴² See Méndez, *supra* note 92; Yao, *supra* note 234.

²⁴³ See Méndez, *supra* note 92; Yao, *supra* note 234.

²⁴⁴ See *id.* at 11-12.

²⁴⁵ See Terry Lynn Karl, *Ensuring Fairness: The Case for a Transparent Fiscal Social Contract*, ESCAPING THE RESOURCE CURSE, at 264-65.

Despite these laudable efforts to minimize corruption, the absence of legislation prohibiting ACP employees from awarding Canal-related contracts to businesses in which they or their families hold a financial stake²⁴⁶ creates the impression of self-dealing. It may also enable government officials and their families to benefit economically from the Canal expansion project while imposing the costs on the Panamanian public. Adoption of conflict of interest legislation (or, alternatively, ACP conflict of interest regulations) should be a priority as the Canal expansion project proceeds.

Furthermore, government accountability requires transparency and public participation in the decision-making process. In theory, Article 325 of the Panamanian Constitution promotes government accountability by requiring a referendum on any proposal for the construction of a third set of locks or a sea-level canal on the existing route. However, this provision covers only major changes to the Canal's operations and is insufficient even for this narrow range of activities in the absence of additional provisions protecting the integrity of the decision-making process.

In order to secure meaningful public input on major changes to the Canal's operations, it is essential to promulgate legislation mandating a pre-referendum comprehensive EIA. As Part II of this article makes clear, one of the fundamental problems with the Canal expansion project referendum was the absence of a comprehensive assessment of the project's environmental and socioeconomic impacts *before* the national plebiscite despite the seriousness of the concerns raised by the project's opponents. Regrettably, the preparation of a comprehensive EIA prior

²⁴⁶ See CARIBBEAN AND CENTRAL AMERICAN REPORT, *supra* note 216 (explaining that "in Panama there are no restrictions for companies owned by relatives of top officials gaining public contracts, including canal extension contracts with ACP.")

to the referendum was not expressly mandated by the Constitution, by the legislation calling for the referendum, by the ACP's Organic Law, or by the ACP's regulations. While the failure to prepare a comprehensive EIA prior to the referendum was inconsistent with the spirit if not the letter of Law No. 41 and of ANAM's EIA manual,²⁴⁷ ANAM's director took the position that an EIA would not be required unless the "Sí" campaign prevailed.²⁴⁸ One of the lessons of this debacle is that any legislation calling for a popular referendum on a project of national significance must expressly require the preparation of a comprehensive EIA well in advance of the referendum.

Moreover, in order to enhance the quality of government decision-making on all Canal-related projects, it is essential that the ACP's environmental determinations be overseen by ANAM. The ACP's EIA regulations for non-Article 325 projects erode government accountability by making the ACP the final arbiter of all Canal-related EIAs including projects undertaken by the ACP.²⁴⁹ This arrangement is problematic because it places the ACP in the position of both promoter and regulator of ACP projects that may have significant impacts on the Canal watershed. In order to avoid actual or apparent conflicts of interest and in order to benefit from the environmental expertise of ANAM, the ACP should modify its regulations to require ANAM approval of EIAs for all Canal-related projects undertaken by the ACP and its consultants or contractors, whether or not these projects rise to the level of Article 325 projects.

Finally, the referendum and the post-hoc EIA for the Canal expansion project exposed deeper problems with the EIA process in Panama that diminish transparency and accountability. Because these problems are inextricably

²⁴⁷ See *supra* notes 137, 143-45, and accompanying text.

²⁴⁸ See *id.*

²⁴⁹ See *supra* notes 136-39 and accompanying text.

intertwined with the issue of public participation and democratic decision-making, they are discussed in the final section of this article.

C. The Civilizing Mission and Authoritarian Political Culture

The Canal divided Panama into two distinct nations: the prosperous, efficiently managed U.S.-dominated Canal Zone and the poverty-stricken, “underdeveloped” Panamanian state ruled by the Panamanian oligarchy.²⁵⁰ U.S. officials and the U.S. media justified the U.S. colonial presence in Panama by depicting the Canal Zone as an oasis of civilization amidst the “torrid, uncontrolled life of the tropics” and by constructing Panamanians, Colombians, West Indians and indigenous peoples as “natives” incapable of democratic self-government.²⁵¹ Sadly, this colonial construct would be internalized by Panamanians and would reinforce both the racism and the authoritarianism of the Panamanian oligarchy, which perceived the Canal Zone as a model of efficiency.²⁵²

This emphasis on efficiency at the expense of other values (such as democracy) is a vestige of the colonial experience that is evident in some of the ACP’s publications. For example, the ACP’s EIA manual (the Manual Técnico de Evaluación Ambiental) is concise and narrowly technocratic (as its name implies), with no discussion of the underlying policies, principles, and objectives of environmental impact assessment.²⁵³ The ACP’s 2003 Social and Environmental Report is replete with references to the

²⁵⁰ See Castro, *supra* note 234, at 208-09; Zárate, *supra* note 151; LAFEBER, *supra* note 2, at 84, 101-05, 118-119; OVIDIO DIAZ ESPINO, HOW WALL STREET CREATED A NATION: J.P. MORGAN, TEDDY ROOSEVELT AND THE PANAMA CANAL 197 (2001).

²⁵¹ See LINDSAY-POLAND, *supra* note 5, at 3-6.

²⁵² See Castro, *supra* note 234, at 209-10.

²⁵³ See ACP, *supra* note 128.

ACP's "efficiency" and "productivity" and emphasizes technocratic environmental objectives (such as energy, efficiency, best practices in reuse and recycling, and best standards to handle hazardous substances) in lieu of process-oriented objectives such as public participation in the environmental decision-making process.²⁵⁴

As environmental impact assessment has become widely utilized by planners and decision-makers throughout the world, two distinct variations of EIA have emerged: technocratic and democratic.²⁵⁵ The technocratic version of EIA is designed to provide information to government officials and project promoters on the environmental impacts of projects and activities in order to comply with pre-established regulatory standards.²⁵⁶ It tends to focus on the physical environment and may not always identify alternative courses of action.²⁵⁷

The democratic version of EIA is designed to integrate environmental and socioeconomic considerations into economic planning and to serve as a vehicle for public involvement in the decision-making process.²⁵⁸ It tends to be process-oriented, externally focused, and open-ended.²⁵⁹ Early identification of alternatives is a hallmark of this approach.²⁶⁰

While the EIA approach adopted by the ACP in its EIA manual incorporates socioeconomic considerations into the EIA process, the ACP's approach is nevertheless

²⁵⁴ See ACP, *Informe Social y Ambiental* (Social and Environmental Report) (2003), at 17, 39, *available at* <http://www.pancanal.com/common/general/reports/acp-social-environmental-report-2003.pdf>.

²⁵⁵ See DAVID B. SMITH & MIEKE VAN DER WANSEM, *STRENGTHENING EIA CAPACITY IN ASIA 1-2* (World Resources Institute 1995).

²⁵⁶ See *id.* at 1.

²⁵⁷ See *id.*

²⁵⁸ See *id.* at 1-2.

²⁵⁹ See *id.* at 2.

²⁶⁰ See *id.*

more akin to the technocratic rather than the democratic EIA model.²⁶¹ Even though the ACP has developed procedures for public involvement,²⁶² the ACP's EIA manual omits several important elements that are essential to the promotion of robust public debate about the environmental and socioeconomic impacts of proposed projects.

First, the ACP's EIA manual neglects to emphasize the importance of EIA as a planning tool and fails to provide guidance on precisely when an EIA should be developed. In the absence of explicit guidance about the timing of environmental review, there is a danger that the EIA will not be prepared until after a decision has been made (as occurred with the Canal expansion project) and will become a post-hoc rationalization rather than a deliberative document designed to facilitate the evaluation of the proposed project by the public and by government officials.

Second, the EIA manual should require public input on the scope of the EIA and the issues to be analyzed at the earliest possible stage in the EIA process.²⁶³ For example, the public should have been invited to comment on the design of the EIA for the proposed Canal expansion project well in advance of the referendum. By involving the public at a preliminary stage in the EIA process, the ACP would have received early notice of the public's key concerns and would have had the opportunity to produce an EIA (prior to the referendum) designed to foster meaningful public de-

²⁶¹ See ACP, *supra* note 128.

²⁶² The ACP provided the author with its public involvement guidelines at the conclusion of a meeting with the ACP staff on December 13, 2007. See ACP, *Procedimiento Para la Realización del Foro Público* (on file with the author); ACP, *Procedimiento Para la Preparación de un Plan de Divulgación y Consulta Pública* (on file with the author).

²⁶³ For example, under the U.S. regulations implementing NEPA, federal agencies are required to invite citizens to participate in the EIA scoping process in order to identify major issues well in advance of the preparation of the EIA. See 40 C.F.R. § 1501.7 (1978).

bate about the costs and benefits of the proposed Canal expansion and its alternatives.

Third, the ACP's EIA manual should require the identification and analysis of alternatives to the proposed action (including the no action alternative) and should provide guidance on how to evaluate these alternatives. As explained in Part II of this article, the alternatives discussion drives the EIA analysis because it enables the public and the government to compare the environmental and socioeconomic costs and benefits of alternative ways of achieving a particular objective. If the EIA is prepared after alternatives have been foreclosed (as occurred with the Canal expansion), the public participation process becomes a meaningless ritual that frustrates and disempowers the communities affected by the proposed project.

Fourth, the ACP's EIA manual should promote meaningful dialogue about the project and its alternatives by requiring the ACP to articulate and provide a detailed response to the concerns voiced by the proposed project's opponents. In so doing, the EIA manual would force the ACP to analyze new information supplied by the public and would reassure the public that its contributions will be valued and taken seriously.

Finally, the ACP should make its EIA manual and public involvement guidelines available on its website so that members of the public can understand and monitor the EIA process.

Because the ACP's EIA manual is consistent with the EIA regulations promulgated by ANAM in Executive Decree 209,²⁶⁴ the recommendations set forth herein apply with equal force to ANAM's EIA regulations. Indeed, given ANAM's statutory obligation to protect the environment and to promote public participation, it is essential that ANAM take a leadership role in promoting a democratic rather than technocratic conception of EIA. Although

²⁶⁴ See Executive Decree 209, *supra* note 137.

ANAM's EIA manual is vastly superior in this respect to the ACP's EIA manual, ANAM's EIA regulations generally provide little to no guidance on the key EIA reforms proposed herein.

As Panama struggles to rid itself of its authoritarian legacy, the adoption of a democratic conception of EIA and the promotion of public participation in government decision-making will fulfill several important objectives. The first objective is to generate additional information. The EIA process invites the public to present additional information and perspectives to decision-makers in order to help overcome bureaucratic inertia or tunnel vision.²⁶⁵ The second objective is to enhance government accountability. Public participation mechanisms facilitate public oversight of government decision-making by requiring decision-makers to publicly justify and explain their decisions.²⁶⁶ The third objective is to create formal mechanisms for public input in order to prevent government "capture" by powerful economic interests.²⁶⁷ In the absence of such mechanisms, the public would lack the resources, the "insider" relationships, and the organization to influence the decision-making process.²⁶⁸ Finally, public participation mechanisms promote democratization and civic engagement by fostering informed and reasoned debate about whether a particular project or decision will promote the common good.²⁶⁹ The democratic conception of the EIA process is particularly compelling in the case of the Panama Canal in light of the Canal's economic and symbolic significance to the Panamanian nation and in light of the danger that this valuable resource will be "captured" by the economic elite.

²⁶⁵ See Stephanie Tai, *Three Asymmetries of Informed Environmental Decisionmaking*, 78 TEMPLE L. REV. 659, 677 (2005).

²⁶⁶ See *id.* at 677-78.

²⁶⁷ See *id.*

²⁶⁸ See *id.*

²⁶⁹ See *id.* at 678-79.

While the recommended reforms are an important first step in ensuring that the Canal expansion debacle will not be replicated in the evaluation of other projects, public participation in the development planning process will not become a reality in the absence of the political will to depart from the country's authoritarian past and to embrace a more democratic conception of the common good.

Conclusion

The Panama Canal case study illustrates the ways in which the colonial legacy frustrates the development planning process in post-colonial societies and highlights the importance of public participation as a counterweight to the persistence of colonial institutions and practices. In addition to the domestic, legal, and political constraints discussed in this article, Panama's options with respect to the Canal are profoundly constrained by the interests of the Canal's users: the international shipping industry and the countries whose merchandise traverses the Canal (particularly the United States, China, Korea, Japan and the European Union).²⁷⁰ While an analysis of these international constraints is beyond the scope of this article, it is important to remember that Panama's destiny (at least in the foreseeable future) will continue to be shaped by its strategic location at the crossroads of international trade. Whether the Canal will be managed in the interests of the Panamanian people will depend on the country's ability to overcome the domestic legacy of colonialism and to skillfully manage the challenges posed by the international economic order.

²⁷⁰ See Ruiz, *supra* note 195.

