

## **Project Update: May 2014**

The hurricane season for the eastern Pacific region has commenced. The first Hurricane of the season has been named Amanda. The first week in May 2014, we began monitoring beach morphology in a new area of coastal development within our study area.

In the attached photos, the concrete pilings represent the limits of construction. Photo 1 shows the beach with a gradual slope at high tide during a new moon. Photo 2 shows the beach with slight natural erosion occurring at high tide just before a full moon. Photo 1 was at a time when the tides ranged only 6 m. Photo 2 is during a lunar cycle where the tidal flux maximum is on average 20 m. One can see the severity of what will happen during a storm event when the tidal flux is over 40 m during a new moon cycle and over 60 m when tidal flux can reach 60 m.

Our research that was funded from Rufford and these photo documentations reveal to us that the federal maritime zone of 20 m, which is used to delineate construction limits, is not sufficient for this area. Thus poor regulation not only leads to lack of natural protection from storm surge, but also permanently removes critical nesting habitat for endangered sea turtles. Thanks to this funding, we are able to present the Mexican government with scientifically - sound, statically reasons why they should expand the federal maritime zone to a minimum of 60 m in nesting habitat.

