

## COLOMBIA FLOOD DISASTER AND SCHOOL RECONSTRUCTION 2010-2011

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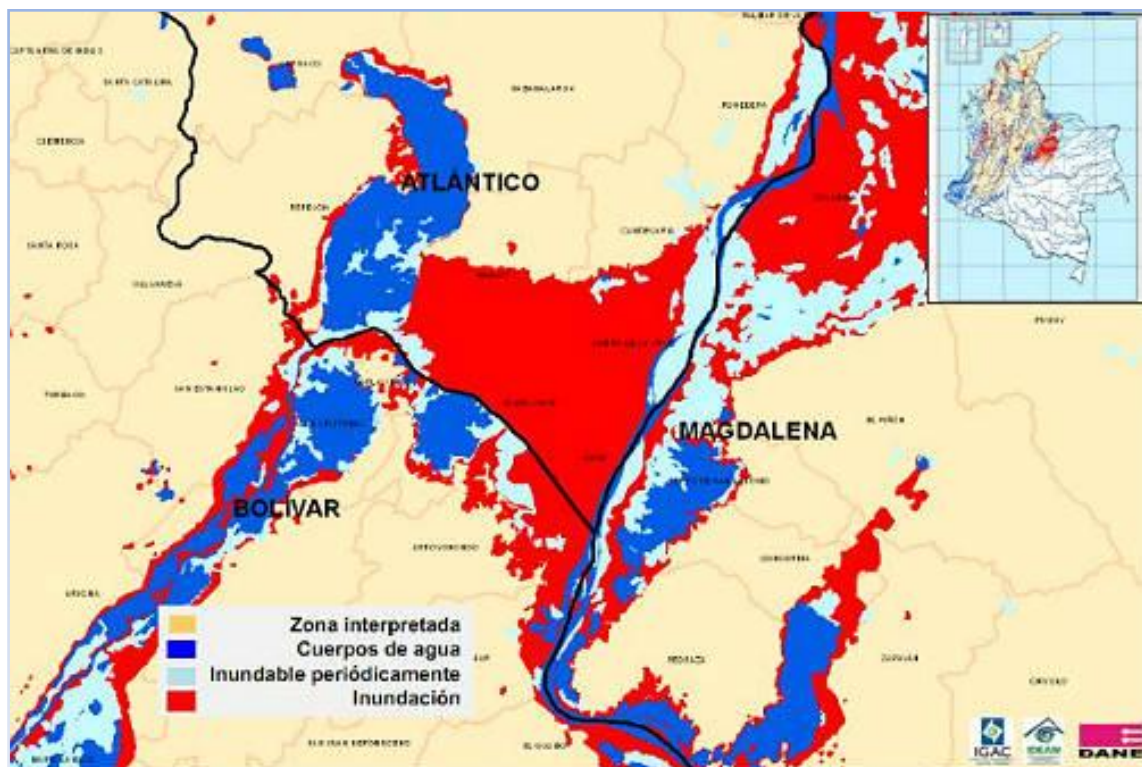
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The current additional flooded areas left by the 2010 *phenomenon of El Niño* in Colombia are 4'000.000 of acres. More than 3'000.000 people have been affected and more than 300,000 homes almost destroyed. The cost of damages were around 6.8 Billions of Dollars.

The United Nations have provided aid in what has been called the worst natural disaster in a South American country ever before.

Now, disasters like these are called hydro-meteorological ones, and caused by climate change in form of floods, windstorms, avalanches, between others.

Because of the disaster, the Colombian government passed a decree in 2010 that will utilize lands confiscated from drug traffickers to provide shelter for homeless people that were affected by the floods.



North of Colombia - Atlantic Coast States most affected.

Graphic by DANE, Colombia. ■ Flooded areas ■ Natural Aquifers  Flooded Areas Periodically

North areas of the country were the most affected ones and dozens of towns at the Atlantic coast were submerged. The most shocking fact was the 3,300 educational facilities that were affected in the whole nation, 450 of those were completely flooded, some of them were new buildings, or just renovated, a fact that also displaced kids from educational programs, making the disaster even worse.

Some schools did not get flooded and were used for sheltering also as a step that provided a little relief in some areas; even cows and other domestic animals died within days for being trapped by the flood and hundreds of people died also. People lost their jobs at farms, even those who worked in big cities like Bogota, Cali, and Medellin were

not able to go to their jobs because many of the main avenues and highways were flooded, so bus transportation and cars could not circulate for weeks.



Aerial view of a flooded area in Valle del Cauca

Photo: AFP

Colombia is not prepared on this 2011 for another flood disaster, in fact, current Soil's ability to hold more amounts of rainfall during next heavy rain seasons is a real issue because soil still wet from previous 2010 floods. The IGAC, The Agustin Codazzi Geographic Institute stated that an important part of the Colombian territory is saturated with water and each year this situation is worse. The IDEAM, The Hidrological, Meteorological and Environmental Studies Institute has assured that in 2011 raining season will be unprecedented, so higher risks for flooded areas and landslides will be a constant factor. Now, the PND the National Development Planning started to work with different ministers to join efforts and budget to face the catastrophe left by the 2010 floods especially on schools.

### **School Reconstruction Efforts 2011**

Past August 03, 2011 the Minister of Education urged the government for reconstruction of 3,300 school facilities that were affected by the 2010 floods. Many of those schools have to be relocated, so the schools won't face other flood disasters.

The Minister of Education opened a national architectural competition for new prototypes school facilities at different regions, so they can build 1,000 new facilities. For that purpose past August Minister of Education announced the competition at the opening of the XXXII Colombian Architecture Congress held in Cali. The announcement created well expectative for Architects to participate at the competition. New ideas with sustainable design components are very welcome, because one of those prototypes could optimize designs with containers for school at the Pacific Coast Areas, closer to port of Buenaventura.

2,300 school facilities started for reconstruction, especially for rural areas where kids were tremendously affected by the 2010 floods. Ms. Maria Fernanda Campo, Minister of Education stated: *"By this competition we'll get different prototypes for different regions. Nothing insides more that having a true learning environment"*.

The current budget for school reconstruction is about 7.2 Billions of dollars and by March 2012 the reconstruction of those 2,300 will be done and by 2014 the whole school facilities has to be completed, which includes the 1,000 new facilities with the new prototypes.

There are 820,000 students that were affected by the 2010 floods. At the Valle state, 130 school facilities were tremendously affected and 100 are ready on reconstruction phase.

Our Architecture practice plays a great roll on this unprecedented school reconstruction and we should be proud that Colombian government relies on the Society of Colombian Architects ( SCA ), which is a tremendous advance on providing Total Quality Management for this reconstruction event. Would be great if AIA and SCA could work together sometime in the future to endure architecture practice and sharing experiences to provide new technology in one scenario.