

INTERNATIONAL COURT OF JUSTICE

**DISPUTE CONCERNING
CONSTRUCTION OF A ROAD IN COSTA RICA
ALONG THE SAN JUAN RIVER
(NICARAGUA V. COSTA RICA)**

MEMORIAL
OF THE REPUBLIC OF NICARAGUA



VOLUME I

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LIST OF ACRONYMS

BMP	Best Management Practices
CACJ	Central American Court of Justice
CCAD (Spanish Acronym)	Central American Commission for Environment and Development
CFIA (Spanish Acronym)	Association of Federated Engineers and Architects of Costa Rica
CONAVI (Spanish Acronym)	Consejo Nacional de Vialidad (Spanish) or National Roads Authority
CRM	Memorial of Costa Rica
EIA	Environmental Impact Assessment
EPN (Spanish Acronym)	Empresa Portuaria Nacional (Spanish) or National Port Authority
FONARE (Spanish Acronym)	National Recycling Forum (Nicaragua)
FUNDENIC-SOS (Spanish Acronym)	Nicaraguan Foundation for Sustainable Development
ILC	International Law Commission
INETER (Spanish Acronym)	Territorial Institute of Nicaragua
IUCN	International Union for the Conservation of Nature
LANAMME (Spanish Acronym)	Laboratorio Nacional de Materiales y Modelos Estructurales, Universidad de Costa Rica (Spanish) or National Laboratory of Materials and Structural Models
MARENA (Spanish Acronym)	Ministerio del Ambiente y los Recursos Naturales (Spanish) or Ministry of the Environment and Natural Resources
MINAET (Spanish Acronym)	Ministerio del Ambiente, Energía y Mares (Spanish) or Ministry of Environment, Energy and Telecommunications
NM	Nicaragua Memorial
NCM	Nicaragua Counter Memorial
NR	Nicaragua Rejoinder
OCAS	Organization of Central American States
SETENA (Spanish Acronym)	Secretary General of Costa Rica's National Environmental Technical Secretariat
SI-A-PAZ (Spanish Acronym)	International System of Protected Areas for Peace

SICA (Spanish Acronym)	Sistema de Integración Centroamericana (Spanish) or Central American Integration System
TAA (Spanish Acronym)	Costa Rica's Administrative Environmental Court
UNECE	United Nations Economic Commission for Europe
UNESCO's MAB	United Nations Educational, Scientific and Cultural Organization 's Man and the Biosphere Programme
UNEP	United Nations Environment Programme

CHAPTER 1

INTRODUCTION

1.1 The Republic of Nicaragua filed an Application with the Court on 22 December 2011 instituting the present proceedings against the Republic of Costa Rica for violations of Nicaraguan sovereignty and major environmental harm to its territory resulting from the construction of a road, most of which follows the southern, or Costa Rican, bank of the San Juan de Nicaragua River (also referred in this Memorial as San Juan River).

1.2 The title given to the case by the Court is *Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica)*.

1.3 By Order of 23 January 2012 the Court fixed the time limits for the filing of the Parties' pleadings as 19 December 2012 for the Memorial of Nicaragua and 19 December 2013 for the Counter-Memorial of Costa Rica. The present Memorial of Nicaragua is filed within the time limit so fixed.

A. JURISDICTION OF THE COURT

1.4 In accordance with the provisions of Article 36, paragraph 1, of the Statute, jurisdiction exists by virtue of Article XXXI of the American Treaty on Pacific Settlement signed in Bogotá on 30 April 1948 (Pact of Bogotá). Both the Republic of Nicaragua and the Republic of Costa Rica are parties to the Pact of Bogotá, the former without any pertinent reservation, and the latter with no reservations. In accordance with the provisions of Article 36, paragraph 2, of the

Statute, jurisdiction also exists by virtue of the operation of the Declaration of the Applicant State dated 24 September 1929 and the Declaration of Costa Rica dated 20 February 1973, both Declarations being without pertinent reservations.

B. THE SCOPE OF THE DISPUTE

1.5 Nicaragua instituted the present proceedings in response to Costa Rica's unilateral decision, made without informing or consulting with Nicaragua, to construct a road (hereafter referred to as the Road for simplicity¹) some 160 kilometers in length, 120 kilometers of which follows the southern bank of the San Juan de Nicaragua River where it forms the border between the two countries and thus causing harm to the San Juan de Nicaragua River². The Road was constructed pursuant to an Emergency Decree³ adopted by the President of Costa Rica which allowed construction to proceed without complying with the normally applicable requirements under Costa Rican law, such as the preparation of an environmental impact assessment⁴. Costa Rican officials also contended that the Emergency Decree exempted them from obligations deriving from bilateral,

¹ Costa Rica's official name for the Road is the "Juan Rafael Mora Porras – Route 1856" (Ruta Juan Rafael Moras Porras- Ruta Nacional 1856). This name is itself inflammatory since it commemorates the Costa Rican invasion and occupation of Nicaraguan territory, including the San Juan de Nicaragua River and Lake Nicaragua, during the period when Nicaragua was hard pressed fighting off the invasions of the American adventurer William Walker. See Counter Memorial of Nicaragua (NCM) in the *Dispute concerning "Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)"*, Volume I, 6 August 2012, paras. 2.25-2.27; further see Counter Memorial of the Republic of Nicaragua in the *Dispute regarding Navigational and Related rights (Costa Rica v. Nicaragua)*, Volume I, 29 May 2007, paras. 1.2.41- 1.2.43.

² See para paras. 2.15-2.16 below; further see Chapter 3 below for a detail presentation on the harm caused to the San Juan de Nicaragua River.

³ Official Daily Gazette No. 46, Decree No. 36440-MP, Year CXXXIII, La Uruca, San José, Costa Rica, 07 March 2011 (NM, Vol. II, Annex 11) (hereafter Decree No.36440).

⁴ See paras. 5.6-5.28 below.

regional and international law, such as informing Nicaragua of the intention to construct the Road⁵, conducting a transboundary environmental impact assessment⁶ regarding the effects of the Road and its construction on the San Juan de Nicaragua River, over which Nicaragua has undisputed sovereignty, and not causing harm to Nicaragua⁷.

1.6 According to the Emergency Decree⁸ and the By-Laws and Regulations⁹ adopted to implement it, the “state of emergency” prompting the issuance of the Decree arose from Nicaragua’s purported violation of Costa Rican sovereignty in the area of Harbor Head, or Isla Portillos as Costa Rica calls it¹⁰. Costa Rica had already instituted proceedings against Nicaragua in respect of this dispute, *Certain Activities carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, and sought provisional measures from the Court. The Court, by Order of 8 March 2011, indicated several such measures, among which that “Each party shall inform the Court as to its compliance with the Court’s Order on Provisional Measures”. Costa Rica filed 7 reports and Nicaragua presented 2 reports, of which the second report filed on 23 July 2012 is relevant to the present case. The said report informed the Court of Costa Rica’s lack of compliance of

⁵ See paras. 5.40-5.55 below.

⁶ See paras. 5.29-5.39 below.

⁷ See paras. 5.56-5.62 below.

⁸ Decree No. 36440 (NM, Vol. II, Annex 11).

⁹ By-Laws and regulations, Presidency of the Republic, National Commissions on Risk Prevention and Attention to Emergencies, Decision No. 0362-2011, Specific By-Laws regarding purchasing and contracts procedures under exception mechanisms regime by virtue of the Declaration of a State of Emergency by virtue of Decree No. 36440, 21 September 2011 (NM, Vol. II, Annex 12) (hereafter Decree No. 0362-2011).

¹⁰ See Section B, Chapter 2 below.

the Court's order by, among others, causing environmental harm to Nicaraguan territory through the construction of the road along the San Juan de Nicaragua River. It should be observed that, despite the fact that this dispute was *sub judice* and had already been addressed by the Court through the provisional measures it ordered, Costa Rica decided to take matters into its own hands by constructing the Road without complying with the normally applicable requirements under national or international law.

1.7 It bears emphasis that Nicaragua has maintained throughout that it never violated Costa Rica's sovereignty. In cleaning by hand a small caño connecting the San Juan de Nicaragua River with Harbor Head Lagoon – the asserted violation of Costa Rica's sovereignty – Nicaragua acted with the conviction that it was performing this work in its own territory and therefore not in violation of Costa Rica's sovereignty. It is also worthy of note that Costa Rica's Road, which according to Costa Rica was a response to Nicaragua's alleged violation of its sovereignty in the Harbor Head area, does not extend to that area at all but stops well short of it, at the Colorado branch of the San Juan de Nicaragua River.¹¹ Costa Rica's Road project thus appears to have been undertaken more as an act of retaliation than as a response to an emergency situation¹². This impression is reinforced by the fact that the decree authorizing

¹¹ Because Costa Rica has not provided information on the Road project to Nicaragua, it is unclear to Nicaragua whether Costa Rica intends to extend the Road across the Colorado River and onto, perhaps even to Harbour Head, despite the fact that much of this area is protected wetland.

¹² See paras. 2.16- 2.20 below.

the project was not issued until some four to five months after the Harbor Head dispute had arisen¹³ – hardly the kind of urgent response that would be indicative of a perceived “emergency”.

1.8 In the *Certain Activities* case, Costa Rica also complained of a small-scale dredging operation being carried out by Nicaragua in its undisputed sovereign territory in the Lower San Juan de Nicaragua. Even though Nicaragua is entitled under the *lex specialis* regime governing the San Juan de Nicaragua River to restore navigability of the San Juan de Nicaragua as it existed in 1858, the purpose of the present operation is much more modest¹⁴. Costa Rica does not dispute that the 1858 Treaty of Limits¹⁵, together with the 1888 Cleveland Award¹⁶ and the Alexander Awards of 1897-1900¹⁷, establish Nicaragua’s sovereignty over the San Juan de Nicaragua River, allowing Costa Rica a right of navigation for commercial purposes on the portion of the river where the border

¹⁴ See Counter Memorial of Nicaragua (NCM) in the *Dispute concerning “Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)”*, paras. 5.172-5.175 below.

¹⁵ Treaty of Limits between Nicaragua and Costa Rica, 15 April 1858 (NM, Vol. II, Annex 5).

¹⁶ Award of the Arbitrator, the President of the United States, upon the validity of the Treaty of Limits of 1858 between Nicaragua and Costa Rica (Cleveland Award), reprinted United Nations, *Report of International Arbitral Awards*, Vol. XXVIII (2006), pp. 207-211 Washington, D.C., 22 March 1888. (NM, Vol. II, Annex 6(1)).

¹⁷ First Award of the Umpire EP Alexander in the boundary question between Costa Rica and Nicaragua, reprinted United Nations, *Reports of International Arbitral Awards*, Vol. XXVIII (2007) pp.215-221, San Juan del Norte, 30 September 1897; Second Award of the Umpire EP Alexander in the boundary question between Costa Rica and Nicaragua, reprinted United Nations, *Reports of International Arbitral Awards*, Vol. XXVIII (2007) pp.223-225, San Juan del Norte, 20 December 1897; Third Award of the Umpire EP Alexander in the boundary question between Costa Rica and Nicaragua, reprinted United Nations, *Reports of International Arbitral Awards*, Vol. XXVIII (2007) pp.227-230, San Juan del Norte, 22 March 1898; Fourth Award of the Umpire EP Alexander in the boundary question between Costa Rica and Nicaragua, reprinted United Nations, *Reports of International Arbitral Awards*, Vol. XXVIII (2007) pp.231-235, Greytown, 26 July 1899. (NM, Vol. II, Annex 6 (2)(3)(4)(5)).

follows its southern bank. But Costa Rica expressed the fear that the dredging operation would lower the Colorado of San Juan water. It brought this claim before the Court in the *Certain Activities* case despite the findings of its own authorities, including its Foreign Minister, that Nicaragua's dredging program would have no significant effects on the flow of the Colorado branch or on Costa Rican territory.¹⁸

1.9 As will be established in the present Memorial, particularly in Chapter 3, Costa Rica's Road project is resulting, and will continue to result, in a massive contribution of sediments into the San Juan de Nicaragua River. In addition to the effects of this on the ecosystem of the San Juan de Nicaragua River and surrounding protected areas, the increased sedimentation due to Costa Rica's Road project will offset, and is already frustrating, Nicaragua's modest efforts to dredge the Lower San Juan de Nicaragua to restore its navigability¹⁹. Given its complaints about Nicaragua's dredging program, this raises the question whether a purpose of the Road project was not to neutralize that program and its possible – though insignificant – effects in Costa Rica.

1.10 Regardless of Costa Rica's motives for constructing the Road, the effects of the project are clear and scientifically verifiable, as shown in Chapter 3 of the present Memorial. In a word, the Road project has caused harm to the

¹⁸ See Counter Memorial of Nicaragua (NCM) in the *Dispute concerning "Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)"*, para. 1.14 and authorities there cited.

¹⁹ See paras. 3.80-3.81 below.

River, an impact that is likely to continue into the foreseeable future as it is explained thoroughly by the team of environmental scientist and road construction experts led by Dr. G. Mathias Kondolf's, who also found that a series of immediate measures need to be taken in view of the impacts caused by erosion. While any road along the right, or southern, bank of the river, no matter how well planned and constructed, would have impacts on the river and its ecosystems, the severity of the present impacts appears to be due largely to the haste and recklessness with which Costa Rica pursued its Road project. Since as indicated above there appears to be no relation between the Road project and the asserted basis for Costa Rica's Emergency Decree – the dispute with Nicaragua over the location of the border on Harbor Head – the rush to construct the Road, ignoring all applicable legal requirements under national and international law, can only be understood as intentional damage to Nicaraguan territory.

1.11 What is clear is that the dumping of sediments and waste from the construction of the Road into the San Juan de Nicaragua River, as well as the ongoing contribution of many tens of thousands of additional cubic meters of sediments into the river per year through erosion and mass wasting processes , constitutes a transgression of Nicaragua's territorial sovereignty. "As the Court has observed: 'Between independent States, respect for territorial sovereignty is

an essential foundation of international relations' (*I.C.J. Reports 1949*, p. 35)

...»²⁰
.....

1.12 But Costa Rica's acts give rise to much more than a technical violation of Nicaragua's sovereignty or even significant environmental harm. Pollution of the River and the increased sediment load resulting from the Road and its construction will result in significant economic damage to Nicaragua and its people, and related adverse social and cultural impacts. Navigation in the lower portion of the River, already difficult in the dry season, will be further impaired, necessitating increased investment in dredging of the River. The impacts on fish will bring with them harm to subsistence and commercial fishing. And scenic beauty will be destroyed, reducing the eco-tourism potential of the riverine area.

C. STRUCTURE OF THE MEMORIAL

1.13 This Memorial is structured in accordance with the schema indicated below that identifies the Chapter into which it is divided. The Schema of this Memorial is as follows:

Chapter 2 addresses the background of the dispute. It is divided into three sections of which the first is an overview of the region including a general description of the San Juan de Nicaragua River and the adjacent biosphere reserves and internationally-protected wetlands. The other two sections shed

²⁰ *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America)*, *I.C.J. Reports 1986*, p. 14, at p. 106, para. 202.

light on the context surrounding the reckless construction of the road and the continuous rejection by Costa Rica to inform Nicaragua about the project or to conduct an EIA.

Chapter 3 addresses the environmental issues and details the impact that the construction of the road along the San Juan de Nicaragua River has produced, the resulting harms and the future consequences, as well as the need for immediate actions to avoid further damage, particularly due to the sedimentation process. It also further highlights the setbacks that this sedimentation process is having and will have in the small dredging program of Nicaragua and thus the increased need to dredge the river. This analysis is based on field studies and reports of environmental scientists and constructions experts, as well as reports from the Costa Rican authorities and civil society.

Chapter 4 analyzes the law applicable to the case. It reviews the relevant instruments that regulate the issues in relation to the border and the San Juan de Nicaragua River and other aspects of the dispute between the Parties, as well as the role of other norms and principles of general international law.

Chapter 5 analyzes the utter disregard of Costa Rica's environmental obligations at the national, bilateral, regional and international level.

Chapter 6 addresses the Remedies requested in light of the harm caused to Nicaragua and the violation of sovereignty. It further addresses the urgency of taking emergency actions in view of the impact of the sedimentation process.

Finally, the submissions of Nicaragua.

In addition to Volume I, this Memorial consists of a Volume II, which contains 40 documentary annexes, 4 reports, 9 documents relating to treaties, awards, agreements, law, decrees and judgment, 4 diplomatic notes, 4 correspondence documents and 19 media reports.

CHAPTER 2

BACKGROUND OF THE DISPUTE

A. THE GEOGRAPHY OF THE SAN JUAN DE NICARAGUA RIVER

2.1 This section describes the geography of the San Juan River, which has suffered significant environmental harm caused by the shoddily designed and incompetently constructed Road that Costa Rica has built immediately adjacent to the River's southern bank. It also describes the fragile ecosystems within and along the River, including internationally-protected biosphere reserves and wetlands and vulnerable human communities, which have been endangered by Costa Rica's road construction.

1. The San Juan de Nicaragua River

2.2 The San Juan River begins at Lake Nicaragua and flows eastward for 205 kilometers through Nicaraguan territory until discharging into the Caribbean Sea. Under the 1858 Treaty of Limits, Nicaragua possesses "exclusive dominion" over the River, and the right (southern) bank forms the border between Nicaragua and Costa Rica from a point "three English miles distant from Castillo Viejo" to Punta Castilla at its mouth on the Caribbean Sea.²¹

²¹ Treaty of Limits between Nicaragua and Costa Rica, 15 April 1858, Art. II (NM, Vol. II, Annex 5).

Figure 2.1: San Juan de Nicaragua River



2.3 As it proceeds from its origin towards the Caribbean, the San Juan River is fed by Costa Rican tributaries, including the San Carlos, Medio Queso, Pocosol, Infiernito and the Sarapiquí Rivers, as well as numerous smaller rivers and streams. The San Juan River also receives a considerable amount of water from the region's heavy rainfall, which ranges from 2,500 to 6,000 millimeters annually, one of the highest rates of precipitation in the Western Hemisphere.²²

2.4 Beginning from the point where the River's south bank forms the international border, the San Juan River passes through several rapids, and narrows to widths no greater than 50 meters. Downstream from this area, the River is fed by Costa Rica's San Carlos River and recovers its normal width. It

²² See RAMSAR Advisory Mission Report No.69 (Annex 147, p.111 to the Memorial of Costa Rica (CRM) in the *Dispute Concerning Certain Activities Carried out by Nicaragua in the Border Area* (Costa Rica v. Nicaragua).

then proceeds to the confluence of the Sarapiquí, another large river originating in Costa Rica. From its juncture with the Sarapiquí River, the San Juan continues to the delta, where it bifurcates into the Lower San Juan River, which continues flowing down Nicaraguan territory, and the Colorado River, which flows into Costa Rica. The Lower San Juan runs through a flat and sedimentary terrain and, due to ever increasing sedimentation, is navigable only part of the year and even then, only by small shallow-draft vessels.

2. The Environment and Protected Reserves in and along the River

2.5 The area around the San Juan River is blessed by tremendous biodiversity, and Nicaragua has invested considerable efforts to protect and conserve these ecologically-delicate areas.

2.6 In particular, Nicaragua has established three nature preserves on or near the San Juan River: (i) the San Juan River Wildlife Refuge, consisting of the river itself and a two-kilometer strip abutting the Nicaraguan bank; (ii) the Indio Maíz Biological Reserve, bordering the Nicaraguan side of the river; and (iii) the San Juan River - Nicaragua Biosphere Reserve, which is affiliated with the Man and the Biosphere Programme of the United Nations Educational, Scientific and Cultural Organization (“UNESCO”).²³

²³ The UNESCO Programme’s objective is to “set a scientific basis for the improvement of the relationships between people and their environment globally” and to establish an “interdisciplinary research agenda and capacity building that target the ecological, social and

Figure 2.2: Sketch Map: The Indio Maíz Biological Reserve (dark green) and the San Juan River Wildlife Refuge (Yellow)



(a) The San Juan River Wildlife Refuge

2.7 In May 1999, Nicaragua created the Southeastern Biosphere Reserve of Nicaragua, which includes seven protected areas.²⁴ One of these protected areas is the San Juan River Wildlife Refuge, which was carved out of

economic dimensions of biodiversity loss and the reduction of this loss.” See the official website of UNESCO’s Man and the Biosphere Programme, available at <http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/man-and-biosphere-programme/> (last visited 4 December 2012).

²⁴ See Nicaraguan Decree No. 66-99, “Update and Definition of categories and limits of Protected Areas located in Nicaragua’s southeast territory,” 31 May 1999, Art. 2 (NM, Vol. II, Annex 10).

the Indio Maíz Reserve, discussed below. This conservation area encompasses the San Juan River from its junction with Nicaragua's Bartola River to the Caribbean Sea, covering the entire portion of the San Juan where the left and right banks belong, respectively, to Nicaragua and Costa Rica. The San Juan River Wildlife Refuge also includes a two-kilometer strip of land extending north from the river's left (Nicaraguan) bank to the southern edge of the Indio Maíz Reserve.

2.8 In 2001, the San Juan River Wildlife Refuge was designated as a wetland of international importance by Nicaragua under the Convention on Wetlands of International Importance (the Ramsar Convention).²⁵ The protection of the San Juan thus became an internationally recognized and monitored priority. According to Ramsar, the San Juan River Wildlife Refuge and the adjoining Indio Maíz Reserve form part of "one of the two most extensive biological nuclei of the Mesoamerican Biological Corridor."²⁶

2.9 The San Juan River Wildlife Refuge encompasses, in addition to the San Juan River itself, a variety of wetlands, including estuaries and shallow marine waters, coastal freshwater lagoons, and inter-tidal marshes, as well as

²⁵ See "Convention on wetlands of international importance especially as waterfowl habitat," concluded at Ramsar, Iran on 2 Feb. 1971. (United Nations, *Treaty Series*, Vol. 996, Reg. No. 14583, 17 Feb. 1976.)

²⁶ See Summary Description of *Refugio de Vida Silvestre Río San Juan* Ramsar site on Ramsar official website, available at http://www.ramsar.org/cda/fr/ramsar-news-archives-2002-nicaragua-announces-7/main/ramsar/1-26-45-87%5E17907_4000_1__ (last visited 4 December 2012).

permanent lakes, smaller rivers, and pools.²⁷ These wetlands support a large diversity of bird, fish, crustacean, and mammal (both aquatic and terrestrial) species. Scientific expeditions have identified 303 bird species, 26 mammals, 15 reptiles, 3 amphibians, and 61 insects, in addition to 7 species of marine crustaceans, 13 marine fish species and 10 fresh water fish species.²⁸ Many of these animal species are threatened with extinction. Indeed, there are no less than 46 endangered species inhabiting the San Juan River Wildlife Refuge, including the exceptionally rare manatee.²⁹ The San Juan River Wildlife Refuge also conserves a great diversity of plant-life.

(b) The Indio Maíz Biological Reserve

2.10 On 17 April 1990, Nicaragua created the San Juan River Indio Maíz Biological Reserve.³⁰ The original footprint of this Reserve covered 435.5 square kilometers. Since then, Nicaragua has increased its size to 3,157 square kilometers.³¹ In addition to a large expanse of land, the Reserve as originally

²⁷ *Ibid.*

²⁸ See MARENA, *The San Juan River Wildlife Refuge Management Plan*, 2005, p. 37 (Annex 40 to the Rejoinder of Nicaragua (NR) in the *Dispute Regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, 15 July 2008); see also pp. 119-128 (Annex 1 of *ibid.*) for a table of the numerous animal species found in the San Juan River Wildlife Refuge.

²⁹ See *ibid.*, p. 39.

³⁰ See Nicaraguan Executive Decree 527, 17 April 1990, published in Official Gazette N° 78 of 23 April 1990 (NM, Vol. II, Annex 8). The same decree which designated the reserves also established a National Commission to manage and develop the protected areas of the Southeast of Nicaragua.

³¹ See MARENA, *Southeastern Nicaragua Biosphere Reserve: Strategic Program 2008* (hereinafter “*Strategic Program 2008*”) (Annex 47 to the Rejoinder of Nicaragua (NR) in the *Dispute Regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, 15 July 2008).

created also included most of the San Juan River extending to the Caribbean Sea, which was later designated as a separate reserve in 1999, as discussed above.

2.11 The Indio Maíz Reserve is comprised of a complex variety of ecosystems, including humid tropical forests, continental wetlands, mangroves, estuaries, and salt marshes.³² These ecosystems support a remarkable number of animal species, including hundreds of different bird species and mammals such as sloths, wild boars, pumas, pacas, manatees, and monkeys, as well as poison dart frogs, snakes, crocodiles, turtles, and iguanas. It is estimated that the Reserve hosts 221 species of birds, 65 mammal species, 34 amphibian species, 55 reptile species, and 57 species of insects.³³

(c) The San Juan River - Nicaragua Biosphere Reserve

2.12 In July 2003, UNESCO's Man and the Biosphere Programme designated the San Juan River Wildlife Refuge and the Indio Maíz Biological Reserve as part of the greater international biosphere reserve denominated the "San Juan River - Nicaragua Biosphere Reserve."³⁴ This internationally

³² See *ibid.*; see also A. Meyrat, *The Biological Stretch of Southeast Nicaragua: Important Space for the Conservation of Nature*, MARENA-ARAUCARIA, 2006 (hereinafter "*The Biological Stretch*") (Annex 41 to the Rejoinder of Nicaragua (NR) in the *Dispute Regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, 15 July 2008).

³³ See MARENA, *Indio Maíz Management Plan: 2005-2010 Period*, 9 May 2006 (Annex 42 to the Rejoinder of Nicaragua (NR) in the *Dispute Regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, 15 July 2008).

³⁴ UNESCO MAB Biosphere Program Certificate, 15 September 2003 (Annex 39 to the Rejoinder of Nicaragua (NR) in the *Dispute Regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, 15 July 2008).

recognized and supported biosphere covers 18,340 square kilometers, a full 14 percent of Nicaragua's national territory.³⁵ The Biosphere Reserve covers a wide variety of ecosystems, including tropical humid forests and wetlands, tidal marshes, coastal lagoons and estuaries, all of which are important shelters for rare or threatened animals and plant resources of the Meso-American tropics. In total, the Biosphere Reserve includes 19 natural ecosystems and is inhabited by 555 species, including 27 types of amphibians, 388 bird species, and 60 species of mammals.³⁶

2.13 This comprehensive reserve system is built around several nucleus zones.³⁷ One of the principal zones is the Indio Maíz Biological Reserve. According to UNESCO, "the vast size of the biosphere reserve, in addition to its proximity to neighbouring Costa Rican protected areas, and as part of the Mesoamerican Biological Corridor, guarantee an adequate area for preserving genetic diversity, free mobility of species, breeding and maintenance of major

³⁵ See "Indio Maíz Declared World Biosphere Reserve," *La Prensa*, 10 July 2003 (Annex 24 to the Rejoinder of Nicaragua (NR) in the *Dispute Regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, 15 July 2008).

³⁶ See *The Biological Stretch*, p. 9 and 21 (Annex 41 to the Rejoinder of Nicaragua (NR) in the *Dispute Regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, 15 July 2008).

³⁷ See *Strategic Program 2008* (Annex 47 to the Rejoinder of Nicaragua (NR) in the *Dispute Regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, 15 July 2008).

species such as the jaguar or American tiger (*Felis onca*), the tapir (*Tapirus biardii*) and the red and green parrot (*Psittacidae*).”³⁸

3. The San Juan de Nicaragua River’s Human Communities

2.14 The area surrounding the San Juan River is remote and relatively undeveloped and, as discussed above, consists largely of protected environmental reserves. The scattered human communities that make their homes along the bank of the River are heavily dependent upon it for their livelihoods and sustenance. Much of the local population relies on the fish and shrimp found in the River, and the crops nourished by its waters and nutrients, for sustenance and/or income. Put simply, the health of the human communities along the river is dependent upon the health of the River itself.

B. COSTA RICA’S AUTHORIZATION OF THE ROAD PURSUANT TO AN “EMERGENCY DECREE”

2.15 As the Court is aware, Nicaragua and Costa Rica are in dispute regarding a very small – approximately 250 hectare – patch of swamp-land located at the extreme eastern terminus of their common land boundary next to the Caribbean coast, in an area which Costa Rica calls Isla Portillos and Nicaragua calls Harbour Head, and which the Parties have submitted to the Court

³⁸ See “Biosphere Reserve Information: Nicaragua: Río San Juan,” UNESCO – MAB Biosphere Reserves Directory (Annex 45 to the Rejoinder of Nicaragua (NR) in the *Dispute Regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, 15 July 2008).

for adjudication in the *Case Concerning Certain Activities Carried Out by Nicaragua in the Border Area*. By its Order of 8 March 2011, the Court indicated provisional measures that, among other things, required the Parties to “refrain from sending to, or maintaining in the disputed territory...any personnel, whether civilian, police or security.”³⁹ Nicaragua immediately complied with the Order, removing all Nicaraguan governmental personnel from the area, as it reported to the Court on 5 April 2011.⁴⁰

2.16 Apparently dissatisfied with the provisional measures indicated by the Court, Costa Rica has chosen to take additional measures unilaterally, and in a way which, as will be shown, has put the delicate environment of the San Juan River at grave risk. In particular, Costa Rica has adopted the pretense that it needed to construct the Road to address alleged “security” concerns, purportedly arising from the territorial dispute near the mouth of the River. In that vein, Costa Rica’s Vice Minister of Environment, Energy and Telecommunications, Ms. Lorena Guevara, stated that building the Road was required because of the “latent threat” of “incursions from Nicaragua,” which she said, had made it necessary to “design vigilance mechanisms and ensure permanent presence of its police forces in the conflict zone at the southernmost part of the Colorado Delta,

³⁹ I.C.J., Order, 28 March 2011, *Case Concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, Request for the indication of provisional measures.

⁴⁰ *Case Concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, Nicaragua’s Report to the Court on Compliance with the Provisional Measures Order, 5 April 2011.

and the border side of the Río San Juan.”⁴¹ Costa Rica makes the same baseless accusation in its Written Observations on the Admissibility of Nicaragua’s Counter-Claims in the *Case Concerning Certain Activities*, where it suggests that “[t]he road was built” as “a consequence of Nicaragua’s invasion and occupation of Costa Rica” in order “to facilitate the mobilization of Costa Rican police and riparians in case of armed conflict...”⁴²

2.17 Costa Rica’s purported justification for building the Road is utterly false: no Nicaraguan military or other governmental personnel have been present in the disputed area since December 2010. Nicaragua so informed the Court during the January 2011 hearings on provisional measures;⁴³ in its 18 January 2011 written response to a question by Judge Bennouna at the end of those hearings;⁴⁴ and again in its 5 April 2011 report to the Court.⁴⁵ As Nicaragua explained in the latter submission: “After the Order was read in open court, all

⁴¹ *University Seminar*, Costa Rica “Environmental damage feared due to construction of highway parallel to Río San Juan,” 1 November 2011 (NM, Vol. II, Annex 22).

⁴² *Case Concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, Written Observations of Costa Rica on the Admissibility of Nicaragua’s Counter-Claims, 30 November 2012, para. 2.20.

⁴³ *Case Concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, Provisional Measures Hearing, CR 2011/2, para. 28 (Argüello Gómez) (“There are no troops presently in the swampland. There is no permanent military post in the area.”); CR 2011/4, para. 15 (Argüello Gómez) (“Nicaragua has no intention of stationing troops or personnel of any type in the swampland Nicaragua identifies as the area of Harbor Head and which coincides with the area Costa Rica alludes to with other names.”).

⁴⁴ *Case Concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, Provisional Measures Hearing, Reply of the Republic of Nicaragua to the questions put by Judges Simma, Bennouna and Greenwood, 18 January 2011.

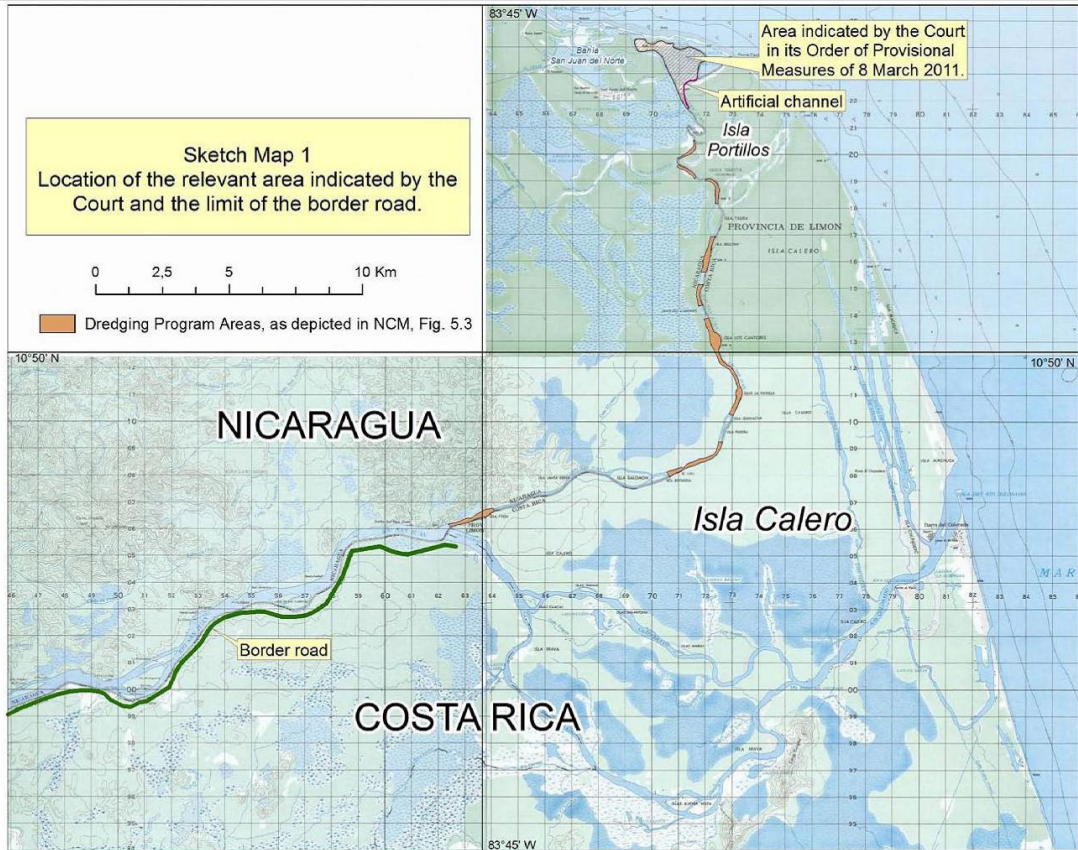
⁴⁵ *Case Concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, Nicaragua’s Report to the Court on Compliance with the Provisional Measures Order, 5 April 2011.

Nicaraguan personnel in the disputed territory, including civilian personnel, were withdrawn and have stayed away from the area.”⁴⁶

2.18 Moreover, the falsity of Costa Rica’s pretense regarding a purported security “emergency” in relation to the territorial dispute on the Caribbean coast is exposed by a brief glance at a map of the area. The 250 hectares of disputed land in Harbour Head are far removed from the areas where Costa Rica has placed its Road. As illustrated by the map that Costa Rica appended to its 30 November 2012 Written Observations on the Admissibility of Nicaragua’s Counter-Claims in the *Case Concerning Certain Activities*, the Road is located far to the west of the disputed area.⁴⁷

⁴⁶ *Ibid.*

⁴⁷ *Case Concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, Written Observations of Costa Rica on the Admissibility of Nicaragua’s Counter-Claims, 30 November 2012, Sketch Map 1.



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2.19 Nevertheless, on 7 March 2011, Costa Rica issued an “Emergency Decree” declaring “that the process unfolded by the violation of Costa Rican sovereignty on the part of Nicaragua conforms a state of emergency.”⁴⁹ The alleged basis for the emergency was the so-called “military invasion and occupation of Costa Rica by Nicaragua,” and the allegation that “Nicaraguan

⁴⁸ *Case Concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, Written Observations of Costa Rica on the Admissibility of Nicaragua’s Counter-Claims, 30 November 2012, Sketch Map 1.

⁴⁹ La Uruca, San José, Costa Rica, Official Daily Gazette No. 46, Decree No. 36440-MP, Year CXXXIII, Monday, 7 March 2011, p. 2 (NM, Vol. II, Annex 11).

troops...now occupy a part of the territory of Costa Rica.”⁵⁰ Costa Rica’s Emergency Decree further declared, against all evidence, that the “actions carried out by the army of Nicaragua and the Government of that country” prevented “normal functioning conditions for activity in several Costa Rican communities along the border area....”⁵¹ At the time, there were no Nicaraguan military forces in or near the area claimed by Costa Rica, and normal life in Costa Rica continued unimpeded.

2.20 Having created a fictitious problem, the Emergency Decree proceeded to “solve” it by declaring that Costa Rica’s “constitutional system” permits the application of “special norms that allow the Executive Branch to address emergency situations so that action in that regard can be as agile and decisive as merited by the circumstances.”⁵² As it turns out, the agility and decisiveness needed by Costa Rica was to relieve itself from any obligation to conduct an Environmental Impact Assessment (“EIA”) prior to constructing the Road, or to subject the project to any meaningful regulatory or environmental protection measures at all.

2.21 In particular, on 21 September 2011, that is 6 months after the Emergency Decree had been issued and had been *de facto* implemented, the Presidency of Costa Rica, acting through its National Commission on Risk

⁵⁰ *Ibid.*

⁵¹ *Ibid.*

⁵² *Ibid.*

Prevention and Attention to Emergencies, promulgated regulations formally implementing the “Emergency Decree.”⁵³ The regulations established special procedures that do not comply with the normal Costa Rican rules for major construction projects, on the ground that “in carry[ing] out the specific purchasing and contracting process necessary by virtue of the emergency resulting from the violation of Costa Rican sovereignty by Nicaragua...a specific mechanism under [the Emergency Decree] is required for purchasing and contracting processes.”⁵⁴ As a result, the normal procurement and contracting rules were avoided: “the specific nature of the event that created the emergency, which was an act of aggression on the part of the neighbor country of Nicaragua, imposes taking actions that are different from those generally carried out under the regimen of exception and under the control of the National Commission on Risk Prevention and Attention to Emergencies....”⁵⁵

2.22 Costa Rica has used this self-serving declaration to justify its decisions not to carry out a prior EIA, and not to notify and consult with Nicaragua in advance of undertaking the works. Costa Rica admits that the purpose of the “Emergency Decree” was to exempt itself from its obligation under Costa Rican law to conduct an EIA. This was acknowledged by the

⁵³ Decree No. 0362-2011 of Costa Rica’s National Commission on Risk Prevention and Attention to Emergencies, “Specific by-laws regarding purchasing and contracts procedures under exception mechanisms regimen by virtue of the declaration of a state of emergency by virtue of Decree No. 36440,” 21 September 2011 (NM, Vol. II, Annex 12).

⁵⁴ *Ibid.*

⁵⁵ *Ibid.*

Foreign Minister of Costa Rica, Mr. Enrique Castillo, who publicly stated that the construction of the Road was not the subject of an EIA because it was carried out in the context of an emergency decree that “exempted” the project from these requirements: “This is a sovereign project we are carrying out under a decree that exempts us from Environmental Impact Assessment, that is why we owe no explanations.”⁵⁶

2.23 In November 2011, Costa Rica’s Vice Minister of Environment, Energy and Telecommunications (MINAET), Ms. Lorena Guevara, responded to questions regarding the consequences of the Emergency Decree and the works initiated under it. When asked whether her agency had been involved in the supervision of the project, given its location in protected land, she responded that the Decree “was issued in the middle of the situation and process caused by the Nicaraguan violation of Costa Rica’s sovereignty, [in] particular in Isla Calero, and because of the environmental damage” purportedly caused to Costa Rican land.⁵⁷ She declared that Costa Rica had not carried out an EIA because that obligation had been relieved by Costa Rica’s self-declared “emergency”:

Due consideration should be given to the particular nature of the event that led to the decree and the General Emergency Plan developed to address it. This was essentially a political phenomenon with many effects and variants that are difficult to

⁵⁶ *El Nuevo Diario*, Nicaragua “Outrage Everywhere Over San Juan River Parallel Highway, No Studies Done for Costa Rican Highway,” 15 December 2011 (NM, Vol. II, Annex 25).

⁵⁷ *University Seminar*, Costa Rica “Environmental damage feared due to construction of highway parallel to Río San Juan,” 1 November 2011 (NM, Vol. II, Annex 22).

pinpoint. Under these circumstances, the constitutional system provides special rules that allow the Executive Branch to address emergency situations, so that action can be as prompt and decisive as the circumstances merit thus minimizing the consequences of natural and other disasters.⁵⁸

2.24 Costa Rican environmental authorities have acknowledged that they were not consulted about the project before it was carried out. In particular, Mr. Uriel Juárez, Secretary General of the National Environmental Technical Secretariat, admitted that his agency was not consulted about the Road or its environmental impacts: “There has been no request or inquiry regarding criteria here.”⁵⁹

2.25 Not only did Costa Rica fail to conduct a prior EIA, it failed even to prepare basic engineering plans or blueprints before commencing construction. This was acknowledged by the Costa Rican Ministry responsible for carrying out the project, the National Roads Authority (*Consejo Nacional de Vialidad*, or “CONAVI” per its Spanish initials), an entity within Costa Rica’s Ministry of Public Works and Transportation. In May 2012, in the wake of a corruption scandal concerning the awarding of contracts in regard to the Road (whose perpetrators CONAVI vowed “to punish”), CONAVI acknowledged that standard procedures had not been followed and that the project was not “subjected to the procedures for development of infrastructure projects that take into account, for

⁵⁸ *Ibid.*

⁵⁹ *Ibid.*

example, stages of conceptualization, feasibility, design, and management of the work.”⁶⁰ By way of explanation, CONAVI felt compelled to issue the following statement:

Because of the serious questions posed by the media about the actions taken by the National Roads Authority (CONAVI) in relation to the construction of Route 1856 and in order to provide citizens with stronger evidence to enable it to form a comprehensive and objective opinion of the circumstances in which the work has been developed, the National Roads Authority clarifies:

1. The first thing that needs to be understood is that the works on Route 1856 were done in a context of national emergency and faced with a situation that clearly and obviously affected the sovereignty and security of our country. Failing to recognize and understand that this was the situation, would lead any person to make judgments of opinion based on an incomplete assessment of the facts and circumstances.
2. The work on Route 1856 was done under those circumstances. Therefore it must be understood that some of the determining factors of the action taken were to act quickly but within the framework of discretion, that is, motivated based on the best interests of the nation. In fact, an Emergency Decree was issued in order to give context to the nature of the situation.
3. As the Costa Rican people will understand, in these circumstances it could not be expected that the works of the route be developed within the framework of standard procedures but rather under the exceptions provided for in the Constitution and

⁶⁰ CONAVI Press Release, 25 May 2012 (NM, Vol. II, Annex 34).

the laws of the Republic. In this respect, it should be understood that the work of starting the trail could not be subjected to the procedures for development of infrastructure projects that take into account, for example, stages of conceptualization, feasibility, design and management of the work. But, not having done that is not synonymous with acting without a proper and speedy analysis for the decision that was made.

4. To say at this stage that there was a lack of blueprints or that it was not reported who the professional responsible for the work was, are assessments that we believe are inappropriate within the framework of the best interests of the nation, which have motivated our actions....⁶¹

2.26 Costa Rica's leading independent authority on road construction, the National Laboratory of the University of Costa Rica, published a May 2012 report criticizing the construction of Highway 1856, which it found to have been carried out "without any basic geometric design" or proper coordination and controls. It also found that, contrary to standard practice, "no uniform technical criteria were set in project implementation".⁶² The same conclusion was reached by Costa Rica's Federated Association of Engineers and Architects in June 2012, when it reported that the Road had been built "without a single plan to indicate the path that was to be opened, or what its characteristics should have been,"⁶³ an

⁶¹ *Ibid.*

⁶² National Laboratory of Materials and Structural Models of the University of Costa Rica, "Report INF-PITRA-014-12: Report from Inspection of Route 1856 - Juan Rafael Mora Porras Border Road," May 2012 (hereinafter "LANAMME Report"), pp. 50-51 (NM, Vol. II, Annex 3).

⁶³ Federated Association of Engineers and Architects of Costa Rica, "Report on Inspection of the on the Border Road, Northern Area Parallel to the San Juan River CFIA Report," 8 June 2012

error that was bound to cause “increased costs, environmental problems, and a rapid deterioration of the project.”⁶⁴ In that regard, the professional association of Costa Rican engineers and architects was prescient, as shown in the next Chapter of this *Memorial*.

C. COSTA RICA’S REFUSAL TO PROVIDE INFORMATION OR TO CONDUCT AN EIA ON THE ROAD CONSTRUCTION

2.27 In light of the serious risks that the Road posed to the San Juan River and its environment, Nicaragua repeatedly requested that Costa Rica provide it with information about the project. These requests were uniformly rebuffed.

2.28 On 29 November 2011, the acting Foreign Minister of Nicaragua sent a diplomatic note to his Costa Rican counterpart requesting information about the Road. The note specifically pointed out that:

[A]ll project[s] of this nature should have an Environmental Impact Assessment due to their characteristics. Further, this assessment should

(hereinafter “CFIA Report”), p. 25, para. 5.3; *see also, ibid.*, p. 27, para. 6.3 (recommending the post-hoc preparation of “[a] detailed topographical blueprint of all work done to the present” and the “[d]evelopment of all pertinent designs and construction blueprints for the whole of the project.”) (NM, Vol. II, Annex 4).

⁶⁴ *Ibid.*, p. 25, para. 5.3. *See also La Nación*, Costa Rica, E. Rivera, E. Oviedo & R. Rojas, “Serious errors expose trail to risk of collapse during the rainy season,” 28 May 2012 (highlighting a lack of geotechnical or topographical information) (NM, Vol. II, Annex 35). *See also* CFIA Report, pp. 25-26, para. 5.6 (“As reflected in the photographs and as observed along certain stretches, it is presumed that protected areas were not taken into account,” citing Forest Law No. 7575 and Law No. 276 to Regulate Water Resources), para. 5.9 (noting a possible failure to obtain “the necessary permits”) & para. 5.10 (noting that compliance with Article 45 of the Organic Environmental Law should be assessed, given the project’s impact on wetlands) (NM, Vol. II, Annex 4).

have been sent to the Government of Nicaragua due to the proximity to Nicaragua of this project and in conformity to International Law and the International Court of Justice 8 March 2011 Order and Article 5 of the RAMSAR Convention, which stipulates that “[t]he Contracting Parties shall consult with each other about implementing obligations arising from the Convention especially in the case of a wetland extending over the territories of more than one Contracting Party or where a water system is shared by Contracting Parties. They shall at the same time endeavour to coordinate and support present and future policies and regulations concerning the conservation of wetlands and their flora and fauna.”⁶⁵

2.29 Costa Rica refused to provide the requested information. Its response suggested that it was *Nicaragua’s* burden to prove how its interests might be affected, stating that it was for “the Government of Nicaragua to present formally the reasons for which it considers that there may be environmental damage or damage to Nicaragua’s interests.”⁶⁶

2.30 Nicaragua’s reply, dated 10 December 2011, emphasized that it was Costa Rica’s “obligation...to present to Nicaragua, prior to the commencement of the road, the Environmental Impact Assessment and the Environmental Management Plan,” both of which were “fundamental requisite[s]

⁶⁵ Diplomatic Note from the Minister of Foreign Affairs of Nicaragua, to the Minister of Foreign Affairs of Costa Rica, Ref: MRE/DVM/AJST/500/11/11, Managua, 29 November 2011 (NM, Vol. II, Annex 14).

⁶⁶ Diplomatic Note from the Minister of Foreign Affairs and Worship of Costa Rica to the Minister of Foreign Affairs of Nicaragua, Ref: DM-AM-601-11, 29 November 2011 (NM, Vol. II, Annex 15).

to carry[ing] out a project of such a magnitude.”⁶⁷ Nicaragua suggested that Costa Rica was “[t]rying to invert the logic in regard to” its “obligations” to carry out an EIA and consult with Nicaragua by shifting to Nicaragua the burden of first showing the risks of Costa Rica’s project before Costa Rica’s obligations would be engaged.⁶⁸

2.31 Nonetheless, Nicaragua set out in detail its concerns about the ecological consequences of the Road project, informing Costa Rica that:

it is evident that the construction of the road seriously affects the environment and the rights of Nicaragua. If the project is not ceased it would have irreversible and transcendental ecological and environmental consequences.

Among the many consequences that can be highlighted are the following:

1. Dumping of trees and soil along the route of the road into the river flow, making more difficult and risking the navigation in its waters, over which Nicaragua has the dominion and sovereign jurisdiction based on the Treaty of 15th April 1858 and the Cleveland Award of 22nd March 1888.
2. Removal and sedimentation of fragile soils resulting in an increased and excessive sedimentation of the waters of the Nicaraguan river.

⁶⁷ Diplomatic Note from the Minister of Foreign Affairs of Nicaragua, to the Minister of Foreign Affairs of Costa Rica, Ref: MRE/DVS/VJW/0685/12/11, Managua, 10 December, 2011 (NM, Vol. II, Annex 16).

⁶⁸ *Ibid.*

3. Impact over the hydrological resources, particularly affecting fishing in the river because of the changes in the quality of the water.
4. Destruction of the natural habitat of the bank by removing the immediate vegetation to the river flow for the construction of the road, affecting the tree diversity around it.
5. Interception of the natural flow of the waters that flow through the south basin to the San Juan River by modifying the drainage of the surrounding wetlands at the lower San Juan and its delta.
6. Erosion of the soil banks in places where a certain slope exists and resulting in the sedimentation of clay soils to the San Juan of Nicaragua River.
7. Decrease or alteration of the aquatic life due to the water cloudiness resulting from the sediments of the road construction.
8. Destruction of the inherent scenic values and eco-tourism potential of the river course.⁶⁹

In light of these environmental concerns, Nicaragua stated:

The obligation of Costa Rica to inform Nicaragua about the Environmental Impact Assessment prior to the commencement of the project cannot be fulfilled by calling upon facilitators. Nicaragua cannot accept anything less than the suspension of the project until it has had the chance to receive and analyze the Environmental Impact Assessment on the project.⁷⁰

⁶⁹ *Ibid.*

⁷⁰ *Ibid.*

2.32 However, Costa Rica continued to reject Nicaragua’s request for information about the Road and persisted in refusing to conduct an EIA. Three days after Nicaragua’s second diplomatic note, the President of Costa Rica, Ms. Laura Chinchilla, declared that Costa Rica had “issued an emergency decree due to national necessity and it is on that basis that we have developed the projects. We are not taking even one step back.”⁷¹ Accordingly, President Chinchilla declared that Costa Rica has “no reason to offer explanations to the Government of Nicaragua.”⁷²

2.33 This policy decision was repeated by Costa Rica’s Minister of Foreign Affairs, Mr. Enrique Castillo, who, as noted above, stated that the Road’s construction had not been the subject of a prior EIA because it was being carried out pursuant to an emergency decree that “exempted” it from any such requirement.⁷³ Minister Castillo further stated that Costa Rica was not obligated to give any explanation to Nicaragua, declaring that “this is a sovereign project we are carrying out under a decree that exempts us from environmental impact studies, that is why we owe no explanations.”⁷⁴

2.34 In view of Costa Rica’s “no explanations” policy – including its refusal to conduct a prior EIA or otherwise consult with Nicaragua about its

⁷¹ *El País*, Costa Rica “Chinchilla defends highway criticized by Nicaragua, rejects dialogue,” 14 December 2011 (NM, Vol. II, Annex 24).

⁷² *Ibid.*

⁷³ See *El Nuevo Diario*, Nicaragua, “Outrage Everywhere Over San Juan River Parallel Highway, No Studies Done for Costa Rican Highway,” 15 December 2011 (NM, Vol. II, Annex 25).

⁷⁴ *Ibid.*

concerns – on 10 December 2011 Nicaragua informed the United Nations Environment Programme (“UNEP”) about “the damages and current threats to our natural patrimony in the Biosphere Reserve of the Rio San Juan as a result of the construction by Costa Rica of a 130 km long road parallel to the San Juan River.”⁷⁵ Nicaragua expressed particular concern that “removal of forests and the immediate vegetation to the river flow...has caused the interruption of the interrelationship of the ecosystem and biological corridors, and has endangered the existing fragile biodiversity.”⁷⁶ Nicaragua explained:

Costa Rica began and continues to construct this parallel road despite its tremendous direct and immediate environmental impact caused upon our Río San Juan Biosphere Reserve, thus disregarding its international obligations of notifying Nicaragua of its intent to pursue a project of this magnitude, especially as it impacts on an area under national, regional and international protection. Further, Costa Rica has also violated its obligation to carry out a trans-boundary environmental impact assessment and to transmit this to us for analysis and comments.

This attitude is contrary to international norms, including the Stockholm Declaration, the Río Declaration, Agenda 21, Principles on Forests, RAMSAR, and especially, the Convention on Biological Diversity which expressly requires notification of projects and environmental impact evaluations, especially when these would have

⁷⁵ Note sent from the Minister of Environment of Nicaragua and Natural Resources (MARENA), to the United Nations Environmental Program (UNEP), 10 December 2011 (NM, Vol. II, Annex 18).

⁷⁶ *Ibid.*

important adverse effects on the biological diversity of another State.⁷⁷

2.35 Nicaragua also conveyed to UNESCO its concerns about environmental harm, drawing particular attention to the San Juan River - Nicaragua Biosphere Reserve, which Nicaragua noted, consists of “a system of protected marine and terrestrial areas, biological reserves, natural reserves and a wetland system.”⁷⁸ Nicaragua described the harm the Road was causing, noting in particular that the San Juan River Biosphere Reserve was suffering “tremendous direct and immediate environment impact.”⁷⁹ Nicaragua further pointed out Costa Rica’s failure to comply with its “obligation to carry out a trans-boundary environmental impact assessment and to transmit this to us for analysis and comments.”⁸⁰ Nicaragua stated:

Bearing in mind UNESCO’s objectives, we invoke Costa Rica’s obligation to respect the Convention concerning the protection of the World Cultural and Natural Heritage, which establishes the obligation “not to take any deliberate measures which might damage directly or indirectly the cultural and natural heritage referred to in Articles 1 and 2 situated on the territory of other States Parties to this Convention.”⁸¹

⁷⁷ *Ibid.*

⁷⁸ Note sent from the Minister of Environment of Nicaragua and Natural Resources (MARENA), to UNESCO, 10 December 2011 (NM, Vol. II, Annex 19).

⁷⁹ *Ibid.*

⁸⁰ *Ibid.*

⁸¹ *Ibid.*

2.36 Nicaragua also informed the Ramsar Secretariat about the damage being done to protected wetlands, stating that:

The Government of Nicaragua has observed with great concern a construction by the Government of Costa Rica of a road, approximately 120 kilometers in length, which runs parallel and very close to the San Juan River of Nicaragua and drains into the river. Besides destruction of the flora and fauna of a very extensive common wetlands zone, the residue resulting from the removal of land and other matter have been dumped in our River.

... According to information published in different Costa Rican media, said construction is only part of a series of projects announced by the government of President Laura Chinchilla in December 2010, including the opening of a road parallel to the San Juan River of Nicaragua of more than 120 kilometers in length, the construction of heliports and a pedestrian bridge over the Colorado River for access to Harbour Head, the installation of sewers and even a pier in the Colorado River, as well as the construction of nets to serve as the openings in the Colorado, San Carlos and Sarapiquí Rivers.

These projects, which are mere meters away from Nicaragua's San Juan River and destroy extensive shared wetland zones, violate the norms of International Law that regulate relations between States; and regarding the RAMSAR Convention they violate, among others, the commitments of the sister nation of Costa Rica of holding consultations on compliance of its obligations derived from said Convention and its duty to actively coordinate and support present and future policies and regulations relative to the conservation of wetlands and their

flora and fauna, related to wetlands and the hydrologic system shared with our country.⁸²

2.37 Nicaragua also addressed the Central American Commission on Environment and Development, informing the organization's Secretariat that Nicaragua's "natural patrimony," including the Río San Juan Biosphere Reserve:

is presently threatened by the various impacts of the construction project of the Government of Costa Rica of a more than 130 kilometer road parallel to Río San Juan of Nicaragua. Deforestation, removal of vegetation, sedimentation, and other factors, are damaging these fragile nationally, regionally and internationally protected ecosystems...

The above mentioned is contrary to a series of international and regional norms, including the Constitutional Convention of the Central American Environment and Development Commission which we subscribe "Conscious that regional cooperation should constitute a fundamental tool ... due to the profound interdependency between the countries of the isthmus"; it is also contrary to the Regional Convention for the management and conservation of natural forest ecosystems and forest development, the Convention for the conservation of the biodiversity and protection of the main wild life sites in Central America, the Agreement over the Protected Areas between Nicaragua and Costa Rica.⁸³

2.38 On 6 December 2011, two independent, non-governmental Nicaraguan environmental organizations, the National Recycling Forum

⁸² Note from the Minister of Environment of Nicaragua and Natural Resources (MARENA), to the Secretary General, RAMSAR Convention, 28 November 2011 (NM, Vol. II, Annex 20).

⁸³ Note from the Minister of Environment of Nicaragua to the Central American Commission on Environment and Development, 10 December 2011 (NM, Vol. II, Annex 21).

(FONARE) and the Nicaraguan Foundation for Sustainable Development (FUNDENIC), filed a complaint against the Government of Costa Rica before the Central American Court of Justice (“CACJ”), the judicial organ of the Central American Integration System (SICA).⁸⁴ The plaintiffs alleged that Costa Rica had violated regional and international law by (i) failing to make available the EIA studies that were required to be carried out under both Costa Rican and international law; and (ii) causing harm to the environment.⁸⁵

2.39 The plaintiffs requested that the CACJ issue a preliminary injunction suspending construction until a final judgment was reached. On 12

⁸⁴ The Member States of the Central American Integration System are Belice, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama. The CACJ was created in 1961 by the modification of the Charter of the Organization of Central American States, and later restructured by the Protocol of Tegucigalpa in 1991. The CACJ has jurisdiction to hear cases: (i) between member States of the Central American Integration System (“SICA”), (ii) between a member State and a non-member State which agrees to the CACJ’s jurisdiction, (iii) between States and a resident of any member State, and (iv) regarding the integration process between the SICA’s organs and member States or natural or legal persons. As of March 2011, the CACJ had adjudicated 69 cases and issued 41 advisory opinions at the request of Central American agencies. See official website of the CACJ, available at <http://portal.ccej.org.ni/ccj2/Historia/tabid/57/Default.aspx> (*last visited* 4 December 2012).

⁸⁵ In particular, the plaintiffs alleged that Costa Rica had violated its legal obligations under: (1) the Central American Agreement for Protection of the Environment and regulations thereof; (2) the Agreement for the Conservation of Biodiversity and Protection of Priority Wildlife Areas in Central America; (3) the Regional Agreement on Climate Change; (4) the Regional Agreement on Trans-Boundary Movement of Hazardous Wastes, Article 3, Adoption of Preventive Measures; and (5) the Alliance for Sustainable Development of Central America. The plaintiffs further contended that Costa Rica has violated (6) the Tegucigalpa Protocol to the Charter of the Organization of the Central American States and complementary instruments or acts derived from it, including: Article 3, subsections (b), (h), and (i); Article 4, subsection (h); Articles 5, 6, 12 and 35 of the aforesaid Protocol; and Articles 26 and 35 of (7) the Protocol to the General Treaty on Central American Economic Integration, known as the Guatemala Protocol. Likewise, the Plaintiffs alleged that Costa Rica had violated Article 14, subsection (j), of (8) the Law Regulating the Organization and Functioning of the Councils of Ministers of Sectorial and Inter-Sectorial Economic Integration; and (9) the Central American Social Integration Treaty, known as San Salvador Treaty. See Central American Court of Justice, Case No. 12-06-12-2011, Decision of 21 June 2012, p. 3 (Whereas III) (hereinafter “C.A.C.J Judgment, 21 June 2012”) (NM, Vol. II, Annex 13).

January 2012, the Court carried out an *in situ* inspection of the Road and its environmental effects. Five days later, on 17 January 2012, the Court unanimously ordered Costa Rica to “immediately suspend the construction of the road...so that the situation does not escalate, thus protecting the rights of each of the parties and preventing the occurrence of irreversible and irreparable damage.”⁸⁶

2.40 Costa Rica ignored the Order of 17 January 2012. Construction of the Road continued,⁸⁷ prompting the Central American Parliament to adopt a resolution urging Costa Rica to respect the CACJ’s provisional measures Order and expressing concern about the “serious damage” that “thousands of metric tons of mud and construction materials” were causing to the San Juan River.⁸⁸ Costa Rica disregarded the Central American Parliament’s resolution as well.

2.41 After reviewing the evidence presented by the plaintiffs, both in written pleadings and during an evidentiary hearing (which Costa Rica refused to attend), the CACJ issued a unanimous Judgment on 21 June 2012, holding Costa Rica liable for breaching its obligations with respect to EIA and for causing environmental harm.

⁸⁶ *Ibid.*, p. 15 (Whereas IX).

⁸⁷ *Ibid.*, p. 16 (Whereas IX).

⁸⁸ *La Prensa*, Nicaragua “San Jose should respect the river,” 28 February 2012 (NM, Vol. II, Annex 30); *see also El Nuevo Diario*, Nicaragua “Central American Parliament supports CIJ decision on environmental damage by Costa Rica” 27 February 2012 (NM, Vol. II, Annex 28); *La Prensa*, Nicaragua “Central American Parliament urges Costa Rica to respect environmental security in the San Juan River,” 27 February 2012 (NM, Vol. II, Annex 29).

2.42 In particular, the CACJ ruled that Costa Rica had failed to carry out “environmental impact and mitigation studies...which are essential for commencing works of this magnitude,”⁸⁹ and instead had “started the work in question without conducting the studies and previous analyses required in the context of the obligations imposed by Regional Community and International Law.”⁹⁰ An EIA, the Court ruled, should not only have been conducted to “consider the relevant precautionary measures before making decisions that could have a significant impact on the conservation and maintenance of the environment they regulate,”⁹¹ but was also required to assure “collaboration, mutual understanding and communication between the State Parties of all these conventions,” an obligation the Court found that Costa Rica had “ignor[ed].”⁹² The CACJ further held that Costa Rica had “acted without consultation, in a unilateral, inappropriate and hasty manner, violating validly contracted international bilateral and multilateral agreements by building the road in question, which cannot be obviated by alleging internal provisions,”⁹³ *i.e.*, Costa Rica’s self-serving “Emergency Decree.”

2.43 The CACJ also held that Costa Rica had not discharged its obligation to “communicate to the Government of Nicaragua the characteristics,

⁸⁹ C.A.C.J Judgment, 21 June 2012, p. 25 (Whereas XXVI) (NM, Vol. II, Annex 13).

⁹⁰ *Ibid.*, p. 26 (Dispositif).

⁹¹ *Ibid.*, pp. 18-24 (Whereas XIV-XXV).

⁹² *Ibid.*, p. 26 (Dispositif).

⁹³ *Ibid.*

effects and environmental impact study of the construction of the road by virtue of its international and community commitments imposed by treaties, conventions, agreements and legislative acts derived from the Tegucigalpa Protocol in the field of environment protection.”⁹⁴ Further, the CACJ found that, because the San Juan River is designated a Nicaragua River Biosphere Reserve belonging to the World Biosphere Reserve Network, Costa Rica had failed to meet its obligation to refrain from adopting unilateral measures contrary to the common purpose created under the International System of Protected Areas for Peace.⁹⁵

2.44 Based on its review of the evidence, including its own *in situ* observations, which “verif[ied] the damage to the bank that protects the river on the south bank, especially in the many sectors where the road is dangerously close to the edge of the River,”⁹⁶ the CACJ held, unanimously, that:

The State of Costa Rica built a high-risk and environmentally hazardous work, which it should have prevented within the framework of the community obligations because it exposes the common watershed and ecosystem shared with Nicaragua and the region to serious and unpredictable damage, which this Court was able to observe during its on-site inspection in the area in question.⁹⁷

⁹⁴ *Ibid.*, p. 25 (Whereas XXVI).

⁹⁵ *Ibid.*, p. 18 (Whereas XIII).

⁹⁶ *Ibid.*, p. 25 (Whereas XXVI).

⁹⁷ *Ibid.*, p. 26 (Dispositif).

2.45 The Judgment expressed particular concern that “in many sections of the inspected area, the distance between the riverbed and the road is a few meters and the difference of level between the two is very pronounced, with the road in a dominant position and the river in a secondary position, all of which makes possible a landslide of large segments of the work in question, with the resulting sedimentation that would pollute the river.”⁹⁸ As Nicaragua shows in Chapter 3 of this *Memorial*, this is exactly what has happened, and continues to happen.

2.46 Ultimately, the CACJ found Costa Rica liable for the “ecological and related damages [caused] to the San Juan de Nicaragua River,” as well as for its refusal to comply with the preliminary Order of 17 January 2012 requiring the suspension of Road construction activities.⁹⁹

2.47 Like the Court’s provisional measures Order of 17 January 2012, Costa Rica publically rejected the Judgment on the merits; and the construction of the Road continued. The damage to Nicaragua that Costa Rica has caused, and continues to cause, is the subject of the following Chapter of this *Memorial*.

⁹⁸ *Ibid.*, p. 25 (Whereas XXVI).

⁹⁹ *Ibid.*, p. 27 (Dispositif).

CHAPTER 3

HARM CAUSED TO NICARAGUA BY COSTA RICA'S ROAD CONSTRUCTION

A. INTRODUCTION

3.1 In the previous Chapter, Nicaragua showed how Costa Rica's precipitous construction of its Road along the environmentally sensitive right bank of the San Juan River was done pursuant to a self-declared "emergency" that attempted to avoid the obligation to conduct a prior Environmental Impact Assessment, as well as the need to prepare basic engineering and construction plans. In this Chapter, Nicaragua describes the risks and actual harm to the San Juan River resulting from Costa Rica's unlawful and irresponsible road construction activities.

3.2 As shown below, the manner in which Costa Rica hastily approved and authorized the construction of the Road, and carried out the construction itself, made harm to the River inevitable. The project involved more than 900 pieces of machinery operated by at least 35 different construction companies,¹⁰⁰ entailed the deforestation and denudation of a huge swath of land extending for more than 100 kilometers directly adjacent to the River. It involved the dumping

¹⁰⁰ *Crhoy.com*, Costa Rica "Path construction supervisors informed problems and the lack of oversight", 11 June 2012 (Annex 111 to the Counter Memorial of Nicaragua (NCM) in the *Dispute Concerning Certain Activities Carried out by Nicaragua in the Border Area* (Costa Rica v. Nicaragua); see also *La Nación*, Costa Rica, E. Oviedo, "Conavi built a dirt road along the border without a single design plan," 23 May 2012 (NM, Vol. II, Annex 31).

into the River of enormous volumes of sediments and other debris – soil, uprooted vegetation, and felled trees – during the clearing and leveling of land for the Road’s bed.¹⁰¹ Further compounding the damage, Costa Rica constructed the Road in a haphazard and irresponsible manner, failing to adhere to established engineering practices or to take necessary precautions to protect vulnerable watercourses and wetlands. The inexorable result has been erosion and sediment-laden runoff, with the consequence that the San Juan River has been, and still is being, heavily polluted by sediments and debris from the Costa Rican side. This will continue unabated unless and until Costa Rica is ordered by the Court to undertake necessary remediation measures.

3.3 More specifically, this Chapter will demonstrate (B) that Costa Rica ignored basic engineering principles in constructing its Road, effectively ensuring harm to the San Juan River by, *inter alia*: (1) extensive deforestation adjacent to the River and the transfer of newly exposed and unstable soils into it; (2) massive earthmoving activities and other topographical alterations in unstable locations inappropriately close to the River, effectively assuring that huge volumes of sediment are transferred into the River; (3) leaving large, steep and unprotected piles of earth exposed to rainfall, resulting in further sedimentation of the River; and (4) failing to construct or install proper drainage systems and stream crossings to prevent erosion and pollution of watercourses in the project

¹⁰¹ *Application Instituting Proceedings*, 21 December 2011, *Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica)*, para. 6.

area, including the River and its tributaries. The Chapter will then demonstrate (C) that Nicaragua has suffered, and will continue to suffer, significant harm as a result of these irresponsible actions.

B. COSTA RICA CONSTRUCTED ITS ROAD IMPROPERLY AND RECKLESSLY, MAKING IMPACTS TO THE SAN JUAN DE NICARAGUA RIVER INEVITABLE

3.4 To avoid or mitigate the risk of environmental harm, appropriate engineering studies and designs are normally prepared before road construction commences, and particular care is taken when planning infrastructure projects in environmentally sensitive areas. This is a matter of common sense, as well as legal obligation. It does not take a Nobel laureate to appreciate that carrying out a major construction project in an area as ecologically vulnerable as the San Juan River Basin without degrading the environment requires meticulous advance planning, and strict adherence to carefully-developed engineering designs. Yet, Costa Rica ignored (or chose not to think about) impacts on the environment, including the San Juan River, and rushed ahead with the construction of its Road before necessary engineering studies and designs were prepared. This is the conclusion of Costa Rica's national professional association of engineers and architects, which is responsible for regulating the country's architects and engineers, the *Colegio Federado de Ingenieros y de Arquitectos de Costa Rica*, or

“CFIA,”¹⁰² as expressed in a June 2012 report. According to CFIA, no engineering plans or preliminary studies were prepared to guide Costa Rica’s road construction efforts, and the project was not even registered with CFIA.¹⁰³ Rather, Costa Rica undertook the project “without a single plan to indicate the path that was to be opened, or what its characteristics should have been.”¹⁰⁴ CFIA’s report concludes that constructing a road in this manner inevitably “causes increased costs, environmental problems, and a rapid deterioration of the project.”¹⁰⁵

3.5 Independently, the National Laboratory of the University of Costa Rica (sometimes referred to as “LANAMME,” its Spanish acronym), Costa Rica’s leading independent authority on road construction,¹⁰⁶ reached the same

¹⁰² The CFIA is responsible for reviewing and approving construction projects in Costa Rica before they receive the required building permits. It is comprised of the College of Architects of Costa Rica (*Colegio de Arquitectos de Costa Rica*), the College of Civil Engineers of Costa Rica (*Colegio de Ingenieros Civiles de Costa Rica*), the College of Electrical Engineers (*Colegio de Ingenieros Electricistas*), the Mechanics and Industrialists of Costa Rica (*Mecánicos e Industriales de Costa Rica* (CIEMI)), the College of Topographical Engineers of Costa Rica (*Colegio de Ingenieros Topógrafos de Costa Rica*), and the College of Technological Engineers of Costa Rica (*Colegio de Ingenieros Tecnólogos de Costa Rica*).

¹⁰³ CFIA Report, p. 2, para. 1.3 & p. 25, para. 5.2 (NM, Vol. II, Annex 4) All construction projects in Costa Rica must be registered with the CFIA’s Registry of Professional Responsibility, under article 54 of the Organic Law of the CFIA, including public works carried out by the State.

¹⁰⁴ CFIA Report, p. 25, para. 5.3; *see also* p. 27, para. 6.3 of same document (recommending the post-hoc preparation of “[a] detailed topographical blueprint of all work done to the present” and the “[d]evelopment of all pertinent designs and construction blueprints for the whole of the project.”) (NM, Vol. II, Annex 4).

¹⁰⁵ CFIA Report, p. 25, para. 5.3. (NM, Vol. II, Annex 4) *See also* *La Nación*, Costa Rica, E. Rivera, E. Oviedo & R. Rojas, “Serious errors expose trail to risk of collapse during the rainy season,” 28 May 2012 (highlighting a lack of geotechnical or topographical information) (NM, Vol. II, Annex 35).

¹⁰⁶ Since 2002, LANAMME has been responsible for monitoring Costa Rica’s public spending on road infrastructure. Its role evaluating road projects includes inspection, technical assistance, investigation and capacity building. LANAMME prepared Costa Rica’s Manual on the General Specifications for the Construction of Highways, Roads and Bridges CR-2010, which established

conclusion in a report published in May 2012, which criticized Costa Rica’s lack of planning and negligent execution of the Road project. The LANAMME report concluded that the road construction project was carried out “without any basic geometric design” or proper coordination and controls, and that “no uniform technical criteria were set in project implementation.”¹⁰⁷ In particular, LANAMME found that “the project failed to follow basic engineering practices during planning and implementation, such as: land survey for road layout; critical point geotechnical assessment; drainage structure location, design, and construction; defining suitable and uniform technical standards; [and] inspection deficiency.”¹⁰⁸

3.6 A team of environmental scientists and road construction experts from the United States, led by Dr. G. Mathias Kondolf, Professor of Environmental Planning at the University of California at Berkeley, has confirmed these conclusions, following their personal inspection of the San Juan River in October 2012. According to Dr. Kondolf, there are established “[p]rotective road design and construction standards, and Best Management Practices (BMPs) for new and reconstructed roads, [that] should have been

the official standards for projects carried out by the Costa Rican Ministry of Public Works and Transportation.

¹⁰⁷ LANAMME Report, pp. 50-51 (NM, Vol. II, Annex 3).

¹⁰⁸ *Ibid.*, p. 50

employed in the construction work that has occurred to date.”¹⁰⁹ However, “[i]t is clear that most of these measures were not followed”.¹¹⁰ In particular, Dr. Kondolf and his team found that Costa Rica’s “road works suffer from a significant lack of physical and environmental planning and protection, and failed to follow international and Costa Rican river, stream and wetland setback and protection standards.”¹¹¹ Costa Rica’s failure to abide by these and other “international road practices intended to minimize on-site and off-site impacts to water quality, channel morphology, navigation and riverine ecology, as well as national and international physical and biological resources” has led to “major deficiencies...related to the design, location, construction, winterization erosion control and subsequent maintenance along Route 1856.”¹¹² These deficiencies have, in turn, resulted in the deterioration of the Road itself and adverse impacts on neighboring watercourses, including the San Juan River.¹¹³

3.7 In short, Costa Rica’s construction of its Road without adherence to basic engineering practices has resulted in a road that is deeply flawed, and whose technical deficiencies pose major risks to the surrounding environment, including the San Juan River, as described below.

¹⁰⁹ G. Mathias Kondolf, Danny Hagans, Bill Weaver and Eileen Weppner, “Environmental Impacts of Juan Rafael Mora Porras Route 1856, Costa Rica, on the Río San Juan, Nicaragua,” December 2012 (hereinafter “Kondolf Report”), Section 5.6 (NM, Vol. II, Annex 1).

¹¹⁰ *Ibid.*, Section 5.6.

¹¹¹ *Ibid.*, Section 6.

¹¹² Appendix B, p. 1. The report also notes the “poor road location and design standards in such close proximity to the Rio San Juan”. *Ibid.*, at Section 1.

¹¹³ *See Ibid.*, e.g., Section 6.

1. Deforestation and Soil Erosion Affecting the San Juan de Nicaragua River

3.8 Deforestation is a major cause of soil erosion.¹¹⁴ Soils in deforested areas are less stable and wash away during the rainy season.¹¹⁵ If the deforested areas are adjacent to rivers and other wetlands, the soils wash into them, increasing their sediment loads, adversely affecting water quality and aquatic life, and sometimes impeding navigation as well. For these and other reasons,¹¹⁶ it is axiomatic that “any project affecting large areas of mostly undisturbed forest will have a high potential for environmental impact, and should be subject to careful, scientifically sound environmental impact assessment.”¹¹⁷

3.9 Costa Rica conducted no such assessment but nevertheless deforested large swaths of territory adjacent to the San Juan River in the course of constructing its Road. Costa Rica’s Federated Association of Engineers and Architects has reported that “deforestation and impact on the zone’s wetlands are evident”¹¹⁸ in various places throughout the length of the Road and in close proximity to the River, requiring “[a]n evaluation for possible environmental

¹¹⁴ *Ibid.*, Section 3.3.

¹¹⁵ *Ibid.*, Section 3.3.

¹¹⁶ As Dr. Kondolf explained, “[d]eforestation results in loss of important ecological habitats, carbon sequestration, and other ecological values, especially in the humid tropics, where cutting of forest is acknowledged to be a principal contributor to greenhouse gas emissions,” and a danger to plant and animal diversity. *Ibid.*, Section 3.3.

¹¹⁷ Kondolf Report, Section 3.3. (NM, Vol. II, Annex 1).

¹¹⁸ CFIA Report, p. 11; *see also* pp. 17, 18, 19 (“impact on the forest is noticeable”), 21, 22 & 26. (NM, Vol. II, Annex 4).

damage.”¹¹⁹ Likewise, Costa Rica’s Administrative Environmental Court found, in an inspection report released in July 2012, that the road construction involved “excessive and unjustified felling [of forests.]” Indeed, the Administrative Environmental Court observed that, in some places, Costa Rica clear-cut a swath of forest *eight times* larger than was appropriate.¹²⁰ In an article entitled “Environmental Court Confirmed Excessive Felling for Construction of 1856 Trail,” the Costa Rican newspaper *El País* illustrated the environmental damage in the following photograph:



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3.10 The following two photographs, which were presented to the Central American Court of Justice in early 2012 by two environmental NGOs from Nicaragua, the National Recycling Forum (“FONARE” per its Spanish

¹¹⁹ *Ibid.*, p. 26, para. 5.9. (NM, Vol. II, Annex 4).

¹²⁰ *El País*, Costa Rica “Environmental Court Confirmed Excessive Felling for Construction of 1856 Trail,” 15 July 2012 (NM, Vol. II, Annex 37).

¹²¹ *Ibid.*

acronym) and the Nicaraguan Foundation for Sustainable Development (FUNDENIC), provide additional examples of the forest destruction caused by Costa Rica during its construction of the Road, and the proximity of such activities to the San Juan River, which is visible in the bottom portion of both images:



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3.11 Images like these, as well a site visit to the project area, led the Central American Court of Justice to make the factual determination that “the felling of a large number of trees in Costa Rican territory” created “vast areas where only reddish and clayish soil remains.”¹²⁴

3.12 In April 2012, four months after Nicaragua filed its *Application* in this case, and after much of the Road had already been constructed, various Costa

¹²² Presented to the Central American Court of Justice by FUNDENIC-SOS/FONDO NATURA and FONARE in “*Ruta de la Carretera*,” 25 March 2012, image of site 25, available at http://lagosdenicaragua.org/index.php?option=com_jdownloads&Itemid=64&view=finish&cid=9&catid=3&m=0 (last visited 27 November 2012).

¹²³ Presented to the Central American Court of Justice by FUNDENIC-SOS/FONDO NATURA and FONARE in “*Audencias Públicas*,” 10 May 2012, slide 17, available at http://lagosdenicaragua.org/index.php?option=com_content&view=article&id=134&Itemid=63 (last visited 27 November 2012)

¹²⁴ C.A.C.J Judgment, 21 June 2012, p. 20 (NM, Vol. II, Annex 13).

Rican ministries belatedly and hurriedly prepared an “Environmental Management Plan”. The document’s main purpose appears to have been to defend the road construction project in the face of Nicaragua’s claims. Nevertheless, even this blatantly self-serving Costa Rican document concedes that there has been “[t]ree removal in some sectors covered by primary and disturbed primary forest, and partial fragmentation of tropical wet and moist tropical forest”¹²⁵ – that is, in plainer language, that there have been “sites where the forest was eliminated and fragmented”¹²⁶ – including in areas where “the road runs parallel to the San Juan River.”¹²⁷ In recognition of the harms such deforestation causes, the belated Costa Rican study recommends that “[a] recovery plan should be established for the affected wetlands”¹²⁸ and that “[p]lantations with native local species should be established to protect river and brook banks, particularly in areas without any forest cover, on the entire land strip between the road and the San Juan River.”¹²⁹

¹²⁵ Costa Rican Ministry of Environment, Energy and Telecommunications, National Conservation Area System, Ministry of Public Works and Transportation, National Road Council, and National Risk Prevention and Emergency Response Commission, “Environmental Management Plan: Juan Rafael Mora Porras Road,” April 2012 (hereinafter “Costa Rican Environmental Management Plan”), pp. 9-10; *see also* Annex 3 of same document (NM, Vol. II, Annex 2).

¹²⁶ *Ibid.*, Annex 3.

¹²⁷ Costa Rican Environmental Management Plan, pp. 9-10. In particular, it reports “[f]orest disturbance along an approximate 75-meter road stretch,” with “[a]lterations spread[ing] some 15 meters on both sides of the road at the ends of the stretch” in one section of the road, and that “[a]pproximately a 3-km long road section was found with trees removed” in another section. *Ibid.*, p. 10.

¹²⁸ *Ibid.*, Annex 3.

¹²⁹ *Ibid.*, p. 19.

3.13 To Nicaragua’s knowledge, Costa Rica has not attempted to carry out the meager remedial measures that its own inadequate and after-the-fact plan concludes are necessary. When Dr. Kondolf and his team visited the San Juan River in October 2012, many deforested areas adjacent to the River were still readily visible, including those pictured in the following photographs from Dr. Kondolf’s report:



3.14 Dr. Kondolf’s review of “numerous ground photos” taken by LANAMME and CFIA, together with his own reconnaissance *in situ* in October 2012, “revealed a near complete lack of secondary, post-construction erosion control measures at the many areas of exposed, bare soil created by the road-related construction and quarrying. This serious omission has resulted in

significant and continuing accelerated erosion and sediment delivery to local streams and the Río San Juan.”¹³⁰

2. Earthmoving and Topographical Changes Affecting the San Juan de Nicaragua River

3.15 In addition to removing large areas of forest and other vegetation, Costa Rica’s road construction efforts have reshaped the landscape along the southern bank of the San Juan River, resulting in vast areas of exposed red earth, where the land has been cut away (“cuts”), and where excavated materials have been deposited in what are now mounds of excavated sediments (“fills”). Making matters worse, these “earthmoving works,” as Costa Rica’s post-hoc “Environmental Management Plan” calls them,¹³¹ were carried out in a disordered and unprofessional manner. This is the conclusion reached by Costa Rica’s own national Federation of Engineers and Architects (CFIA) and the University of Costa Rica’s National Laboratory.

3.16 The June 2012 CFIA Report found – after CFIA conducted two separate site visits – that the land along the Road’s path had been cut and filled in a “disorganized” manner precisely because “it was not based on plans”.¹³² The CFIA concluded that it was not possible to ascertain what, if any, “technical criteria” had guided Costa Rica’s earthmoving efforts. The result was unstable

¹³⁰ Kondolf Report, Section 6 (NM, Vol. II, Annex 1).

¹³¹ Costa Rican Environmental Management Plan, p. 9 (NM, Vol. II, Annex 2).

¹³² CFIA Report, p. 10 (NM, Vol. II, Annex 4); *See also La Nación*, Costa Rica, E. Rivera, E. Oviedo & R. Rojas, “Serious errors expose trail to risk of collapse during the rainy season”, 28 May 2012 (NM, Vol. II, Annex 35).

cuts and fills, including “very elevated longitudinal slopes” that make transit in certain sections of the Road “almost impossible”.¹³³ The CFIA report provides the following images of what it calls “[a] dirt road with no drainage: as it was not based on plans, disorganized cuts and fills were carried out.”¹³⁴



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3.17 The University of Costa Rica National Laboratory (LANAMME) reached similar conclusions in its May 2012 report, observing that many of the cuts and fills created during Costa Rica’s construction of the Road appear to have been made without reference to “any topographic and geotechnical information”¹³⁶ and without following an organized design.¹³⁷ This haphazard approach to such “large earthmoving (cut and fill) operations”¹³⁸ resulted in what

¹³³ CFIA Report, p. 26, para. 5.8 (NM, Vol. II, Annex 4).

¹³⁴ *Ibid.*, Figure 14.

¹³⁵ *Ibid.*

¹³⁶ LANAMME Report, p. 49 (NM, Vol. II, Annex 3).

¹³⁷ *Ibid.*, p. 19 (“Cuts and fills in mountainous areas were done without following an orderly system.”).

¹³⁸ *Ibid.*, p. 28.

LANAMME refers to as “stockpiles of materials not conforming to the basic criteria for debris disposal site[s] or embankment management.”¹³⁹

3.18 Costa Rica’s lack of basic plans or preliminary studies also led to the excessive clearing and alteration of land in some areas, including areas parallel to the San Juan River that contain “markedly rugged terrain”.¹⁴⁰ This caused earthmoving works to be more extensive and more complicated than necessary, particularly given the existing slopes and types of soil present.¹⁴¹ The CFIA agreed that work in these sectors “is incomplete,” there are places where the Road “is almost impossible to transit,” and “[i]mpact on the forest is noticeable”.¹⁴²

3.19 Dr. Kondolf captured a number of images of the extensive and insufficiently planned forest clearing and earthmoving undertaken by Costa Rica in close proximity to the San Juan River. The following photograph is an example:

¹³⁹ *Ibid.*, p. 19.

¹⁴⁰ *Ibid.*, p. 31.

¹⁴¹ *Ibid.*, p. 31.

¹⁴² CFIA Report, p. 19 (NM, Vol. II, Annex 4).



3.20 As is apparent, Costa Rica’s earthmoving works in very close proximity to the San Juan River created and exposed large areas of sediments to the elements, making erosion and the transfer of materials to the River via wind and water inevitable. The University of Costa Rica’s National Laboratory observed “surface run-off impact” in these areas, namely “the development of gullies” that erode the soil of the slopes, making them unstable¹⁴³ and prone to collapse, especially when it rains.¹⁴⁴ The National Laboratory therefore warned that Costa Rica’s excessive and disorganized earthmoving efforts would inevitably result in the transfer of sediments to nearby waterbodies – especially

¹⁴³ LANAMME Report, p. 31 (NM, Vol. II, Annex 3).

¹⁴⁴ *Ibid.*, pp. 49 & 51 (noting that the Road has “a high risk of collapsing during the rainy season as a result of nonexistent drainage structures and instability of a large number of cuts and fills.”).

the San Juan River – during the rainy season; the following photograph was provided as an example.¹⁴⁵



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3.21 Dr. Kondolf agrees with the University of Costa Rica’s National Laboratory. He concluded, based on his site visit in October 2012, that Costa Rica’s lack of proper geotechnical assessments for its Road project is “apparent” and that “standard engineering and construction practices for the location of the right-of-way, cut and fill design, appropriateness of spoil disposal locations, road surface drainage and stream crossing designs, and material compaction standards” have not been followed.¹⁴⁷ According to Dr. Kondolf, “These deficiencies are pervasive”.¹⁴⁸

¹⁴⁵ *Ibid.*, p. 39.

¹⁴⁶ *Ibid.*, Figure 39.

¹⁴⁷ Kondolf Report, Section 4.5 (NM, Vol. II, Annex 1).

¹⁴⁸ *Ibid.*, Section 4.5.

3.22 In particular, Costa Rica’s “lack of planning has resulted in siting the road across steep, unstable hillsides,”¹⁴⁹ many of which are composed of “deeply weathered, unconsolidated, or otherwise weak material, which is prone to erosion and slope failure.”¹⁵⁰ This poor siting of the Road is a violation of “[o]ne of the principles of sound practice in road construction” – namely, that the “best route, through the most stable terrain” should be selected.¹⁵¹ As a result, Costa Rica’s road construction activities have “resulted in numerous, active fillslope and hillslope failures, ranging in size from shallow sidecast¹⁵² failures to large deep-seated landslides, with consequent downstream sediment delivery into the Río San Juan.”¹⁵³ This delivery of sediments to the River was essentially assured – and has indeed occurred – because much of the Road has been constructed within 50 meters of the River, in violation of Costa Rica’s own regulations for the protection of watercourses.¹⁵⁴

3.23 Costa Rica itself acknowledges in its “Environmental Management Plan” that the road construction project has involved “[e]arthmoving works altering the ecosystem and directly or indirectly affecting water dynamics.”¹⁵⁵ This has included, specifically, “moderate sedimentation in waterbodies as a

¹⁴⁹ *Ibid.*, Section 4.1.

¹⁵⁰ *Ibid.*, Section 4.3.

¹⁵¹ *Ibid.*, Section 4.3.

¹⁵² In road construction parlance, the term “side casting” refers to “the bulldozer blade simply pushing material (removed from the cutbank) ‘over the edge’ so that it tumbles down the bank. Such sidecast fill is prone to failure as a mass movement, often failing along the former (buried) ground surface, or partial failure of sediment within the fill”. *Ibid.*, Section 3.1.2.

¹⁵³ *Ibid.*, Section 6.

¹⁵⁴ *Ibid.*, Section 4.2.

¹⁵⁵ Costa Rican Environmental Management Plan, p. 9 (NM, Vol. II, Annex 2).

result of surface runoff during construction processes,”¹⁵⁶ which has been exacerbated by the fact that, “[i]n some sectors, *no* soil conservation works were implemented to minimize local water and soil impacts.”¹⁵⁷ Thus, in addition to being disorganized and excessive, Costa Rica’s earthmoving works were carried out without the “soil conservation works” necessary to prevent erosion and sediment transfer.

3.24 As a result, according to the University of Costa Rica’s National Laboratory, existing conditions “could easily lead to serious landslide problems”¹⁵⁸ in sections of the Road, and the situation “immediately requires a major additional investment of resources to build missing drainage structures [and] complete and stabilize many cut and fill sectors”.¹⁵⁹ There is no evidence that Costa Rica has acted upon these recommendations. To the contrary, it appears that the contractors responsible for constructing Costa Rica’s road “rapidly demobilized their equipment and crews and left the site with little effort to stabilize the work sites or install erosion and sediment control measures prior to the beginning of the rainy season,” and that, as of October 2012, “little maintenance or corrective work has occurred”.¹⁶⁰ This “evident lack of measures to prepare for the wet season and lack of erosion control measures along the

¹⁵⁶ Costa Rican Environmental Management Plan, p. 19. In addition to sediments, runoff has also led to the transmittal of solid and liquid waste from construction processes, including lubricants and hydrocarbons, thereby polluting nearby bodies of water. *Ibid.*

¹⁵⁷ *Ibid.*, pp. 9 & 22 (emphasis added); *see also* Annex 3 of same document (noting the “[a]bsence of soil conservation works to minimize impact on hydric and edaphic resource[s].”).

¹⁵⁸ LANAMME Report, p. 20 (NM, Vol. II, Annex 3).

¹⁵⁹ *Ibid.*, p. 51.

¹⁶⁰ Kondolf Report, Section 6 (NM, Vol. II, Annex 1).

route” that Dr. Kondolf observed “has resulted in persistent and serious erosion of bare soils all along the recently bulldozed alignment and at disturbed rock quarry sites,” with “[m]uch of this eroded sediment ha[ving] been delivered to the Río San Juan.”¹⁶¹ As Dr. Kondolf found in October 2012, Costa Rica’s “lack of prudent on-the-ground corrective actions continue to impact downslope and downstream water quality and resources of the Río San Juan.”¹⁶²

3. Exposed, Unprotected and Unstable Mounds of Earth

3.25 In cutting away sections of earth and piling up new mounds of exposed soil – without properly planning such activities, analyzing the likely results, or endeavoring to compact, cover or otherwise protect the resulting cuts and fills – Costa Rica has created unstable, bare slopes that are prone to erosion and even collapse.

3.26 It is elementary that cuts are only as stable as the geological material in which they have been formed, and that “the steeper the cutbank, the more prone it is to slope failure.”¹⁶³ The University of Costa Rica’s National Laboratory reported that there are some locations where it is obvious that the slopes created in the construction of Costa Rica’s Road, some of which are nearly vertical,¹⁶⁴ have not been “properly shaped” with safe angles suited to their soil type, causing them to be “unstable and therefore susceptible to landslides,

¹⁶¹ *Ibid.*, Section 4.8.

¹⁶² *Ibid.*, Section 6.

¹⁶³ *Ibid.*, Sections 3.1.2 & 4.5.

¹⁶⁴ LANAMME Report, p. 15 (NM Vol. II, Annex 3).

particularly in the rainy season.”¹⁶⁵ What concerns Nicaragua is the location of these “unstable slopes” in very close proximity to the San Juan River, and the risk that their susceptibility to “landslides” will result in tons of sediment being washed into the River during the heavy rainfalls that are common in the area.

3.27 Costa Rica’s Federation of Engineers and Architects voiced concern about the same problem, emphasizing the presence of slopes that are four to six meters high “with very elevated margins,”¹⁶⁶ and calling particular attention to a stretch of the Road where “huge slopes with high peaks and no protection whatsoever”¹⁶⁷ were created “a short distance from the bank of the Río San Juan” – only “approximately 15 meters.”¹⁶⁸

3.28 Costa Rican environmental and engineering organizations have called for measures to stabilize and reinforce these unstable slopes in order to prevent their deterioration and the transfer of sediments to surrounding bodies of water. The National Laboratory of the University of Costa Rica insisted that the characteristics of the soil along the Road’s route must be evaluated to ascertain whether the land is physically capable of maintaining the angles of the slopes that have been cut into it¹⁶⁹ (an analysis that should have been conducted before the cuts were made), and recommended that works be undertaken to improve slope

¹⁶⁵ *Ibid.*, p. 29; *see also* p. 42 of same document (noting the existence of “unstable slopes as a result of cuts that were not carried out at proper angles for the type of soil present,” resulting slippage and erosion).

¹⁶⁶ CFIA Report, pp. 6, 9, 14, 15, 22 & 24 (NM, Vol. II, Annex 4).

¹⁶⁷ *Ibid.*, p. 16; *see also* pp. 17-18.

¹⁶⁸ *Ibid.*, p. 16; *see also* pp. 17-18 of same document.

¹⁶⁹ LANAMME Report, p. 15 (NM, Vol. II, Annex 3).

stability and prevent erosion.¹⁷⁰ Likewise, Costa Rica’s Federation of Engineers and Architects recommended the immediate “[s]tabalization of the slopes with high margins and significant dimensions in order to avoid landslides during the rains.”¹⁷¹

3.29 Even Costa Rica’s untimely and self-serving “Environmental Management Plan” of April 2012 acknowledges that the slopes created in constructing the Road do not have “safe and stable gradients” and are “devoid of vegetation,”¹⁷² with the result that there is an “instability in some slopes,” and increased risk of “focused erosion processes”¹⁷³ in close proximity to the San Juan River. These conditions prompted the recommendation that “[t]ransversal slopes in sites where land cuts are more than 3 meters high” must be addressed “to avoid landslides,”¹⁷⁴ and that, “[i]n cases where slopes devoid of vegetation are created, complementary slope-stabilizing measures should be taken”.¹⁷⁵ Here again, there is no evidence, as of the submission of this *Memorial*, that Costa Rica has taken measures to implement its own recommendations.

3.30 During their site visit in October 2012, Dr. Kondolf and his team took notice of the “lack of any design or construction standard on the preponderance of steep hillslopes...resulting in significant accelerated erosion

¹⁷⁰ *Ibid.*, p. 52.

¹⁷¹ CFIA Report, p. 27, para. 6.2 (NM, Vol. II, Annex 4).

¹⁷² See Costa Rican Environmental Management Plan, p. 23 (NM, Vol. II, Annex 2).

¹⁷³ *Ibid.*, p. 22.

¹⁷⁴ *Ibid.*, Annex 3.

¹⁷⁵ *Ibid.*, p. 23.

and sediment delivery to the Río San Juan at most of these locations.”¹⁷⁶ The team observed “numerous examples of steep cutbanks that have already failed, both along the road itself and in quarries.” They expressed concern that, “As the exposed cutbanks continue to weather, and as the area is exposed to more intense rains, these vulnerable slopes will inevitably experience a high rate of slope failure and continuing erosion.”¹⁷⁷

3.31 These are not isolated problems. There are numerous sites of concern, including those in the following images, which Dr. Kondolf and his team captured during their site visit. All of these images, which Dr. Kondolf’s report characterizes as “*just a few* of the observed incipient to active instabilities that are present along the road,”¹⁷⁸ illustrate different problem areas directly adjacent to the San Juan River:



¹⁷⁶ Kondolf Report, Appendix B, Section 4 (NM, Vol. II, Annex 1).

¹⁷⁷ *Ibid.*, Section 4.5.

¹⁷⁸ *Ibid.*, Appendix B, Section 1 (emphasis added).





3.32 According to Dr. Kondolf, “during the short time period since road construction activities began and as a result of generally average rainfall events,” these unstable, unprotected slopes have already caused problems.¹⁷⁹ In particular,

¹⁷⁹ *Ibid.*, Appendix B, Section 1.

gullying and “mass wasting processes” – *i.e.*, landslides, collapse and other deterioration caused by gravity – have already occurred on hillslopes affected by these cuts.¹⁸⁰ And this is just the beginning: “Given the poor road location and design standards in such close proximity to the Río San Juan, we expect significantly elevated hillslope mass wasting processes to occur during future large magnitude storm events.”¹⁸¹

3.33 Landslides, collapse, and serious erosion are a concern not only in these sites of bare, unstable cutslopes, but also where Costa Rica’s construction activities have resulted in the creation of unprotected, unstable piles of excavated material, or “fills.” The stability of a fill “depends largely on how it is constructed. If the underlying slope has been properly cleaned and the fill compacted to engineering standards, it may be stable for years or decades.”¹⁸² If, on the other hand, the underlying slope is not cleared before the fill is placed on it, and if the fill is not compacted to engineering standards, the fill “will be highly unstable.”¹⁸³ When the fill covers or incorporates “dead trees and other such debris, either because the underlying slope was not properly cleared or such debris was incorporated in the cutting of the bank, the likelihood of failure is increased.”¹⁸⁴

¹⁸⁰ *Ibid.*, *e.g.*, Appendix B, Section 1.

¹⁸¹ *Ibid.*, Appendix B, Section 1.

¹⁸² *Ibid.*, Section 3.1.2.

¹⁸³ *Ibid.*, Section 3.1.2.

¹⁸⁴ *Ibid.*, Section 3.1.2.

3.34 Based on these criteria, the University of Costa Rica’s National Laboratory expressed particular concern about “the way several fills have been built, in terms of both their undue height and the poor evidence of a mechanical layer compaction process, as mandated by best engineering practices.”¹⁸⁵ The National Laboratory observed that some fills of up to 1.5 meters high had been created but not properly compacted – “a normal practice for this kind of work” – leaving the material very loose and prone to eroding or sliding away.¹⁸⁶ In other locations, the fills were piled up to 3 meters high, with borders showing signs of prior landslides, “indicating they were not built according to suitable compaction processes.”¹⁸⁷

3.35 The National Laboratory expressed concern that the uncompacted fill areas “are particularly vulnerable to damage during the rainy season,”¹⁸⁸ reporting that a lack of adequate compaction appears to have already led to slippage and erosion “in most sectors.”¹⁸⁹ The National Laboratory further observed what it described as the “poor management” of excavated material, which has in some instances been “laid next to a body of water” in an uncontrolled fashion,¹⁹⁰ as depicted in the following photograph:

¹⁸⁵ LANAMME Report, p. 21 (NM, Vol. II, Annex 3).

¹⁸⁶ *Ibid.*, p. 18.

¹⁸⁷ *Ibid.*, p. 46.

¹⁸⁸ *Ibid.*, p. 21.

¹⁸⁹ *Ibid.*, p. 29.

¹⁹⁰ *Ibid.*, p. 24.



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3.36 The National Laboratory characterized this as “a totally inadequate practice, from both the construction and engineering point of view, that damages not only [the] body of water but also [the Road itself], since there is no erosion control to prevent loss of material under rainy conditions”.¹⁹²

3.37 Dr. Kondolf agreed. Costa Rica’s use of “archaic ‘cut and fill and sidecasting’ road construction methods on steep hillslopes in such close proximity to waterbodies displays a total disregard of well-established water quality and environmental protection principles.”¹⁹³ He and his team “observed few newly constructed fillslopes that did *not* clearly exhibit widespread settlement, slope failure and mass movement of material following construction.”¹⁹⁴ Some of the fills “appeared to have pieces of dead wood incorporated into [them], or living

¹⁹¹ *Ibid.*, Figure 21: “Inadequate cut material and embankment management.”

¹⁹² *Ibid.*, p. 24.

¹⁹³ Kondolf Report, Appendix B, Section 4 (NM, Vol II, Annex 1).

¹⁹⁴ *Ibid.*, Section 4.5 (emphasis in original).

trees that were buried by sidecast fill.”¹⁹⁵ According to Dr. Kondolf, “[t]hese construction methods – sidecasting, lack of compaction and incorporation of woody debris in fill materials – are a recipe for continued slope failure and off-site sediment delivery,”¹⁹⁶ and have already “resulted in numerous, active fillslope and hillslope failures, ranging in size from shallow sidecast failures to large deep-seated landslides, with consequent downstream sediment delivery into the Río San Juan.”¹⁹⁷ The following photographs taken by Dr. Kondolf and his team illustrate the point:



¹⁹⁵ *Ibid.*, Section 4.5.

¹⁹⁶ *Ibid.*, Section 4.5.

¹⁹⁷ *Ibid.*, Section 6.



3.38 According to Dr. Kondolf, urgent interventions are necessary to prevent further erosion and sediment transport in these and many similar locations: “Without immediate efforts to stabilize these failing fillslopes (i.e. utilizing excavators to retrieve all the failing fills and creating a ‘full bench’ road), ongoing erosion and sedimentation impacts will continue to occur at extreme rates,”¹⁹⁸ with dangerous consequences for the San Juan River.

3.39 To prevent the washing away of exposed earth, it is standard procedure to cover exposed areas, either with a completed cover of mulch, quick-growing vegetation or, where no vegetation exists, or has been planted but has not yet grown in, protective geotextiles and erosion-control fabrics.¹⁹⁹ Costa Rica’s April 2012 plan acknowledges this, stating that “[e]xcavations should remain

¹⁹⁸ *Ibid.*, Appendix B, Section 4.

¹⁹⁹ *Ibid.*, Section 4.8.

uncovered the shortest time possible,”²⁰⁰ and that it is necessary to “[p]lace mesh over slopes to avoid landslides and plant vetiver grass on the side of the slope.”²⁰¹

3.40 Unfortunately, this acknowledgment came too late – long after the exposed “cuts” and “fills” were left uncovered and vulnerable to the elements – and went unheeded. The University of Costa Rica’s National Laboratory reported in May 2012 that the Road was constructed without “slope protection or impermeabilization measures implemented to help to decrease moisture impact during high rainfall events.”²⁰² The National Laboratory did note that in some locations fabric had been stretched on the slopes, presumably for protection, but found that it “will not decrease the amount of sedimentation because it is not a nonwoven geotextile capable of retaining these sediments.”²⁰³ Moreover, even this fabric of limited utility had only been used sporadically, such that the National Laboratory found, as depicted below, that “it is not significantly effective”²⁰⁴:

²⁰⁰ Costa Rican Environmental Management Plan, p. 23 (NM, Vol. II, Annex 2).

²⁰¹ *Ibid.*, Annex 3.

²⁰² LANAMME Report, p. 29 (NM, Vol. II, Annex 3).

²⁰³ *Ibid.*, p. 37.

²⁰⁴ *Ibid.*, p. 37.



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3.41 As late as October 2012, aerial and river-based inspection showed that Costa Rica’s “cuts” and “fills” of exposed earth in close proximity to the San Juan River remained uncovered or inadequately covered, just as its slopes remained precariously steep and its fills inadequately compacted. Dr. Kondolf and his team “observed unprotected, eroding bare soil areas to be ubiquitous throughout virtually all construction areas along the alignment.”²⁰⁶ There was an “evident lack of measures to prepare for the wet season and [a] lack of erosion control measures along the route,” which already resulted in “persistent and serious erosion of bare soils” all along the recently bulldozed Road, and the delivery of eroded sediment to the San Juan River.²⁰⁷

²⁰⁵ *Ibid.*, Figures 36 & 38.

²⁰⁶ Kondolf Report, Section 4.8 (NM, Vol. II, Annex 1).

²⁰⁷ *Ibid.*, Section 4.8.

4. Lack of Proper Drainage Systems and Stream Crossings

3.42 Management of surface water is essential to proper road construction and maintenance, particularly in an area like the San Juan River Basin, which receives an extraordinarily large volume of rainfall and is crisscrossed by a multitude of watercourses, many of which lead directly into the San Juan River.²⁰⁸ As the National Laboratory of the University of Costa Rica observed, “Managing surface and run-off water is one of the main issues to be taken into account in constructing this kind of road.”²⁰⁹ Remarkably, Costa Rica failed to consider this during the planning (such as it was) and construction of its Road.

3.43 Because rainwater inevitably washes away unstable and exposed soils from deforested areas, as well as from unprotected “cuts” and “fills” attendant to road construction sites, and deposits those soils as sediments in nearby watercourses and wetlands, a proper drainage system to minimize erosion is essential to prevent environmental harm.²¹⁰ This is true even for roads that have been constructed properly, without excessive deforestation or unstable, unprotected cuts and fills near watercourses, because even well-constructed roads disturb natural drainage patterns and infiltration into groundwater, increasing and concentrating storm runoff, which must be appropriately managed and drained in

²⁰⁸ *Ibid.*, Sections 4.7-4.10.

²⁰⁹ LANAMME Report, p. 35 (NM, Vol. II, Annex 3).

²¹⁰ *See* Kondolf Report, Section 3 (NM, Vol. II, Annex 1).

order to prevent damage to the road itself, as well as to surrounding land and bodies of water.²¹¹ However, just as Costa Rica constructed its Road without due regard for the need to avoid excessive clearing or the creation of unstable, unprotected slopes, so too did it fail to incorporate an appropriate drainage system. In fact, there were no plans for one.

3.44 Belatedly, in April 2012, Costa Rica recognized its error. In its “Environmental Management Plan” published at that time, it noted the absence of a drainage system, sediment traps, and related drainage gutters, and called for them to be installed immediately “to prevent sediments from leaving work areas and reaching nearby bodies of water,”²¹² emphasizing that “[d]rainages should be installed as soon as possible *before* placing the fills to prevent excess moisture and reduce erosion.”²¹³ But with the Road almost completely constructed, it was no longer possible to install drainages “*before*” placing the fills.

3.45 In its June 2012 report, the Costa Rican Federation of Engineers and Architects found, after conducting two separate site visits to the Road, that drainage systems were lacking in many areas.²¹⁴ In particular, “[t]he lack of adequate drainage for channeling rainwater was observed. It can be foreseen that

²¹¹ *Ibid.*, Section 3.

²¹² Costa Rican Environmental Management Plan, pp. 20 & 22 (NM, Vol. II, Annex 2).

²¹³ *Ibid.*, p. 22 (emphasis added); *see also* Annex 3 of same document (repeatedly stressing the need for sediment traps to be installed and periodically cleaned, together with structures to reduce the speed of rainwater flows).

²¹⁴ CFIA Report, pp. 5, 6, 9, 10, 14, 16, 20, 21 & 22 (NM, Vol. II, Annex 4); *See also La Nación*, Costa Rica, E. Rivera, E. Oviedo & R. Rojas, “Serious errors expose trail to risk of collapse during the rainy season,” 28 May 2012 (NM, Vol. II, Annex 35).

this situation may prematurely erode the work already done.”²¹⁵ The organization therefore recommended the “[i]mmediate construction of drainage canals in all stretches of the road where gravel is already in place; and their construction in the water in areas where this is still a dirt road.”²¹⁶

3.46 The University of Costa Rica’s National Laboratory made similar findings, observing serious “drainage shortfalls” all along the length of the Road.²¹⁷ Indeed, in one of the stretches that runs parallel to the River, the National Laboratory found “a large number of sites with no drainage structures” at all.²¹⁸ In other areas, the National Laboratory observed problems with “surface water drainage and an absence of gutters”²¹⁹ and commented that, in addition to missing “roadside gutters or any other drainage system to channel surface run-off water,” various stretches are also lacking the curvature necessary to properly drain water.²²⁰

3.47 The lack of proper drainage is a significant failing of Costa Rica’s road construction project, and is a major cause of harm to the San Juan River. As Dr. Kondolf explained, in order to “protect water quality and minimize ongoing and future sediment transport and delivery to streams,” Best Management Practices for road construction “emphasize dispersing road runoff rather than

²¹⁵ CFIA Report, p. 25, para. 5.4 (NM, Vol. II, Annex 4).

²¹⁶ *Ibid.*, p. 27, para. 6.2.

²¹⁷ LANAMME Report, p. 49 (NM, Vol. II, Annex 3).

²¹⁸ *Ibid.*, p. 49.

²¹⁹ *Ibid.*, p. 15.

²²⁰ *Ibid.*, p. 25.

collecting and concentrating runoff along the road”.²²¹ By failing to plan for and implement proper drainage, Costa Rica has done exactly the opposite, utilizing construction methods that have resulted in “long lengths of ‘hydrologically connected’ roads that will during every future rainfall and runoff event deliver sediment to nearby stream channels crossed by the road.”²²² In further explanation:

Hydrologic connectivity means rain running off the road will flow directly into the channel system, instead of taking a slower path through vegetation or infiltrating into the groundwater, as was dominantly the case prior to road construction. ... If the approaches to a road-stream crossing are long and/or steep leading to the adjacent tributary stream crossing, road surface gulying adds to the sediment load in road surface runoff.

...[The way] road beds are shaped and drained (i.e., do they collect and concentrate runoff or disperse road runoff at many non-stream drainage points along the road) dictates whether the road’s segments are well connected or the opposite, “shaped to be hydrologically invisible” on the landscape, which would be typical of best management practices today in North America. Highly connected roads can be significant and persistent sources of man-caused accelerated sediment delivery, and they represent active sediment sources even in light rainfall events.²²³

This is why regulators in North America and elsewhere prohibit the construction of “hydrologically connected” roads: in order to prevent or minimize “man-

²²¹ Kondolf Report, Appendix B, Section 6 (NM, Vol. II, Annex 1).

²²² *Ibid.*, Appendix B, Section 6.

²²³ *Ibid.*, Section 4.9.

caused fine sediment inputs to streams, reduce cumulative watershed effects, and protect water quality for beneficial users.”²²⁴

3.48 Nevertheless, “a large proportion of [Costa Rica’s] road is hydrologically connected to nearby streams, and through them, to the mainstem [*i.e.*, San Juan] river.”²²⁵ In particular, the Road “has long lengths of road surfaces that drain to inboard ditches,”²²⁶ “efficiently routing most runoff and eroded sediment directly to adjacent streams.”²²⁷ Further, “Not only is the runoff from a given rainfall increased because the compacted road surface does not infiltrate, but the runoff is collected and concentrated such that road surface and ditch erosion is virtually guaranteed to occur, and where these concentrated flows are discharged onto adjacent fills and native slopes, severe gullying results.”²²⁸ These gullies are both sources of sediment, because of the way they quickly erode, *and* channels to carry sediment-laden water downstream, including to the San Juan River.²²⁹ Thus, Costa Rica’s failure to incorporate proper road surface drainage structures during its construction of the Road has resulted in “widespread and serious gully erosion, which efficiently delivers eroded sediment directly to the Río San Juan” and to the tributaries that feed it.²³⁰

²²⁴ *Ibid.*, Section 4.10.

²²⁵ *Ibid.*, Section 4.9 (emphasis removed).

²²⁶ *Ibid.*, Section 4.8.

²²⁷ *Ibid.*, Section 4.9.

²²⁸ *Ibid.*, Section 4.8.

²²⁹ *Ibid.*, Section 6.

²³⁰ *Ibid.*, Section 4.8.

3.49 In proceeding with the construction of its Road in the absence of proper drainage systems, Costa Rica appears to have ignored the fact that there are “numerous”²³¹ bodies of water in the project area, some of which – including large parts of the San Juan River – lie at the bottom of slopes and are therefore especially at risk of sedimentation as a result of slope erosion, landslides, and sediment-laden runoff.²³² Many of the watercourses cross the Road and ultimately discharge directly into the San Juan River.²³³

3.50 As an illustration, the University of Costa Rica’s National Laboratory reports that in the 13 kilometers between Tiricias and San Isidro – a mountainous and forested section of the Road – small rivers and streams “are found approximately every 200 meters”.²³⁴ Dr. Kondolf observed these and many additional watercourses during his site visit in October 2012. He and his team mapped 126 stream and river crossings along the length of the Road.²³⁵

3.51 The alteration of these watercourses has serious implications for the San Juan River because, as their character and quality are compromised, so are the character and quality of the San Juan itself, because they “serve as conduits to efficiently transport sediment to the Río San Juan.”²³⁶ Costa Rica has created a scenario that “effectively guarantee[s] that road surface erosion and fine sediments are delivered directly to tributary streams and thence to the Río San

²³¹ LANAMME Report, p. 40 (NM, Vol. II, Annex 3).

²³² See, e.g., LANAMME Report, p. 32.

²³³ Kondolf Report, Section 4.9 (NM, Vol. II, Annex 1).

²³⁴ LANAMME Report, p. 40 (NM, Vol. II, Annex 3).

²³⁵ Kondolf Report, Sections 4.9 & 6 (NM, Vol. II, Annex 1).

²³⁶ *Ibid.*, Section 4.9.

Juan,” posing a “significant long-term, persistent threat of cumulative, road-related and man-caused fine sediment impacts to the Río San Juan.”²³⁷

3.52 Not until April 2012, after much of the Road’s construction had already been completed, did Costa Rican officials recommend that “[h]ydrological studies should be made for all water crossings,” that “a channel maintenance plan should be developed,”²³⁸ and that an “engineering and geological assessment [should be performed] that permits to ensure the stability and permanence of the works already initiated.”²³⁹ These are precisely the assessments and plans that should have been conducted *prior* to Costa Rica’s initiation of construction activities over a year earlier. As the University of Costa Rica’s National Laboratory noted, proper planning necessarily affects where and how certain activities are undertaken, and the early construction phase is the proper time to create the structures necessary to address water-related concerns.²⁴⁰

3.53 Costa Rica’s neglect of appropriate pre-construction assessment and planning regarding the management of watercourses has created a range of problems. As the National Laboratory explained:

One of the issues of greatest concern is the poor management of waterbodies crossed by the route.

²³⁷ *Ibid.*, Section 6.

²³⁸ Costa Rican Environmental Management Plan, pp. 19-20 (NM, Vol. II, Annex 2); *see also* Annex 3 of same document (recommending a study “to determine current characteristics of superficial hydric system, including wetlands, in order to identify potential impacts on the hydric system in the intervened area that are not yet visible”).

²³⁹ *Ibid.*, Annex 3.

²⁴⁰ *See* LANAMME Report, p. 35 (NM, Vol. II, Annex 3).

Due to the kind of area where works are taking place (wetland), the road layout sometimes comes across meanders that have not been channeled and which could erode the platform [of the road] in the short term and cut the road at multiple points.

This is not only inadequate for the route itself but also causes a negative impact on these bodies of water, limiting oxygenation capacity and degrading water quality as a result of stagnation.²⁴¹

3.54 As the result of Costa Rica’s “poor management of the bodies of water that cross the route,” Costa Rica’s Administrative Environmental Court found that “[a]t least seven rivers, streams, and creeks display different types of damage, due to the deviation of their watercourses, and canalization, piping, tapping or clogging of the waterways with sedimentation.”²⁴² The Costa Rican Federation of Engineers and Architects found the same problem in a range of locations along the Road’s course.²⁴³ Its photographs of these locations are included in Annex 4 to this *Memorial*.

3.55 There are various locations where Costa Rica has opted not to simply dump fill into and obstruct or divert the natural watercourse, but rather to build some sort of crossing over it. As Dr. Kondolf explained, these “earthen fill crossings with culverts”²⁴⁴ are “inherently unstable,” because they require the placement of “massive volumes of fill within the stream channel and valley,

²⁴¹ *Ibid.*, p. 34; *see also* p. 40 of same document.

²⁴² *El País*, Costa Rica “Environmental Court Confirmed Excessive Felling for Construction of 1856 Trail”, 15 July 2012 (NM, Vol. II, Annex 37).

²⁴³ *See* CFIA Report, pp. 9, 12, 19, 21, 22, 24 & 26 para. 5.9 (NM, Vol. II, Annex 4).

²⁴⁴ Kondolf Report, Section 3.1.3 (NM, Vol. II, Annex 1).

where it can easily be eroded and enter the river system.”²⁴⁵ In order to avoid such erosion, a stream crossing structure must be constructed properly, pursuant to accepted standards, so that it will not back up with water, become blocked with debris, or collapse under its own weight or that of the traffic traversing the road.²⁴⁶ Yet, most of the stream crossings Costa Rica built into its Road were constructed improperly. Costa Rica’s own institutions have reached this conclusion. In mid-2012, the Administrative Environmental Court gave the example of a particular watercourse having been “strangled with rock to shorten the distance for building a bridge. ... An eventual flood or strong waterfront will collapse and bring down the bridge and its foundations.”²⁴⁷ The University of Costa Rica’s National Laboratory found that the Road’s stream crossings were constructed in an *ad hoc*, rather than a carefully planned, manner and that they were inadequate, consisting of clusters of tree trunks, which are bound to rot and collapse, and improperly installed pipes and cargo containers.²⁴⁸ The Costa Rican Federation of Engineers and Architects cited the same problem, noting that these haphazard structures “do not comply with minimal structural design and engineering mechanics requirements”²⁴⁹ and, in some cases, “are already bulging

²⁴⁵ *Ibid.*, Section 3.1.3.

²⁴⁶ *Ibid.*, Section 3.1.3.

²⁴⁷ See *El País*, Costa Rica “Environmental Court Confirmed Excessive Felling for Construction of 1856 Trail”, 15 July 2012 (NM, Vol. II, Annex 37).

²⁴⁸ LANAMME Report, pp. 35, 40-41 & 44-46 (NM, Vol. II, Annex 3) ; see also Kondolf Report, Section 6 (explaining that wood used in stream crossings “will rot, probably within a decade”) (NM, Vol. II, Annex 1).

²⁴⁹ CFIA Report, p. 27, para. 6.2; see also p. 28, para. 6.3 of same document. (NM, Vol. II, Annex 4).

and in imminent danger of collapsing.”²⁵⁰ The reports provide the following images to illustrate these concerns:



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3.56 The University of Costa Rica’s National Laboratory and the Costa Rican Federation of Engineers and Architects warned in May and June 2012 that properly designed drainage pipes adequate to handle the flow of each watercourse must be installed as quickly as possible in order to prevent damage to the Road embankment and resulting sediment transfer during the rainy season.²⁵³ In August 2012, Costa Rican press reports confirmed the warnings of the Costa Rican National Laboratory and Federation of Engineers and Architects that various stream crossings – including some over streams that lead directly into the San Juan River – were “crumbling,” “threatening to fall into the waterway at any moment,” or had already “collapsed”.²⁵⁴

²⁵⁰ CFIA Report, pp. 9 &12 (NM, Vol. II, Annex 4) ; *see also* p. 25, para. 5.4 of same document (noting that these structures “already reflect deterioration and are at risk of collapsing”).

²⁵¹ LANAMME Report, Figure 40: “Provisional log stream crossing.” (NM, Vol. II, Annex 3).

²⁵² *Ibid.*, Figure 45: “Poorly installed Rib-Loc pipes.”

²⁵³ *Ibid.*, p. 40; CFIA Report, p. 27, para. 6.2 (NM, Vol. II, Annex 4).

²⁵⁴ *La Nación*, Costa Rica “Border Roadway presents more Collapsing”,13 August 2012 (NM, Vol. II, Annex 39).

3.57 Nevertheless, these problems had not been addressed as of the time Dr. Kondolf and his team visited the site in October 2012. Dr. Kondolf concluded: “From our field inspection (from aerial overflight and from riverboat inspections) of approximately 60 recently constructed stream crossings, we observed that essentially *all* road-stream crossings exhibited some form of serious design and/or construction deficiency,”²⁵⁵ as well as a need “to curtail ongoing and future erosion and sediment delivery to the Río San Juan, and these emergency actions should be of the highest priority to all parties involved.”²⁵⁶

3.58 As a result, harm to the San Juan River has already occurred and continues to occur: “At virtually all the observed stream crossings, some volume of sediment has been introduced directly into the receiving tributary stream and to the Río San Juan,”²⁵⁷ and “active erosion and sediment delivery were occurring”.²⁵⁸

3.59 Costa Rica’s April 2012 “Environmental Management Plan” acknowledges the damage to the San Juan River, even as it attempts to understate it; it recognizes that there has been “local impact from moderate sedimentation in waterbodies as a result of surface runoff during construction processes,” “sediments clogging waterbodies,”²⁵⁹ and “small pollution foci in some bodies of water due to carried solid (excavated materials and others) and liquid waste from

²⁵⁵ Kondolf Report, Section 4.6 (emphasis added) (NM, Vol. II, Annex 1).

²⁵⁶ *Ibid.*, Section 5.1.

²⁵⁷ *Ibid.*, Section 4.6.

²⁵⁸ *Ibid.*, Appendix B, Section 2.

²⁵⁹ Costa Rican Environmental Management Plan, p. 19(NM, Vol. II, Annex 2).

construction processes, such as lubricants and hydrocarbons.”²⁶⁰ Thus, even Costa Rica concedes that watercourses in the project area have been impacted by sediments and pollutants as a result of its road construction activities.²⁶¹

C. DAMAGE TO NICARAGUA HAS ALREADY OCCURRED AND CONTINUES, WITH SERIOUS CONSEQUENCES

3.60 Harm to the San Juan River, and therefore to Nicaragua, was made inevitable by the reckless manner in which Costa Rica hastily chose to construct Road 1856 on an “emergency” basis, without an Environmental Impact Assessment or properly drawn engineering plans, resulting in all of the defects and deficiencies in road design and construction – and the consequent risks of harm to the River and other nearby watercourses that flow into it – that were identified in Part B above. In this Part C, Nicaragua shows that Costa Rica’s irresponsible and unlawful actions have already caused, and will continue to cause, harm to Nicaragua in the form of massive sedimentation and other pollution of the River, with attendant adverse impacts on water quality, aquatic

²⁶⁰ *Ibid.*, p. 19.

²⁶¹ For instance, regarding the issue of contamination, the authors of the Environmental Management Plan saw fit to emphasize the importance of “[p]reventing fuel, oil, or chemical spills in general,” insisting that “[c]are should be taken...to make sure no oil or fuel leaks may reach bodies of water,” and that “[m]achinery washing and maintenance tasks in streams [must] be prohibited.” *Ibid.*, p. 20. To be sure, those same officials are quick to insist that “some” of the clogged waterbodies are “unimportant,” and that “although small amounts of sediments may be carried by rain or some streams flowing into the [San Juan R]iver within its ecosystem normal dynamics,” “[n]o sediment deposition was observed in the San Juan River.” *Ibid.*, p. 19. These statements are not convincing. They mean at most, that the authors of the Environmental Management Plan were not able to see – or did not meaningfully try to see – the impact of the road works on the San Juan River during their few hours of on-site reconnaissance. This certainly does not mean that the impacts which have occurred and continue to occur to surface water in the project area have not led and will not continue to lead to impacts in Nicaragua’s River.

life, navigation, and other general uses and enjoyments of the River by local residents and businesses.

1. The San Juan de Nicaragua River has been Damaged, and Continues to be Damaged, by Costa Rica’s Road Construction

3.61 According to the Central American Court of Justice (or “CACJ”), Costa Rica’s “high-risk and environmentally hazardous work”²⁶² has already caused harm to the San Juan River and its zone of influence – and thus to Nicaragua. The CACJ found that this harm will continue as long as the impacts of Costa Rica’s reckless, illegal behaviors continue, unless Costa Rica immediately implements appropriate remediation measures.

3.62 The Central American Court reached this conclusion after visiting the Road for itself on 12 January 2012 and reviewing the scientific and technical evidence before it.²⁶³ The CACJ found that Costa Rica initiated its road construction project without the prior studies and analyses required not only under the relevant professional standards²⁶⁴ but also under regional and international law²⁶⁵ – studies and analyses which the CACJ called “*essential* for

²⁶² C.A.C.J Judgment,, 21 June 2012, p. 21, Fifth Ruling (NM, Vol. II, Annex 13).

²⁶³ *Ibid.*, pp. 1, 4-6 & 21-22.

²⁶⁴ See *Crhoy.com*, Costa Rica “Engineers Association: ‘Emergency Decree does not justify absence of engineering principles’”, 30 May 2012 (quoting the Executive Director of the Costa Rican CFIA as characterizing the project as not having followed “the proper steps of engineering” and having not been “adequately designed and planned”) (Annex 108 to the Counter Memorial of Nicaragua (NCM) in the *Dispute Concerning Certain Activities Carried out by Nicaragua in the Border Area* (Costa Rica v. Nicaragua).

²⁶⁵ See C.A.C.J Judgment,, 21 June 2012, p. 21, Fourth Ruling. (NM, Vol. II, Annex 13).

commencing works of this magnitude.”²⁶⁶ The CACJ then ruled, unanimously, that Costa Rica had caused “ecological and related damages to the San Juan de Nicaragua River, as well as to the shared ecosystem that forms part of the Central American Biological Corridor and to the respective basin,” and to “the common wildlife biodiversity that rotates and remains around the river and maintains the ecological balance of fauna, flora, and the environment.”²⁶⁷ The Central American Court also ruled that Costa Rica has exposed the shared basin to “serious and unpredictable risks,” which the members of the Court were able to observe first-hand during their site visit,²⁶⁸ despite Costa Rica’s efforts to hide from them the erosion and environmental damage that had been caused.²⁶⁹

3.63 This harm and risk of future harm has been captured in photographs. As Dr. Kondolf explained in an expert report submitted to the Court in August 2012 in the *Case Concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, photographs depict evidence of “extensive disturbance” at many sites, “creating steep eroding slopes that deliver sediment directly to the channel of the Río San Juan.”²⁷⁰ Indeed,

²⁶⁶ *Ibid.*, p. 20 (emphasis added).

²⁶⁷ *Ibid.*, p. 22, Seventh Ruling.

²⁶⁸ *Ibid.*, p. 21, Fifth Ruling (NM, Vol. II, Annex 13).

²⁶⁹ *E.g.*, *La Prensa*, Nicaragua, “Surrounding damage could not be hidden,” 14 January 2012 (reporting that Costa Rica attempted, but failed, to hide erosion and environmental damage from the visiting judges by covering unstable slopes with synthetic fabrics to obscure the orange color of the exposed earth, and by covering exposed drainage pipes with dirt) (NM, Vol. II, Annex 26); *See also La Prensa*, Nicaragua, “Costa Rica’s difficulties due to road construction” 16 January 2012 (similar) (NM, Vol. II, Annex 27).

²⁷⁰ G. Mathias Kondolf, “Distributary Channels of the Rio San Juan, Nicaragua and Costa Rica: Review of Reports by Thorne, UNITAR, Ramsar, MEET, and Araya-Montero,” July 2012, submitted to the Court on 6 August 2012 as Appendix 1 to the *Counter-Memorial* of the Republic

there is photographic evidence, including the example below, of “raw, eroding slopes,” some of them “clearly show[ing] tongues of coarse sediment, reflecting the transport of sediment by surface runoff from the disturbed area directly into the channel” of the San Juan²⁷¹:



3.64 In its ruling against Costa Rica, the Central American Court repeatedly stressed that the proximity of the Road to the San Juan River was largely responsible for the damage caused to the River:

of Nicaragua in the *Case Concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)* (hereinafter “First Kondolf Report”), Section 2.14 (Appendix 1 to the Counter Memorial of Nicaragua (NCM) in the Dispute Concerning Certain Activities Carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua).

²⁷¹ First Kondolf Report, Section 2.14.

The Court has been able to verify the damage to the bank that protects the River on the south bank, *especially in the many sectors where the road is dangerously close to the edge of the River*, leaving it exposed to sedimentation by leaching, and also noted the lack of general buffering measures, such as culverts, drainages, etc. This Court highlights the fact that *in many sections of the inspected area, the distance between the riverbed and the road is a few meters* and the difference between the two is very pronounced, with the road in a dominant position and the river in a secondary position, all of which makes possible a landslide of large segments of the work in question, with the resulting sedimentation that would pollute the river.²⁷²

3.65 Costa Rica’s Federation of Engineers and Architects criticized the Road project for the same reason. It urged that the stretches of the Road “where its path is very close to the bank of the Río San Juan...should be re-evaluated”²⁷³ “by way of a technical study under present applicable law.”²⁷⁴ As the CFIA report explained, various Costa Rican laws required the Road to be constructed at least 50 meters away from the River.²⁷⁵

3.66 Dr. Kondolf concluded that, in the particular circumstances present here, avoidance of harm to the San Juan River required a minimum distance of at

²⁷² C.A.C.J Judgment, 21 June 2012, pp. 19-20 (emphasis added) (NM, Vol. II, Annex 13).

²⁷³ CFIA Report, p. 13; *see also* the following pages of the same document: p. 9 (“There are stretches where the recess on the bank of the Río San Juan should be revised; in some areas the recess is of approximately 10 meters”); p. 16 (“In several stretches of the road that were inspected the path of the road is a short distance from the bank of the Río san Juan, some of these bluffs are at a distance of approximately 15 meters.”); p. 18 (distance from the River in the 15 kilometers near Tiricias “should also be evaluated for compliance with the law”); and p. 26 (“there are doubts regarding the recess of the road along the Río San Juan in some stretches where it is only a few meters from the bank.”) (NM, Vol. II, Annex 4).

²⁷⁴ *Ibid.*, p. 27, para. 6.3.

²⁷⁵ *Ibid.*, p. 25, para. 5.6.

least 100 meters between the Road and the River. However, based on his on-site inspection and comparison of high-resolution satellite imagery, he found that Costa Rica violated even its own 50 meter minimum distance requirement along at least 17.9 kilometers of the Road.²⁷⁶ In the upstream section to the west, before the confluence of the San Carlos River with the San Juan, where the terrain is at its steepest and was largely undisturbed prior to Costa Rica's construction efforts, some 30% of the Road has been built in violation of the 50-meter requirement.²⁷⁷ Moreover, this "measurement includes only the road itself, and does not include the numerous new driveways, residential clearings and initial attempts to construct the road that were abandoned in favor of another route," many of which were also less than 50 meters from the River.²⁷⁸ There are even a number of locations where the Road comes within a mere *five* (5) meters from the bank.²⁷⁹

3.67 Based on their experience assessing impacts of roads and other land-use disturbances on vulnerable watercourses, and their inspection of Costa Rica's Road in particular, Dr. Kondolf and his team determined that a buffer zone of 100 meters was required, taking into account "which sections of road are likely to contribute eroded sediment directly to the river."²⁸⁰ One of the reasons so much Road-related sediment has already made its way into the River is that

²⁷⁶ Kondolf Report, Sections 2.2-2.3 & 4.2 (NM, Vol. II, Annex 1).

²⁷⁷ *Ibid.*, Sections 4.2-4.3 & 4.12.

²⁷⁸ *Ibid.*, Section 4.2.

²⁷⁹ *Ibid.*, Section 4.2.

²⁸⁰ *Ibid.*, Section 4.2.

“*nearly half* of the road was built within 100 m of the River, greatly elevating the potential for the road to negatively impact the Río San Juan.”²⁸¹ According to Dr.

Kondolf:

The poor siting of the road – across steep, unstable hillslopes and in close proximity to the river – were tragic errors with significant short- and long-term environmental consequences. There is no technical or environmental reason the road needed to go where it was put. In fact, the contrary would be true: better sites with more stable ground and located a greater distance from the river would have resulted in far less environmental impact, and over the long run, far less expense in attempting to maintain a poorly-sited, poorly-constructed road.²⁸²

3.68 Because Costa Rica decided to ignore environmental impacts and build the Road immediately adjacent to the River, “sediment eroded from the land cleared for its construction has a direct path into the river channel,” making it “a sediment source that is well connected to the receiving waters.”²⁸³ Thus, there is “every reason to believe that this extensive disturbance directly adjacent to the Río San Juan has contributed substantial volumes of sediments directly into the river,”²⁸⁴ and that it will continue to do so unless the many problems resulting from the location of the Road and the manner in which it was constructed are addressed.

3.69 As Dr. Kondolf concluded after inspecting the Road *in situ*:

²⁸¹ *Ibid.*, Section 4.2 (emphasis added).

²⁸² *Ibid.*, Section 4.3.

²⁸³ First Kondolf Report, Section 2.14 (Appendix 1 to the Counter Memorial of Nicaragua (NCM) in the Dispute Concerning Certain Activities Carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua).

²⁸⁴ *Ibid.*, Section 2.14.

[T]he rapid, unplanned, poorly designed and poorly constructed road has clearly resulted in both on-site and off-site environmental impacts as a direct result of accelerated erosion and landsliding along the road alignment. Work on the project did not follow generally accepted or scientifically developed engineering standards and Best Management Practices related to protecting water quality and natural resources. Consequently, past and continuing erosion is widespread and unchecked, with no obvious efforts being put forth to address the observed serious problems where the road alignment crosses steeper terrain.²⁸⁵

As a consequence, there are many segments of the Road that “have delivered sediment to the river or pose a high risk of future sediment delivery to the Río San Juan.”²⁸⁶

3.70 Dr. Kondolf and his team were able to extract samples from various “debris cones and fine sediment deposits in the channel of the Río San Juan, all clearly derived from road-induced erosion”.²⁸⁷ As to the ways in which these sediments have reached the San Juan, Dr. Kondolf and his team identified over 50 “sediment delivery locations” during their field work, documenting various types of “pathways of sediment visible from eroding sites to the river channel” where deposited cones of sediment were visible underwater, as well as the details of these “well-connected sediment sources.”²⁸⁸

²⁸⁵ Kondolf Report, Section 6 (NM, Vol. II, Annex 1).

²⁸⁶ *Ibid.*, Section 2.4; *see also, inter alia*, Sections 2.3, 4.11 & 6 of same document.

²⁸⁷ *Ibid.*, Section 2.4.

²⁸⁸ *Ibid.*, Sections 2.4 & 4.12.

3.71 The most obvious sediment delivery points are those where slopes were found to be eroding and collapsing directly into the River. As Dr. Kondolf observed, “At many locations, fillslopes appear to be actively adjusting and virtually ‘melting’ downslope with little evidence of maintenance or corrective effort along the route. As a consequence, accelerated human-caused erosion processes remain unchecked, and sediment continues to be delivered directly to the Río San Juan.”²⁸⁹ He captured the following images to illustrate this problem, immediately adjacent to the San Juan River:



²⁸⁹ *Ibid.*, Section 4.5 (internal citations to figures omitted).



3.72 A second sediment delivery mechanism to the River documented during Dr. Kondolf’s October 2012 site visit consists of the gullies have been “carved by concentrated road runoff and landslides in unstable road cuts and poorly constructed road fills along the newly built road.”²⁹⁰ According to Dr. Kondolf, these gullies, which are “rare in the natural, undisturbed tropical landscape, are nearly ubiquitous on both cut- and fillslopes, as well as on bare soil areas exhibiting any slope steepness,”²⁹¹ and they have been caused by Costa Rica’s “poorly constructed and compacted fills...over-steepened cutbanks, poorly designed road surface drainage, and lack of any efforts to maintain the road post-

²⁹⁰ Kondolf Report, Section 2.4; *see also* Section 4.11 of same document (NM, Vol. II, Annex 1).

²⁹¹ *Ibid.*, Appendix B, Section 3.

seasonable construction activities.”²⁹² The following image, taken from a boat just off the south bank of the River, provides an example:



3.73 As Dr. Kondolf explained, the “widespread and serious gully erosion” visible along much of the Road “delivers eroded sediment directly to the Río San Juan” when water flows through and continuously erodes the gullies, collecting sediment as it goes, and makes its way downhill the short distances to the River.²⁹³ Indeed, there is “direct evidence that sediment from gullies in

²⁹² *Ibid.*, Appendix B, Section 3; *see also* Kondolf Report, Section 6 (explaining that “mass wasting, gully erosion and surface erosion processes are widespread and common,” appearing in “virtually all disturbed land areas,” and there is scant evidence that efforts have been made to “control the ongoing erosion and sediment transport process”).

²⁹³ *Ibid.*, Section 4.8.

earthen road fill has been delivered to the Río San Juan.”²⁹⁴ In several locations, Dr. Kondolf and his team photographed the “sediment deltas” that have formed in the River as a result of this gully erosion and related sediment transport, as shown in the following example:



Some of the “sediment deltas” that have formed in the San Juan River as a result of the widespread gully erosion caused by Costa Rica’s improper road construction techniques are more visible from the air, exhibiting the same reddish hue that characterizes the disordered, unstable gashes Costa Rica has carved into the landscape. The following photographs were taken from a helicopter:

²⁹⁴ *Ibid.*, Section 4.11.



3.74 A third sediment transport mechanism documented by Dr. Kondolf and his team consists of the tributaries that cross the Road and reach the San Juan River. As explained in Part B of this Chapter, many of these watercourses have received sediment-laden runoff as a result of Road-related erosion and transported it to the San Juan.²⁹⁵ Dr. Kondolf found that much of the sediment from the “extensively rilled and gullied” fills “enters the river system at stream crossings. Similarly, sediment eroded from the road surface enters the stream system at road crossings; these are the lowest points in the road system, so roads drain towards them, carrying eroded sediment.”²⁹⁶ The eroded sediments are transferred by these streams into the San Juan River. As Dr. Kondolf and his team found:

Almost all of the observed confluences exhibited evidence of varying degrees of recent, active and/or ongoing sediment transport into the [River]. Visual sedimentation effects ranged from thin veneers of silt- and clay-sized sediments deposited on and amongst stunted sedges and grasses, to the formation of coarse grained terraced outwash deltas and alluvial fans. Several of these outwash deltas extended up to 10 meters into the [River]. Many observed tributaries were considerably more turbid than the main stem [River]. These persistent cumulative impacts will continue to occur without an immediate extensive effort at conducting emergency erosion control, grade and slope stabilization, effectively dispersing road surface runoff, and re-routing many road segments farther from the [River].²⁹⁷

²⁹⁵ See Part A, Section 4, *supra*.

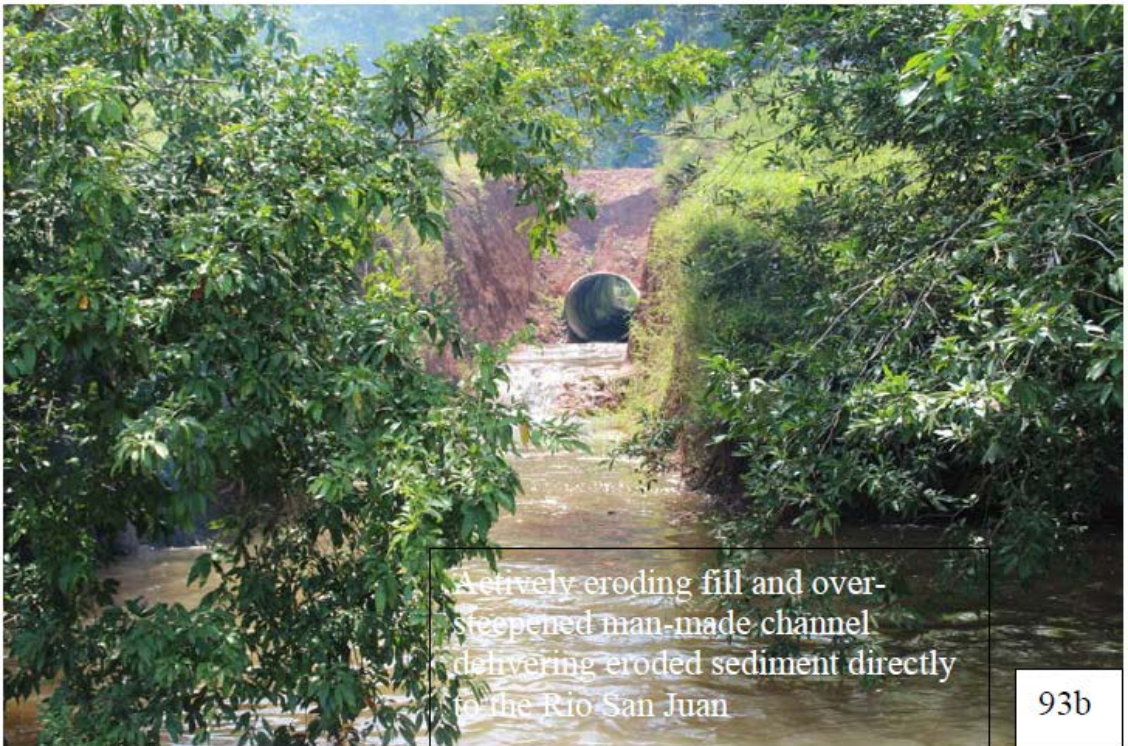
²⁹⁶ Kondolf Report, Section 4.11 (internal citations to figures omitted) (NM, Vol. II, Annex 1).

²⁹⁷ *Ibid.*, Appendix B, Section 5.

3.75 The fourth sediment delivery mechanism consists of the drainage channels that Costa Rica has dug, intentionally connecting its Road to the San Juan River and ensuring that water carrying sediment from the Road will be transferred to the River. As Dr. Kondolf found, Costa Rica’s construction of its Road involved the digging of man-made ditches, as well as the “intentional re-routing and diversion of natural stream channels,” which “focused concentrated flow to areas where erosion is accelerated and sediment delivery to the Río San Juan is virtually assured.”²⁹⁸ Some of these man-made channels connecting the Road to the River are visible in the following images:



²⁹⁸ *Ibid.*, Section 6.



3.76 The sediment fans, choked vegetation and other obvious signs of Road impacts on the River resulting from these four sediment delivery mechanisms which Dr. Kondolf and his team observed and documented reflect only a fraction of the much larger sediment transfers to the River that have taken place to date as a result of Costa Rica's construction of the Road:

It is important to note that the sediment we could sample was only the "lag deposit" from a much larger sediment load that was carried into the river. The cones of sand and gravel we sampled probably represent less than 5% of the total amount of sediment that passed at those points into the river. Most of the finer sediment has been flushed deeper into the river and carried downstream. Thus, even under the conditions of modest rainfall over the past two years, our field work demonstrated that sediment eroded from the road has reached the river in substantial amounts.²⁹⁹

3.77 According to Dr. Kondolf, erosion along the Road has been "astronomically accelerated over background natural gully erosion rates," and the "lack of any planning, design, construction and maintenance standards for the road is resulting in widespread erosion that is displacing tens of thousands of cubic meters of soil".³⁰⁰ Using chronic erosion rates published in the scientific literature, including studies on road surface erosion rates in tropical areas, Dr. Kondolf and his team estimate that, in just the 41-kilometer stretch of the Road upstream from the confluence of the San Carlos River, surface erosion alone is

²⁹⁹ *Ibid.*, 4.11.

³⁰⁰ *Ibid.*, Appendix B, Section 3.

producing some 17,800 to 21,300 m³ of displaced soil per year.³⁰¹ In addition, the “mass wasting” and gully erosion that has been taking place along the same upper stretch of the Road as a result of Costa Rica’s improper construction practices and lack of corrective measures or maintenance is displacing between 218,400 and 273,000 m³ of soil per year, according to conservative estimates.³⁰²

3.78 Not all of this sediment makes its way into the San Juan River immediately. However, due to the unreasonably close proximity of the Road to the River, the high percentage of its length that has been constructed across steep hillslopes, and the large number of stream crossings, “a significant portion of the transported sediment” is delivered to the River.³⁰³ In particular, based on the foregoing factors, as well as his own field observations and those published in the reports prepared by the University of Costa Rica’s National Laboratory and Costa Rica’s Federation of Engineers and Architects, Dr. Kondolf estimated that 40% of the displaced soils being generated upstream from the confluence of the San Carlos River reaches the San Juan River annually.³⁰⁴ That is, some 7,120 to 8,520 m³ of sediments produced by surface erosion are making their way to the River, and roughly *ten times* that amount – some 87,000 to 109,000 m³ per year – are being transported into the River as a result of the mass wasting and gully

³⁰¹ *Ibid.*, Sections 2.5 & 4.12.

³⁰² *Ibid.*, Section 4.12.

³⁰³ *Ibid.*, Appendix B, Section 3.

³⁰⁴ *Ibid.*, Section 4.12.

erosion taking place along the Road.³⁰⁵ Combined, these sums total between 94,120 and 117,520 m³ of sediment that have been and will continue to be deposited into the San Juan River per year as a result of Costa Rica's Road.

3.79 To put these numbers into perspective, a typical dump truck has a capacity of 20 cubic meters.³⁰⁶ This means that it would take 5,000 dump trucks, each loaded to capacity, to haul the approximately 100,000 m³ of sediments that Costa Rica's Road is causing to be delivered to the San Juan River on an annual basis.

3.80 For Nicaragua, a more striking comparison is how this sediment contribution compares to the volume of sediments which Nicaragua anticipates being able to dredge from the Lower San Juan River through its current dredging program. As the Court is aware, before Costa Rica initiated its road construction activities, the problem of sedimentation in the San Juan River was sufficiently acute that it forced Nicaragua to undertake a dredging program to restore navigability of the lower stretches of the River. As Nicaragua reported to the Court in August 2012, its current budget for the dredging project allows for the extraction of an estimated 395,395 m³ of sediment from the lower stretches of the San Juan.³⁰⁷ This means that Costa Rica's Road is, on an annual and ongoing basis, adding back into the River a quarter or more of the amount of sediment that

³⁰⁵ *Ibid.*, Section 4.12.

³⁰⁶ *See, e.g.*, the specifications for the SINOTRUK HOWO 4x2 Dump Truck, available for purchase here: http://www.alibaba.com/product-gs/333309090/20_Cubic_Meters_Carriage_SINOTRUK_HOWO.html (last accessed 30 November 2012).

³⁰⁷ *Counter-Memorial* of the Republic of Nicaragua in the *Case Concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, para. 5.176.

Nicaragua is trying to extract in order to ensure the navigability of the River, frustrating Nicaragua's efforts and forcing Nicaragua to re-dredge the same stretch of the River over and over again to keep up with increased sediment loads caused by Costa Rica.³⁰⁸ And this is without taking into account Dr. Kondolf's calculation that "future erosion and sediment delivery during a tropical storm or hurricane will likely be greater than the current sediment transfer *by a factor of at least 10.*"³⁰⁹

3.81 As shown below, sediment contributions of even the current magnitude are known to result in compromised water quality and damage to aquatic life. Thus, Costa Rica's activities have not only exacerbated existing problems with navigability and increased the costs Nicaragua must incur to dredge the River, but have also harmed the River's water quality and aquatic life, Nicaragua's fishing industry, and the Nicaraguan (and Costa Rican) nationals who rely on the River and its life-forms for sustenance and livelihood, as well as transport and recreation. Having failed to conduct an environmental impact

³⁰⁸ See, e.g., EPN, "Dredging Project Technical Evaluation Analysis 2011: Improving Navigation on the San Juan River," 23 January 2012, p. 2 (Annex 17 to the Counter Memorial of Nicaragua (NCM) in the Dispute Concerning Certain Activities Carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua); INETER, "Summary of Measurements of Liquid and Suspended Solids Content During the Years 2006, 2011, 2012 (Annex 16 to the Counter Memorial of Nicaragua (NCM) in the Dispute Concerning Certain Activities Carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua); see also *Diario Extra*, Costa Rica "Nicaragua requests studies on the Soberania road", 13 December 2011 (quoting Nicaraguan Vice Minister of Foreign Affairs, Valdrak Jaentschke, who has explained that Costa Rica's road construction project has caused "slopes to deteriorate which in turn leads to sedimentation in the San Juan River, affecting [Nicaragua's] dredging works, navigation, and altering the ecological balance of the species that live in the River.") (NM, Vol. II, Annex 23).

³⁰⁹ Kondolf Report, Section 6 (emphasis added) (NM, Vol. II, Annex 1).

assessment, Costa Rica took none of these impacts into account prior to undertaking its road construction project.

2. Harms Caused by Road Construction to Watercourses in Environmentally Sensitive Areas Generally

3.82 It is well established in scientific and professional literature that the construction of roads in the vicinity of vulnerable watercourses dramatically increases sediment transfer impacts.³¹⁰ According to Dr. Kondolf, “roads disturb pre-existing natural drainage patterns, increasing storm runoff from a given rainfall, and more importantly, concentrating surface runoff such that it is capable of eroding gullies and transporting sediment and contaminants to the river system.”³¹¹

3.83 This is true even when the changes are made in areas that have been “previously disturbed,” including for agricultural uses, or where smaller roads are replaced by larger ones – as has occurred here in some stretches:

Constructing a road across formerly natural or agricultural land will convert formerly pervious surface into impervious surface. Falling rain can no longer infiltrate into the soil and groundwater, but flows on the compacted road as surface runoff. Moreover...the road tends to channel surface runoff, often in a ditch adjacent to the road surface. Thus roads produce concentrated surface runoff, not only because of the lack of infiltration on the road surface, but also because they collect dispersed runoff into concentrated flow.³¹²

³¹⁰ *Ibid.*, Section 3; *see also* Kondolf Report, Appendix C: Detailed Literature Review.

³¹¹ *Ibid.*, Section 3.1.5.

³¹² *Ibid.*, Section 3.1.1.

3.84 Importantly, “[u]npaved roads are prone to high, chronic erosion from surface runoff, and the concentrated surface runoff from the road can cause gullies and other downstream impacts in virtually any topographic setting.”³¹³ These impacts are magnified when the unpaved road has been built, as here, in rugged terrain:

Roads cut across steep hillslopes concentrate runoff even more by virtue of the steep slopes, and if runoff down roads and adjacent ditches is not frequently diverted and spread to infiltrate, the effect of gullying and road surface erosion is exaggerated with the steep topography. More importantly, the cut and fill required to put the road across a slope has the potential to induce landslide failure of the cut banks and failure of [fills]. In essence, the entire volume of material moved to make the road becomes vulnerable to mass wasting and particulate erosion.³¹⁴

3.85 These impacts are inevitable, as prior cases demonstrate, when roads are constructed in the same manner as Costa Rica’s Road, in close proximity to watercourses like the San Juan River. The same problematic construction practices that Costa Rica used in building its Road “were commonplace in the Pacific Northwest of North America in the 1950s and 1960s, and they created a legacy of problems that persist to this day”.³¹⁵ These problems include “fish populations that have never recovered their pre-disturbance levels, continued slope instability in many sites, excessive sediment supply persisting in

³¹³ *Ibid.*, Section 3.1.1.

³¹⁴ *Ibid.*, Section 3.1.5.

³¹⁵ *Ibid.*, Section 4.5.

many rivers such that aquatic habitats are still degraded and cannot support fish and other species as formerly.”³¹⁶

3.86 As a result, the practices that led to these problems – the same destructive practices that Costa Rica employed in its construction of the Road at issue in this case – were prohibited in California by the Forest Practice Act of 1974, in other North American states by comparable legislation, and by the federal U.S. Government for all publicly owned forest lands in the United States.³¹⁷ In particular, those statutes make it illegal to, *inter alia*: construct a road without detailed plans, build on steep hillsides, cut excessively steep slopes, sidecast fill, leave fill uncompacted, discharge water and sediment directly into streams, install non-standard stream-crossing materials, or allow *ad hoc* earthen stream crossings to erode.³¹⁸

3.87 The reason for these prohibitions is: the banned activities cause serious damage to the environment, including to rivers and their aquatic life. That damage has been well documented, as has the decades of work that is required to remediate the environmental harm caused by the improper construction of roads in close proximity to rivers. There is a wealth of scientific literature documenting past experiences with precisely the sorts of inappropriate road construction activities that Costa Rica has undertaken in this case. As Dr. Kondolf observes in his report: “Constructing a road such as this has well-

³¹⁶ *Ibid.*, Section 4.5.

³¹⁷ *Ibid.*, Sections 4.5 & 4.10.

³¹⁸ *Ibid.*, Section 4.10.

documented environmental effects, especially where roads are constructed in steep terrain and through weak geological materials,”³¹⁹ as Costa Rica has done.

3.88 Of particular relevance for this case, the delivery of substantial volumes of sediment to rivers has been documented to cause significant ecological damage. There are many documented examples of habitats within waterbodies being “buried in fine sediment such that fish and other aquatic organisms are unable to reproduce, feed, or find cover, leading to the loss of formerly productive fisheries.”³²⁰ Dr. Kondolf cited the example of sediment releases from the construction of a road in Bolivia, which severely impacted a tropical, humid-climate river, whose aquatic ecosystem was decimated in terms of both the abundance and diversity of its invertebrates.³²¹ This is not surprising to experts in the field, who are well aware that increased fine sediment in rivers causes “increased turbidity, reduced light penetration, and consequently, reduced primary productivity, which can have effects up the food chain.”³²² Fine sediments (*e.g.*, silt and clay) also cause, *inter alia*:

- Clogging of gravel and sand beds, reducing the exchange of stream and shallow groundwater, altering natural water pathways and quality;
- Infiltration of fine sediments into formerly clean gravel beds, which are needed by aquatic macro-invertebrates, juvenile fish, and other organisms for their habitat;

³¹⁹ *Ibid.*, Section 3.1.

³²⁰ *Ibid.*, Section 3.1.4 (internal citations omitted).

³²¹ *Ibid.*, Section 3.1.4, citing Fossati et al. (2001).

³²² *Ibid.*, Section 3.1.4.

- Burial and loss of aquatic vegetation, which serve as both habitat and food source for other organisms, and whose destruction affects oxygen content in the water; and
- Clogging and damage to the gills of fish from high concentrations of suspended sediments.³²³

3.89 Road-related erosion can also introduce *coarse* sediments (*i.e.*, gravel and sand) into nearby watercourses, which move through the environment differently than fine sediments and tend to affect river systems adversely – including their “stability, ecosystems, and water quality” – by decreasing water depth and channel capacity. Such impacts, which already plague the Lower San Juan River, cause “channel destabilization as flow is displaced from sediment-choked channels toward the banks,” and – as Nicaragua has already experienced – decreased navigability of the watercourse.³²⁴ The deposition of excess coarse sediments, like fine sediments, also causes the burial of important aquatic habitats and the consequent loss of native species, “impacts that have been documented to persist for decades.”³²⁵

3.90 The scientific literature reports these effects from “all parts of the globe, including Asia, Europe, Australia, and Latin America, and in a wide range of climates from northern-latitudes to the tropics”.³²⁶ However, the environmental impacts of road-induced sedimentation of watercourses have been

³²³ *Ibid.*, Section 3.1.4.

³²⁴ *Ibid.*, Section 3.1.4.

³²⁵ *Ibid.*, Section 3.1.4. (internal citations omitted).

³²⁶ *Ibid.*, Section 3.1.4.

especially well-documented in North America, in the forests of the Pacific Northwest (California, Oregon and Washington), where logging roads were constructed through forested areas rich in watercourses during the mid-1900s “using exactly the same practices” as those used by Costa Rica in the present case.³²⁷ As Professor Kondolf explained:

For example, roads built with similar problems to Route 1856 constructed to cut timber in the Quinault River basin, Washington, were identified as key sources of erosion and sediment to the river, resulting in a near-complete destruction of a sockeye salmon run that formerly numbered a million adult fish annually, and which has still not recovered after over four decades in which such practices have been outlawed and numerous restoration projects attempted.³²⁸

3.91 Similar impacts to salmon populations were felt in the Clearwater River catchment, also in Washington state, where road-related landslides, sidecast erosion, gullies, and debris-flows – all present in this case – delivered massive amounts of sediment into the river, causing a “severe impact to spawning salmon populations.”³²⁹ Redwood National Park in northern California, which is home to the tallest trees in the world, “is still recovering from the effects of high sediment

³²⁷ *Ibid.*, Section 3.1.4.

³²⁸ *Ibid.*, Section 3.1.4.

³²⁹ *Ibid.*, Section 3.1.4.

loads,” as described in the detailed literature review presented as Appendix C to Dr. Kondolf’s report.³³⁰

3.92 In short, road construction of the sort at issue in this case causes a combination of hydrologic effects and increased erosion that results in “significant increases of sediment loading to rivers and streams, which in turn have been documented to cause a range of serious environmental problems,” including but not limited to “the loss of aquatic vegetation, macroinvertebrates, and valued fish species, as well as degraded water quality,” all of which have been documented across the globe in a wide range of ecosystems.³³¹

3.93 Thus, it was inevitable that Costa Rica’s irresponsible and haphazard road works, and lack of any environmental impact assessment, would harm the San Juan River and its ecosystem. This is particularly true given the inappropriate location of much of the Road through steep terrain right next to the River. As Dr. Kondolf explained, two of the “most effective professionally accepted standards to minimize the potential for water quality and habitat impacts associated with roads” are:

- Avoiding locating and constructing roads on steep slopes; and
- Observing increased buffers and setbacks from waterbodies,³³² because “it is an accepted principle that building [a road] close to a river or other water

³³⁰ *Ibid.*, Section 3.1.4.

³³¹ *Ibid.*, Sections 3.1.4 & 3.1.5.

³³² *Ibid.*, Appendix B, Section 7.

body increases the likelihood that sediment from the road will reach the water body.”³³³

Costa Rica has, quite simply, demonstrated a “total disregard for [both of] these widely accepted principles.”³³⁴

3. Required Remediation Measures

3.94 Dr. Kondolf and his team of experts found that “[i]mmediate emergency actions are needed to curtail ongoing and future sediment delivery to the Rio San Juan” in light of the “erosional impacts” that have already occurred, which they characterized as “extraordinary in scale.”³³⁵ They attributed these impacts to “inadequate planning (location), design, construction and maintenance practices,” along almost all the “road reaches and stream crossings” of Costa Rica’s Road:

Based on our extensive experience in controlling and normalizing wildland road erosion processes to protect water quality on both public and private road systems, we recommend the following mitigation and emergency erosion/sediment control measures be undertaken immediately. The measures include those designed to mitigate and prevent damage from 1) fillslope instability and mass wasting, 2) stream crossing erosion and failure, 3) surface erosion from road surfaces, and 4) erosion and gullyng from cutbanks, fillslopes and other bare soil areas. These measures are those that are required, at a minimum, to control ongoing impacts and reduce the risk of future sediment delivery to the Río San Juan from the existing road work. Their implementation should be overseen by

³³³ *Ibid.*, Section 4.2.

³³⁴ *Ibid.*, Appendix B.

³³⁵ *Ibid.*, Section 5.1.

qualified engineers and geologists specifically trained and experienced in road restoration and erosion control.³³⁶

3.95 Under the heading “**RECOMMENDED EMERGENCY STABILIZATION AND EROSION CONTROL MEASURES TO PREVENT CONTINUING AND FUTURE IMPACTS TO THE RÍO SAN JUAN,**”³³⁷ Dr. Kondolf and his team specified four urgent tasks, which are described below, in the experts’ own words:

Task 1: Reduce the rate and frequency of road fill failure slumps and landslides where the road crosses the steeper hillslopes, especially in locations where failed or eroded soil materials have been or could potentially be delivered to the Río San Juan.

- A. As soon as weather and soil conditions permit, mobilize heavy earthmoving equipment to excavate all unstable and potentially unstable sidecast fills and fill materials. Hydraulic excavators will be required, and in many locations temporary benches and access spur roads will be required to reach all the unstable and failing fill materials. Long boom excavators may be useful for reaching and removing unstable spoil materials where a temporary access road cannot be safely built.
- B. Dump trucks will be required for endhauling the excavated spoil materials for disposal at stable, low gradient locations where the materials will have no potential for re-mobilization and delivery to streams or wetlands.
- C. It should be noted that seeding, mulching or planting unstable and failing fills, or employing various fabrics designed for surface erosion

³³⁶ Kondolf Report, Section 5.1 (NM, Vol. II, Annex 1).

³³⁷ *Ibid.*, Section 5.

control, are **not** acceptable methods for controlling mass wasting processes.

- D. Once the unstable fills have been excavated and removed, the road will largely consist of a full bench road bed with little or no part of the remaining road constructed on potentially unstable fill material. If road widths are insufficient to accommodate the expected traffic in these treated reaches, either the cut portion of the road can be moved farther into the hillslope (provided the earth materials are stable) or a well designed and constructed engineered fill can be built along the outside of the road. The structural fill should be designed by a qualified engineer who should also be present during construction.³³⁸

Task 2: Eliminate or significantly reduce the risk of future erosion and sediment delivery at all stream crossings along Route 1856.

- A. As soon as weather and soil conditions permit, mobilize heavy earthmoving equipment to stabilize failing stream crossings by excavating all unstable or potentially unstable, poorly compacted and over-steepened fills at all road-stream crossings.
- B. As soon as weather and soil conditions permit, mobilize heavy earthmoving equipment to stabilize failing or potentially unstable road fills on the immediate road approaches to stream crossings by excavating all unstable or potentially unstable, poorly compacted and over-steepened fills.
- C. Endhaul the excavated spoil materials to stable spoil disposal locations where the soils will not be eroded and delivered to the Río San Juan or its tributaries.

³³⁸ *Ibid.*, Section 5.2.

- D. Poorly designed road-stream crossings should be immediately removed until they can be properly designed and reconstructed.

These sites include those crossings where:

- i. road-stream crossing culverts and bridges have been constructed with unsuitable materials (e.g., logs, metal shipping containers, etc.), or
- ii. stream crossing structures have not been designed (engineered) to accommodate the 100-year return interval runoff event or
- iii. road-stream crossing bridges or culverts are misaligned with the natural channels

Removal of these poorly designed and/or constructed road-stream crossings should consist of:

- i. excavating and removing the drainage structure,
 - ii. excavating the fill materials out of the stream crossing so as to "exhume" the original channel bed, re-establish the natural thalweg channel gradient and flood flow width, and provide stable sideslopes with maximum 2:1 sideslope, and
 - iii. seed and mulch bare exposed soils for temporary erosion control.
- E. The stream crossings can be properly reconstructed in the future once they have been properly designed using a) the proper materials, locations, orientations and sized drainage structures to accommodate the 100-year flow along with woody debris that will be in transport, and b) sufficient drainage structure length to construct stable, compacted fillslopes and transport stream flow beyond the construction site right-of-way.³³⁹

³³⁹ *Ibid.*, Section 5.3.

Task 3: Immediately reduce road surface erosion and sediment delivery by improving dispersion of concentrated road runoff and increasing the number and frequency of road drainage structures. This measure will address gully erosion and hydrologically connected road segments that are currently delivering sediment to the Río San Juan and its tributaries.

- A. As weather and soil conditions permit, and after excavating all the fillslopes exhibiting instabilities referenced in Recommendation #1 (above) along Route 1856, immediately construct temporary rolling dips, cross road drains and/or waterbars at average 15 meter intervals (or more frequently) to drain road surface runoff to the outside edge of the road.
- B. Construct surface drainage structures at close enough intervals so they will not result in new gully formation capable of transporting eroded sediment to the Río San Juan or its tributaries. Some erosion of the road fillslopes can be expected, but sediment should be deposited on the native hillslope beyond the base of the fill and not transported to the river or a stream. Culvert down drains can be constructed to carry road surface runoff down the fillslope wherever the road is too close to the river to prevent sediment delivery.
- C. Ensure that every drain or waterbar is constructed at a slightly steeper slope angle/gradient than the existing road gradient where the drain is constructed, so that they will be self-flushing and self-maintaining.
- D. Ditches should be drained under the road using ditch relief culverts installed at sufficient intervals to prevent gulying of the fillslope or the natural hillside where they discharge.
- E. Ditch drains and road surface drains should be placed close to each road approach to tributary stream crossings so as to divert surface runoff

onto adjacent natural, undisturbed (vegetated) hillslopes, and thereby prevent or minimize road surface runoff delivery to streams that flow into the Río San Juan.

- F. Maintain all surface drainage structures and ditch drains so they continue to function as intended and so eroded sediment is not discharged to the Río San Juan or its tributaries. If drainage structures are damaged by traffic or equipment, they should be rebuilt immediately, and before the next rainfall and runoff event.³⁴⁰

Task 4: Control surface erosion and resultant sediment delivery from bare soil areas that were exposed during clearing, grubbing and construction activities in the last several years.

- A. Concurrent with the completion of the excavation and road drainage improvements in recommendations outlined in #1, #2 and #3 above, seed and mulch all bare soil areas with any potential for sediment delivery to nearby streams/wetlands with straw mulch at a rate of 4,485 kg/ha and native seed at a rate of 56 kg/ha. If mulches other than wheat or rice straw are employed, ground coverage should be at least 95%.
- B. Cutbanks with slopes steeper than 50% will likely require the combined use of seeding, mulching and installation of rolled erosion control fabrics, stapled to the slope, to control surface erosion.
- C. Inspect, re-treat and maintain all erosion control measures so they continue to function as intended and they prevent sediment delivery to the Río San Juan and its tributaries.³⁴¹

³⁴⁰ *Ibid.*, Section 5.4.

³⁴¹ *Ibid.*, Section 5.5.

3.96 The foregoing are just the “temporary, emergency measures” that must be “implemented to control erosion, mass wasting and sediment delivery to the Río San Juan and its tributaries.”³⁴² In other words, these measures are simply triage, intended to staunch the bleeding from the “patient’s” open wounds. The treatment recommended by Dr. Kondolf and his team also include measures to bring about the River’s full recovery and maintain its long-term health:

[W]e strongly recommend that qualified engineers and geologists evaluate the location, design, and construction measures that were employed... as well as those that are planned for any future earthmoving activities. Protective road design and construction standards, and Best Management Practices for new and reconstructed roads, should have been employed in the construction work that has occurred to date. It is clear that most of these measures were not followed, and the resulting high rates of mass wasting and gully erosion on steeper areas reflect this shortcoming. In addition to the emergency erosion and sediment control measures detailed above, it is imperative that any new or continued construction work on the Route 1856 needs to follow more formal, protective planning, design and construction BMPs if they are to avoid additional damage to the Río San Juan.³⁴³

3.97 In particular:

Portions of Route 1856 that have already undergone some measure of construction, and are currently exhibiting severe erosion rates or slope instabilities, will need to be completely reconstructed or realigned to more favorable locations. Ideally, any road in this general vicinity should be aligned farther inland, so as to take advantage of favorable

³⁴² *Ibid.*, Section 5.6.

³⁴³ *Ibid.*, Section 5.6.

terrain while not threatening the river or delivering eroded sediment that could impair downstream river morphology or ecology.

Sections of the current road alignment that have been pioneered or constructed close to the river, where sediment delivery is highly likely or has already occurred, should be evaluated for relocation and realignment. All future road construction should be completed only after sound professional engineering and geologic design has been completed, and only under the field supervision of engineers and geologist trained in road location, design and construction, as well as effective road-related erosion and sediment control measures.³⁴⁴

3.98 Employing “Best Management Practices” – which is the essence of what the experts recommend – will serve Costa Rica’s interests as well as Nicaragua’s:

Employing Best Management Practices for road construction and road management in the forest environment will help minimize the potential environmental impacts of the construction project, it will also minimize future maintenance requirements and storm-related impacts during seasonally wet weather and when large floods occur. Poor practices, as were employed in many locations along Route 1856 not only result in high cost, high maintenance roads that perform poorly during bad weather, they also result in unnecessarily high costs when portions of the road fail and become impassable, and when such sections need to be rerouted and the old alignment requires expensive road restoration and decommissioning measures to be permanently closed.³⁴⁵

³⁴⁴ *Ibid.*, Section 5.6.

³⁴⁵ *Ibid.*

CHAPTER 4

BREACHES OF THE LEGAL REGIME OF THE SAN JUAN DE NICARAGUA RIVER

4.1. In addition to causing substantial harm to the scenic value and eco-tourism potential of the San Juan River, the construction of Route Juan Rafael Mora Porras - Route 1856, which involves more than 900 pieces of machinery operated by at least 35 construction companies,³⁴⁶ have resulted in the dumping into the River of substantial volumes of sediments and debris – soil, uprooted vegetation, and felled trees – produced by the clearing and levelling of land for the road bed. Furthermore, the felling of trees and the removal of topsoil and vegetation close to the bank of the San Juan River is facilitating land collapse and both erosion and runoff during rains, which are leading to the transfer of even greater amounts of sediments into the River.³⁴⁷

4.2. In so doing, Costa Rica seriously breaches its obligations in matters of environment as will be shown in the next Chapter of this Memorial; it also infringes its obligations resulting from the 1858 Treaty of Limits as interpreted by successive arbitral and judicial decisions, which recognizes

³⁴⁶ *Crhoy.com*, Costa Rica “Path construction supervisors informed problems and the lack of oversight”, 11 June 2012 (Annex 111 to the Counter Memorial of Nicaragua (NCM) in the *Dispute Concerning Certain Activities Carried out by Nicaragua in the Border Area* (Costa Rica v. Nicaragua) and *La Nación*, Costa Rica, “CONAVI Built a Dirt Road along the Border without a Single Design Plan”, 23 May 2012 (NM, Vol. II, Annex 31).

³⁴⁷ For a detailed presentation of the facts and of the harms caused to Nicaragua by Costa Rica’s activities, see respectively Chapters 3 and 5.

Nicaragua's sovereignty over the San Juan River (A.) as well as various well established principles of general international law (B.).

A. BREACHES OF THE 1858 TREATY AND ITS SUCCESSIVE ARBITRAL AND JUDICIAL INTERPRETATIONS

4.3. The legal regime of the San Juan River lies on the Jerez-Cañas Treaty of Limits concluded between Nicaragua and Costa Rica on 15 April 1858.³⁴⁸ Since the Court is already familiar with this legal regime, the relevant aspects of the 1858 Treaty of Limits and its successive arbitral and judicial interpretations will only be concisely (1.) recalled before establishing that the construction of the Road breaches Nicaragua's sovereignty over the San Juan de Nicaragua River as established by the Treaty (2.).

1. The 1858 Treaty of Limits and its Arbitral Interpretations

4.4. The 1858 Treaty of Limits is a comprehensive settlement of the long-standing dispute involving the boundary between the two countries. In the case concerning the Dispute regarding navigational and related rights, the Court summarized the content of the 1858 Treaty as follows:

“The 1858 Treaty of Limits fixed the course of the boundary between Costa Rica and Nicaragua from the Pacific Ocean to the Caribbean Sea. According

³⁴⁸ Treaty of Limits between Costa Rica and Nicaragua, 15 April 1858 (NM, Vol. II, Annex 5).

to the boundary thus drawn the district of Nicoya lay within the territory of Costa Rica. Between a point three English miles from Castillo Viejo and the Caribbean Sea, the Treaty fixed the boundary along the right bank of the San Juan River. It established Nicaragua's dominion and sovereign jurisdiction over the waters of the San Juan River, but at the same time affirmed Costa Rica's navigational rights 'con objetos de comercio' on the lower course of the river (Article VI). The 1858 Treaty established other rights and obligations for both parties, including, inter alia, an obligation to contribute to the defence of the common bays of San Juan del Norte and Salinas as well as to the defence of the San Juan River in case of external aggression (Article IV), an obligation on behalf of Nicaragua to consult with Costa Rica before entering into any canalization or transit agreements regarding the San Juan River (Article VIII) and an obligation not to commit acts of hostility against each other (Article IX).³⁴⁹

4.5. The discussion about the validity of the Treaty of 1858, which was questioned by Nicaragua, led to the conclusion of the Roman-Esquivel-Cruz Convention of 24 December 1886,³⁵⁰ by which the Parties agreed to submit the matter to the US President Cleveland for arbitration. The first part of the Arbitral Award rendered on 22 March 1888³⁵¹ found that the Treaty was valid and, having established this, the Arbitrator continued deciding on eleven points of doubtful interpretation that were submitted for his consideration.

³⁴⁹ I.C.J., Judgement, 13 July 2009, *Dispute regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, I.C.J. Reports 2009, p. 229, para. 19.

³⁵⁰ Roman-Esquivel-Cruz Convention of 24 December 1886 (Annex 4 to the Memorial of Costa Rica (CRM) in the *Dispute Concerning Certain Activities Carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*).

³⁵¹ (Annex 7 to the Memorial of Costa Rica (CRM) in the *Dispute concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*).

4.6. In order to demarcate this boundary line, the Parties concluded, on 27 March 1896, the Convention on Border Demarcation.³⁵² The Convention provided for the appointment by the parties of Commissions charged with “defining and marking out” the boundary (Art. I) and the appointment by the President of the United States of an engineer tasked with resolving disputes between the Commissions and demarcating the border line (Arts. II and III). The U.S. President appointed as Engineer-Umpire General Edward Porter Alexander, who rendered a total of five awards concerning the location of the boundary.

4.7. The main points, as far as the present dispute is concerned, are contained in Articles II and VI of the 1858 Treaty. According to the former:

“The dividing line between the two Republics, starting from the Northern Sea, shall begin at the end of Punta de Castilla, at the mouth of the San Juan de Nicaragua river, and shall run along the right bank of the said river up to a point three English miles distant from Castillo Viejo, said distance to be measured between the exterior works of said castle and the above-named point.”

As a consequence of the establishment of the boundary on the right (Costa Rican) bank of the river, Article VI provides that:

“The Republic of Nicaragua shall have exclusively the dominion and sovereign jurisdiction over the waters of the San Juan River from its origin in the Lake to its mouth in the Atlantic.”

³⁵² (Annex 8 to the Memorial of Costa Rica (CRM) in the *Dispute concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*).

4.8. As was noted in the first Alexander Award:

“Nicaragua was to have her prized ‘*sumo imperio*’ of all the waters of this same outlet for commerce, also unbroken to the sea.

It is to be noted that this division implied also, of course, the ownership by Nicaragua of all islands in the river and of the left or northwest bank and headland.”³⁵³

4.9. And, in its Judgment of 2009, the Court noted that “a simple reading of Article VI” of the Treaty “shows that”:

“the right of free navigation, albeit ‘perpetual’, is granted [to Costa Rica] only on condition that it does not prejudice the key prerogatives of territorial sovereignty.”³⁵⁴

Therefore, as far as Costa Rica has breached its obligations regarding the San Juan River and prejudiced Nicaragua’s sovereign prerogatives on the River, it has lost its right of free navigation.³⁵⁵

4.10. An extended right of regulating activities on and in relation with the River San Juan, including in environmental matters,³⁵⁶ stems from the Nicaraguan sovereignty over the River as recognized in Article VI of the Treaty.³⁵⁷ Moreover, “in respect of matters lying outside the scope of Costa Rica’s right of free navigation, and in respect of other parts of the river, which are not

³⁵³ First Award by the Umpire E.P. Alexander rendered on 30 September 1897 in San Juan del Norte, Nicaragua, *RIAA*, vol. XXVIII, p. 217 (NM, Vol. II, Annex 6 (2)).

³⁵⁴ I.C.J., Judgment, 13 July 2009, *Dispute regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, *I.C.J. Reports 2009*, p. 237, para. 48.

³⁵⁵ See paras. 6.35-6.45 below.

³⁵⁶ Cf. e.g. ICJ, Judgment, 13 July 2009, *Dispute regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, *I.C.J. Reports 2009*, p. 250, para. 88. See Chapter 4, below.

³⁵⁷ See *ibid.*, p. 249, para. 87 or p. 253, para. 101.

subject to the régime of the 1858 Treaty, Nicaragua, as sovereign, has complete power of regulation.”³⁵⁸

4.11. Another provision of the 1858 Treaty which is not without relevance for the present case is Article IV which obliges Costa Rica to contribute to the security (“custody”) of the river “for the part that belongs to her of the banks”.

4.12. As the Court put it in its Judgment of 13 July 2009, in the case concerning the *Dispute regarding navigational and related rights (Costa Rica v. Nicaragua)*: “[t]he 1858 Treaty of Limits completely defines the rules applicable to the section of the San Juan River that is in dispute in respect of navigation.”³⁵⁹ As for the rest, the River is submitted to the usual rules applicable to State sovereignty.

2. Costa Rica’s breaches of the 1858 Treaty of Limits

(a) Breach of Nicaragua’s right of navigation

4.13. As explained above, Article VI of the 1858 Treaty establishes that Nicaragua has sovereignty over the waters of the San Juan River, the right bank of which constitutes the boundary between the two States. Apart from the right of navigation for commercial purposes, the 1858 Treaty confers no other right over

³⁵⁸ *Ibid.*, p. 248, para. 85.

³⁵⁹ I.C.J., Judgment, 13 July 2009, *Dispute regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, *I.C.J. Reports 2009*, p. 233, para. 36.

the San Juan River to Costa Rica – and certainly not the right to dump into the river substantial volumes of sediments, soil, uprooted vegetation and felled trees which resulted in the invasion of Nicaraguan territory.³⁶⁰

4.14. It goes without saying that Nicaragua enjoys a complete freedom of navigation on the San Juan River, while Costa Rica’s right of navigation is only granted to it in a limited way. The object and purpose of the 1858 Treaty – with respect to navigation in the river – was to guaranty navigation from the river to and from the Atlantic Ocean (Caribbean Sea). In his third Award, General Alexander clarified

“that in the practical interpretation of the 1858 Treaty, the San Juan river must be considered a navigable river...with the water at ordinary stage and navigable by ships and general-purpose boats.”³⁶¹

At the time of the signing of the Treaty Nicaragua did not have “the full possession of all her rights in the port of San Juan”, and thus Article 5 of the Treaty provided in pertinent part as follows:

“As long as Nicaragua does not recover the full possession of all her rights in the port of San Juan

³⁶⁰ See above para. 4.1 See also Chapter 2 above and [FUNDENIC SOS & FONARE, Technical Report “Evaluation of the environmental impacts caused by the construction of a 120 km long road parallel to the right bank of the San Juan de Nicaragua River”, March 2012, (Annex 115 to the Counter Memorial of Nicaragua (NCM) in the *Dispute Concerning Certain Activities Carried out by Nicaragua in the Border Area* (Costa Rica v. Nicaragua) or 2012 Van Rhee & De Vriend Supplemental Report, Chapter 3.2 (See Vol. I, Appendix 2 to the Counter Memorial of Nicaragua (NCM) in the *Dispute Concerning Certain Activities Carried out by Nicaragua in the Border Area* (Costa Rica v. Nicaragua) and Kondolf’s Report (NM, Vol. II, Annex 1).

³⁶¹ Third Award, by the Umpire E.P. Alexander rendered on 30 September 1897 in San Juan del Norte, Nicaragua, *RIAA*, vol. XXVIII, p. 230 (NM, Vol. II, Annex 6 (4)).

del Norte, the use and possession of Punta de Castilla shall be common and equal both for Nicaragua and Costa Rica; and in the meantime, and as long as this community lasts, the boundary shall be the whole course of the Colorado river.”

4.15. The works for the construction of road 1856 constitute a serious threat on the navigation on the river – and not only in the short term:³⁶²

- Dumping of trees³⁶³ and soil along the route of the road into the river flow, makes more difficult, and increases the risk of, navigation in its waters;³⁶⁴

- Destruction of the vegetation along the right bank of the river, together with the creation of unstable, unprotected slopes and a lack of proper drainage, result in both increased land collapse, and excessive erosion and sediment runoff into the San Juan de Nicaragua River and an aggravation of which aggravate the obstacles to navigating the river³⁶⁵ – a conclusion confirmed by Costa Rica’s Association of Engineers and Architects, which finds that the road construction

³⁶² Harms caused to the San Juan de Nicaragua River are further detailed in Chapter 3 above.

³⁶³ See Kondolf’s Report, (NM, Vol. II, Annex 1).

³⁶⁴ CFIA Report, p. 11; see also pp. 17, 18, 19 (“impact on the forest is noticeable”), 21, 22 and 26 (NM, Vol. II, Annex 4). See also photographs of trees and soil along the route of the road (*Application Instituting Proceedings*, 22 December 2011, *Construction of a Road in Costa Rica along the San Juan River (Nicaragua vs. Costa Rica)*, Annex 5). See also Kondolf Report, Sections 3.1.4 & 3.3 (NM, Vol. II, Annex 1). See for a more detailed analysis, paras. 3.8-3.14 above .

³⁶⁵ See e.g. photographs of fragile soil removal (*Application Instituting Proceedings*, 22 December 2011, *Construction of a Road in Costa Rica along the San Juan River (Nicaragua vs. Costa Rica)*, Annex 6). See also the Costa Rican Environmental Management Plan, April 2012, pp. 22-23 (NM, Vol. II, Annex 2), CFIA Report DRD-INSP-0299-2012, 8 June 2012, pp. 15-17 (noting the existence of high, nearly vertical slopes without protection of any kind) (NM, Vol. II, Annex 4) and LANAMME Report, pp. 49 & 51 (NM, Vol. II, Annex 3). See also “First Kondolf Report”, July 2012, Section 2.14 (Appendix 1 to the Counter Memorial of Nicaragua (NCM) in the *Dispute concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*) and Kondolf Report, e.g., Section 6 (NM, Vol. II, Annex 1). See for a more detailed analysis, paras. 3.15-3.41 above .

project may negatively impact the ability of Costa Ricans to navigate the River;³⁶⁶
or

- Interruption of the natural flow patterns and deterioration of the quality of the watercourses crossed by the road. The alteration of the character and quality of these watercourses will affect the character and quality of the San Juan de Nicaragua River since they discharge into it,³⁶⁷

4.16. As noted in Chapters 2 and 3 above,³⁶⁸ the Central American Court of Justice, whose members conducted their own on site visit,³⁶⁹ has confirmed these findings. In its Judgment of 21 June 2012, the Court unanimously stated that:

“This Court, at the request of the applicant and given the nature of the case, made on-site inspection at eight thirty five in the morning on the twelfth of January of two thousand twelve, which concluded at six thirty in the afternoon, in order to ascertain if there was any danger in the works concerning the road under construction that runs along the south bank of the San Juan River and, as a result thereof, took due note of the hazards and risks involved for the conservation of the ecosystem by the works initiated by the Government of Costa Rica. The Court has been able to verify the damage to the bank that protects the river on the south bank, especially in the many sectors where the road is dangerously close to the edge of the River, leaving it exposed to sedimentation by leaching, and also noted the lack of general buffering measures, such as culverts, drainages, etc. This Court highlights the fact that in many sections of the inspected area, the

³⁶⁶ See e.g. CFIA Report, p. 26 (NM, Vol. II, Annex 4).

³⁶⁷ See also Kondolf Report, Section 4.9 (NM, Vol. II, Annex 1). See for a more detailed analysis, paras. 3.42-3.59 above.

³⁶⁸ See paras. 2.39 - 2.47 and 3.11, 3.62 above.

³⁶⁹ C.A.C.J., Judgment, 21 June 2012, *ruling V* (NM, Vol. II, Annex 13).

distance between the riverbed and the road is a few meters and the difference of level between the two is very pronounced, with the road in a dominant position and the river in a secondary position, all of which makes possible a landslide of large segments of the work in question, with the resulting sedimentation that would pollute the river. The Court also verified the felling of a large number of trees in Costa Rican territory, giving rise to vast areas where only reddish and clayish soil remains.³⁷⁰

4.17. This unlawful conduct has been recognized by Costa Rica. As the CACJ noted in its 2012 decision:

“[...] the webpage of the Ministry of Foreign Affairs and Worship of the Republic of Costa Rica, contain[s] statements by the President of the Republic and opinions of technical and scientific authorities of the Costa Rican society, that the Government of that State made unilateral decisions, in a hasty manner and without consultation, in light of the Community Integration System, which affect the bilateral commitments of that Government with the neighbouring State of Nicaragua.”³⁷¹

4.18. It must be noted in particular that the construction of Road 1856 exacerbates the existing problem of sedimentation³⁷² in the San Juan River that caused Nicaragua to undertake its dredging program to restore – at least to a minimal level – the navigability of the lower stretches of the River. This is one of the main subject-matters of the case concerning *Certain Activities carried out by*

³⁷⁰ *Ibid.*, *Whereas XXVI*.

³⁷¹ *Ibid.*, *Whereas XXVII*.

³⁷² *See e.g. La Nación*, Costa Rica “Serious Errors Expose Trail to Risk of Collapse during the Rainy Season,” 28 May 2012 (NM, Vol. II, Annex 35).

Nicaragua in the Border Area which was paradoxically brought before the Court by Costa Rica in 2010.

4.19. As explained in the previous Chapter, the construction of the Road importantly worsened the already critical situation of the sediments within the River³⁷³. As a reminder: around 100,000 m³ of sediment are being deposited into the San Juan River per year as a result of the misconceived construction of the Road,³⁷⁴ a volume that will increase dramatically as the result of any storms of serious magnitude.³⁷⁵ As explained by Dr. Kondolf, erosion along the Road has been “astronomically accelerated over background natural gully erosion rates,” and the “lack of any planning, design, construction and maintenance standards for the road is resulting in widespread erosion that is displacing tens of thousands of cubic meters of soil”.³⁷⁶ This risks to render the dredging enterprise of the River a Sisyphean task thus depriving Nicaragua of its ability to restore or maintain the navigability of the lower stretches of the San Juan River.

³⁷³ See paras. 3.77-3.80 above.

³⁷⁴ Kondolf Report, Sections 4.12 & 6 (NM, Vol. II, Annex 1).

³⁷⁵ *Ibid.*, e.g., Section 4.11 (“During future hurricanes and other large storms, deep-seated landslides are likely to occur...and these will deliver significantly larger quantities of sediment to the river.”) & Section.6:

[T]his poorly-sited, poorly-constructed road (and its extensive deforestation, slope destabilization, and extensive bare, exposed ground) has simply “set the table” for massive erosion and road failures that will occur in a major storm. The situation is exacerbated by the nearly complete lack of competent erosion control measures, leaving many parts of the road highly vulnerable to continued increased erosion and landsliding during intense rains. The proximity of the road to the Río San Juan means that the sediment produced will be efficiently transported to the river....

³⁷⁶ *Ibid.*, Appendix B, Section 3.

(b) Breach of the obligation to notify

4.20. On 13 December 2011, the President of Costa Rica, Ms Laura Chinchilla, declared that Costa Rica “issued an emergency decree due to national necessity and it is on that basis that we have developed the projects”³⁷⁷ and, therefore, has “no reason to offer explanations to the Government of Nicaragua.”³⁷⁸ President Chinchilla then made clear that Costa Rica is “not taking even one step back.”³⁷⁹ This unambiguous refusal to consult with Nicaragua, the sovereign over the river and neighbouring State affected by the works of construction of road 1856 violates not only environmental obligations of Costa Rica – violations which will be discussed in the next Chapter of this Memorial -, but also an obligation stemming from the Treaty of Limits itself.

4.21. In this respect, the reasoning of the Court in its 2009 Judgment in the *Dispute regarding navigational and related rights (Costa Rica v. Nicaragua)* is transposable to the present case *mutatis mutandis*.

³⁷⁷ *El País*, Costa Rica, “Chinchilla Defends Highway Criticized by Nicaragua, Rejects Dialogue”, 14 December 2011 (Source: EFE / 13 December 2011). (NM, Vol. II, Annex 24).

³⁷⁸ *Ibid.*

³⁷⁹ *Ibid.*

4.22. In that case, Costa Rica's position was that Nicaragua was under an obligation to notify Costa Rica of the measures it adopts to regulate navigation on the river, or to give notice and consult with Costa Rica prior to the adoption by Nicaragua of such measures. After having noted that "the part of the text of Article VI on which Costa Rica depends does not extend to the full range of measures taken to regulate navigation on the river [and] cannot be read as imposing a general obligation of notification and consultation," the Court did not consider that argument further³⁸⁰. However it stated:

"94. Despite the lack of any specific provision in the Treaty relating to notification, the Court sees three factors^[381] as together imposing an obligation of notification of regulations in the circumstances of this case. The first is to be found in the 1956 Agreement^[382] under which the Parties agreed as follows:

'The two Parties, acting in the spirit which should move the members of the Central American family of nations, shall collaborate to the best of their ability in order to carry out those undertakings and activities which require a common effort by both States and are of mutual benefit and, in particular, in order to facilitate and expedite traffic on the Pan American Highway and on the San Juan River

³⁸⁰ I.C.J., Judgement, 13 July 2009, *Dispute regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, I.C.J. Reports 2009, p. 251, para. 92.

³⁸¹ The third factor which "lies in the very nature of regulation" (*ibid.*, p. 252, para. 96) is not relevant in the present case.

³⁸² The Fournier-Sevilla Agreement concluded between Nicaragua and Costa Rica on 9 January 1956.

within the terms of the Treaty of 15 April 1858 and its interpretation given by arbitration on 22 March 1888, and also in order to facilitate those transport services which may be provided to the territory of one Party by enterprises which are nationals of the other.’

It is difficult to see how the obligation, set out under the terms of the 1956 Agreement, to collaborate to facilitate traffic on the San Juan and to facilitate transport services being provided in the territory of one country by the nationals of the other could be met without Nicaragua notifying Costa Rica of relevant regulations which it adopts.

95. The second factor indicating that Nicaragua is obliged to notify the adoption of the regulations lies in its very subject-matter: navigation on a river in which two States have rights, the one as sovereign, the other to freedom of navigation. Such a requirement arises from the practical necessities of navigation on such a waterway. If the various purposes of navigation are to be achieved, it must be subject to some discipline, a discipline which depends on proper notification of the relevant regulations.”³⁸³

4.23. Both arguments hold true for both States and must also be applied in the present case: if Nicaragua, the sovereign over the waters of the San Juan River, is bound to notify Costa Rica of the regulations it adopts to regulate the traffic on the river, this is true *a fortiori* for the activities by Costa Rica which have an impact on the navigation over the river – to which Nicaragua is at least as

³⁸³ I.C.J., Judgement, 13 July 2009, *Dispute regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, I.C.J. Reports 2009, p. 252, paras. 94-95.

much entitled as the other riparian State (which has no right of sovereignty over the river).

4.24. Not only has Costa Rica not notified or consulted Nicaragua prior to – or even after – the beginning of the construction of Road 1856, but it has abruptly refused to do so.

4.25. In a note dated 29 November 2011, Nicaragua requested from Costa Rica information on these works and pointed out

“that a project of this nature should have an Environmental Impact Assessment due to their characteristics. Further, this assessment should have been sent to the Government of Nicaragua due to the proximity to Nicaragua of this project and in conformity to International Law and the International Court of Justice 8 March 2011 Order and Article 5 of the RAMSAR Convention, which stipulates that " The Contracting Parties shall consult with each other about implementing obligations arising from the Convention especially in the case of a wetland extending over the territories of more than one Contracting Party or where a water system is shared by Contracting Parties. They shall at the same time endeavour to coordinate and support present and future policies and regulations concerning the conservation of wetlands and their flora and fauna”³⁸⁴.

³⁸⁴ Note from the Minister of Foreign Affairs of Nicaragua, to the Minister of Foreign Affairs of Costa Rica, Ref: MRE/DVM/AJST/500/11/11, 29 November 2011 (NM, Vol. II, Annex 14).

4.26. In reaction, the Costa Rican Foreign Minister simply invited “the Government of Nicaragua to present formally the reasons for which it considers that there may be environmental damage or damage to Nicaragua’s interests.”³⁸⁵ No further information was provided. However, in a Note dated 10 December 2011, although it has no obligation to do so, Nicaragua explained its position on this question in full.³⁸⁶ After enumerating various instruments for the protection of the environment breached by Costa Rica and denounced the misinformation about the project, the Government of Nicaragua went on by stating:

“Independently of the above mentioned, it is evident that the construction of the road seriously affects the environment and the rights of Nicaragua. If the project is not ceased it would have irreversible and transcendental ecological and environmental consequences.”,

and by enumerating and briefly describing these consequences.

4.27. Except for the abrupt flat refusal by President Laura Chinchilla on 13 December 2011,³⁸⁷ no further development has occurred since then. However,

³⁸⁵ Diplomatic note from the Minister of Foreign Affairs and Worship of Costa Rica to the Minister of Foreign Affairs of Nicaragua, Ref: DM-AM-601-11, 29 November 2011 (NM, Vol. II, Annex 15); *see also* Diplomatic note from the Minister of Foreign Affairs and Worship of Costa Rica to the Minister of Foreign Affairs of Nicaragua, Ref: DVM-AM-286-11, 20 December 2011 (NM, Vol. II, Annex 17) .

³⁸⁶ Note from the Minister of Foreign Affairs of Nicaragua, to the Minister of Foreign Affairs of Costa Rica, Ref: MRE/DVS/VJW/0685/12/11, Managua, 10 December 2011 (NM, Vol. II, Annex 16). For a more complete analysis of that Note, *see below*, paras. 5.55-5.57.

³⁸⁷ *See* para. 4.20 above.

without formally answering Nicaragua's Note, Costa Rica went as far as denying any damage caused to the River San Juan and Nicaragua.³⁸⁸

B. THE CONSTRUCTION OF THE ROAD VIOLATES PRINCIPLES AND RULES OF INTERNATIONAL LAW

4.28. As shown above,³⁸⁹ “[t]he 1858 Treaty of Limits completely defines the rules applicable to the section of the San Juan River” relevant to the present case.³⁹⁰ However, other norms and principles of general international law, whether customary or included in treaties to which both Nicaragua and Costa Rica are parties, apply as far as they do not contradict the relevant provisions contained in the 1858 Treaty as interpreted by the subsequent arbitral and judicial decisions. In the present case Costa Rica has breached, in particular, the fundamental principles of the territorial integrity of Nicaragua (1.) and of the non-harmful use of the territory (2), the obligation to inform, notify and consult (3) and the principle of good neighbourliness stemming from the Tegucigalpa Protocol to the Charter of the Organization of Central American States (4).

1. The violation of Nicaragua's territorial sovereignty

³⁸⁸ See *El País*, Costa Rica, “Environmental Court Confirmed Excessive Felling for Construction of 1856 Trail”, 15 July 2012 (NM, Vol. II, Annex 37): “The Court confirmed damages in Costa Rican territory but found no evidence of sediments dragged into the San Juan River.” See also *El País*, Costa Rica, “Road 1856: First Study by the TAA Points Out Impacts to the Protection Area of the San Juan River”, 26 July 2012 (NM, Vol. II, Annex 38): “The report highlights that, “Apparently, there is erosion and sediment-laden toward the rivers, freshwater marshes and lakes.”

³⁸⁹ See paras. 4.3 and 4.12 above.

³⁹⁰ I.C.J., Judgment, 13 July 2009, *Dispute regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, I.C.J. Reports 2009, p. 233, para. 36. See also para. 4.12 above.

4.29. It might not be superfluous to repeat once more, since Costa Rica seems to ignore this studiously, that the San Juan River is under Nicaragua's exclusive sovereignty.³⁹¹ As a consequence, the principles applying to the State territory fully apply on and in relation to the river.

4.30. This is the case, in particular, of the principle of State sovereignty itself. As explained by Arbitrator Max Huber in a celebrated passage of its Award in the case concerning the Island of Palmas,

“Sovereignty in the relations between States signifies independence. Independence in regard to a portion of the globe is the right to exercise therein, to the exclusion of any other State, the functions of a State. [...] It may be stated that territorial sovereignty belongs always to one, or in exceptional circumstances to several States, to the exclusion of all others.”³⁹²

In other words, territorial sovereignty is both all-inclusive and exclusive. And, as the Court put it “[b]etween independent States, respect for territorial sovereignty is an essential foundation of international relations.”³⁹³

³⁹¹ See para. 4.7 above.

³⁹² Arbitral Award, 4 April 1928, *Island of Palmas*, UNRIAA, vol. II, p. 838.

³⁹³ I.C.J., Judgment, 9 April 1949, *Corfu Channel (United Kingdom of Great Britain and Northern Ireland v. Albania)*, I.C.J. Reports 1949, p. 22.

4.31. The immediate consequence of this key principle is that, failing the existence of a permissive rule to the contrary, a State “may not exercise its power in any form in the territory of another State.”³⁹⁴

4.32. Yet, as explained above³⁹⁵ and detailed in the subsequent Chapters, this is what Costa Rica has done by dumping soils and sediments, trees and vegetation into the San Juan de Nicaragua Rica.³⁹⁶ Furthermore, the interception of the natural flow of the waters that flow to the San Juan River modifies the drainage of the surrounding wetlands in the lower San Juan.³⁹⁷ Consequently, it significantly affects the level and the quality of the water of the San Juan River.

2. The violation of the principle of the non-harmful use of the territory

4.33. By the same token, Costa Rica is also violating another essential principle stemming from the very idea of territorial sovereignty, that of the non-harmful use of the State territory.

4.34. As will be further exposed in the next Chapter of this memorial, States are under an obligation “to ensure that activities within their jurisdiction

³⁹⁴ P.C.I.J., Judgment, 7 September 1927, *The Case of the S.S. “Lotus”*, Series A, No. 10, p. 18.

³⁹⁵ *See* par. 4.15.

³⁹⁶ *Ibid.*

³⁹⁷ *Ibid.*

and control respect the environment of other States.”³⁹⁸ This principle has been first expressed in the 1972 Stockholm Declaration³⁹⁹ and recalled several times since then.⁴⁰⁰ However it is not limited to the issue of the protection of the environment and it has a more general scope.

4.35. It is well established that, very generally, States are under a duty of due diligence to “take all appropriate measures to prevent significant transboundary harm or at any event to minimize the risk thereof.”⁴⁰¹ It was also brilliantly explained in Max Huber’s 1928 Award concerning the Island of Palmas:

“Territorial sovereignty, as has already been said, involves the exclusive right to display the activities of a State. This right has as corollary a duty: the obligation to protect within the territory the rights of other States, in particular their right to integrity and inviolability in peace and in war, together with the rights which each State may claim for its nationals in foreign territory.”⁴⁰²

That same principle was firmly reaffirmed in the *Trail Smelter Arbitration*:

³⁹⁸ I.C.J., Advisory Opinion, 8 July 1996, *Legality of the Threat or Use of Nuclear Weapons*, I.C.J. Reports 1996, pp. 241-242, para. 29. See CRM, pp. 211-212, para. 5.29.

³⁹⁹ *Report of the United Nations Conference on the Human Environment, Stockholm, 5–16 June 1972* (United Nations publication, Sales No. E.73.II.A.14 and corrigendum), Principle 21.

⁴⁰⁰ See e.g. *Report of the United Nations Conference on Environment and Development*, Rio de Janeiro, 3-14 June 1992, UN doc. A/CONF.151/26 (vol. I), Annex I, Principle 2 or Article 3 of Draft Articles on Prevention of Transboundary Harm from Hazardous Activities, *Yearbook of the International Law Commission*, 2001, vol. II, Part Two, p. 153.

⁴⁰¹ Article 3 of the ILC Draft Articles on Prevention of Transboundary Harm from Hazardous Activities, *Yearbook of the International Law Commission*, 2001, vol. II, Part Two, p. 153.

⁴⁰² Arbitral Award, 4 April 1928, *Island of Palmas (Netherlands v. United States of America)*, UNRIIA, vol. II, p. 839.

“[U]nder the principles of international law, ... no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequences and the injury is established by clear and convincing evidence.”⁴⁰³

And again with the greatest firmness and clarity in the Court’s 1949 Judgment in the Corfu Channel case where it restates that every State is under an “obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States.”⁴⁰⁴

4.36. By authorizing the construction of road 1856 without taking the most elementary precautions not to cause harm to the San Juan River, its navigability and its environment, and by effectively damaging it – as explained in more detail in Chapter 3 above, Costa Rica has seriously breached this essential obligation. Moreover, as explained in Chapters 2 and 3, various entities within and affiliated with Costa Rica have criticized the road construction project and demonstrated that environmental harm and risks of future harm have been caused by Costa Rica’s unplanned and irresponsible activities. Costa Rica has completely ignored this obligation with respect to Road 1856, the construction of which caused significant harm to the San Juan River – that is, to Nicaragua. Not only has

⁴⁰³ Arbitral Award, 11 March 1941, *Trail Smelter Arbitration (United States of America v. Canada)*, *UNRIAA*, vol. III, p. 1965.

⁴⁰⁴ I.C.J., Judgment, 9 April 1949, *Corfu Channel (United Kingdom of Great Britain and Northern Ireland v. Albania)*, *I.C.J. Reports 1949*, p. 22.

Costa Rica failed to prevent significant transboundary harm; it did not even assess the risks its actions posed to the environment and the territory of Nicaragua, much less an attempt to minimize those risks.

3. The violation of the obligation to inform, notify and consult

4.37. As shown above,⁴⁰⁵ Costa Rica has breached its obligation to notify Nicaragua of its activities affecting the San Juan River. This obligation does not only result from the 1858 Treaty of Limits; it is also a general obligation under customary international law as is well illustrated by the Corfu Channel case:

“The obligations incumbent upon the Albanian authorities consisted in notifying, for the benefit of shipping in general, the existence of a minefield in Albanian territorial waters and in warning the approaching British warships of the imminent danger to which the minefield exposed them. Such obligations are based, not on the Hague Convention of 1907, No. VIII, which is applicable in time of war, but on certain general and well-recognized principles, namely: elementary considerations of humanity, even more exacting in peace than in war [...]”⁴⁰⁶

4.38. And three articles of the ILC Draft Articles on Prevention of Transboundary Harm from Hazardous Activities elaborate the principle as follows:

⁴⁰⁵ See paras. 4.19-4.267 above.

⁴⁰⁶ I.C.J., Judgment, 9 April 1949, *Corfu Channel (United Kingdom of Great Britain and Northern Ireland v. Albania)*, I.C.J. Reports 1949, p. 22.

Article 8 (1)

“If the assessment referred to in article 7⁴⁰⁷ indicates a risk of causing significant transboundary harm, the State of origin shall provide the State likely to be affected with timely notification of the risk and the assessment and shall transmit to it the available technical and all other relevant information on which the assessment is based.”⁴⁰⁸

Article 9 (1)

“The States concerned shall enter into consultations, at the request of any of them, with a view to achieving acceptable solutions regarding measures to be adopted in order to prevent significant transboundary harm or at any event to minimize the risk thereof. The States concerned shall agree, at the commencement of such consultations, on a reasonable time frame for the consultations.”⁴⁰⁹

Article 12

“While the activity is being carried out, the States concerned shall exchange in a timely manner all available information concerning that activity relevant to preventing significant transboundary harm or at any event minimizing the risk thereof. Such an exchange of information shall continue until such time as the States concerned consider it appropriate even after the activity is terminated.”⁴¹⁰

⁴⁰⁷ “Any decision in respect of the authorization of an activity within the scope of the present articles shall, in particular, be based on an assessment of the possible transboundary harm caused by that activity, including any environmental impact assessment.” *Yearbook of the International Law Commission*, 2001, vol. II, Part Two, p. 157.

⁴⁰⁸ *Yearbook of the International Law Commission*, 2001, vol. II, Part Two, p. 159; *see also* the commentary, *ibid.*, p. 160.

⁴⁰⁹ *Ibid.* p. 160; *see also* the commentary, *ibid.*

⁴¹⁰ *Ibid.* p. 164.

As explained by the ILC in its commentary on Article 12:

“Article 12 requires the State of origin and the States likely to be affected to exchange information regarding the activity after it has been undertaken. The phrase “concerning that activity” after the words “all available information” is intended to emphasize the link between the information and the activity and not any information. The duty of prevention based on the concept of due diligence is not a one-time effort but requires continuous effort. This means that due diligence is not terminated after granting authorization for the activity and undertaking the activity; it continues in respect of monitoring the implementation of the activity as long as the activity continues.”⁴¹¹

4.39. The obligation to notify applies with particular strength concerning international watercourses as was recalled in the Lac Lanoux case:

“A State wishing to do that which will affect an international watercourse cannot decide whether another State’s interests will be affected; the other State is the sole judge of that and has the right to information on the proposals. Consultations and negotiations between the two States must be genuine, must comply with the rules of good faith and must not be mere formalities.”⁴¹²

4.40. Finally, Costa Rica ignores two binding decisions of the CACJ which ordered the suspension of the works on Road 1856.⁴¹³ This conduct is not

⁴¹¹ *Ibid.*, p. 165, para. 2 of the commentary.

⁴¹² *Lake Lanoux Arbitration (France v. Spain)*, Award, 16 November 1957, *International Law Reports*, vol. 24, p. 119.

⁴¹³ C.A.C.J., Judgment, 21 June 2012, *Whereas IX* (NM, Vol. II, Annex13).

compatible with and endangers the establishment of a “Central American Integration System on the basis of an institutional and legal order and mutual respect between Member States.”⁴¹⁴

4.41. As shown in the present Chapter, Costa Rica has committed several material breaches of its obligations to Nicaragua both under the 1858 Treaty of Limits and under other applicable sources of international law. By dumping soils and sediments, trees and vegetation into the San Juan de Nicaragua River, Costa Rica:

(i) has violated the right of navigation of Nicaragua stemming from Article IV of the 1858 Treaty of Limits as interpreted by successive arbitral and judicial decisions and defeated an element of the object and purpose of the 1858 Treaty of Limits by affecting the navigability of the San Juan de Nicaragua River;

(ii) it has also violated Nicaraguan territorial integrity and failed to respect the principle of non-harmful use of the State territory;

(iii) it has failed to inform, notify or consult Nicaragua concerning the construction of road 1856 and therefore has breached its obligation to do so stemming from the 1858 Treaty of Limits as well as general international law; and

(iv) it violated the Tegucigalpa Protocol to the Charter of the Organization of Central American States.

⁴¹⁴ *Ibid.*

CHAPTER 5

COSTA RICA'S BREACHES OF ITS ENVIRONMENTAL OBLIGATIONS

A. INTRODUCTION

5.1 Costa Rica has presented itself in a variety of fora, including this Court, as a paragon of environmentalism and environmental protection.⁴¹⁵ It has at the same time sought to portray Nicaragua, at best, as being oblivious of the environment and its protection, and at worst, as having willfully caused environmental harm in the Lower San Juan de Nicaragua.⁴¹⁶

5.2 The present Chapter will show that it is in fact Costa Rica that has acted in utter disregard of its environmental obligations in constructing what it has chosen to call the “Juan Rafael Mora Porras 1856 Highway,”⁴¹⁷ hereafter referred to as the Road for simplicity, resulting in destruction of the environment

⁴¹⁵ This is evident from, e.g., Costa Rica's oral pleadings in the Provisional Measures hearings in the case concerning *Certain Activities carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)* (hereinafter the *Certain Activities* case), e.g., the opening statement of the Agent of Costa Rica, Ambassador Edgar Ugalde, on 11 Jan. 2011, para. 6, available at <http://www.icj-cij.org/docket/files/150/16282.pdf>; and in Costa Rica's Memorial (CRM) in that case. Reference may be made in particular to Chapter V of the Memorial, Nicaragua's Breaches of the environmental Protection Regime, at p. 199, et seq. See also the website of Costa Rica's Ministry of Environment, Energy and Telecommunications (MINAET), <http://www.minae.go.cr/>; and the Costa Rica Tourism website, also <http://www.tourism.co.cr/>. Costa Rica was once dubbed “the Switzerland of Central America”, a sobriquet it no doubt welcomed due to its heavy reliance on tourism for foreign exchange. See http://news.bbc.co.uk/2/hi/americas/country_profiles/1166587.stm.

⁴¹⁶ See, e.g., Chapter V of Costa Rica's Memorial (CRM) in the *Certain Activities* case.

⁴¹⁷ See footnote 1 above

on a massive scale and leaving an ugly scar some 120 kilometers long⁴¹⁸ along the right bank of the San Juan de Nicaragua River. It will be recalled that pursuant to Article II of the 1858 Treaty of Limits⁴¹⁹ between the parties, the border runs along the right bank of the river beginning three English miles below Castillo Viejo,⁴²⁰ making the Road project, and the Road itself, something of intense interest and concern on the part of Nicaragua.

5.3 For this reason, and more generally, it is most unfortunate that Costa Rica has laid waste to some 120 kilometers of the right bank of the San Juan de Nicaragua River, particularly in view of the fact that, as recognized by the Court, “the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn.”⁴²¹

5.4 It is thus especially remarkable that, in constructing this Road, Costa Rica seems to have been determined to commit blatant violations of every possible environmental obligation, including failure to prepare a transboundary environmental impact assessment (EIA), or even a national EIA (A), breach of

⁴¹⁸ Costa Rican Environmental Management Plan, April 2012, p. 5, (NM, Volume II, Annex 2). *See also* the CFIA Report, p. 2, (NM, Vol. II, Annex 4) where it is stated that the Road “extends along the approximately 160 kilometres between Los Chiles and Delta . . . and the arteries that access it, which total approximately 400 additional kilometres.” For 120 kilometers of its total length the Road follows the bank of the San Juan River, *i.e.*, from the point at which the border meets the right bank of the river, at Castillo Viejo, to the point at which the Colorado River branches off from the San Juan.

⁴¹⁹ Treaty of Limits between Nicaragua and Costa Rica, 15 April 1858 (NM, Vol. II, Annex 5).

⁴²⁰ *Ibid.*, Art. II.

⁴²¹ *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I. C. J. Reports 1996*, p. 241, para. 29.

the obligation to provide prior notification of planned measures that may have a significant adverse effect upon Nicaragua (B), violation of the obligation to use its territory in a manner that does not cause harm to its neighbor, Nicaragua (C), and breaches of treaties to which the two states are parties (D). That Costa Rica has succeeded in this mission of leaving no environmental obligation unbreached is supported by the judgment of 21 June 2012 of the Central American Court of Justice (CACJ),⁴²² which will be referred to throughout the present chapter.

5.5 A point already noted in Chapter 4 should be recalled at the outset of the present chapter, as well – namely, that, as the Court stated in *the Navigational and Related Rights* case, “[t]he 1858 Treaty of Limits completely defines the rules applicable to the section of the San Juan River that is in dispute in respect of navigation.”⁴²³ However, this leaves room for the applicability of other principles and rules of international law insofar as they do not contradict the 1858 Treaty as interpreted by the subsequent arbitral awards⁴²⁴.

⁴²² C.A.C.J. Judgement, 21 June 2012 (NM, Vol. II, Annex 13).

⁴²³ *Dispute regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, I.C.J. Reports 2009, p. 233, para. 36.

⁴²⁴ First Award of the Umpire EP Alexander in the boundary question between Costa Rica and Nicaragua, reprinted United Nations, *Reports of International Arbitral Awards*, Vol. XXVIII (2007) pp.215-221, San Juan del Norte, 30 September 1897; Second Award of the Umpire EP Alexander in the boundary question between Costa Rica and Nicaragua, reprinted United Nations, *Reports of International Arbitral Awards*, Vol. XXVIII (2007) pp.223-225, San Juan del Norte, 20 December 1897; Third Award of the Umpire EP Alexander in the boundary question between Costa Rica and Nicaragua, reprinted United Nations, *Reports of International Arbitral Awards*, Vol. XXVIII (2007) pp.227-230, San Juan del Norte, 22 March 1898; Fourth Award of the Umpire EP Alexander in the boundary question between Costa Rica and Nicaragua, reprinted United Nations, *Reports of International Arbitral Awards*, Vol. XXVIII (2007) pp.231-235, Greytown, 26 July 1899. (NM, Vol. II, Annex 6 (2)(3)(4)(5)).

B. COSTA RICA BREACHED ITS OBLIGATION TO ASSESS THE ENVIRONMENTAL IMPACT OF THE ROAD, ON BOTH THE NATIONAL AND TRANSBOUNDARY LEVELS

1. The National Level

5.6 The obligation to assess the environmental impact of proposed activities is one of long standing. First introduced in national legislation in the late 1960s,⁴²⁵ this obligation was recognized in Principle 17 of the 1992 Rio Declaration on Environment and Development in the following terms:

Principle 17

Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.⁴²⁶

5.7 There seems little doubt that it would have been obvious to the government of Costa Rica that its Road project was “likely to have a significant adverse impact on the environment” in view of its length and its route through areas that are in part heavily forested, not to mention that it was to run along a river which could not escape being impacted in view of its proximity to the route of the Road, the river’s location below the Road, the torrential rains characteristic

⁴²⁵ National Environmental Policy Act of 1969, Volume 42 United States Code §§ 4321- 4347.

⁴²⁶ Rio Declaration on Environment and Development, adopted by the United Nations Conference on Environment and Development, Rio de Janeiro, June 14 1992, 31 I.L.M. 874 (1992), Principle 17.

of the area which would wash soil and debris into the river,⁴²⁷ and similarly evident considerations.

5. 8 It is also clear that this “proposed activity” – even though its “proposal” was shrouded in secrecy – was “subject to a decision of a competent national authority.” In this case the “competent national authority” was, exceptionally, “The President of the Republic and the Minister of the Presidency” according to Costa Rica’s decree declaring a State of Emergency along the border with Nicaragua. Specifically, the authority for proceeding with the Road project outside all normal legal procedures was provided by Emergency Decree No. 36440-MP, published in the Official Daily Gazette in San José, Costa Rica, on 7 March 2011, by the President of the Republic and the Minister of the Presidency.⁴²⁸ The Emergency Decree declared that “the situation unfolded by the violation of Costa Rican sovereignty on the part of Nicaragua conforms a state of emergency”.

5. 9 The authority to proceed with the construction of the Road – which we now know was made without any prior planning, impact assessment, or even blueprints,⁴²⁹ – thus came from the highest levels of government in Costa Rica. The By-Laws and Regulations adopted on 21 September 2011 by Costa

⁴²⁷ See *La Nación*, Costa Rica, “Conavi Built a Dirt Road along the Border without a single Design Plan”, 23 May 2012, (NM, Vol. II, Annex 31) quoting a partner of one of the construction companies involved in the Road project as observing that, due to the lack of provisions for drainage: “A great deal of the investment might end up lost with a few rainfalls.”

⁴²⁸ Decree No. 36440 (NM, Vol. II, Annex 11).

⁴²⁹ *La Nación*, Costa Rica, “Conavi Built a Dirt Road along the Border without a single Design Plan”, 23 May 2012, (NM, Vol. II, Annex 31).

Rica’s National Commission on Risk Prevention and Attention to Emergencies, Presidency of the Republic, recite that:

“the specific nature of the event that created the emergency, which was an act of aggression on the part of the neighbor country of Nicaragua, imposes taking actions that are different from those generally carried out under the regimen of exception and under the control of the National Commission on Risk Prevention and Attention to Emergencies”⁴³⁰

5. 10 Remarkably, these “actions that are different from those generally carried out” included proceeding without the prior preparation of an environmental impact assessment, required by Costa Rican law,⁴³¹ or even any blueprints for the Road project,⁴³² a normal prerequisite to such a significant undertaking.

5. 11 The Preliminary Report of the Association of Federated Engineers and Architects of Costa Rica (CFIA by its Spanish acronym) confirms this, in the matter-of-fact language of engineers: “The project has no plans or preliminary

⁴³⁰ Decree No. 0362 – 2011, preamble, para. 2. (NM, Vol. II, Annex 12).

⁴³¹ Mr. Uriel Juárez, Secretary General of Costa Rica’s National Environmental Technical Secretariat (SETENA by its Spanish acronym) acknowledged that his agency was not consulted, nor was its guidance on the highway and its possible risks requested. *University Seminar*, Costa Rica, “Environmental damage feared due to construction of highway parallel to Rio San Juan”, 1 November 2011, (NM, Vol. II, Annex 22) .

⁴³² See CFIA Report, p. 25, para. 5.2. (NM, Vol. II, Annex 4) ; See also CONAVI Press Release, 25 May 2012 (NM, Vol.II, Annex 34); *La Nación*, Costa Rica, “Conavi Built a Dirt Road along the Border without a Single Design Plan”, 23 May 2012 (NM, Vol. II, Annex 31); *El Pais*, Costa Rica, “Faced with Criticism, Conavi Confirms to Have Done Work on 332 Kilometers of Roads around Route 1856”, 26 May 2012 (NM, Vol. II, Annex 32); and *Diario Extra*, Costa Rica “Government acknowledges mistakes in the construction of the trail”, 30 May 2012 (NM, Vol. II, Annex 36) also available at <http://www.diarioextra.com/2012/mayo/30/nacionales13.php> (last visited 5 December).

studies, a situation that was corroborated through use of the CFIA database where there is no record of the project.”⁴³³ The report continues:

The route was constructed without a single plan to indicate the path that was to be opened, or what its characteristics should have been. This situation causes increased costs, environmental problems, and a rapid deterioration of the project.

5.4 The lack of adequate drainage for channeling rainwater was observed. It can be foreseen that this situation can prematurely erode the work already done. ...

5.5 It is unknown if soil samples were analyzed, and without such analysis the top base could suffer premature contamination due to the material used.

5.6 As reflected in the photographs and as observed along certain stretches, it is presumed that protected areas were not taken into account. As defined by Forests Law No. 7575, Article 33, Section ii, a protected area is “a 15 meter strip in a rural zone and 10 meters in an urban zone, horizontally measured on both sides of the bank of a river, a brook or stream if the land is flat, and fifty horizontal meters if the land is uneven.” Further, according to the Law No. 276 to Regulate Water Resources, Article 31, Section ii, “The forest area that protects or should protect the land that filters drinking water as well as those that assist in the formation of hydrographic basins and accumulation areas, supply sources, or permanent pathways for the same water,” are declared reserves that are subject to dominion of the Nation.⁴³⁴

But not, apparently, if an Emergency Decree dictates to the contrary.

5. 12 The crude manner in which Costa Rica proceeded with work on the Road is confirmed by an official of one of the construction companies

⁴³³ CFIA Report, op. cit. supra, p. 25, para. 5.2. (NM, Vol. II, Annex 4)

⁴³⁴ *Ibid.*, paras. 5.3-5.6.

involved in the project: “We are in the XXI Century. This requires a design To think about making 150 kilometers with just machines, without design ... I’m referring to mere professional diligence ... it is not done in this manner”.⁴³⁵

5.13 Costa Rica’s Administrative Environmental Court (TAA, its Spanish acronym) confirmed excessive felling of trees and found clearings that were more than eight times the established width of the Road.⁴³⁶ The TAA found that “[t]ree felling at the edge of the trail was not rational, limited or proportional for purposes of the road”⁴³⁷ It further determined that along the first 49 kilometers of the Road alone that specialists inspected, more than ten wetlands and water bodies were affected, and that at least seven different watercourses were damaged.⁴³⁸ The Environmental Court found that substantial and in many cases excessive movements of land had been effected without making the corresponding conservation works.⁴³⁹ Evidently in desperation, the construction companies are said to have “placed *sarén* to retain sediments”, something that would be comical were it not for the obvious fact that “this does not work to retain such amounts of sediment.”⁴⁴⁰

5.14 The rationale for dispensing with the normal requirements for such a massive construction project appears to have been the “emergency”

⁴³⁵ *La Nación*, Costa Rica, “Conavi Built a Dirt Road along the Border without a single Design Plan”, 23 May 2012. (NM, Vol. II, Annex 31).

⁴³⁶ *El País*, Costa Rica, “Environmental Court Confirmed Excessive Felling for Construction of 1856 Trail”, July 15, 2012. (NM, Vol. II, Annex 37).

⁴³⁷ *Ibid.*

⁴³⁸ *Ibid.*

⁴³⁹ *Ibid.*

⁴⁴⁰ *Ibid.*

purportedly “resulting from the violation of Costa Rican sovereignty by Nicaragua, on Isla Calero in particular, as well as the environmental damage infringed on national territory”⁴⁴¹

5.15 Costa Rica had already submitted the alleged “violation of Costa Rican sovereignty by Nicaragua, on Isla Calero” to the Court in 2010 in *Certain Activities carried out by Nicaragua in the Border Area*, a case relating to the Lower San Juan de Nicaragua River area, below the point at which the Colorado branch splits off from the main San Juan de Nicaragua. Evidently dissatisfied with the provisional measures it sought and which were indicated by the Court in that case,⁴⁴² or indeed not satisfied with settlement of the dispute through adjudication by the International Court of Justice in general, Costa Rica decided to take matters into its own hands, adopting unilateral measures, including construction of the Road. That Costa Rica’s decision to construct the Road was a reaction to Nicaragua’s activities in the border area in the Lower San Juan de Nicaragua is confirmed by the By-Laws and Regulations adopted on 21 September 2011 by Costa Rica’s National Commission on Risk Prevention and Attention to Emergencies, discussed above. This is precisely the kind of action the Court has disapproved of in the past. In *United States Diplomatic and Consular Staff in Tehran*, the United States undertook an operation to rescue its

⁴⁴¹ Decree No. 0362 – 2011, preamble, para. 1. (NM, Vol. II, Annex 12).

⁴⁴² *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, Request for the Indication of Provisional Measures, Order of 8 March 2011.

hostages during the pendency of proceedings before the Court concerning those hostages. The Court stated:

The Court therefore feels bound to observe that an operation undertaken in those circumstances, from whatever motive, is of a kind calculated to undermine respect for the judicial process in international relations; and to recall that in paragraph 47, 1 B, of its Order of 15 December 1979 the Court had indicated that no action was to be taken by either party which might aggravate the tension between the two countries.⁴⁴³

The circumstances in the present case are directly analogous: Costa Rica brought a case against Nicaragua concerning *Certain Activities Carried Out by Nicaragua in the Border Area* and then proceeded with its Road project, which it asserted to be in response to Nicaragua's "activities" in the border area. It did this despite the Court's Provisional Measures Order of 8 March 2011, which, *inter alia*, indicated unanimously in paragraph 86 (3) that: "Each Party shall refrain from any action which might aggravate or extend the dispute before the Court or make it more difficult to resolve;" Costa Rica, in proceeding with its Road project during the pendency of its *Certain Activities* case and despite the Court's Provisional Measures Order in that case, may therefore be said to have undertaken an operation "of a kind calculated to undermine respect for the judicial process in international relations".⁴⁴⁴

⁴⁴³ *United States Diplomatic and Consular Staff in Tehran (United States of America v. Iran)*, *I.C.J. Reports 1980*, p. 3, at p. 43, para. 93.

⁴⁴⁴ *Ibid.*

5. 16 Leaving aside whether a reasonable, necessary and proportionate response to alleged environmental damage is the causing of far greater environmental damage to both countries involved, Costa Rica's Road project is not situated anywhere near Isla Calero, or Harbor Head, the location of the tiny parcel of some 250 hectares of uninhabited swampland near the mouth of the San Juan de Nicaragua River where Costa Rica claims Nicaragua violated its sovereignty. In addition to its lack of proximity to Harbor Head, the Road in fact ends where the Colorado River branches off from the San Juan de Nicaragua; there is, at least as yet, no bridge over the Colorado.⁴⁴⁵ Moreover, the Emergency Decree was issued four months after the dispute arose concerning Harbor Head/Isla Calero, a delay that calls into question whether the dispute was the true reason for the emergency declaration. The Road thus bears no apparent relation to the area in dispute in the *Certain Activities* case, making that dispute appear to be a complete pretext for the rash decision to construct the Road without conducting any prior studies.

5. 17 In addition, Article 1 of the Emergency Decree refers to six "villages on the border with Nicaragua" in which a State of Emergency is declared. These villages⁴⁴⁶ span the length of the Road project and are thus far removed from the area in dispute in the *Certain Activities* case. Moreover, in

⁴⁴⁵ According to the CFIA Report, there are also no bridges over "the mouths of the Sarapiquí, San Carlos and Pocosol Rivers". CFIA Report, op. cit. supra, p. 2, para. 1.3. (NM, Vol. II, Annex 4).

⁴⁴⁶ See Article 1 of the Decree No. 36440 (NM, Vol. II, Annex 11).

describing the “factual context” in the *Navigational and Related Rights* case, the Court observed: “According to Costa Rica, about 450 people, about half of them Nicaraguans, live along the approximately 140 km of the Costa Rican bank.”⁴⁴⁷ Evidently in an attempt to bring Nicaragua’s activities in Harbor Head within the definition of a “disaster” in its National Law on Emergencies and Risk Prevention – which requires that “a population is brought under conditions of vulnerability [by a phenomenon] that causes intense disruption of the community’s normal functioning conditions”⁴⁴⁸ – the Emergency Decree refers to “the activities illicitly carried out by Nicaragua on Costa Rican territory, which threaten the life, physical integrity and property of those within national territory”⁴⁴⁹ It further states that:

The present declaration of a state of emergency encompasses all the actions and projects necessary for the protection of life, physical integrity, property and the environment, as well as those necessary for attention, rehabilitation, reconstruction and restoration of infrastructure, housing, communications and disrupted production activities as well as all damaged public services within the zone covered under article 1) of this Decree .⁴⁵⁰

5. 18 To read this decree, one would think that the area in dispute in the *Certain Activities* case was highly populated. On the contrary, no one lives there

⁴⁴⁷ *Dispute regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, judgment of 13 July 2009, paragraph 98.

⁴⁴⁸ Decree No. 36440, op. cit. supra, preamble, paragraph X (emphasis added). (NM, Vol. II, Annex 11).

⁴⁴⁹ *Ibid.*, Article 1.

⁴⁵⁰ *Ibid.*, Article 3.

at all. As the Court will be aware from that case, the area involved there is a wetland that is home to a rich assortment of biota but, as far as human habitation is concerned, is inhospitable.

5. 19 Thus Costa Rica has attempted to force the actual situation onto the Procrustean bed of its law's definition of "disaster" in order to justify a colossal and environmentally destructive project having absolutely nothing to do with what it cites as the cause of the "disaster", the report of the TAA states:

"Implementation of a work of this magnitude under the argument of protection of the country's sovereignty in the face of a possible Nicaraguan invasion does not justify that the works took place in a specific site that did not encompass the precise area where most ecological impacts happened. The need to provide transportation facilities to inhabitants in the area does not justify it either, because these lands are public assets and landholders contributed to the destruction of the biodiversity existing in the area, and they continue to change the natural panorama of the place"⁴⁵¹.

5. 20 Since Nicaragua's cleaning, by hand, of a small caño in an area of uninhabited wetland of some 250 hectares, and dredging in its undisputed sovereign territory cannot justify a road being constructed far away from the location, instead the Road project is justified, according to the Emergency Decree, by the need to protect and provide services to some 450 people⁴⁵² living

⁴⁵¹ *El País*, Costa Rica, "Road 1856: First Study by the TAA Points Out Impacts to the Protection Area of the San Juan River", 26 July 2012 (NM, Vol. II, Annex 38).

⁴⁵² *Dispute regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, judgment of 13 July 2009, paragraph 98.

along a stretch of the right bank of the San Juan de Nicaragua around 120 kilometers in length that is far removed from the site involved in the *Certain Activities* case. Costa Rica's rationale for by-passing its internal laws – and, as will be seen, its international obligations – is thus based upon an illusion that is a product of its own imagination.

5. 21 A July, 2012 report of Costa Rica's own Administrative Environmental Court (TAA, its Spanish acronym) confirms the lack of any connection between the Road and Nicaragua's activities in the Lower San Juan.

5. 22 Also remarkable is the brazenness of Costa Rica with regard to its not having carried out an environmental impact assessment prior to constructing the Road, and not having notified or consulted with Nicaragua concerning the potential environmental impacts of the project before beginning to implement it. No less an official than Costa Rica's Foreign Minister minced no words in explaining why the construction of the Road needed no EIA: "This is a sovereign project we are carrying out under a decree that exempts us from Environmental Impact Assessment, that is why we owe no explanations"⁴⁵³

5. 23 Thus the Foreign Minister seems to be saying that a self-judging declaration of national emergency, authorizing a project that has no apparent relation to the claimed emergency, trumps any inconsistent rules of international law.

⁴⁵³ *El Nuevo Diario*, Nicaragua, "Outrage everywhere over San Juan River parallel highway. No studies Done for Costa Rican Highway", 15 December 2011. (NM, Vol. II, Annex 25).

5. 24 This kind of reasoning runs afoul of the principle expressed in Article 27 of the Vienna Convention on the Law of Treaties, which provides in relevant part as follows:

A party may not invoke the provisions of its internal law as justification for its failure to perform a treaty.⁴⁵⁴

Oppenheim confirms that this is true for failure to perform obligations under general international law, as well.

So far as concerns international obligations, ... international law requires that states fulfill their obligations and they will be held responsible if they do not. ... Thus a national statute prescribing treatment of aliens in a manner contrary to international law is simply one of the facts tending to establish the state's breach of its international obligations, and does not establish on the international plane the lawfulness of the state's action, however much it may do so on the national plane.⁴⁵⁵

5. 25 The Articles adopted by the International Law Commission on State Responsibility include the same rule in Article 32, "Irrelevance of internal law", which provides as follows:

The responsible State may not rely on the provisions of its internal law as justification for failure to comply with its obligations under this Part.⁴⁵⁶

⁴⁵⁴ Vienna Convention on the Law of Treaties, 22 May 1969, U.N. Doc. A/CONF.39/27, at p. 289 (1969), 1155 U.N.T.S. 331, 8 I.L.M. 679 (1969).

⁴⁵⁵ *Oppenheim's International Law*, Volume 1, pp. 82-83, Jennings & Watts, 9th ed. 1996, Longman, London & New York.

⁴⁵⁶ Draft articles on Responsibility of states for internationally wrongful acts, adopted by the International Law Commission at its fifty-third session (2001), Report of the International Law

5.26 A national emergency decree authorizing actions that are contrary to international law is thus “simply one of the facts tending to establish [Costa Rica’s] breach of its international obligations, and does not establish on the international plane the lawfulness of [Costa Rica’s] action, however much it may do so on the national plane.” Costa Rica is therefore internationally responsible for failing to fulfill its obligations of environmental impact assessment under international law, on both the national and transboundary levels.

5.27 It follows that none of the obligations discussed in this chapter can be avoided by declaring a “State of Emergency”. Costa Rica has not argued that the so-called “emergency” constituted a “state of necessity”. As the *Gabčíkovo* case showed,⁴⁵⁷ proof of the existence of necessity as a circumstance precluding wrongfulness would be extremely difficult, requiring as it does, inter alia, a showing that the act (here the construction of the road) “is the only way for the State to safeguard an essential interest against a grave and imminent peril ...”⁴⁵⁸ That situation clearly is not present in this case. Even if it were, *quod non*, it would only temporarily suspend Costa Rica’s obligation not to allow its territory to be used in a manner that results in harm to Nicaragua. As the Court said in *Gabčíkovo*, “[a]s soon as the state of necessity ceases to exist, the duty to

Commission on the work of its Fifty-third session, [2001] *Yearbook of the International Commission*, Vol. II, Part Two, p. 26, Art. 32, p. 94.

⁴⁵⁷ *Gabčíkovo*, op. cit. supra, pp. 39-46.

⁴⁵⁸ Draft articles on Responsibility of States for internationally wrongful acts, op. cit. supra, Art. 25, para. 1(a), p. 80.

comply with treaty obligations revives.”⁴⁵⁹ The same would be true for obligations under general international law. In any event, Costa Rica has not relied on “necessity” as a circumstance precluding the wrongfulness of its various breaches connected with the Road project, perhaps because that would be to admit that it had committed wrongful acts.

5. 28 Costa Rica did produce an “Environmental Management Plan” for the Road, but only after the bulk of the construction work had been done.⁴⁶⁰ As a matter of law, this is no more than a jural band-aid on an open wound. It does not fulfill Costa Rica’s obligation to prepare an environmental impact assessment before undertaking “activities that are likely to have a significant adverse impact on the environment”.⁴⁶¹ Furthermore, as shown in Chapter 3 the document is wholly inadequate as an assessment of the environmental impact of the Road project.

5. 29 Therefore, in proceeding with the construction of the Road with no environmental impact assessment, Costa Rica acted contrary to the obligation reflected in Principle 17 of the Rio Declaration to undertake an environmental impact assessment “as a national instrument”. Such an exercise is not only required by Costa Rican law but would be part and parcel of undertaking an assessment of the environmental impact of the Road in a transboundary context as required by general international law.

⁴⁵⁹ *Gabčíkovo*, op. cit. supra, p. 63, para. 101.

⁴⁶⁰ Costa Rican Environmental Management Plan (NM, Vol. II, Annex 2).

⁴⁶¹ Principle 17 of the Rio Declaration, op. cit. supra.

2. The Transboundary Level

5. 30 The obligation of a state considering a project that might have transboundary impacts to prepare an environmental impact assessment concerning those possible impacts is now well-established. This has been confirmed most recently by the Court's judgment in *Pulp Mills on the River Uruguay* in which the Court referred to:

“a practice, which in recent years has gained so much acceptance among States that it may now be considered a requirement under general international law to undertake an environmental impact assessment where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource. Moreover, due diligence, and the duty of vigilance and prevention which it implies, would not be considered to have been exercised, if a party planning works liable to affect the régime of the river or the quality of its waters did not undertake an environmental impact assessment on the potential effects of such works.”⁴⁶²

5. 31 Although Nicaragua's right to dredge the San Juan de Nicaragua River is regulated by the 1858 Treaty⁴⁶³ and arbitral awards⁴⁶⁴, as explained in

⁴⁶² *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, judgment of 20 April 2010, para. 204.

⁴⁶³ Treaty of Limits between Nicaragua and Costa Rica, 15 April 1858 (NM, Vol. II, Annex 5).

⁴⁶⁴ First Award of the Umpire EP Alexander in the boundary question between Costa Rica and Nicaragua, reprinted United Nations, *Reports of International Arbitral Awards*, Vol. XXVIII (2007) pp.215-221, San Juan del Norte, 30 September 1897; Second Award of the Umpire EP Alexander in the boundary question between Costa Rica and Nicaragua, reprinted United Nations, *Reports of International Arbitral Awards*, Vol. XXVIII (2007) pp.223-225, San Juan del Norte, 20 December 1897; Third Award of the Umpire EP Alexander in the boundary question between Costa Rica and Nicaragua, reprinted United Nations, *Reports of International Arbitral Awards*, Vol. XXVIII (2007) pp.227-230, San Juan del Norte, 22 March 1898; Fourth Award of the

Chapter 4 Nicaragua, prepared an environmental impact assessment for the dredging project of the San Juan de Nicaragua River that was publicly announced and known by the Costa Rica authorities.⁴⁶⁵

5. 32 Costa Rica exercised no diligence, due or otherwise, with respect to its Road project. It did not respect “the duty of vigilance and prevention which [due diligence] implies”. Therefore, due diligence cannot “be considered to have been exercised, [since] a party planning works liable to affect the régime of the river or the quality of its waters did not undertake an environmental impact assessment on the potential effects of such works.”

5. 33 Costa Rica has itself recognized in the *Certain Activities* case that “[a] State is obliged, as a matter of general international law, to assess the extent to which activities within its jurisdiction will cause harm to other States, particularly in areas or regions of shared environmental conditions”.⁴⁶⁶ In its Memorial in that Case, Costa Rica quotes from a note sent by its Minister of Foreign Affairs to his Nicaraguan counterpart in which the Costa Rican Minister

“points out to the Government of Nicaragua that before the performance of any dredging work, environmental impact assessments must be carried out to determine that the works will not damage the

Umpire EP Alexander in the boundary question between Costa Rica and Nicaragua, reprinted United Nations, *Reports of International Arbitral Awards*, Vol. XXVIII (2007) pp.231-235, Greytown, 26 July 1899. (NM, Vol. II, Annex 6 (2)(3)(4)(5)).

⁴⁶⁵ For a detailed reading on Nicaragua’s exhaustive procedure for the preparation of the environmental impact assessment for the dredging project see the Counter Memorial of Nicaragua (NCM) in the *Dispute concerning “Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)”*, Volume I, 6 August 2012, paras. 5.1 – 5.108.

⁴⁶⁶ *Certain Activities carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, CRM, para. 5.22.

wetlands, rivers and woodlands of Costa Rica, nor the Bay of San Juan del Norte. These assessments must also determine that there will be no impact on the current flow of the Colorado River, or of any other Costa Rican River.”⁴⁶⁷

5. 34 Three points regarding this statement bear emphasis. First, Costa Rica recognizes that an environmental impact assessment must be carried out before any work is begun, something that Costa Rica failed to do in relation to its Road project. And second, Costa Rica’s Foreign Minister insisted that Nicaragua’s modest dredging project should have “no impact on the current flow of the Colorado River, or of any other Costa Rican River” (emphasis added), something of which Costa Rica most certainly could not assure Nicaragua in respect of the impact of its Road project on the San Juan de Nicaragua River.

5. 35 Also In the *Certain Activities* case, Costa Rica has trumpeted “[t]he necessity of a proper environmental impact assessment in order to prevent or minimize transboundary harm,” which it states “is now a well-recognized requirement of general international law: the Court recently had the occasion to declare it [referring to paragraph 204 of the *Pulp Mills* case], it is embodied in a number of instruments, and it is also a requirement of treaties to which Nicaragua is a party”⁴⁶⁸

⁴⁶⁷ *Ibid.*, CRM, para. 3.73, p. 104, citing Vol. III, Annex No. 45, Note from the Minister of Foreign Affairs and Worship of Costa Rica to the Minister of Foreign Affairs of Nicaragua, Ref: DM-637-9, 27 August 2009.

⁴⁶⁸ *Certain Activities carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, CRM, para. 5.23.

5.36 Costa Rica has also confirmed that “a proper environmental impact assessment is a prerequisite” to complying with the duty of the States to ensure that “activities within their jurisdiction or control do not cause damage to the environment of other States.”⁴⁶⁹ The latter duty is considered below, but Costa Rica is certainly correct that in order to comply with it a state must investigate whether a proposed project may cause damage to the environment of other states. And yet, in respect of the Road, Costa Rica utterly failed to practice what it preached.

5.37 The contours of what is expected of a state considering a proposed project that may have adverse transboundary impacts are set out in the well-known 1991 Convention on Environmental Impact Assessment in a Transboundary Context (the “Espoo Convention”).⁴⁷⁰ While a treaty of the U.N. Economic Commission for Europe (UNECE), it has been amended to allow universal participation⁴⁷¹ and sets forth the general requirements and procedures relating to transboundary environmental impact assessment globally. Among the considerations recited in the preamble to the convention is that the parties are:

⁴⁶⁹ *Ibid.*, CRM, para. 5.22, citing the Rio Declaration on Environment and Development (1992), Principle 2 (“States have...the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction”).

⁴⁷⁰ Convention on Environmental Impact Assessment in a Transboundary Context, 25 February 1991, Espoo, Finland, 1989 U.N.T.S. 309, 30 I.L.M. 800 (1991) (hereinafter Espoo Convention).

⁴⁷¹ The first amendment to the convention, adopted by the parties in 2001, would allow UN member states that are not members of the UNECE to become parties to the convention, indicating that its principles are universally applicable. *See* <http://www.unece.org/env/eia/eia.html> (last visited 5 December 2012).

“Conscious of the need to give explicit consideration to environmental factors at an early stage in the decision-making process by applying environmental impact assessment, at all appropriate administrative levels, as a necessary tool to improve the quality of information presented to decision makers so that environmentally sound decisions can be made paying careful attention to minimizing significant adverse impact, particularly in a transboundary context”.⁴⁷²

5. 38 The convention provides that:

“The Party of origin⁴⁷³ shall ensure that in accordance with the provisions of this Convention an environmental impact assessment is undertaken prior to a decision to authorize or undertake a proposed activity listed in Appendix I⁴⁷⁴ that is likely to cause a significant adverse transboundary impact.”⁴⁷⁵

5. 39 The convention also requires that the Party of origin “ensure that affected Parties are notified” of such activities⁴⁷⁶ and that it provide “an opportunity to the public in the areas likely to be affected to participate in relevant environmental impact assessment procedures regarding proposed activities”.⁴⁷⁷ It further requires the Party of origin to “enter into consultations

⁴⁷² *Ibid.*, preamble.

⁴⁷³ The expression “Party of origin” is defined in Article 1 of the convention to mean a party “under whose jurisdiction a proposed activity is envisaged to take place”. *Ibid.*, Article 1, para. (ii).

⁴⁷⁴ Appendix I contains a list of activities, including “motorways” and “express roads” (para. 7) and “deforestation of large areas” (para. 17). Paragraph 5 of Article 2 provides that at the initiative of any concerned party, discussions are to be held on whether an activity not listed in Appendix I should be treated as if it were so listed.

⁴⁷⁵ Espoo Convention, op. cit. supra, Article 2, para. 3.

⁴⁷⁶ *Ibid.*, para. 4. This requirement is fleshed out in Article 3 of the convention. “Affected Party” is defined to mean a party “likely to be affected by the transboundary impact of a proposed activity.” *Ibid.*, Article 1, para. (iii).

⁴⁷⁷ *Ibid.*, Article 2, para. 6.

with the affected Party concerning, inter alia, the potential transboundary impact of the proposed activity and measures to reduce or eliminate its impact.”⁴⁷⁸ Indeed, it is difficult to see how a proper transboundary environmental impact assessment could be conducted without such consultation, since data and information concerning potentially affected areas in the other state would have to be provided by that state – in this case, Nicaragua.

5. 40 All of the foregoing principles contained in the Espoo Convention follow naturally and logically from the obligation recognized by the Court to prepare a transboundary environmental impact assessment. None of them was observed by Costa Rica, as shown in the previous sub-section. This failure was unanimously confirmed by the Central American Court of Justice in its judgment of 21 June 2012 in the following terms:

FOURTH: The State of Costa Rica started the work in question without conducting the studies and previous analyses required in the context of the obligations imposed by Regional Community and International Law, ignoring collaboration, mutual understanding and communication between the State Parties of all these conventions that should exist in the field of environment and sustainable development.⁴⁷⁹

5. 41 Not only did Costa Rica fail to prepare, in advance, an assessment of the environmental impact of the Road project either within Costa Rica or in

⁴⁷⁸ *Ibid.*, Article 5.

⁴⁷⁹ C.A.C.J Judgment, 21 June 2012, Fourth ruling (NM, Vol. II, Annex 13).

Nicaragua, it also failed to perform the more elementary obligation of notifying Nicaragua of the project and its intent to proceed with it.

C. COSTA RICA BREACHED ITS OBLIGATION TO PROVIDE PRIOR NOTIFICATION TO NICARAGUA

5.42 It has been generally accepted for at least twenty years, and probably more, that a state considering a project that may result in harm to another state must notify that other state of the project in a timely manner. Costa Rica trumpeted this obligation in its Memorial in the *Certain Activities* case: “That States are under a procedural obligation to notify and consult in respect of those activities which carry a risk of environmental harm to neighbouring States is an uncontroversial rule of general international law, extending from the *Lac Lanoux* arbitration to Principle 19 of the Rio Declaration ...”⁴⁸⁰ Yet Costa Rica did not observe this “uncontroversial rule” in respect of its Road project. In fact, as has been seen in Chapter 3, it baldly denied any obligation to do so.

5.43 As with the obligation to conduct an environmental impact assessment, Costa Rica “honors” the obligation of prior notification and consultation more in the breach than the observance. This fact was not lost on the Central American Court of Justice, which made the following ruling in its judgment of 21 June 2012:

THIRD: The State of Costa Rica acted without consultation, in a unilateral, inappropriate and

⁴⁸⁰ *Certain Activities carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, CRM, para. 5.5, p. 200.

hasty manner, violating international bilateral and multilateral agreements validly contracted by building the road in question, which cannot be obviated by alleging internal provisions.⁴⁸¹

5. 44 The following review of illustrative authorities supporting the obligation of prior notification demonstrates its general acceptance and contours and makes plain the extent of Costa Rica’s breaches of that obligation.

5. 45 The 1992 Rio Declaration provides in Principle 19 as follows:

“States shall provide prior and timely notification and relevant information to potentially affected States on activities that may have a significant adverse transboundary environmental effect and shall consult with those States at an early stage and in good faith.”⁴⁸²

5. 46 This principle, which Costa Rica quotes in its Memorial in *Certain Activities*⁴⁸³ but then quickly forgets to apply to itself in the context of its Road project, is echoed in all of the relevant instruments. For example, Article 3, Notification, of the 1991 Espoo Convention provides in part as follows:

1. For a proposed activity listed in Appendix I that is likely to cause a significant adverse transboundary impact, the Party of origin shall, for the purposes of ensuring adequate and effective consultations under Article 5, notify any Party which it considers may be an affected Party as early as possible and no later than when informing its own public about that proposed activity.
2. This notification shall contain, inter alia:

⁴⁸¹ C.A.C.J Judgment, 21 June 2012, Third ruling. (NM, Vol. II, Annex 13).

⁴⁸² Report of the United Nations Conference on Environment and Development, Rio Declaration on Environment and Development, 1992, U.N. Doc. A/CONF. 151/26 (Vol. I), Principle 19.

⁴⁸³ CRM, op. cit. supra, para. 5.5, p. 200.

1. Information on the proposed activity, including any available information on its possible transboundary impact;
 2. The nature of the possible decisions; and
 3. An indication of a reasonable time within which a response under paragraph 3 of this Article is required, taking into account the nature of the proposed activity; and may include the information set out in paragraph 5 of this Article.
3. The affected Party shall respond to the Party of origin within the time specified in the notification, acknowledging receipt of the notification, and shall indicate whether it intends to participate in the environmental impact assessment procedure.⁴⁸⁴

5. 47 In addition, as noted in Chapter 4, the draft articles on Prevention of Transboundary Harm from Hazardous Activities adopted by the International Law Commission (ILC) in 2001, after requiring an assessment of possible transboundary harm entailed by the proposed activity in question in article 7, provide:

If the assessment referred to in article 7 indicates a risk of causing significant transboundary harm, the State of origin shall provide the State likely to be affected with timely notification of the risk and the assessment and shall transmit to it the available technical and all other relevant information on which the assessment is based.⁴⁸⁵

⁴⁸⁴ Espoo Convention, *op. cit. supra*, Article 3.

⁴⁸⁵ *Yearbook of the International Law Commission*, 2001, vol. II, Part Two, p. 159.

5. 48 The 1997 Convention on the Law of the Non-Navigational Uses of International Watercourses⁴⁸⁶ is not applicable to the San Juan de Nicaragua River per se, in view of the *lex specialis* of the 1858 Treaty and the arbitral awards interpreting it, which establish Nicaragua’s undisputed sovereignty over the San Juan de Nicaragua River. Nevertheless, the 1997 Convention, which was negotiated on the basis of draft articles prepared by the ILC, sets forth the general principles applicable to the non-navigational uses of international watercourses and contains a detailed set of nine articles on notification of planned measures. These articles provide an indication of how the notification process should properly unfold in a case such as the present one. Their titles are as follows: Article 11, Information concerning planned measures; Article 12, Notification concerning planned measures with possible adverse effects; Article 13, Period for reply to notification (the notified State is given six months within which to reply); Article 14, Obligations of the notifying State during the period for reply (inter alia, not to “implement or permit the implementation of the planned measures without the consent of the notified States”); Article 15, Reply to notification; Article 16, Absence of reply to notification; Article 17, Consultations and negotiations concerning planned measures; Article 18, Procedures in the absence of notification (a state believing it may be affected by a

⁴⁸⁶ United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses, U.N. Doc. A/RES/51/229, Annex, 21 May 1997, Official Records of the General Assembly, Fifty-first Session, Supplement No. 49 (A/51/49) (hereinafter “U.N. Watercourses Convention”).

project in another state may request the latter to apply the provisions of Article 12; during the course of any ensuing consultations and negotiations the state planning the measures shall refrain from implementing them at the request of the other state); and Article 19, Urgent implementation of planned measures. The latter article is set forth in full in view of Costa Rica's Declaration of a State of Emergency:

1. In the event that the implementation of planned measures is of the utmost urgency in order to protect public health, public safety or other equally important interests, the State planning the measures may, subject to articles 5 and 7, immediately proceed to implementation, notwithstanding the provisions of article 14 and paragraph 3 of article 17.
2. In such case, a formal declaration of the urgency of the measures shall be communicated without delay to the other watercourse States referred to in article 12 together with the relevant data and information.
3. The State planning the measures shall, at the request of any of the States referred to in paragraph 2, promptly enter into consultations and negotiations with it in the manner indicated in paragraphs 1 and 2 of article 17.”⁴⁸⁷

It will be noted that a state's right to proceed with the implementation of planned measures for the extraordinary reasons of public health, public safety, or the like, is conditioned upon its compliance with Articles 5 and 7 of the Convention. Those articles are entitled, respectively, “Equitable and reasonable utilization and participation”, and “Obligation not to cause significant harm”. Thus even if,

⁴⁸⁷ *Ibid.*, article 19.

quod non, Costa Rica could make out a case for urgent implementation of planned measures under article 19 – which Nicaragua submits it has not and cannot – in implementing those measures Costa Rica would have to avoid actions that breached Nicaragua’s right of equitable and reasonable utilization of the San Juan de Nicaragua and that caused significant harm to Nicaragua. This Costa Rica clearly has not done.

5. 49 As to the obligation of prior notification itself, Article 12 of the 1997 Convention provides as follows:

Before a watercourse State implements or permits the implementation of planned measures which may have a significant adverse effect upon other watercourse States, it shall provide those States with timely notification thereof. Such notification shall be accompanied by available technical data and information, including the results of any environmental impact assessment, in order to enable the notified States to evaluate the possible effects of the planned measures.⁴⁸⁸

Article 12 thus requires not only prior notification of planned measures, such as the Road project, but also that the notification be “accompanied by available technical data and information, including the results of any environmental impact assessment”. Costa Rica provided Nicaragua with neither “available technical data and information” concerning its Road project, nor “the results of any environmental impact assessment” on the project. This would in fact have been difficult for Costa Rica to do because, so far as appears, neither existed.

⁴⁸⁸ *Ibid.*, Article 19.

5. 50 As noted in Chapter 2, Nicaragua nonetheless became aware of Costa Rica's Road project: it was covered extensively by the Costa Rican media and, in any event, an undertaking of such massive scale cannot be missed by an observer on the opposite bank of the San Juan de Nicaragua River, or by Nicaraguan personnel conducting routine patrols on or over the river. In a note dated 29 November 2011, Nicaragua consequently requested that Costa Rica provide the data and information concerning the project that it should have provided *sua sponte*.⁴⁸⁹

5. 51 Nicaragua had every right to make this request. Indeed, it is an integral part of the procedural regime under general international law concerning projects with possible transboundary implications. Thus, Article 3(7) of the Espoo Convention provides as follows:

When a Party considers that it would be affected by a significant adverse transboundary impact of a proposed activity listed in Appendix I, and when no notification has taken place in accordance with paragraph 1 of this Article, the concerned Parties shall, at the request of the affected Party, exchange sufficient information for the purposes of holding discussions on whether there is likely to be a significant adverse transboundary impact.⁴⁹⁰

5. 52 Similarly, Article 18 of the 1997 U.N. Watercourses Convention anticipates and provides for such a situation:

⁴⁸⁹ Diplomatic Note from the Minister of Foreign Affairs of Nicaragua to the Minister of Foreign Affairs of Costa Rica, Ref: MRE/DVM/AJST/500/11/11, 29 November 2011 (NM, Vol. II, Annex 14). The text of the relevant portion of the Note is set forth in Chapter 4 at para. 4.25.

⁴⁹⁰ Espoo Convention, *op. cit. supra*, Article 3(7).

1. If a watercourse State has reasonable grounds to believe that another watercourse State is planning measures that may have a significant adverse effect upon it, the former State may request the latter to apply the provisions of article 12. The request shall be accompanied by a documented explanation setting forth its grounds.⁴⁹¹

Nicaragua had grounds to believe that Costa Rica was not planning, but actually undertaking (without any prior planning, as it turned out) the Road project. Nicaragua further had reasonable grounds to believe that this project, not only might but certainly would have a significant adverse effect upon it. Nicaragua accordingly, in effect, “requested [Costa Rica] to apply the provisions of article 12” – i.e., to provide timely notification of the project, “accompanied by available technical data and information, including the results of any environmental impact assessment, in order to enable [Nicaragua] to evaluate the possible effects of the planned measures.”⁴⁹² Nicaragua’s request was accompanied by citations to reports in Costa Rican newspapers that Costa Rica was “constructing a 120 kilometer road parallel to the border with Nicaragua” and that the Costa Rican Minister for Public Safety indicated that “the road parallel to the Rio San Juan will be completed in December 2011.”⁴⁹³ The ILC’s commentary on what became Article 18 of the U.N. Watercourses Convention explains that the requirement of a “documented explanation setting forth its [i.e.,

⁴⁹¹ U.N. Watercourses Convention, op. cit. supra, Article 18, para. 1.

⁴⁹² *Ibid.*, Article 12 (modified to apply it to the present facts).

⁴⁹³ See Diplomatic Note from the Minister of Foreign Affairs of Nicaragua to the Minister of Foreign Affairs of Costa Rica of 29 November 2011, op. cit. supra (NM, Vol. II, Annex 14).

Nicaragua’s] reasons” is “intended to require that the requesting State have more than a vague and unsubstantiated apprehension. A serious and substantiated belief is necessary”⁴⁹⁴ Nicaragua in fact had more than a “serious and substantiated belief” since, in addition to the Costa Rican press accounts, the Road project was visible from the San Juan River’s left (Nicaraguan) bank, as shown in the following photographs annexed to the Application.⁴⁹⁵

Figure 5.1⁴⁹⁶



⁴⁹⁴ Report of the International Law Commission on the Work of Its Forty-Sixth Session, [1994] *Yearbook of the International Law Commission*, Vol. II, Part Two, pp. 116-117.

⁴⁹⁵ See *Application Instituting Proceedings*, 22 December 2011, *Construction of a Road in Costa Rica along the San Juan River (Nicaragua vs. Costa Rica)*, Annexes 1 and 4-9.

⁴⁹⁶ Site Visit on the 1st of December, 2011. *Note: This photograph was taken from the San Juan de Nicaragua River. (Application Instituting Proceedings, 22 December 2011, Construction of a Road in Costa Rica along the San Juan River (Nicaragua vs. Costa Rica), Annex 1).*

Figure 5.2⁴⁹⁷



Figure 5.3⁴⁹⁸



⁴⁹⁷ *El Nuevo Diario*, Nicaragua, "Nicaragua requires Costa Rica the immediate halt of the works and lists eight blows to the river", 12 december 2011. (*Application Instituting Proceedings*, 22 December 2011, *Construction of a Road in Costa Rica along the San Juan River (Nicaragua vs. Costa Rica)*, Annex 4).

⁴⁹⁸ *El Nuevo Diario*, Nicaragua, "Environmentalist corroborate damage by the Costa Rican road in Río San Juan on sight, Violation of sovereignty", 5 December 2011 (*Application Instituting Proceedings*, 22 December 2011, *Construction of a Road in Costa Rica along the San Juan River (Nicaragua vs. Costa Rica)*, Annex 7).

Figure 5.4⁴⁹⁹



5. 53 Costa Rica’s dismissive response to Nicaragua’s request for information concerning the Road project has already been noted in Chapter 2.⁵⁰⁰ In particular, in his response, Costa Rica’s foreign minister stated: “Costa Rica considers that the project mentioned is not affecting Nicaraguan territory.”⁵⁰¹ He went on to invite “the Government of Nicaragua to present formally the reasons for which it considers that there may be environmental damage or damage to Nicaragua’s interests.”⁵⁰² No further information was provided. For her part, the

⁴⁹⁹ Site Visit on the 1st of December, 2011. *Note: This photograph was taken from the San Juan de Nicaragua River (Application Instituting Proceedings, 22 December 2011, Construction of a Road in Costa Rica along the San Juan River (Nicaragua vs. Costa Rica), Annex 8).*

⁵⁰⁰ See paras. 2.27-2.33 above.

⁵⁰¹ Diplomatic Note from the Minister of Foreign Affairs and Worship of Costa Rica to the Minister of Foreign Affairs of Nicaragua, Ref: DM-AM-601-11, 29 November 2011 (NM, Vol. II, Annex 15).

⁵⁰² *Ibid.*, See also Diplomatic note from the Minister of Foreign Affairs and Worship of Costa Rica to the Minister of Foreign Affairs of Nicaragua, Ref: DVM-AM-286-11, 20 December 2011 (NM, Vol. II, Annex 17).

President of Costa Rica insisted: “We have no reason to offer explanations to the Government of Nicaragua”.⁵⁰³

5. 54 Costa Rica’s attitude runs directly contrary to the principle that a state is not the sole judge of whether its interests may be affected. This principle was stated by the tribunal in the *Lake Lanoux* arbitration⁵⁰⁴ as discussed in Chapter 4.

5. 55 Nicaragua reminded Costa Rica of this principle in a note of 10 December 2011, and went on nevertheless to provide, *ex gratia*, a detailed exposition of the obligations breached by Costa Rica and the harmful consequences for Nicaragua of the construction of the Road by Costa Rica:

“The National Reconciliation and Unity Government regrets to communicate that, in relation to your note DM-AM-601-11 dated 29th November 2011, it considers inappropriate and inadmissible to request Nicaragua to point out the damages that may result from the project that your government is constructing in the right bank of the San Juan of Nicaragua River.

The Government of Nicaragua considers that such expression is the result of a wrong interpretation of the obligation of your distinguished government to present to Nicaragua, prior to the commencement of the road, the Environmental Impact Assessment and the Environmental Management Plan, both of them being a fundamental requisite to carry out a project of such a magnitude.

⁵⁰³ *El País*, Costa Rica, “Chinchilla Defends Highway Criticized by Nicaragua, Rejects Dialogue”, 14 December 2011 (Source: EFE / 13 December 2011) (NM, Vol. II, Annex 24).

⁵⁰⁴ *Lake Lanoux Arbitration (France v. Spain)*, Award, 16 November 1957, *International Law Reports*, vol. 24, p. 119.

Trying to invert the logic in regard to the obligations of Costa Rica implies not assuming the commitments with mother nature, International Law and the bilateral and multilateral Conventions and Treaties that your government has subscribed in defense of the environment and biodiversity, among which we can mention the Regional Convention for the Management and Conservation of the Natural Forest Ecosystems and the Development of Forest Plantations signed in Guatemala on 29th October 1993, the Stockholm Declaration, the Rio Declaration, Agenda 21 and the February 2, 1971 Convention on Wetlands of International Importance especially as Waterfowl Habitat (RAMSAR), whose Article 5 was highlighted in paragraph 79 of the Order of the International Court of Justice dated March 8 2011: ‘Article 5.- The contracting parties shall consult with each other about implementing obligations arising from the Convention especially in the case of a wetland extending over the territories of more than one Contracting Party or where a water system is shared by Contracting Parties. They shall at the same time endeavor to coordinate and support present and future policies and regulations concerning the conservation of wetlands and their flora and fauna’.

The Government of Costa Rica, far from informing its own people and Nicaragua about the project, has hidden it from them. Furthermore, high-ranking people of the government have made misleading statements in the media by affirming that the project was suspended.

Independently of the above-mentioned, it is evident that the construction of the road seriously affects the environment and the rights of Nicaragua. If the project is not ceased it would have irreversible and transcendental ecological and environmental consequences.

Among the many consequences that can be highlighted are the following:

1. Dumping of trees and soil along the route of the road into the river flow, making more difficult and risking the navigation in its waters, over which Nicaragua has the dominion and sovereign jurisdiction based on the Treaty of 15th April 1858 and the Cleveland Award of 22nd March 1888.
2. Removal and sedimentation of fragile soils resulting in an increased and excessive sedimentation of the waters of the Nicaraguan river.
3. Impact over the hydrological resources, particularly affecting fishing in the river because of the changes in the quality of the water.
4. Destruction of the natural habitat of the bank by removing the immediate vegetation to the river flow for the construction of the road, affecting the tree diversity around it.
5. Interception of the natural flow of the waters that flow through the south basin to the San Juan River by modifying the drainage of the surrounding wetlands at the lower San Juan and its delta.
6. Erosion of the soil banks in places where a certain slope exists and resulting in the sedimentation of clay soils to the San Juan of Nicaragua River.
7. Decrease or alteration of the aquatic life due to the water cloudiness resulting from the sediments of the road construction.
8. Destruction of the inherent scenic values and eco-tourism potential of the river course.

I point out that the above list does not exhaust all the consequences and responsibilities of Costa Rica related to the execution of this project, including the incursions in Nicaraguan territory and the destruction of the border markers.

The obligation of Costa Rica to inform Nicaragua about the Environmental Impact Assessment prior to the commencement of the project cannot be fulfilled by calling upon facilitators. Nicaragua cannot accept anything less than the suspension of the project until it has had the chance to receive and

analyse the Environmental Impact Assessment on the project.”⁵⁰⁵

5. 56 But far from suspending the project, Costa Rica not only continued to proceed with it at reckless speed, but also never provided Nicaragua with any information on it, least of all an environmental impact assessment.

5. 57 In sum, Costa Rica undertook the Road project in violation of the obligation to provide prior notification to Nicaragua, as the state that would be likely to be adversely affected by the project. Costa Rica’s excuse for not providing such notification was the same as for failing to prepare environmental impact assessments concerning its bulldozing of forest, farm and riverbank: it had exempted itself from these obligations by adopting an Emergency Decree, even though there was no emergency. Thus, ignoring the well-known principle that a state may not invoke the provisions of its internal law to justify its failure to perform its international obligations, Costa Rica ran roughshod over both its international legal obligations and its own environment, with serious consequences for Nicaragua.

D. COSTA RICA BREACHED ITS OBLIGATION NOT TO CAUSE SIGNIFICANT TRANSBOUNDARY HARM

5. 58 Contrary to offhand statements of Costa Rica’s government officials,⁵⁰⁶ its Road project is causing Nicaragua significant transboundary harm,

⁵⁰⁵ Diplomatic Note from the Minister of Foreign Affairs of Nicaragua to the Minister of Foreign Affairs of Costa Rica, Ref: MRE/DVS/VJW/0685/12/11, Managua, 10 December 2011 (NM, Vol. II, Annex 16).

as shown in Chapter 3 above, and recognized by the CACJ, as will be seen presently. Costa Rica is thus in breach of the fundamental obligation not to cause significant transboundary harm.

5. 59 Costa Rica as much as announced its intention to bring about a harmful occupation of Nicaraguan territory with the very naming of its Road which, as indicated earlier,⁵⁰⁷ refers to Costa Rican occupation of Nicaragua in the 1850s. Indeed, the siltation of the San Juan de Nicaragua River that is caused by the Road project constitutes an intentional trespass upon Nicaraguan sovereign territory. And there is no doubt that this trespass was and continues to be intentional, in that it was either a deliberate response to Nicaragua's dredging project and cleaning of the caño,⁵⁰⁸ or a consequence substantially certain to follow from the manner in which the Road was constructed.

5. 60 The authorities supporting the obligation not to cause transboundary harm, which is traceable to the sovereignty of a state over its territory, were reviewed in Chapter 3; that survey will not be repeated here. It will suffice for present purposes to recall that the principle that a state may not

⁵⁰⁶ See, e.g., the statement of Costa Rica's foreign minister quoted above: "Costa Rica considers that the project mentioned is not affecting Nicaraguan territory." Diplomatic Note from the Minister of Foreign Affairs and Worship of Costa Rica to the Minister of Foreign Affairs of Nicaragua, Ref: DM-AM-601-11, 29 November 2011 (NM, Vol. II, Annex 15).

⁵⁰⁷ See footnote [1], supra.

⁵⁰⁸ The Emergency Decree presented the "state of emergency", which led to the initiation of the Road project, as having been caused by "the violation of Costa Rican sovereignty on the part of Nicaragua". Decree No. 36440, op. cit. supra (NM, Vol. II, Annex 11). And the By-Laws and Regulations adopted to implement the Decree were stated to have been made "necessary by virtue of the emergency resulting from the violation of Costa Rican sovereignty by Nicaragua", Decree No. 0362-2011, op. cit. supra, paragraph 1. (NM, Vol. II, Annex 12).

allow its territory to be used in a way that is likely to result in harm to other states is a venerable one, and has been applied to the environment in modern decisions of the Court⁵⁰⁹ and in international instruments such as the 1972 Stockholm Declaration on the Human Environment⁵¹⁰ and the 1992 Rio Declaration on Environment and Development.⁵¹¹ Indeed, the Court has established that this obligation “is now part of the corpus of international law relating to the environment”.

5. 61 As Nicaragua has stated in a report to the Court pursuant to the Provisional Measures Order of 8 March 2011 in the *Certain Activities* case, Costa Rica’s Road’s of 160 km alongside the river has “caused silting of the San Juan River, erosion of the river banks, disturbances of its natural channels, and harm to the surrounding ecosystem of wetlands and other protected areas, in addition to the disruption of natural biological corridors.”⁵¹² These forms of harm to Nicaragua resulting from Costa Rica’s Road project, as well as others, are examined in detail in Chapter 3 above. But for present purposes, this summary is sufficient to indicate the scope of harm to Nicaragua caused by Costa Rica’s

⁵⁰⁹ See *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996*, pp. 241-242, para. 29, invoked by Costa Rica in the *Certain Activities* case, CRM, pp. 211-212, para. 5.29; *Gabčíkovo-Nagymaros Project, Hungary/Slovakia, I.C.J. Reports 1997*, p. 7, at p. 41, para. 53 (hereinafter “*Gabčíkovo*”); and *Pulp Mills on the River Uruguay, Argentina v. Uruguay, I.C.J. Reports 2010*, p. 14, at p. 56, para. 101.

⁵¹⁰ United Nations Conference on the Human Environment, Stockholm, 5-16 June 1972, Report of the U.N. Conference on the Human Environment, 11 I.L.M. 1416 (1972), Principle 21.

⁵¹¹ United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, Report of the U.N. Conference on Environment and Development, 31 I.L.M. 874 (1992), Principle 2.

⁵¹² *Certain Activities*, Nicaragua’s report to the Court on compliance with the Provisional Measures Order, 23 July 2012.

Road project. These actions by Costa Rica clearly constitute a breach of the obligation not to cause significant transboundary harm.

5. 62 The findings of the Central American Court of Justice (CACJ), recorded in its judgment of 21 June 2012, confirm the risks posed by the Road project for the San Juan de Nicaragua River, the sloppy way in which it was constructed, and some of the harm it had already caused, nearly a year ago:

WHEREAS XXVI: This Court, at the request of the applicant and given the nature of the case, made on-site inspection at eight thirty five in the morning on the twelfth of January of two thousand twelve, which concluded at six thirty in the afternoon, in order to ascertain if there was any danger in the works concerning the road under construction that runs along the south bank of the San Juan River and, as a result thereof, took due note of the hazards and risks involved for the conservation of the ecosystem by the works initiated by the Government of Costa Rica. The Court has been able to verify the damage to the bank that protects the river on the south bank, especially in the many sectors where the road is dangerously close to the edge of the River, leaving it exposed to sedimentation by leaching, and also noted the lack of general buffering measures, such as culverts, drainages, etc. This Court highlights the fact that in many sections of the inspected area, the distance between the riverbed and the road is a few meters and the difference of level between the two is very pronounced, with the road in a dominant position and the river in a secondary position, all of which makes possible a landslide of large segments of the work in question, with the resulting sedimentation that would pollute the river. The Court also verified the felling of a large number of trees in Costa Rican

territory, giving rise to vast areas where only reddish and clayish soil remains.⁵¹³

...

FIFTH: The State of Costa Rica built a high-risk and environmentally hazardous work, which it should have prevented within the framework of the community obligations because it exposes the common watershed and ecosystem shared with Nicaragua and the region to serious and unpredictable damage, which this Court was able to observe during its on-site inspection in the area in question.⁵¹⁴

5. 63 The harm to the San Juan de Nicaragua River and risk of such harm documented in the judgment of the CACJ and examined in Chapter 3 above, violate a number of principles reflected in the 1997 Watercourses Convention, including the obligation not to cause significant harm (Article 7),⁵¹⁵ the obligation to protect and preserve ecosystems, (Article 20)⁵¹⁶ and the

⁵¹³ C.A.C.J Judgement, 21 June 2012 (NM, Vol. II, Annex 13).

⁵¹⁴ *Ibid.*, Fifth ruling.

⁵¹⁵ Article 7 reads as follows:

Article 7

Obligation not to cause significant harm

1. Watercourse States shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States.
2. Where significant harm nevertheless is caused to another watercourse State, the States whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures, having due regard for the provisions of articles 5 and 6, in consultation with the affected State, to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation.

U.N. Watercourses Convention, op. cit. supra, Article 7.

⁵¹⁶ Article 20 reads as follows:

Article 20

Protection and Preservation of ecosystems

obligation to prevent, reduce and control pollution (Article 21),⁵¹⁷ a specific application of the general obligation not to cause transboundary harm. The only “defense” Costa Rica has cited is the Emergency Decree of 7 March 2011. While this may exempt the Costa Rican government from some of its obligations under Costa Rican internal law, however, as noted above it cannot exempt Costa Rica from obligations under international law, which is the only question before the Court.

Watercourse States shall, individually and, where appropriate, jointly, protect and preserve the ecosystems of international watercourses.

U.N. Watercourses Convention, *op. cit. supra*, Article 20.

⁵¹⁷ Article 21 reads as follows:

Article 21
Prevention, reduction and control of pollution

1. For the purpose of this article, "pollution of an international watercourse" means any detrimental alteration in the composition or quality of the waters of an international watercourse which results directly or indirectly from human conduct.
2. Watercourse States shall, individually and, where appropriate, jointly, prevent, reduce and control the pollution of an international watercourse that may cause significant harm to other watercourse States or to their environment, including harm to human health or safety, to the use of the waters for any beneficial purpose or to the living resources of the watercourse. Watercourse States shall take steps to harmonize their policies in this connection.
3. Watercourse States shall, at the request of any of them, consult with a view to arriving at mutually agreeable measures and methods to prevent, reduce and control pollution of an international watercourse, such as:
 - (a) Setting joint water quality objectives and criteria;
 - (b) Establishing techniques and practices to address pollution from point and non-point sources;
 - (c) Establishing lists of substances the introduction of which into the waters of an international watercourse is to be prohibited, limited, investigated or monitored.

U.N. Watercourses Convention, *op. cit. supra*, Article 21.

5. 64 It is clear, therefore, that Costa Rica has violated the obligation not to cause transboundary harm. Specific harm to the hydrologic regime of the San Juan de Nicaragua River is detailed in Chapter 3.

E. COSTA RICA'S CONSTRUCTION OF THE ROAD BREACHED TREATIES TO WHICH THE TWO STATES ARE PARTIES

5. 65 Costa Rica's reckless construction of the Road project violates a number of treaties binding on the two parties of a universal, regional and bilateral character.

1. Costa Rica's Road Project Breaches Universal Agreements

(a) The Convention on Biological Diversity

5. 66 The Convention on Biological Diversity (CBD) of 5 June 1992,⁵¹⁸ has 193 parties, including both Costa Rica, which ratified the CBD on 26 August 1994, and Nicaragua, which ratified the treaty on 20 November 1995. This is a universal agreement in every sense, including both its subject-matter coverage and the breadth of state participation in it.

5. 67 In the Preamble of the CBD the Contracting Parties note that:

the fundamental requirement for the conservation of biological diversity is the in-situ conservation of ecosystems and natural habitats and the maintenance and

⁵¹⁸ Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, 1760 U.N.T.S. 79, 31 I.L.M. 818 (1992), available at <http://www.cbd.int/doc/legal/cbd-en.pdf> (hereinafter CBD) (last visited 5 December 2012).

recovery of viable populations of species in
their natural surroundings⁵¹⁹

This “fundamental requirement” constitutes one of the objects and purposes of the Convention, namely, *in-situ* conservation of ecosystems and natural habitats. Costa Rica’s Road project is flatly incompatible with this object and purpose of the CBD, since it destroys and otherwise damages, along its entire route of some 160 kilometers, ecosystems and natural habitats within Costa Rica’s territory. Indeed, on 15 February 1994 the Costa Rican President and its Ministry of Natural Resources, Energy and Mines adopted a Decree declaring the entire borderline corridor between Costa Rica and Nicaragua, from Punta Castilla in the Caribbean Sea to Salinas Bay in the Pacific Ocean, a National Wildlife Refuge.⁵²⁰ Moreover, for most of its length, along the right bank of the San Juan de Nicaragua River, the Road inflicts serious harm on the ecosystems and natural habitats of the San Juan de Nicaragua, causing harm thereto which is irreparable as a practical matter. All of this is the antithesis of “*in-situ* conservation”.

5. 68 Article 8 of the CBD implements this object and purpose of the Convention substantively. Paragraphs (d) through (f) of Article 8 require that each Contracting Party:

(d) Promote the protection of ecosystems,
natural habitats and the maintenance of

⁵¹⁹ CBD, *ibid.*, Preamble.

⁵²⁰ The Borderline Corridor conformed by the Territories encompassed along the Border with Nicaragua, from Punta Castilla in the Caribbean Sea up to Salinas Bay in the Pacific Ocean is Hereby Declared as a National Wildlife Refuge, Executive Decree No. 22962, 15 February 1994. (NM, Vol. II, Annex 9) (hereafter Decree No. 22962).

viable populations of species in natural surroundings;

(e) Promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas;

(f) Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, *inter alia*, through the development and implementation of plans or other management strategies;⁵²¹

Costa Rica's Road project flies in the face of these requirements, constituting aggravated breaches thereof. Again, this is true not only of the effects of the Road in Costa Rican territory, but also of the substantial harm it causes within Nicaragua's territory.

5. 69 The latter form of harm caused to Nicaragua is in direct violation of Article 3 of the CBD, which provides as follows:

Article 3. Principle

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

⁵²¹ *Ibid.*, Article 8(d)-(f).

This provision, which is based on Principle 21 of the Stockholm Declaration, makes the sovereign right of a state to exploit its own resources subject to the responsibility to ensure that in doing so, damage is not caused to, inter alia, the environment of other states.

5. 70 There is no sense in which Costa Rica can be said not to have breached this obligation. Costa Rica most certainly failed to “ensure that activities within [its] jurisdiction or control do not cause damage to the environment of [Nicaragua]”. “Ensur[ing]” that construction of the Road would not cause damage to the environment of Nicaragua would entail the preparation of an environmental impact assessment, notification to, and consultation with Nicaragua and, at the very least,⁵²² the exercise of due diligence to prevent adverse transboundary impacts. Costa Rica did none of these and is therefore responsible for the breach of Article 3. Indeed, as the CACJ found, the “high-risk and environmentally hazardous [Road project] ... exposes the common watershed and ecosystem shared with Nicaragua and the region to serious and unpredictable damage”⁵²³

5. 71 Article 14 of the CBD addresses the anticipatory measures that Costa Rica failed entirely to take: environmental impact assessment; planning to avoid adverse impacts on biological diversity; and notification, exchange of information and consultation regarding planned measures that may adversely

⁵²² The term “ensure” could be interpreted to require that Costa Rica guarantee that no harm would occur in or to Nicaragua, thus entailing a strict, or absolute, form of responsibility.

⁵²³ C.A.C.J. Judgement, 21 June 2012, op. cit. supra, Fifth ruling. (NM, Vol. II, Annex 13).

affect biological diversity of other states. Article 14 provides in relevant part as follows:

Article 14. Impact Assessment and
Minimizing Adverse Impacts

1. Each Contracting Party, as far as possible and as appropriate, shall:

- (a) Introduce appropriate procedures requiring environmental impact assessment of its proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimizing such effects and, where appropriate, allow for public participation in such procedures;
- (b) Introduce appropriate arrangements to ensure that the environmental consequences of its programmes and policies that are likely to have significant adverse impacts on biological diversity are duly taken into account;
- (c) Promote, on the basis of reciprocity, notification, exchange of information and consultation on activities under their jurisdiction or control which are likely to significantly affect adversely the biological diversity of other States or areas beyond the limits of national jurisdiction, by encouraging the conclusion of bilateral, regional or multilateral arrangements, as appropriate;⁵²⁴

5. 72 Costa Rica has implemented paragraph 1(a) but did not actually apply it in this case – something that is implicit in a provision requiring the introduction of “appropriate procedures requiring environmental impact assessment” Nicaragua is not aware whether Costa Rica has even attempted to implement, even *ex post facto*, paragraph 1(b) but if it has, it did not comply

⁵²⁴ CBD, *op. cit. supra*, Article 14(a)-(c).

with that requirement either. And in relation to its Road project, Costa Rica has utterly failed to promote “notification, exchange of information and consultation” as to its activities that are likely to have significant adverse effects on the biological diversity of Nicaragua.

(b) The Ramsar Convention

5. 73 Both Costa Rica and Nicaragua are parties to the Convention on Wetlands of International Importance especially as Waterfowl Habitat, Ramsar (Iran), 2 February 1971 (the Ramsar Convention).⁵²⁵ Given Costa Rica’s heavy – though misplaced – reliance on this agreement in the *Certain Activities* case, one might have thought it would have observed the Convention’s requirements when taking the decision to construct the Road. Unfortunately, there is no indication at all that the Ramsar Convention so much as crossed the minds of Costa Rica’s officials.

5. 74 Both countries have numerous Ramsar sites – Costa Rica 12, and Nicaragua 9.⁵²⁶ Costa Rica is thus presumably well aware of the importance of protecting these sensitive ecosystems, whether or not in its own territory, as required by Article 3, paragraph 1, of the Ramsar Convention, and of the requirement of providing information to the Ramsar secretariat on possible

⁵²⁵ Convention on Wetlands of International Importance especially as Waterfowl Habitat, Ramsar (Iran), 2 February 1971, UN Treaty Series No. 14583, as amended by the Paris Protocol, 3 December 1982, and Regina Amendments, 28 May 1987.

⁵²⁶ See the Ramsar Convention website, http://www.ramsar.org/cda/en/ramsar-about-parties-parties/main/ramsar/1-36-123%5E23808_4000_0__ (last visited 5 December 2012).

changes to the ecological character of its wetlands, as required by paragraph 2 of that article:

1. The Contracting Parties shall formulate and implement their planning to as to promote the conservation of wetlands included in the List [of Wetlands of International Importance], and as far as possible the wise use of wetlands in their territory.
2. Each Contracting Party shall arrange to be informed at the earliest possible time if the ecological character of any wetland in its territory and included in the List has changed, is changing or is likely to change as the result of technological developments, pollution or other human interference. Information on such changes shall be passed without delay to the organization or government responsible for the continuing bureau duties specified in Article 8.⁵²⁷

5. 75 Paragraph 1 of Article 3 makes clear that conservation of wetlands is premised upon appropriate planning, something Costa Rica did not do in respect of its Road project. Thus Costa Rica prevented itself from complying with the gravamen of paragraph 1: promotion of the conservation of the wetlands included in the List. And it bears emphasis that there is nothing in paragraph 1 that limits its requirements to Costa Rican wetlands; they apply to Nicaraguan wetlands, as well.

5. 76 Costa Rica also failed to comply with paragraph 2 of Article 3. It may be presumed that high-level Costa Rican officials were well aware that the

⁵²⁷ Ramsar Convention, *op. cit. supra*, Article 3.

ecological character of wetlands in its territory and included in the List were “likely to change as the result of technological developments, pollution or other human interference”⁵²⁸ – namely, the Road project. Yet there is no evidence that Costa Rica informed the Ramsar secretariat of such changes as required by paragraph 2 of Article 3.

5. 77 But perhaps the most obvious breach of the Ramsar Convention by Costa Rica in respect of its Road project is that of Article 5. That article provides as follows:

The Contracting Parties shall consult with each other about implementing obligations arising from the Convention especially in the case of a wetland extending over the territories of more than one Contracting Party or where a water system is shared by Contracting Parties. They shall at the same time endeavour to coordinate and support present and future policies and regulations concerning the conservation of wetlands and their flora and fauna.⁵²⁹

This article is applicable in the present case on two grounds, viz., wetlands extend over the territories of Costa Rica and Nicaragua, and, of course, a water system, that of the San Juan River, is shared by the two states. As has been shown, Costa Rica not only did not consult with Nicaragua concerning the implementation of its obligations under the Convention in connection with its Road project, it baldly refused to do so, stating “Costa Rica considers that the

⁵²⁸ *Ibid.*, Article 3, para. 2.

⁵²⁹ *Ibid.*, Article 5.

project mentioned is not affecting Nicaraguan territory.”⁵³⁰ Rather than consulting with Nicaragua as required by Article 5, Costa Rica, even after receiving an official note of complaint from Nicaragua⁵³¹, “invite[d] the Government of Nicaragua to present formally the reasons for which it considers that there may be environmental damage or damage to Nicaragua’s interests.”⁵³² As noted earlier, Nicaragua responded to this request even though it was under no obligation to do so. Moreover Costa Rica “request[ed] to receive serious and objective scientific information that proves Nicaragua’s allegation.”⁵³³

5. 78 Apart from the fact that it would be impossible as a practical matter for Nicaragua to comply with Costa Rica’s invitation without detailed information from Costa Rica concerning the Road project, the obligation to consult in Article 5 – like that of prior notification and consultation under general international law – is not premised on the prior presentation by one of the parties of such reasons or scientific information as Costa Rica demanded. Thus Costa Rica breached, *inter alia*, the obligation to consult under Article 5 of the Ramsar Convention.

⁵³⁰ Diplomatic Note from the Minister of Foreign Affairs and Worship of Costa Rica to the Minister of Foreign Affairs of Nicaragua, Ref: DM-AM-601-11, 29 November 2011. (NM, Vol. II, Annex 15).

⁵³¹ Diplomatic Note from the Minister of Foreign Affairs of Nicaragua to the Minister of Foreign Affairs of Costa Rica, Ref: MRE/DVM/AJST/500/11/11, 29 November 2011. (NM, Vol. II, Annex 14).

⁵³² Diplomatic Note from the Minister of Foreign Affairs and Worship of Costa Rica to the Minister of Foreign Affairs of Nicaragua, Ref: DM-AM-601-11, 29 November 2011 (NM, Vol. II, Annex 15).

⁵³³ *Ibid.*

2. Costa Rica's Road Project Breaches Regional and Bilateral Agreements

5. 79 In addition to the treaties of a universal character discussed above, Costa Rica's Road project breaches a number of regional and bilateral agreements. The states of Central America have a long record of common concern for environmental protection and efforts at regional integration, objectives wholly ignored by Costa Rica in the construction of its Road project.

(a) Regional Agreements

i. The Central American Convention for the Protection of the Environment

5. 80 As early as 1989, the states of the region concluded the Central American Convention for the Protection of the Environment, signed at San José, Costa Rica, on 12 December 1989.⁵³⁴ The objects and purposes of the convention are well captured in its preamble:

The Presidents of the Republics of Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua, mindful of the need to establish regional cooperation mechanisms for the rational use of natural resources, pollution control and the restoration of the ecological balance, Convinced that, to ensure that the peoples of Central America enjoy a better quality of life, respect for the environment must be promoted within the framework of a sustainable development

⁵³⁴ Central American Convention for the Protection of the Environment, 12 December 1989, 2278 U.N.T.S. p. 151 (hereinafter CACPE).

model, in order to avoid the destructive effects of previous models on the region's natural resources, Mindful that, in view of the significant interdependence among the countries of the isthmus, regional cooperation must be an essential tool for the solution of ecological problems,

And convinced that the ordered use of natural resources and the environment at the regional level is an essential requirement for the achievement of lasting peace,
Have decided to sign this Convention⁵³⁵

5. 81 How Costa Rica could proceed with its Road project unmindful of these solemn recitals, in an agreement signed in its capital city, defies comprehension. The values they reflect evidently fell victim to Costa Rica's reaction to Nicaragua's having cleaned a small channel by hand, with shovels and pickaxes, on what Nicaragua regards – on the basis of arbitral awards over a century old – as its own territory.⁵³⁶ Surely this cannot be cooperation, “an essential tool for the solution of ecological problems”.

5. 82 Article I of the convention establishes

“a regional system of cooperation for the optimal and rational use of the region's natural resources, pollution control and the restoration of the ecological balance, in order to ensure that the peoples of the Central American isthmus enjoy a better quality of life.”⁵³⁷

⁵³⁵ *Ibid.*, preamble.

⁵³⁶ See Nicaragua's Counter-Memorial in the case concerning *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v. Nicaragua), filed with the Court on 06 August 2012.

⁵³⁷ CACPE, *op. cit. supra*, Article I.

Costa Rica's actions and failure to do what international law requires of it in relation to the Road project are incompatible with such a system, and show nothing but disrespect for it.

5. 83 The convention goes on to establish the objectives of the regional system of cooperation (Article II), including:

- (a) To instill respect for and protect the region's natural heritage, which is characterized by its high level of biological and ecological diversity;
- (b) To establish collaborative relations among the countries of Central America in the context of the quest for and adoption of methods of sustainable development, with the participation of all entities involved with development;
- (c) To promote coordinated action by governmental ... bodies in order to ensure the optimal and rational use of the region's natural resources, pollution control and the restoration of the ecological balance; ... [and]
- (g) To determine the priority areas for action, including: ... protection of shared watersheds and ecosystems, tropical forest management, ... and other aspects of environmental degradation that affect the health and quality of life of the population;⁵³⁸

5. 84 Once again, Costa Rica's Road project flies in the face of these objectives. A government that conducts itself in this way hardly "instill[s] respect for ... the region's natural heritage" and fails utterly to "protect" that natural heritage. Costa Rica's snubbing of Nicaragua's request for environmental studies on the Road project works affirmatively against the objectives of "establish[ing] collaborative relations among the countries of Central America"

⁵³⁸ *Ibid.*, Article II(a)-(c) and (g).

and “promot[ing] coordinated action by governmental ... bodies in order to ensure the optimal and rational use of the region’s natural resources, pollution control and the restoration of the ecological balance”. Finally, Costa Rica’s Road project runs counter to several “priority areas for action”, including “protection of shared watersheds and ecosystems” and “tropical forest management”.

5. 85 The convention then establishes the Central American Commission on Environment and Development and provides for its structure and functions (chapter II of the convention, Articles III-X).⁵³⁹ The Commission is “responsible for managing and administering the system referred to in this Convention.” (Article V.) Costa Rica’s actions in respect of its Road project seriously undermine that system.

ii. The Tegucigalpa Protocol

5. 86 In 1991, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama concluded the Tegucigalpa Protocol⁵⁴⁰ to the Charter of the Organization of Central American States (OCAS).⁵⁴¹ Article 1 of the Protocol establishes the Central American Integration System (SICA). Among

⁵³⁹ See also the Internal Regulations of the Central American Commission on Environment and Development, available at <http://www.sica.int/ccad/> (last visited 5 December 2012).

⁵⁴⁰ Tegucigalpa Protocol to the Charter of the Organization of Central American States (ODECA), Tegucigalpa, 13 December 1991, 1695 U.N.T.S. p. 382 (hereinafter Tegucigalpa Protocol), also available at <http://www.sieca.int/site/CacheING/17990000000018/17990000000018.pdf> (last visited 5 December 2012).

⁵⁴¹ Charter of the Organization of Central American States, Panama City, 12 December 1962, 552 U.N.T.S. p. 15. also available at <http://treaties.un.org/untc//Pages//doc/Publication/UNTS/Volume%20552/volume-552-I-8048-English.pdf> (last visited 5 December 2012).

the objectives of SICA enumerated in Article 3 of the Tegucigalpa Protocol are the following:

(b) To define a new regional security model based on a reasonable balance of forces, the strengthening of civilian government, the elimination of extreme poverty, the *promotion of sustained development, protection of the environment*, and the eradication of violence, corruption, terrorism, and the trafficking in drugs and arms;

...

(h) To promote, in a *harmonious and balanced manner*, the sustained economic, social, cultural and political development of the Member[] States and of the region as a whole;

(i) To carry out *concerted action to protect the environment through respect for and harmony with nature*, while ensuring *balanced development* and the rational exploitation of the natural resources of the area, with a view to establishing a *new ecological order* in the region;⁵⁴²

5. 87 Nothing about Costa Rica’s Road project is consistent with these objectives. The Road contradicts the concepts of “sustained”, or sustainable, development, in view of its construction in what Costa Rica’s own engineering organization has found to be shoddy, and without prior planning or environmental impact assessments.⁵⁴³ There is nothing “harmonious and balanced” about the project, or the manner in which Costa Rica proceeded with it in relation to Nicaragua, its immediate neighbor, which was hardly designed to maintain “harmonious and balanced” relations. “Concerted action to protect the

⁵⁴² Tegucigalpa Protocol, op. cit. supra, Article 3, paras. (b) (h) and (i) (emphasis added).

⁵⁴³ CFIA Report, op. cit. supra. (NM, Vol. II, Annex 4).

environment” requires acting in concert with other states, in this case most immediately Nicaragua, something that Costa Rica has deliberately avoided doing. And the Road project is clearly at cross-purposes with the objective of “establishing a new ecological order in the region”.

5. 88 Costa Rica’s Road project also contravenes several of the “fundamental principles” set forth in Article 4 of the Protocol:

Article 4

In order to attain the above objectives, the Central American Integration System and its members shall proceed in accordance with the following fundamental principles:

...

(e) The phased, specific and progressive nature of the process of economic integration, based on *harmonious and balanced regional development*, with special treatment for relatively less developed Member States, and on equity and reciprocity, and the Central American Exception Clause;

...

(h) Good faith on the part of the member States in the discharge of their obligations; Member States shall abstain from establishing, agreeing to or *adopting any measure* that contravenes the provisions of this instrument or *that impedes compliance with the fundamental principles of the Central American Integration System or the attainment of its objectives*;⁵⁴⁴

5. 89 Article 6 of the Protocol requires that all Member States, including Costa Rica, act in compliance with the foregoing objectives and principles:

⁵⁴⁴ *Ibid.*, Article 4, paras. (e) and (h) (emphasis added).

Member States shall undertake to abstain from the adoption of any unilateral measure that may endanger the attainment of the objectives and compliance with the fundamental principles of the Central American Integration System.⁵⁴⁵

5. 90 Costa Rica's Road project is precisely a "unilateral measure that ... endanger[s] the attainment of the objectives and compliance with the fundamental principles of the Central American Integration System." As has been shown, it was unilateral in that it was undertaken without any prior notification to, let alone consultation with, Nicaragua. Costa Rica is therefore in breach of Article 6 of the Tegucigalpa Protocol.

5. 91 The Central American Court of Justice (CACJ) also found violations by Costa Rica of the Tegucigalpa Protocol and conduct inconsistent with the integration system it establishes:

"The Court estimates that it is public knowledge, in view of the official statements made in the regional media by Costa Rican authorities, as well as an official statement of the Presidency of the Republic regarding "the position of the Government with regard to Route 1856" . . . , that the Government of that State made unilateral decisions, in a hasty manner and without consultation, in light of the Community Integration System, which affect the bilateral commitments of that Government with the neighbouring State of Nicaragua. In addition, these news of obvious notoriety, known by the majority of the Central American and international community, reveal the absence of environmental impact and mitigation studies by Costa Rica, which are essential for commencing works of this magnitude. Likewise,

⁵⁴⁵ *Ibid.*, Article 6.

added to the case file on page 1173 is the affidavit of the Minister of Foreign Affairs of Nicaragua, Licentiate Samuel Santos López, expressing that the Ministry has not received any report or official communication from the Government of Costa Rica requesting a dialogue, mitigation measures or the beginning of a potential negotiation with the Government of Nicaragua in relation to the road it is building on the right bank of the San Juan River and that he has not received from official Costa Rican sources any environment impact study relating to this work. Consequently, this Court considers that Costa Rica was obliged to communicate to the Government of Nicaragua the characteristics, effects and environmental impact study of the construction of the road by virtue of its international and community commitments imposed by treaties, conventions, agreements and legislative acts derived from the Tegucigalpa Protocol in the field of environment protection.”⁵⁴⁶

5. 92 In the present case, Costa Rica acted in violation of these obligations. As shown in Chapter 3, Costa Rica’s unilateral decision to build the Road without first conducting an environmental impact assessment, and even without blueprints, has caused significant harm to the environment of both Nicaragua and Costa Rica. It clearly jeopardizes several objectives of the SICA such as the respect and protection of the environment and the establishment of a new ecological order. Costa Rica compounded these breaches by ignoring two binding decisions of the CACJ ordering the suspension of work on the Road.⁵⁴⁷

⁵⁴⁶ C.A.C.J. Judgement, 21 June 2012, op. cit. supra, (NM, Vol. II, Annex 4).

⁵⁴⁷ *Ibid.*, *Whereas IX*. (NM, Vol. II, Annex 4).

*iii. The Convention for the
Conservation of Biodiversity*

5. 93 On 5 June 1992 the six Central American states concluded the Convention for the Conservation of Biodiversity and the Protection of Wilderness Areas in Central America.⁵⁴⁸ The convention is in force for both Costa Rica and Nicaragua.⁵⁴⁹

5. 94 The objective of the convention is to conserve to the maximum extent possible the land-based and coastal-marine biological diversity of the Central American region for the benefit of present and future generations. (Article 1.) The convention contains detailed provisions aimed at achieving this objective. It includes chapters on Fundamental Principles (Chapter I), General Obligations (Chapter II) and Means of Implementation (Chapter III), among others. As with the treaties considered above, Costa Rica's Road project runs afoul of many of the provisions of this agreement. Only a few examples will be cited for purposes of illustration.

⁵⁴⁸ Convention for the Conservation of Biodiversity and the Protection of Wilderness Areas in Central America, Managua, 5 June 1992, (Annex 23 to the Memorial of Costa Rica (CRM) in the *Dispute concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*), original Spanish text available at <http://www.ecolex.org/server2.php/libcat/docs/TRE/Multilateral/En/TRE001162.txt> (hereinafter Central American Biodiversity Convention) (last visited 5 December 2012).

⁵⁴⁹ See the entry in Ecolex (maintained by the Food and Agriculture Organization of the United Nations (FAO), the International Union for the Conservation of Nature and Natural Resources (UNCN), and the United Nations Environment Programme (UNEP), <http://www.ecolex.org/ecolex/ledge/view/RecordDetails?id=TRE-001162&index=treaties>, indicating that the convention entered into force for Costa Rica on 20 December 1994 and for Nicaragua on 20 January 1996 (last visited 5 December 2012).

5. 95 The states parties undertake to ensure that activities within their jurisdiction or control do not cause damage to biological diversity within their territories or areas bordering them. (Article 2(b).) As indicated above, Costa Rica's Road project endangers biological diversity within both Costa Rica and Nicaragua. Article 3 records that the conservation of biodiversity in habitats or boundary waters requires the will of all and external, regional and global cooperation. (Article 3.) Nicaragua has received no cooperation at all from Costa Rica in respect of the Road project, which further jeopardizes the biological diversity of the two countries. Under Article 10, each state in the region commits, according to its capabilities, national programs and priorities, to take all possible measures to ensure the conservation of biodiversity and its sustainable use, as well as the development of its components within its national jurisdiction, and to cooperate to the extent possible in regional border actions. Not even the flexibility afforded by this article with regard to a state's capabilities, national programs and priorities would permit deliberate actions incompatible with the objectives of the convention in general and this provision in particular. And that describes Costa Rica's actions in respect of its Road project perfectly.

5. 96 A final group of examples of provisions of this agreement that have not been observed by Costa Rica in relation to its Road project is provided by Articles 13 and 33. Article 13 lists a number of actions that are to be taken in

order to comply fully with the convention. One of those actions is to ensure the establishment of measures that contribute to the conservation of natural habitats and their populations of natural species.⁵⁵⁰ Another is to facilitate the exchange of information between national institutions, the countries of the Central American region, and other international organizations.⁵⁵¹ While Costa Rica has established some of the kinds of measures mentioned, they were ignored entirely in respect of the Road project. And Costa Rica failed completely to exchange information concerning the project, whether nationally, with countries in the region – especially the one most directly affected, Nicaragua – or with international organizations. And Article 33 of the Convention addresses the exchange of information in a transboundary context:

The exchange of information, on the basis of reciprocity, should be promoted regarding actions that could be undertaken in territories under their jurisdiction that are potentially harmful to biological resources, in order that the affected countries may assess the most appropriate bilateral or regional course of action.⁵⁵²

5. 97 In its Memorial in the *Certain Activities* case, Costa Rica quotes this article, then states as follows:

The object and purpose of the Convention is to oblige the Central American parties to the Convention not only to physically preserve valuable natural resources, but also to notify and consult with neighboring States whose environment

⁵⁵⁰ Central American Biodiversity Convention, op. cit. supra, Article 13(c).

⁵⁵¹ *Ibid.*, Article 13(g).

⁵⁵² *Ibid.*, Article 33.

may be affected by potentially harmful actions. This permits those States affected to take the appropriate bilateral or regional measures in sufficient time to prevent harm from occurring. These measures encapsulate what Costa Rica understands to be the inherent right of each State to either mitigate potential harm, or to reject and oppose any activities that may place their [*sic*] national territories and natural resources at risk of serious harm.⁵⁵³

5. 98 With respect to its Road project Costa Rica failed to observe the object and purpose of the convention, as Costa Rica itself explains it in this passage. Moreover, Costa Rica certainly did not respect what it characterizes as “the inherent right of each State” to take action to “mitigate potential harm” or at least to “reject and oppose any activities that may place their [*sic*] national territories and natural resources at risk of serious harm.” As has been seen, Costa Rica not only did not exchange any information concerning its Road project with Nicaragua, it affirmatively declined to do so when information was requested by Nicaragua. Nicaragua therefore had no opportunity to “mitigate potential harm” and was left to “reject and oppose” the environmentally destructive Road project that could not be halted. It is thus clear that with respect to its Road project Costa Rica is acting in utter disregard of this convention, as Costa Rica itself interprets it.

⁵⁵³ *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, CRM, para. 5.16.

*iv. The Regional Agreement on the
Transboundary Movement of
Hazardous Wastes*

5. 99 A final Central American treaty that may be mentioned, since it was cited in the judgment of the Central American Court of Justice, is the Regional Agreement on the Transboundary Movement of Hazardous Wastes, concluded in Panama City on 11 December 1992.⁵⁵⁴ Article 3 of this treaty, entitled General Obligations, provides in paragraph 3 as follows: Adoption of Preventive Measures.

3. Adoption of Preventive Measures:

Each of the Parties shall endeavor to adopt and implement the preventive and precautionary approach to pollution problems. This approach will aim, among other things, at preventing the release into the environment of substances that could cause harm to humans or the environment. The Parties shall cooperate with each other to take appropriate measures to apply the precautionary approach to pollution prevention through the implementation of clean production methods or failing that an approach relating to permissible or tolerable emissions.

5. 100 Costa Rica's dumping of debris and other waste from its Road project into the San Juan de Nicaragua River and its Costa Rican tributaries

⁵⁵⁴ Regional Agreement on the Transboundary Movement of Hazardous Wastes, Panama City, 11 December 1992, U.N. Doc. UNEP/CHW/C.1/INF.2 (Oct. 1993), *available in* 3 YB. INT'L ENVTL. L., 1992, Doc. No. 10 (Appended Disk, Gunther Handl et al. eds., 1992), original Spanish text available in <http://www.ecolex.org/ecolex/ledge/view/RecordDetails?id=TRE-001167&index=treaties> (last visited 5 December 2012).

constitutes pollution of the San Juan.⁵⁵⁵ While this waste may not be hazardous in itself, it can carry with it oil and other hydrocarbons that may be hazardous. As the report of CFIA, the Costa Rican Engineers Association,⁵⁵⁶ shows, Costa Rica did not make the slightest effort to adopt or implement a preventive or a precautionary approach in respect of pollution even of watercourses in its own territory, let alone of the San Juan de Nicaragua River. This resulted in “the release into the environment [i.e., the San Juan de Nicaragua River] of substances that could cause harm to humans or the environment.” Furthermore, Costa Rica refused to “cooperate with [Nicaragua] to take appropriate measures to apply the precautionary approach to pollution prevention” in respect of the Road project.

5. 101 Thus in deciding to proceed with its Road project without providing Nicaragua with so much as a hint that it was doing so, and in constructing the project without any environmental impact assessment or even any blueprints or other plans, Costa Rica committed numerous violations of agreements concluded by Central American States to protect the environment of the region. The foregoing discussion of these agreements does not include all of the regional treaties and other instruments in the fields of environment, cooperation and integration whose letter and spirit Costa Rica’s Road project

⁵⁵⁵ See the definition of the term “pollution” in Article 21 of the Convention on the Law of the Non-Navigational Uses of International Watercourses, *supra* note 93.

⁵⁵⁶ CFIA Report, *op. cit. supra* (NM, Vol. II, Annex4).

disparages,⁵⁵⁷ but it provides a representative indication of Costa Rica's breaches. It is perhaps not surprising that the conduct of Costa Rica that violates regional treaties breaches bilateral agreements, as well.

(b) Bilateral Agreements: SI-A-PAZ

5. 102 Foremost among the bilateral agreements between Costa Rica and Nicaragua that should be mentioned in this connection is the Agreement on Border Protected Areas, known as the "SI-A-PAZ" agreement, signed by the presidents of the two states at Puntarenas, Costa Rica, on 15 December 1990.⁵⁵⁸ This agreement concerns the International System of Protected Areas for Peace (SI-A-PAZ), in the border area of Costa Rica and Nicaragua, which originated in the First Central American Meeting on Management of Natural and Cultural Resources held in San Jose, Costa Rica, in December 1974.⁵⁵⁹

5. 103 In its Memorial in the *Certain Activities* case, Costa Rica quotes four paragraphs from the agreement's preamble, claiming that they "state the object and purpose of the agreement".⁵⁶⁰ Those paragraphs read as follows:

⁵⁵⁷ See, e.g., Articles 26 and 35 of the Protocol to the General Treaty on Central American Economic Integration, known as Guatemala Protocol, 2217 U.N.T.S., A-6543; the Central American Social Integration Treaty, known as the San Salvador Treaty, the Alliance for the Sustainable Development of Central America, adopted at the Central American environment summit meeting for sustainable development, Managua, Nicaragua, 12 and 13 October 1994, http://www2.ohchr.org/english/law/compilation_democracy/alliance.htm (last visited 5 December 2012).

⁵⁵⁸ Agreement on Border Protected Areas, the "SI-A-PAZ" agreement, signed at Puntarenas, Costa Rica, 15 December 1990. (NM, Vol. II, Annex 7).

⁵⁵⁹ *Ibid.*, Preamble, paras. 1 and 2.

⁵⁶⁰ *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, CRM, para. 5.41.

- (7) The largest example of a tropical rainforest located along Central America's Caribbean coast will be fully protected in the SI-A-PAZ;
- (8) The area has an extraordinary diversity of habitats such as rainforests and riversides, rivers, lagoons and wetlands, as well as a vast wealth and diversity of fauna, and major potential for ecotourism;
- (9) The area is inhabited by marginalized rural groups that have been unable to achieve sustainable development due to a lack of financial resources and technical advice;
- (10) There is an interest and the political will to put into practice projects for rational and sustained management of natural resources, with respect for the sovereign rights of each country, in order to improve the quality of life of the local populations and those of both countries in general.⁵⁶¹

5. 104 If these paragraphs do indeed capture the object and purpose of the agreement, Costa Rica has acted in contravention of that object and purpose in the construction of its Road project. It has drawn “[t]he largest example of a tropical rainforest located along Central America’s Caribbean coast” into great jeopardy rather than “fully protect[ing]” it through the SI-A-PAZ agreement. It has likewise placed under serious threat the “extraordinary diversity of habitats” of the area, “as well as [the] vast wealth and diversity of fauna” found there, and has probably eradicated all of the area’s attractiveness to ecotourists. The “marginalized rural groups” inhabiting the area could be further marginalized and otherwise threatened through the significant changes in the character of the area the road is likely to bring. And if there was on the part of Costa Rica “an interest

⁵⁶¹ SI-A-PAZ agreement, Preamble, paras. 7-10 (NM, Vol. II, Annex 7).

and the political will to put into practice projects for rational and sustained management of natural resources”, this has been given a premature but definitive burial by Costa Rica’s actions in rushing to construct its Road, which speak much louder than its words.

5. 105 Of the four operative provisions of the agreement, one consists of a declaration (Article 1) and three constitute requests of international and other organizations (Articles 2-4). In the declaration, the parties agree: “To declare the SI-A-PAZ the highest priority conservation project in both countries”.⁵⁶² Twenty-two years after the two states solemnly agreed on this declaration, Costa Rica has called into question its commitment to the SI-A-PAZ System through the reckless and environmentally destructive construction of its Road.

F. CONCLUSION

5. 106 This Chapter has shown that Costa Rica’s Juan Rafael Mora Porras 1856 Highway project violates fundamental principles of general international law, environmental treaties of a universal character to which both Costa Rica and Nicaragua are parties, and regional as well as bilateral treaties binding on the two states. These breaches begin with Cost Rica’s failure to notify Nicaragua of a project that posed significant risks of harm to the San Juan de Nicaragua River environment, and continue through the manner of construction of the Road: Costa Rica refused to provide Nicaragua with

⁵⁶² *Ibid.*, Article 1.

information concerning the Road, failed to conduct any environmental impact assessment, whether on the national or transboundary level, concerning a project that was to involve more than 900 pieces of machinery operated by at least 35 construction companies, and undertook the project with “no plans or preliminary studies” according to the Costa Rican Association of Engineers and Architects.⁵⁶³ The result is an ugly gash along the 160-kilometer route of the Road, most of which follows closely the right bank of the San Juan de Nicaragua River, leaving an open environmental wound whose flow of sediment into the San Juan de Nicaragua has already caused great harm and will not be readily stanchd. The harm that such a project would cause to Nicaragua and to the entire San Juan de Nicaragua River watershed would in fact have been obvious even to the casual observer; it is detailed in Chapter 3.

5. 107 These conclusions are confirmed by the judgment of the Central American Court of Justice of 21 June 2012 in the following terms:

THIRD: The State of Costa Rica acted without consultation, in a unilateral, inappropriate and hasty manner, violating international bilateral and multilateral agreements validly contracted by building the road in question, which cannot be obviated by alleging internal provisions. **FOURTH:** The State of Costa Rica started the work in question without conducting the studies and previous analyses required in the context of the obligations imposed by Regional Community and International Law, ignoring collaboration, mutual understanding and communication between the State Parties of all these conventions that should

⁵⁶³ CFIA Report, *op. cit. supra*, p. 25 (NM, Vol. II, Annex 4).

exist in the field of environment and sustainable development. **FIFTH:** The State of Costa Rica built a high-risk and environmentally hazardous work, which it should have prevented within the framework of the community obligations because it exposes the common watershed and ecosystem shared with Nicaragua and the region to serious and unpredictable damage, which this Court was able to observe during its on-site inspection in the area in question. **SIXTH:** Consequently, the State of Costa Rica is condemned for having violated, inter alia, Articles 3, 4 and 6 of the Tegucigalpa Protocol, Articles 26 and 35 of the Guatemala Protocol, Articles 1, 2, subparagraphs a, b and g, of the CCAD [the Central American Agreement for Protection of the Environment], Article 3 of the CCAD regulations, Articles 2, 10, 13, 25, 29, 33 and 37 of the Convention for the Conservation of Biodiversity and Protection of Priority Wildlife Areas in Central America, Objectives 3 and 7 of the Alliance for the Sustainable Development of Central America (ALIDES), as well as the provisions of international conventions, such as RAMSAR (Article 5) and other treaties, conventions and agreements on the subject described in WHEREAS XIV and acts derived from the Tegucigalpa Protocol that form part of the regional community body of knowledge. **SEVENTH:** The State of Costa Rica is condemned for having incurred in liability for ecological and related damages to the San Juan de Nicaragua River, as well as to the shared ecosystem that forms part of the Central American Biological Corridor and to the respective basin. Further, to the common wildlife biodiversity that rotates and remains around the river and maintains the ecological balance of fauna, flora and the environment that the State of Costa Rica is obliged to respect and sustain as a Natural Heritage of Humanity.⁵⁶⁴

⁵⁶⁴ C.A.C.J. Judgement, 21 June 2012, op. cit. supra, 3rd through 7th operative paragraphs (NM, Vol. II, Annex 4).

5. 108 This catalogue of breaches, set forth in a judgment of a court of the region and based on a consideration of the applicable legal authorities as well as a visit to the site, leaves no doubt about the unilateral, reckless, and highly destructive manner in which Costa Rica proceeded with its Road project, whose environmental consequences will be felt in the area for years to come.

CHAPTER 6

REMEDIES

6.1 In this Memorial, Nicaragua has shown the multiple violations of international law committed by Costa Rica and the significant damages caused to Nicaragua's territory which resulted and continues to result from these violations. The present Chapter sets out the most urgent remediation measures to be taken in order to avoid continuous and irreparable harm to Nicaragua's territory, and particularly to the San Juan de Nicaragua River (Section A) as well as the remedies further requested by Nicaragua from the Court (Section B).

A. URGENTLY NEEDED IMMEDIATE REMEDIATION MEASURES

6.2 As Nicaragua explained in its Application,

“53. Costa Rica has repeatedly refused to give Nicaragua appropriate information on the road works it is undertaking and has denied that it has any obligation to prepare an Environmental Impact Assessment or to provide such a document to Nicaragua. This in itself would more than justify Nicaragua in making a request for provisional measures.

54. The main factual element is that major works are being undertaken a few meters from the border area (and in some sections immediately next to the border or even crossing into Nicaraguan territory) and that no Environmental Impact Assessment has been prepared or communicated to Nicaragua. This fact is absolutely clear and a matter of public knowledge since the Costa Rican authorities

including the President have so stated. It can easily be confirmed by the Court by simply ordering Costa Rica to produce such a document without going through a formal request for interim measures and into the costly and lengthy exercise of public hearings. Thus, Nicaragua requests that the Court exercises its statutory powers to order Costa Rica to produce this document.”

6.3 This suggestion was made on the basis of Article 75 of the Rules of the Court, according to which:

“1. The Court may at any time decide to examine proprio motu whether the circumstances of the case require the indication of provisional measures which ought to be taken or complied with by any or all of the parties.”

6.4 As the Court noted in the LaGrand case:

“... a provision of this kind has substantially featured in the Rules of Court since 1936, and (...), if the Court has not, to date, made use of the power conferred upon it by this provision, the latter appears nonetheless to be clearly established; (...) the Court may make use of this power, irrespective of whether or not it has been seised by the parties of a request for the indication of provisional measures; whereas in such a case it may, in the event of extreme urgency, proceed without holding oral hearings; and whereas it is for the Court to decide in each case if, in the light of the particular circumstances of the case, it should make use of the said power.”⁵⁶⁵

⁵⁶⁵ I.C.J., Order, 3 March 1999, *LaGrand (Germany v. United States of America)*, I.C.J. Reports 1999, p. 14, para. 21.

6.5 As of today, the Court has not followed up the suggestion made by Nicaragua in its Application. However, the present case appears as the archetype of a situation where the Court should use the power conferred upon it by Article 75.

6.6 As explained in its Application⁵⁶⁶, Nicaragua has abstained to formally request Interim Measures of Protection envisaged by Article 41 of the Statute for reasons of expediency and in order to avoid lengthy and costly proceedings. It remains that the situation is alarming and that Costa Rica has taken no measure to stop or at least mitigate the serious harms caused to the San Juan River by the construction of the Road.

6.7 It might have been the case that the harms in question and the urgency to remedy them were not fully established to the satisfaction of the Court in the Application. However, now, these possible deficiencies are cured and both the harms caused to the River and the urgency to take measures to stop or, at least, alleviate them are now fully documented by Costa Rican Institutions⁵⁶⁷ and in particular in the Kondolf Report.

⁵⁶⁶ See above, para. 6.2.

⁵⁶⁷ See LANAMME Report, (NM, Vol. II, Annex 3) and CFIA Report (NM, Vol. II, Annex 4); See e.g. paras. 2.26,3.4,3.5,3.15-3.18,3.20,3.26,3.34-3.36,3.40,3.46 and 3.53 above; See also *La Nación*, Costa Rica "The damage had already taken place" 26 May 2012(quoting Costa Rican Deputy Minister of Environment Ana Lorena Guevara, who has explained that "The only thing we could do was to take mitigation and compensation measures because the damage had already taken place" and continues "In addition, road construction was already underway. The damages or impacts had already taken place") (NM, Vol II, Annex.33).

6.8 As explained in that Expert Report:

“Based on our extensive experience in controlling and normalizing wildland road erosion processes to protect water quality on both public and private road systems, we recommend the following mitigation and emergency erosion/sediment control measures be undertaken immediately. The measures include those designed to mitigate and prevent damage from 1) fillslope instability and mass wasting, 2) stream crossing erosion and failure, 3) surface erosion from road surfaces, and 4) erosion and gullyng from cutbanks, fillslopes and other bare soil areas. These measures are those that are required, at a minimum, to control ongoing impacts and reduce the risk of future sediment delivery to the Río San Juan from the existing road work. Their implementation should be overseen by qualified engineers and geologists specifically trained and experienced in road restoration and erosion control.”⁵⁶⁸

Then follows an enumeration of the urgent tasks to be accomplished:

“Task 1: Reduce the rate and frequency of road fill failure slumps and landslides where the road crosses the steeper hillslopes, especially in locations where failed or eroded soil materials have been or could potentially be delivered to the Río San Juan.

A. As soon as weather and soil conditions permit, mobilize heavy earthmoving equipment to excavate all unstable and potentially unstable sidecast fills and fill materials. (...)

B. Dump trucks will be required for endhauling the excavated spoil materials for disposal at stable, low gradient locations where the materials will have no potential for re-mobilization and delivery to streams or wetlands.

⁵⁶⁸ Kondolf Report, Section 5.1 – italics added (NM, Vol. II, Annex 1).

C. It should be noted that seeding, mulching or planting unstable and failing fills, or employing various fabrics designed for surface erosion control, are not acceptable methods for controlling mass wasting processes.”⁵⁶⁹

(...)

“Task 2: Eliminate or significantly reduce the risk of future erosion and sediment delivery at all stream crossings along Route 1856.

A. As soon as weather and soil conditions permit, mobilize heavy earthmoving equipment to stabilize failing stream crossings by excavating all unstable or potentially unstable, poorly compacted and over-steepened fills at all road-stream crossings.

B. As soon as weather and soil conditions permit, mobilize heavy earthmoving equipment to stabilize failing or potentially unstable road fills on the immediate road approaches to stream crossings by excavating all unstable or potentially unstable, poorly compacted and over-steepened fills.

C. Endhaul the excavated spoil materials to stable spoil disposal locations where the soils will not be eroded and delivered to the Río San Juan or its tributaries.

D. Poorly designed road-stream crossings should be immediately removed until they can be properly designed and reconstructed.

These sites include those crossings where:

i. road-stream crossing culverts and bridges have been constructed with unsuitable materials (e.g., logs, metal shipping containers, etc.), or

⁵⁶⁹ *Ibid.*, Section 5.2.

ii. stream crossing structures have not been designed (engineered) to accommodate the 100-year return interval runoff event or

iii. road-stream crossing bridges or culverts are misaligned with the natural channels

Removal of these poorly designed and/or constructed road-stream crossings should consist of:

i. excavating and removing the drainage structure,

ii. excavating the fill materials out of the stream crossing so as to "exhume" the original channel bed, re-establish the natural thalweg channel gradient and flood flow width, and provide stable sideslopes with maximum 2:1 sideslope, and

iii. seed and mulch bare exposed soils for temporary erosion control.

(...)

Task 3: Immediately reduce road surface erosion and sediment delivery by improving dispersion of concentrated road runoff and increasing the number and frequency of road drainage structures. This measure will address gully erosion and hydrologically connected road segments that are currently delivering sediment to the Río San Juan and its tributaries.

A. As weather and soil conditions permit, and after excavating all the fillslopes exhibiting instabilities referenced in Recommendation #1 (above) along Route 1856, immediately construct temporary rolling dips, cross road drains and/or waterbars at average 15 meter intervals (or more frequently) to drain road surface runoff to the outside edge of the road.

B. Construct surface drainage structures at close enough intervals so they will not result in new gully

formation capable of transporting eroded sediment to the Río San Juan or its tributaries. (...)

C. Ensure that every drain or waterbar is constructed at a slightly steeper slope angle/gradient than the existing road gradient where the drain is constructed, so that they will be self-flushing and self-maintaining.

D. Ditches should be drained under the road using ditch relief culverts installed at sufficient intervals to prevent gullyng of the fillslope or the natural hillside where they discharge.

E. Ditch drains and road surface drains should be placed close to each road approach to tributary stream crossings so as to divert surface runoff onto adjacent natural, undisturbed (vegetated) hillslopes, and thereby prevent or minimize road surface runoff delivery to streams that flow into the Río San Juan.

F. Maintain all surface drainage structures and ditch drains so they continue to function as intended and so eroded sediment is not discharged to the Río San Juan or its tributaries. If drainage structures are damaged by traffic or equipment, they should be rebuilt immediately, and before the next rainfall and runoff event.⁵⁷⁰

Task 4: Control surface erosion and resultant sediment delivery from bare soil areas that were exposed during clearing, grubbing and construction activities in the last several years.

A. Concurrent with the completion of the excavation and road drainage improvements in recommendations outlined in #1, #2 and #3 above, seed and mulch all bare soil areas with any potential for sediment delivery to nearby streams/wetlands with straw mulch at a rate of 4,485 kg/ha and native seed at a rate of 56 kg/ha. If mulches other than

⁵⁷⁰ Kondolf Report, Section 5.4 (NM, Vol. II, Annex 1).

wheat or rice straw are employed, ground coverage should be at least 95%.

B. Cutbanks with slopes steeper than 50% will likely require the combined use of seeding, mulching and installation of rolled erosion control fabrics, stapled to the slope, to control surface erosion.”⁵⁷¹

B. REMEDIES REQUESTED BY NICARAGUA

6.9 In Chapters 3 to 5 of the present Memorial, Nicaragua has demonstrated that Costa Rica committed and continues to commit internationally wrongful acts and, therefore, that it entails Costa Rica's responsibility. Therefore, it is for the Court to declare Costa Rica's unlawful conduct and responsibility (I.) and, as a consequence, to order Costa Rica to immediately cease its internationally wrongful acts (II.) and provide appropriate guarantees of non-repetition (III.), and to make full reparation of all damages caused to Nicaragua (IV.). Moreover, having seriously breached its obligations under the 1858 Treaty, Costa Rica is no more entitled to claim the benefits ensuing from the Treaty (V.).

⁵⁷¹*Ibid.* , Section 5.5.

1. A Declaration by the Court on Costa Rica's Internationally Wrongful Acts

6.10 Nicaragua is well aware that the Court may “, in an appropriate case, make a declaratory judgment.”⁵⁷² But, given the circumstances of the present case - especially the fact that Costa Rica continues to breach its obligations and to cause harm to Nicaragua -, such a judgment would not be “in itself appropriate satisfaction.”⁵⁷³ A declaration on Costa Rica's internationally wrongful acts nevertheless constitutes a pre-requisite to a Court's decision on the content of Costa Rica's responsibility.

6.11 In Chapters 3 to 5, Nicaragua has demonstrated in details that Costa Rica has breached and continues to breach a number of treaties it is a Party to as well as several rules and principles of international law. Suffice it to recall here that Costa Rica has violated the following instruments:

⁵⁷² P.C.I.J., Judgment, 25 May 1926, *German Interests in Polish Upper Silesia*, Series A, No. 7, p. 19. See also P.C.I.J., Judgment, 16 December 1927, *Factory at Chorzów*, Series A, No. 13, p. 20; I.C.J., Judgment, 13 June 1951, *Haya de la Torre Case*, I.C.J. Reports 1951, p. 71 and I.C.J., Judgment, 2 December 1963, *Northern Cameroons (Cameroon v. United Kingdom)*, I.C.J. Reports 1963, p. 37.

⁵⁷³ I.C.J., Judgment, 9 April 1949, *Corfu Channel (United Kingdom of Great Britain and Northern Ireland v. Albania)*, I.C.J. Reports 1949, p. 35. See also the *dispositif* p. 36. See also 27 June 2001, *LaGrand (Germany v. United States of America)*, I.C.J. Reports 2001, p. 508, para. 116; *Land and Maritime Boundary between Cameroon and Nigeria (Cameroon v. Nigeria: Equatorial Guinea intervening)*, I.C.J. Reports 2002, p. 452, para. 319; I.C.J., Judgment, 26 February 2007, *Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v. Serbia and Montenegro)*, I.C.J. Reports 2007, p. 234, para. 463, p. 235, para. 465 and p. 236, para. 469 and *Certain Questions of Mutual Assistance in Criminal Matters (Djibouti v. France)*, I.C.J. Reports 2008, p. 245, para. 204.

- Nicaragua-Costa Rica Treaty of Limits (Jerez-Cañas) of 15 April 1858;
- Arbitral Award of President Cleveland of 22 March 1888;
- Awards of the Umpire EP Alexander of 30 September 1897, 20 December 1897, 22 March 1898, 26 July 1899 and 10 March 1900;
- Convention on Wetlands of International Importance especially as Waterfowl Habitat, Ramsar (Iran), 2 February 1971 as amended by the Paris Protocol of December 1982, and Regina Amemendments, 28 May 1987;
- Convention Concerning the Protection of the World Cultural and Natural Heritage, adopted by the General Conference of UNESCO in 1972;
- Central American Convention for the Protection of the Environment, 12 December 1989;
- The Tegucigalpa Protocol to the Charter of the Organization of Central American States of 13 December 1991;
- Agreement over the Border Protected Areas between Nicaragua and Costa Rica (International System of Protected Areas for Peace [SI-A-PAZ] Agreement). 15 December 1990;
- Convention on Biological Diversity, 5 June 1992;
- Convention for the Conservation of the Biodiversity and Protection of the Main Wild Life Sites in Central America, 5 June 1992; and
- Regional Agreement on the Transboundary Movement of Hazardous Wastes, 11 December 1992.

And that Costa Rica has also violated several other rules and principles of international law such as:

- the obligation to conduct an appropriate EIA;

- the principle of non-harmful use of the territory; - the obligation to inform, notify and consult; and
- principles embodied in the Declaration of the United Nations Conference on Human Environment, 16 June 1972.

6.12 As a consequence of these violations, Nicaragua is entitled to a declaration by the Court that Costa Rica has entailed its responsibility to Nicaragua with all the legal consequences described below.

2. Cessation of Costa Rica’s Continuing Internationally Wrongful Acts and Performance of the Obligations Breached

6.13 Under international law, “the State responsible for an internationally wrongful act is under an obligation to cease that act, if it is continuing.”⁵⁷⁴ The cessation of the unlawful act(s) “is the first requirement in eliminating the consequences of wrongful conduct.”⁵⁷⁵ Up until this day, Costa Rica has not stopped the construction of Road 1856.⁵⁷⁶ Even more: it has

⁵⁷⁴ I.C.J., Judgment, 3 February 2012, *Jurisdictional immunities of the State (Germany v. Italy: Greece intervening)*, para. 137. See also I.C.J., Judgment, 20 July 2012, *Questions relating to the obligation to prosecute or extradite (Belgium v. Senegal)*, para. 121; or ILC, Article 30 of the Articles on responsibility of States for internationally wrongful acts and its commentary, *Yearbook of the International Law Commission*, 2001, vol. II, Part Two, pp. 88-91.

⁵⁷⁵ Commentary on the Articles on responsibility of States for internationally wrongful acts, *Yearbook of the International Law Commission*, 2001, vol. II, Part Two, p. 89, commentary on Article 30, para. 4.

⁵⁷⁶ *La Nación*, Costa Rica “The Ministry for Public Works and Transport will sign contracts for conclusion of project”, 29 August 2012 (NM, Vol. II, Annex 40).

expressly refused to do so as the Central-American Court of Justice noted in its Judgment of 21 June 2012.⁵⁷⁷

6.14 As shown in Chapter 3 above,⁵⁷⁸ the construction of Road 1856 has led, among other things, to the removal, destruction and dumping of soils, trees and vegetation into the San Juan de Nicaragua River and to the increasing of the sedimentation of the River. These acts, attributable to Costa Rica, constitute:

- a violation of the right of navigation of Nicaragua stemming from Article IV of the 1858 Treaty of Limits as interpreted by successive arbitral and judicial decisions and from the object and purpose of the 1858 Treaty of Limits; and

- a violation of Nicaraguan territorial integrity and a failure to respect the principle of non-harmful use of the State territory;

- a violation of a series of instruments and principles, binding on Costa Rica, relating to the protection of the environment⁵⁷⁹.

The construction of Road 1856 still being underway, these violations must be considered as being continuing internationally wrongful acts. Therefore, Nicaragua requests the Court to order that Costa Rica shall immediately cease the construction of Road 1856 and all other linked constructions underway that affect or may affect the rights of Nicaragua.

6.15 However the mere cessation of on-going wrongful conduct is not the sole consequence of other breaches attributable to Costa Rica.

⁵⁷⁷ C.A.C.J., Judgment, 21 June 2012 (NM, Vol. II, Annex 13).

⁵⁷⁸ See Chapter 3 above for a more detailed analysis; see also para. 4.15 above.

⁵⁷⁹ See para. 6.11 above.

6.16 As recalled in Article 29 of the ILC 2011 Articles on State Responsibility on the “Continued duty of performance” the other “legal consequences of an internationally wrongful act ... do not affect the continued duty of the responsible State to perform the obligation breached.” Indeed,

“a new set of legal relations is established between the responsible State and the State or States to whom the international obligation is owed. But this does not mean that the pre-existing legal relation established by the primary obligation disappears. Even if the responsible State complies with its obligations [...] to cease the wrongful conduct and to make full reparation for the injury caused, it is not relieved thereby of the duty to perform the obligation breached. The continuing obligation to perform an international obligation, notwithstanding a breach, underlies the concept of a continuing wrongful act (see article 14) and the obligation of cessation (see article 30 (a)).”⁵⁸⁰

6.17 Several Costa Rican internationally wrongful acts, which are still continuing, call for such a duty to – at last – perform the obligation breached. This is in particular the case for Costa Rica’s failures to inform, notify or consult Nicaragua concerning the construction of road 1856. By not consulting Nicaragua, not giving it any information concerning the construction of the Road, Costa Rica has breached its obligation to do so stemming from the 1858 Treaty of Limits as

⁵⁸⁰ Commentary on the Articles on responsibility of States for internationally wrongful acts, *Yearbook of the International Law Commission*, 2001, vol. II, Part Two, p. 88, commentary on Article 29, para. (2).

well as general international law.⁵⁸¹ These violations by omissions constitute continuing unlawful acts of Costa Rica which call not only for cessation but also for positive performance of the obligation breached. Therefore, Nicaragua requests the Court to order that Costa Rica shall not undertake any future development in the area without an appropriate transboundary Environmental Impact Assessment and that this assessment must be presented in a timely fashion to Nicaragua for its analysis and reaction.⁵⁸²

3. Nicaragua is Entitled to Appropriate Guarantees of Non-Repetition by Costa Rica of its Internationally Wrongful Acts

6.18 In addition to the cessation of the internationally wrongful act and the performance of the obligations breached, the responsible State “is under an obligation [...] to offer appropriate assurances and guarantees of non-repetition, if circumstances so require.”⁵⁸³ The circumstances of the present case clearly require it.

6.19 The multiple and repeated internationally wrongful acts of Costa Rica has cast serious doubt on its intention to uphold its obligations vis-à-vis Nicaragua. As explained in Chapter 4 and 5, Nicaragua has invited Costa Rica to discuss the issue of the road several times. But Costa Rica has abruptly refused

⁵⁸¹ See paras. 4.20-4.27 and 4.37-4.41 above.

⁵⁸² *Application Instituting Proceedings*, 21 December 2011, *Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica)*, para. 50.

⁵⁸³ Article 30 of the Articles on responsibility of States for internationally wrongful acts, *Yearbook of the International Law Commission*, 2001, vol. II, Part Two, p. 88.

and continues to refuse to discuss the issue. In November and December 2011, Nicaragua sent two Notes Verbales to Costa Rica explaining its position. In response, the President of Costa Rica made clear last that Costa Rica has “no reason to offer explanations to the Government of Nicaragua,”⁵⁸⁴ and that it is “not taking even one step back.”⁵⁸⁵

6.20 Even the repeated decisions of the Regional Court have not led Costa Rica to cease its unlawful conduct since it has ignored two binding decisions of the CACJ which ordered the suspension of the works on Road 1856. On 17 January 2012, the CACJ had ordered the immediate and definitive suspension of the construction of Road 1856.⁵⁸⁶ Costa Rica has failed to comply with this Order and the CACJ condemned this failure in its Judgment of 21 June 2012.⁵⁸⁷ Once again, Costa Rica simply ignored the decision and continued the construction of Road 1856. This is in sharp contrast with, for example, the circumstances of the *Avena* case, where the Court refused to grant the guarantees of non-repetition requested by Mexico after it had noted “that the United States has been making considerable efforts to ensure that” the violation complained of

⁵⁸⁴ *El País*, Costa Rica, “Chinchilla Defends Highway Criticized by Nicaragua, Rejects Dialogue”, 14 December 2011 (Source: EFE / 13 December 2011) (NM, Vol. II, Annex 24).

⁵⁸⁵ *Ibid.*

⁵⁸⁶ C.A.C.J., Order, 17 January 2012, (NM, Vol. II, Annex 13). *See also*, C.A.C.J., Judgment, 21 June 2012, *Whereas IX and ruling X* (NM, Vol. II, Annex 13).

⁵⁸⁷ *Ibid.*, point 8 of the *dispositif*. *See Inside Costa Rica*, “Costa Rica: Central American Court Ruling Illegitimate”, 3 July 2012, available at <http://www.insidecostarica.com/dailynews/2012/july/03/costarica120070301.htm>

by Mexico would not occur again.⁵⁸⁸ Similarly, in *DRC v. Uganda*, the Court considered that “the commitments assumed by Uganda under the Tripartite Agreement must be regarded as meeting the DRC’s request for specific guarantees and assurances of non-repetition.”⁵⁸⁹ In the present case, the Defendant categorically refused to give any guarantee and declared on the contrary that it would not take “even one step back”.⁵⁹⁰

6.21 Moreover, it is worth noting that Road 1856 is only an element of a vast road building project of more than 500 kilometres that is likely to significantly harm Nicaragua.⁵⁹¹ In effect, in addition to the Road 1856, works have been undertaken on roads that access to the Road 1856. Several of these roads⁵⁹² cross distributaries of the San Juan de Nicaragua River, such as the San

⁵⁸⁸ I.C.J., Judgement, 31 March 2004, *Avena and Other Mexican Nationals (Mexico v. United States of America)*, *I.C.J. Reports* 2004, pp. 68-69, para. 149.

⁵⁸⁹ I.C.J., Judgment, 19 December 2005, *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)*, *I.C.J. Reports* 2005, p. 26, para. 257; see also: I.C.J., Judgment, 27 June 2001, *LaGrand (Germany v. United States of America)*, *I.C.J. Reports* 2001, pp. 512-513, paras. 123-124.

⁵⁹⁰ See note 15 above.

⁵⁹¹ CFIA Report, para. 1.3 [“Route 1856 extends along the approximately 160 kilometres between Los Chiles and Delta (in front of Isla Calero) and the arteries that access it, which total approximately 400 additional kilometres] (NM, Vol. II, Annex 4). See also FUNDENIC SOS & FONARE, Technical Report “Evaluation of the environmental impacts caused by the construction of a 120 km long road parallel to the right bank of the San Juan de Nicaragua River”, March 2012, para. 1.3 (Annex 115 to the Counter Memorial of Nicaragua (NCM) in the *Dispute concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*).

⁵⁹² See e.g. the Boca Río Sucio – Caño Tambor hillside route, the Boca Tapada – Boca San Carlos route, the Buenos Aires – Moravia – Crucitas route or the Route 760 Parque – La Trocha CFIA Report, p. 4, diagram No. 1, p. 5, diagram No. 2, p. 8, diagram No. 3, p. 14, diagram No. 4 and p. 20, diagram No. 5 (NM, Vol. II, Annex 4).

Carlos River. As explained above,⁵⁹³ damages caused to the San Carlos River are likely to significantly affect the San Juan de Nicaragua River.

6.22 As Professor Kondolf and his team have noted, “Route 1856 along the Río San Juan was badly sited and has been poorly constructed, using many of the same practices that caused extensive damage in North America in the 1950s and 1960s, and which are now explicitly prohibited in North America, Europe, and parts of Asia.”⁵⁹⁴ Further works on those other roads, based on identical practices, are likely to cause significant damage to the distributaries of the San Juan de Nicaragua River and, therefore, to the San Juan itself.⁵⁹⁵

6.23 These very special circumstances certainly are of such a nature that they call for an order by the Court of guarantees of non-repetition.

6.24 In its commentaries of Article 30 of its Draft Articles, the ILC explained that:

“Assurances or guarantees of non-repetition may be sought by way of satisfaction (e.g. the repeal of the legislation which allowed the breach to occur) and there is thus some overlap between the two in practice. However, they are better treated as an aspect of the continuation and repair of the legal relationship affected by the breach. Where assurances and guarantees of non-repetition are sought by an injured State, the question is

⁵⁹³ See paras. 3.77-3.78 above.

⁵⁹⁴ Kondolf Report, Section 6.0 (NM, Vol. II, Annex 1).

⁵⁹⁵ *Ibid.*, Section 4.9

essentially the reinforcement of a continuing legal relationship and the focus is on the future, not the past.”⁵⁹⁶

6.25 Therefore, neither a declaration by the Court that Costa Rica has breached the obligations it owes to Nicaragua, nor declarations to the effect that it must cease its internationally wrongful acts and perform its continuing obligations can dispense Costa Rica from its duty to make full reparation for said acts.

4. Nicaragua is Entitled to Full Reparation from Costa Rica for All Damages Caused by its Internationally Wrongful Acts

6.26 As the Permanent Court of International Justice put it, “[i]t is a principle of international law that the breach of an engagement involves an obligation to make reparation in an adequate form.”⁵⁹⁷ The adequate form of reparation “depend[s] upon the concrete circumstances surrounding each case and the precise nature and scope of the injury.”⁵⁹⁸

6.27 In a famous *dictum*, the PCIJ explained that:

⁵⁹⁶ Commentary on the Articles on responsibility of States for internationally wrongful acts, *Yearbook of the International Law Commission*, 2001, vol. II, Part Two, p. 90, commentary on Article 30, para. (11).

⁵⁹⁷ P.C.I.J., Judgment, 26 July 1927, *Factory at Chorzów, Jurisdiction*, Series A, No. 9, p. 21 and 13 September 1928, Series A, No. 17, p. 29. See also in the ICJ most recent case law, Judgment, 27 June 2001, *LaGrand (Germany v. United States of America)*, *I.C.J. Reports 2001*, p. 485, para. 48; Judgment, 14 February 2002, *Arrest Warrant of 11 April 2000 (Democratic Republic of the Congo v. Belgium)*, *I.C.J. Reports 2002*, pp. 31-32, para. 76; Judgement, 31 March 2004, *Avena and Other Mexican Nationals (Mexico v. United States of America)*, *I.C.J. Reports 2004*, p. 59, para. 119; Judgment, 3 February 2012, *Jurisdictional immunities of the State (Germany v. Italy: Greece intervening)*, para. 136.

⁵⁹⁸ *Avena and Other Mexican Nationals (Mexico v. United States of America)*, *I.C.J. Reports 2004*, p. 59, para. 119.

“The essential principle contained in the actual notion of an illegal act – a principle which seems to be established by international practice and in particular by the decisions of arbitral tribunals – is that reparation must, as far as possible, wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed.”⁵⁹⁹

And the Permanent Court went on to say that:

“Restitution in kind, or, if this is not possible, payment of a sum corresponding to the value which a restitution in kind would bear ; the award, if need be, of damages for loss sustained which would not be covered by restitution in kind or payment in place of it-such are the principles which should serve to determine the amount of compensation due for an act contrary to international law.”⁶⁰⁰

6.28 These principles, which have been confirmed by an impressive case-law of the World Court,⁶⁰¹ are reflected in Articles 31 (1), 34 and 35 of the 2001 ILC Articles:

⁵⁹⁹ P.C.I.J., Judgment, 13 September 1928, *Factory at Chorzów*, Jurisdiction, Series A, No. 17, p. 47.

⁶⁰⁰ *Ibid.*

⁶⁰¹ See among the recent case law of the Court: I.C.J., Judgment, 25 September 1997, *Gabčíkovo-Nagymaros Project (Hungary/Slovakia)*, *I.C.J. Reports* 1997, p. 80, para. 149; I.C.J., Judgment, 14 February 2002, *Arrest Warrant of 11 April 2000 (Democratic Republic of the Congo v. Belgium)*, *I.C.J. Reports* 2002, pp. 31-32, para. 76; I.C.J., Advisory Opinion, 9 July 2004, *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, *I.C.J. Reports* 2004, p. 198, para. 152; I.C.J., Judgment, 19 December 2005, *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)*, *I.C.J. Reports* 2005, p. 257, para. 259; I.C.J., Judgment, 26 February 2007, *Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v. Serbia and Montenegro)*, *I.C.J. Reports* 2007, pp. 232-233, para. 460; I.C.J., Judgment, 20 April 2010, *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, *I.C.J. Reports* 2010, p. 104, para. 274; I.C.J., Judgment, 30 November 2010, *Ahmadou Sadio Diallo (Republic of Guinea v. Democratic Republic of the Congo)*, para. 161; I.C.J., Judgment, 3 February 2012, *Jurisdictional Immunities of the State (Germany v. Italy: Greece intervening)*, para. 137. See also Article 34 of the Articles on responsibility of States for internationally wrongful acts, *Yearbook of the International Law Commission*, 2001, vol. II, Part Two, p. 95.

Article 31

Reparation

1. The responsible State is under an obligation to make full reparation for the injury caused by the internationally wrongful act.

Article 34

Forms of reparation

Full reparation for the injury caused by the internationally wrongful act shall take the form of restitution, compensation and satisfaction, either singly or in combination...

Article 35

Restitution

A State responsible for an internationally wrongful act is under an obligation to make restitution, that is, to re-establish the situation which existed before the wrongful act was committed, provided and to the extent that restitution:

- (a) Is not materially impossible;
- (b) Does not involve a burden out of all proportion to the benefit deriving from restitution instead of compensation.

6.29 However, it is important to note in this respect that the facts of the present case are different from those of the *Pulp Mills* case since, contrary to Argentina, Nicaragua has suffered, and is suffering, effective damages. In its Judgment of 20 April 2010, the Court found that “the procedural obligations under the 1975 Statute [of the Uruguay River]” did not entail any ensuing

prohibition on Uruguay's building of the Orion (Botnia) mill, failing consent by Argentina, after the expiration of the period for negotiation"⁶⁰² and that "Uruguay [had] not breached substantive obligations arising under the 1975 Statute"⁶⁰³. As a consequence, the Court declared itself unable to grant reparation under the form of compensation or *restitutio in integrum* and found "that the declaration by the Court of [the] breach [of Uruguay's procedural obligations] constitutes appropriate satisfaction."⁶⁰⁴

6.30 In the present case, not only the breaches of a procedural nature are continuing – which should lead the Court to order Costa Rica to immediately cease its internally wrongful acts – but also, Nicaragua has suffered – and is still suffering – serious harms as a consequence of Costa Rica's unlawful conduct.

6.31 In the present case, nothing can dispense Costa Rica from complying with this fundamental obligation of restitution. Nicaragua is therefore entitled to request the Court to order Costa Rica to restore the *status quo ante*. This implies that Costa Rica shall at least:

- plant trees in order to re-establish the ravaged vegetation and landscape;
- rebuild the right bank of the San Juan River where it has been affected by construction works; and

⁶⁰² I.C.J., Judgment, 20 April 2010, *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, I.C.J. Reports 2010, p. 103, para. 275.

⁶⁰³ *Ibid.*, p. 104, para. 276.

⁶⁰⁴ *Ibid.*, p. 106, para. 282.

- restore the natural flow of the waters that flow through the south basin to the San Juan River which has been modified as a consequence of the construction works which also and consequently has modified the drainage of the surrounding wetlands in the lower San Juan and its delta.
- and comply with the recommendations of the experts on the works necessary for full restoration of the *status quo ante*.

The long term treatment recommended by Dr Kondolf and his team is described in some details in Chapter 3 of the present Memorial.⁶⁰⁵

6.32 However, even if and when faithfully executed by Costa Rica, this duty to re-establish the *status quo ante*, might avoid further future harm to be caused to Nicaragua and the San Juan River, but it will not make good the harm suffered since the construction was undertaken and until the *restitutio in integrum* is achieved. Therefore, in conformity with the well-established rule embodied in Article 36 of the Articles on the responsibility of States for internationally wrongful acts, Costa Rica “is under an obligation to compensate for the damage caused” by its internationally wrongful acts, “insofar as such damage is not made good by restitution.”

6.33 In the present case, Costa Rica must compensate Nicaragua for the damages already suffered and which cannot be rubbed out by any kind of *restitutio*, such as:

⁶⁰⁵ See paras 3.96-3.98 above and see the Kondolf Report Section 5.6 (NM, Vol. II, Annex 1).

- the cost of the cleaning of the San Juan de Nicaragua (the removal of soils, trees and other vegetation⁶⁰⁶ as well as the restoration of the quality of the water of the San Juan River⁶⁰⁷);
- additional costs for the dredging,⁶⁰⁸
- losses and increased costs in the sector of tourism, fishing and public health.⁶⁰⁹

6.34 Nicaragua requests that the modalities of the restitution that cannot be assessed at the present stage as well as the amount of the pecuniary compensation be assessed in a separate phase of the proceedings.⁶¹⁰

⁶⁰⁶ See e.g. paras. 3.2 and 3.77 above.

⁶⁰⁷ See e.g. paras. 3.6, 3.8, 3.24, 3.37, 3.51, 3.60, 3.81, 3.89 above and Kondolf Report, Sections 3.1.4, 4.5, 4.9, 4.10 and 66 (NM, Vol. II, Annex 1).

⁶⁰⁸ See paras. 3.77-3.81 above. See also Kondolf Report, Sections 2.5, 4.11-4.1 (NM, Vol. II, Annex 1) and 6 and EPN, “Dredging Project Technical Evaluation Analysis 2011: Improving Navigation on the San Juan River,” 23 January 2012, p. 2 (Annex 17 to the Counter Memorial of Nicaragua (NCM) in the *Dispute concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*); INETER, “Summary of Measurements of Liquid and Suspended Solids Content During the Years 2006, 2011, 2012 (Annex 16 to the Counter Memorial of Nicaragua (NCM) in the *Dispute concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*); see also *Diario Extra*, Costa Rica “Nicaragua requests studies on the Soberania Road,” 13 December 2011 (quoting Nicaraguan Vice Minister of Foreign Affairs, Valdrak Jaentschke, who has explained that Costa Rica’s road construction project has caused “slopes to deteriorate which in turn leads to sedimentation in the San Juan River, affecting [Nicaragua’s] dredging works, navigation, and altering the ecological balance of the species that live in the River.”) (NM, Vol. II, Annex 23)

⁶⁰⁹ See paras. 3.81, 3.85, 3.88 and 3.90-3.91 above. See also Kondolf Report, Sections 3.1.4 and 4.5. (NM, Vol.II, Annex 1)

⁶¹⁰ I.C.J., Judgment, 24 May 1980, *United States Diplomatic and Consular Staff in Tehran*, I.C.J. Reports 1980, pp. 44-45, para. 6 of the dispositif. See also I.C.J., Judgment, 25 July 1974, *Fisheries Jurisdiction (Federal Republic of Germany v. Iceland)*, Merits, I.C.J. Reports 1974, pp. 204-206, paras. 76-77 ; I.C.J., Judgment, 27 June 1986, *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America)*, I.C.J. Reports 1986, pp. 142-143, para. 284 ; I.C.J., Judgment, 19 December 2005, *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)*, I.C.J. Reports 2005, p. 257, para. 260; I.C.J., Judgment, 30 November 2010, *Ahmadou Sadio Diallo (Republic of Guinea v. Democratic Republic of the Congo)*, para. 164.

5. The Prejudice to Nicaragua’s territory affects the Navigational Rights granted by the 1858 Treaty to Costa Rica

6.35 As noted above,⁶¹¹ in its Judgment of 2009, the Court noted that “a simple reading of Article VI” of the Treaty “shows that”:

“the right of free navigation, albeit ‘perpetual’, is granted [to Costa Rica] only on condition that it does not prejudice the key prerogatives of territorial sovereignty.”⁶¹²

6.36 By deliberately causing significant harm to the San Juan River – which is entirely under Nicaraguan sovereignty –, Costa Rica has seriously prejudiced “the key prerogatives of [Nicaraguan] territorial sovereignty.” It is, therefore no more entitled to claim its “perpetual” but conditional right of free navigation.

6.37 Moreover, the suspension of the operation of the 1858 Treaty – if not its termination – is but the legal consequence of its breach in application of the rules provided for in this respect by the Vienna Convention on the Law of Treaties:

Article 60 (Termination or suspension of the operation of a treaty as a consequence of its breach)

⁶¹¹ See para. 4.9 above.

⁶¹² I.C.J., Judgment, 13 July 2009, *Dispute regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, I.C.J. Reports 2009, p. 237, para. 48.

A material breach of a bilateral treaty by one of the parties entitles the other to invoke the breach as a ground for terminating the treaty or suspending its operation in whole or in part.

(...)

3. A material breach of a treaty, for the purposes of this article, consists in:

(a) a repudiation of the treaty not sanctioned by the present Convention; or

(b) the violation of a provision essential to the accomplishment of the object or purpose of the treaty.”

6.38 As the Court explained, it is

“mindful of the fact that it has several times had occasion to hold that some of the rules laid down in that Convention might be considered as a codification of existing customary law. The Court takes the view that in many respects this applies to the provisions of the Vienna Convention concerning the termination and the suspension of the operation of treaties, set forth in Articles 60 to 62 (see *Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) notwithstanding Security Council Resolution 276 (1970)*, *Advisory Opinion*, *I.C.J. Reports*. 1971, p. 47, and *Fisheries Jurisdiction (United Kingdom v. Iceland)*, *Jurisdiction of the Court, Judgment*, *I.C.J. Reports* 1973, p. 18; see also *Interpretation of the Agreement of 25 March 1951 between the WHO and Egypt*, *Advisory Opinion*, *I. C. J. Reports* 1980, pp. 95-96).”⁶¹³

⁶¹³ I.C.J., Judgment, 25 September 1997, *Gabčíkovo-Nagymaros Project (Hungary/Slovakia)*, *I.C.J. Reports* 1997, p. 38, para. 46.

6.39 In the present case, there can be no doubt that Costa Rica violated several provisions “essential to the accomplishment of the object or purpose of the treaty” as explained in details in Chapter 4 of the present Memorial. Therefore, in application of Article 60 (1) of the Vienna Convention, Nicaragua is entitled “to invoke the breach as a ground for terminating the treaty or suspending its operation in whole or in part”.

6.40 Consequently, Article 72 of the Vienna Convention on the Law of Treaties must apply:

“1. Unless the treaty otherwise provides or the parties otherwise agree, the suspension of the operation of a treaty under its provisions or in accordance with the present Convention:

(a) releases the parties between which the operation of the treaty is suspended from the obligation to perform the treaty in their mutual relations during the period of the suspension;

(b) does not otherwise affect the legal relations between the parties established by the treaty.

2. During the period of the suspension the parties shall refrain from acts tending to obstruct the resumption of the operation of the treaty.”

6.41 It must also be specified that since the breaches of the Treaty by Costa Rica consist in adversely affecting the navigability of the San Juan River and the navigation on the River provided for in article VI of the Treaty, only the

application of this provision should be implemented in application of Article 72 – quoted above – and Article 44 of the Vienna Convention (on “Separability of treaty provisions”) according to which:

“2. A ground for invalidating, terminating, withdrawing from or suspending the operation of a treaty recognized in the present Convention may be invoked only with respect to the whole treaty except as provided in the following paragraphs or in article 60.

3. If the ground relates solely to particular clauses, it may be invoked only with respect to those clauses where:

(a) the said clauses are separable from the remainder of the treaty with regard to their application;

(b) it appears from the treaty or is otherwise established that acceptance of those clauses was not an essential basis of the consent of the other party or parties to be bound by the treaty as a whole; and

(c) continued performance of the remainder of the treaty would not be unjust.”

6.42 However, it should be noted that, whatever the circumstances, the provisions regarding the boundary between the Parties as fixed by the 1858 Treaty would continue to apply. As the Court explained in *Libya/Chad*:

“Once agreed, the boundary stands, for any other approach would vitiate the fundamental principle of the stability of boundaries, the importance of which has been repeatedly emphasized by the Court (Temple of Preah Vihear, I. C. J. Reports 1962, p.

34; Aegean Sea Continental Shelf: I.C.J. Reports 1978, p. 36).

73. A boundary established by treaty thus achieves a permanence which the treaty itself does not necessarily enjoy. The treaty can cease to be in force without in any way affecting the continuance of the boundary.”⁶¹⁴

6.43 Moreover, the various violations by Costa Rica of its obligations, not only under the 1858 Treaty, but also under many rules of general international law and of various other treaties – as exposed in Chapters 4 and 5 of the present Memorial – allow Nicaragua to take counter-measures against the Defendant. The law applicable to counter-measures is summarized in Articles 49 to 53 of the ILC Articles on Responsibility of States for Internationally Wrongful Acts.⁶¹⁵ In the present case, the suspension of Costa Rica’s right of navigation on the San Juan River is a “commensurate with the injury suffered” by Nicaragua⁶¹⁶, it fully “permit[s] the resumption of performance of the obligations in question”⁶¹⁷ and it should induce Costa Rica “to comply with its obligations” to make good the harm suffered by Nicaragua.⁶¹⁸

6.44 Such an action would be all the more warranted that Costa Rica acted deliberately in order to harm Nicaragua as a reprisal for an alleged “act of

⁶¹⁴ I.C.J., Judgment, 3 February 1994, *Territorial Dispute (Libyan Arab Jamahiriya/Chad)*, p. 37, paras. 72-73.

⁶¹⁵ The Articles are annexed to Resolution 56/83 of the General Assembly (12 December 2001).

⁶¹⁶ *Ibid.*, Article 51.

⁶¹⁷ *Ibid.*, Article 49 (3).

⁶¹⁸ *Ibid.*, Article 49 (1)

aggression on the part of the neighbour country of Nicaragua.”⁶¹⁹ This bellicose attitude is attested, by example by the declaration made by the second Vice President of Costa Rica, Alfio Piva, who indicated that since the new road being constructed made the River unnecessary for Costa Ricans, he called upon them to “eat the San Juan [River].”⁶²⁰

6.45 The Submissions of Nicaragua as detailed below draw the consequences of the present Chapter.

⁶¹⁹ Decree No. 36440-MP, year CXXXIII, Monday, 7 March 2011 (NM, Vol. II, Annex 11).

⁶²⁰ *El Nuevo Diario*, Nicaragua “Costa Rican Vice-President suggests eating the San Juan ”, 23 January 2012 (Annex 102 to the Counter Memorial of Nicaragua (NCM) in the *Dispute concerning Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*).

SUBMISSIONS

1. For the reasons given herein, the Republic of Nicaragua requests the Court to adjudge and declare that, by its conduct, Costa Rica has breached:

(i) Its obligation not to violate the integrity of Nicaragua's territory as delimited by the 1858 Treaty of Limits, the Cleveland Award of 1888 and the five Awards of the Umpire EP Alexander of 30 September 1897, 20 December 1897, 22 March 1898, 26 July 1899 and 10 March 1900.

(ii) Its obligation not to damage Nicaraguan territory;

(iii) Its obligations under general international law and the relevant environmental conventions, including the Ramsar Convention on Wetlands, the Agreement over the Border Protected Areas between Nicaragua and Costa Rica (International System of Protected Areas for Peace [SI-A-PAZ] Agreement), the Convention on Biological Diversity and the Convention for the Conservation of the Biodiversity and Protection of the Main Wild Life Sites in Central America;

2. furthermore, Nicaragua requests the Court to adjudge and declare that Costa Rica must:

(i) Cease all the constructions underway that affects or may affect the rights of Nicaragua.

(ii) Restore the situation to the *status quo ante*.

(iii) Compensate for all damages caused including the costs added to the dredging of the San Juan de Nicaragua River, with the amount of the compensation to be determined in a subsequent phase of the case.

(iv) Not to continue or undertake any future development in the area without an appropriate transboundary Environmental Impact Assessment and that this assessment must be presented in a timely fashion to Nicaragua for its analysis and reaction.

3. The Republic of Nicaragua further requests the Court to adjudge and declare that:

(i) Nicaragua is entitled, in accordance with the 1858 Treaty as interpreted by the subsequent arbitral awards, to execute works to improve navigation on the San Juan River as it deems suitable, and that these works include the dredging of the San Juan de Nicaragua River to remove sedimentation and other barriers to navigation; and,

(ii) In so doing, Nicaragua is entitled to re-establish the conditions of navigation that existed at the time the 1858 Treaty was concluded.

(iii) That the violations of the 1858 Treaty and under many rules of International Law by Costa Rica, allow Nicaragua to take appropriate counter measures including the suspension of Costa Rica's right of navigation in the San Juan de Nicaragua River.

4. Finally, Nicaragua requests the Court to order Costa Rica to immediately take the emergency measures recommended by its own experts and further detailed in the Kondolf Report, in order to alleviate or mitigate the continuing

damage being caused to the San Juan de Nicaragua River and the surrounding environment.

If Costa Rica does not of itself proceed to take these measures and the Court considers it cannot order that it be done without the full procedure contemplated in Articles 73 *et seq.* of the Rules of Court, the Republic of Nicaragua reserves its right to request provisional measures on the basis of Article 41 of the Statute and the pertinent procedures of Articles 73 and ff. of the Rules of Court and to amend and modify these submissions in the light of the further pleadings in this case.

The Hague, 19 December 2012.

Carlos J. Argüello-Gómez
Agent of the Republic of Nicaragua

CERTIFICATION

I have the honour to certify that this Memorial and the documents annexed in Volume II are true copies and conform to the original documents and that the translations into English made by the Republic of Nicaragua are accurate translations.

The Hague, 19 December 2012

Carlos J. Argüello-Gómez
Agent of the Republic of Nicaragua

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