

CHALILLO DAM REPORT CARD

PREPARED BY THE BELIZE INSTITUTE OF ENVIRONMENTAL LAW AND POLICY

MAY 1, 2006

In 2002, Fortis/BECOL entered into an agreement with the Department of Environment, as part of its legal obligations for the Chalillo Dam in Belize. Under the terms of this agreement, known as the “Environmental Compliance Plan,” the Department of Environment was responsible for monitoring dam construction while Fortis/BECOL agreed **“to strictly adhere to the implementation of the mitigation measures in the time frame outlined in this document [the ECP] during all stages of development of the project.”**

Belizeans grade Fortis/BECOL on its compliance with the ECP

	GRADE
<p>Dam Safety</p> <p>ECP Objective: Fortis/BECOL was required to have an emergency preparedness plan in place before the dam began operating. The company was also supposed to setup a warning system to alert Belizeans downstream in the event of a flood or dam break.</p> <p>Reality:</p> <ul style="list-style-type: none">▪ Communities and business operators along the Macal River have not been informed or consulted about the company’s Dam Safety/Emergency Preparedness Plan or flood warning system. The plan was posted on the government’s web site www.nemo.org.bz/publications/BECOL_Emergency_Preparedness_Plan.pdf last year but has not been disclosed or discussed with affected residents.▪ At a public meeting on August 29, 2005 to review Fortis/BECOL’s plans for a third dam on the Macal River, BECOL’s Chalillo manager, Steven Usher, reported that the Chalillo dam leaks, adding to public concerns about the dam’s safety, cost, and ability to produce reliable power. <p>Background:</p> <p>Fortis/BECOL profits without taking financial responsibility for potential failures. Under its agreement with Belize’s government, if the Chalillo Project is destroyed or damaged by a natural catastrophe, even if that catastrophe could have been prevented by safer dam design, Fortis cannot be held liable for damages. This arrangement violates internationally recognized standards. According to the World Bank Operational Policy on Dam Safety, the dam owner should have “full responsibility” for the dam’s life “irrespective of its funding sources or construction status” (The World Bank Operational Manual, Operational Policy, Safety of Dams, OP 4.37, October 2001).</p>	F

<p>Dam Construction</p> <p>ECP Objective: To provide detailed engineering designs for the dam (ECP § 6.50) and to include all additional geotechnical assessments conducted and associated with the project with such designs (ECP § 6.51)</p> <p>Reality: Fortis/BECOL has refused to publicly acknowledge mistakes in its geotechnical assessment, which incorrectly identified the dam site’s sandstone foundation as granite, and failed to account for seismic faults and activity in the project area.</p> <ul style="list-style-type: none"> ▪ Fortis/BECOL then suppressed the results of an independent geology report (prepared by consultant Jean Cornec and Craig Moore of the Geology and Petroleum Department, May 3, 2002), which concluded the dam design should be changed to reflect actual dam site conditions and seismic risk. ▪ Fortis/BECOL has not explained to Belizeans whether or not it corrected its final dam design to reflect actual site conditions and seismic risk. 	<p>F</p>
<p>Power Costs</p> <p>ECP Objective: “[T]o save costs in the generation of electricity and that the general public and the country shall share in the benefits of such cost savings” (ECP § 8.25).</p> <p>Reality:</p> <ul style="list-style-type: none"> ▪ Fortis/BEL raised rates by 12% in mid-2005. ▪ Fortis/BEL raised rates by another 13% in January 2006. ▪ Fortis/BEL claims Chalillo is a least-cost source of power but has not disclosed the true costs of building Chalillo, environmental compliance, and supplying replacement power during the dry season. The Belize media reported last year that Chalillo cost between US\$35 and 40 million, and more than US\$100 million (Channel 5 and 7, respectively). ▪ Fortis/BEL blames its high costs on rising fuel prices but one-third to half its power supply is expected to come from Chalillo and Mollejon hydro facilities, both owned by BECOL, another Fortis subsidiary. 	<p>F</p>
<p>Water Quality</p> <p>ECP Objective: To establish monitoring programs, to test the water, record changes in water quantity and quality, and make that information public.</p> <p>Reality: The people of the Macal River Valley depend on river water as a source of drinking water, fish, and ecotourism revenue.</p> <ul style="list-style-type: none"> ▪ Fortis/BECOL has failed to notify the general public about water testing; it also has not yet purchased the monitoring equipment required for compliance. ▪ Fortis/BECOL has not released information required under the ECP, including mercury levels in fish; data about iron, chloride, sulfates, other heavy metals in the water; or information about dam releases, changes in river levels, and river flows. 	<p>F</p>

<p>Wildlife and Archaeological Heritage Protection</p> <p>ECP Objective: To find alternate habitat for wildlife displaced by the Chalillo Project, and to protect what remains of the area's wildlife and Maya heritage.</p> <p>Reality: The Chalillo dam and reservoir has impacted parts of the Chiquibul National Park, the Chiquibul and the Mountain Pine Ridge Forest Reserves, an area known for its rare and endangered wildlife, including the Scarlet Macaw, Jaguar and Tapir. The dam has also drowned important Maya sites.</p> <ul style="list-style-type: none"> ▪ No wildlife protection or archaeology mitigation plans have been implemented. ▪ The small population of Scarlet Macaws in the project area faces extinction; no new nests of hatchlings have been spotted since dam construction began. ▪ There is a notable reduction in the area's wildlife. 	F
<p>Public Participation</p> <p>ECP Objective: To encourage public participation in the dam's construction and operations by ensuring an exchange of information concerning the dam construction and its impacts.</p> <p>Reality: Fortis/BECOL has not held any meetings to inform residents of issues relating to the dam's safety, its costs or any other aspects of the project and its impact on the Macal River Valley. Fortis/BECOL announced the creation of a Public Participation Committee in November 2004, but the public has received no further information.</p>	F
<p>OVERALL GRADE</p> <p>Fortis/BECOL has failed to meet its legal obligations in construction of the Chalillo Dam and providing for the health and safety of the people, the river, and the environment. The company has not kept its promise to share any project benefits or cost savings resulting from the investment.</p>	F
<p>- Cayo, Belize -</p>	