

A Sustainable Development Approach to Climate Change!

The Case of Monkey River

Introduction:

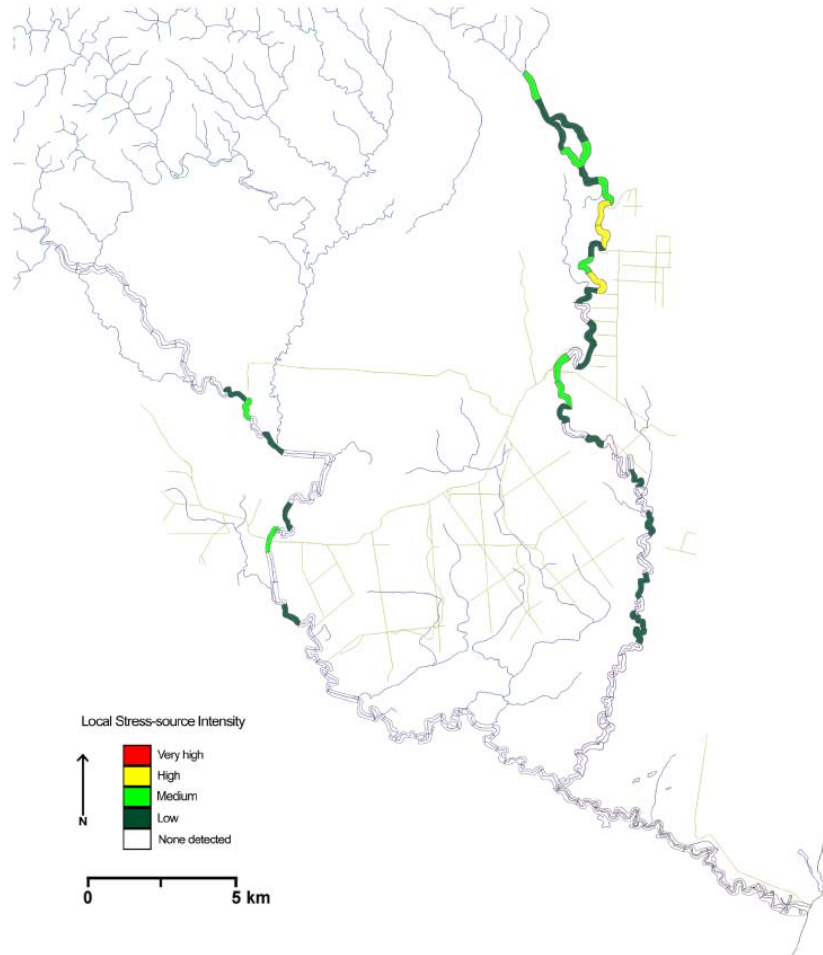
- Monkey River Population – 200 approx.
 - 2001 Hurricane Iris
 - 95% of Homes destroyed
 - 176 persons impacted
 - 2009 Earthquake
 - 27 Homes suffered (infrastructural damages)
 - 500' of beach lost
- Belize Population – 360,000 approx.

Introduction Cont/d

- 1861 Monkey River declared a town with 2,500 pop. (approx.)
- 1930 Industry hit with Banana Blight Disease
- 1981 downgraded to a Village
- 1985 accessible by dirt road (13 miles)
- 2009 connected to the Electrical Grid

- Named after the Howler Monkeys

Swasey & Bladen conjoining to form Monkey River



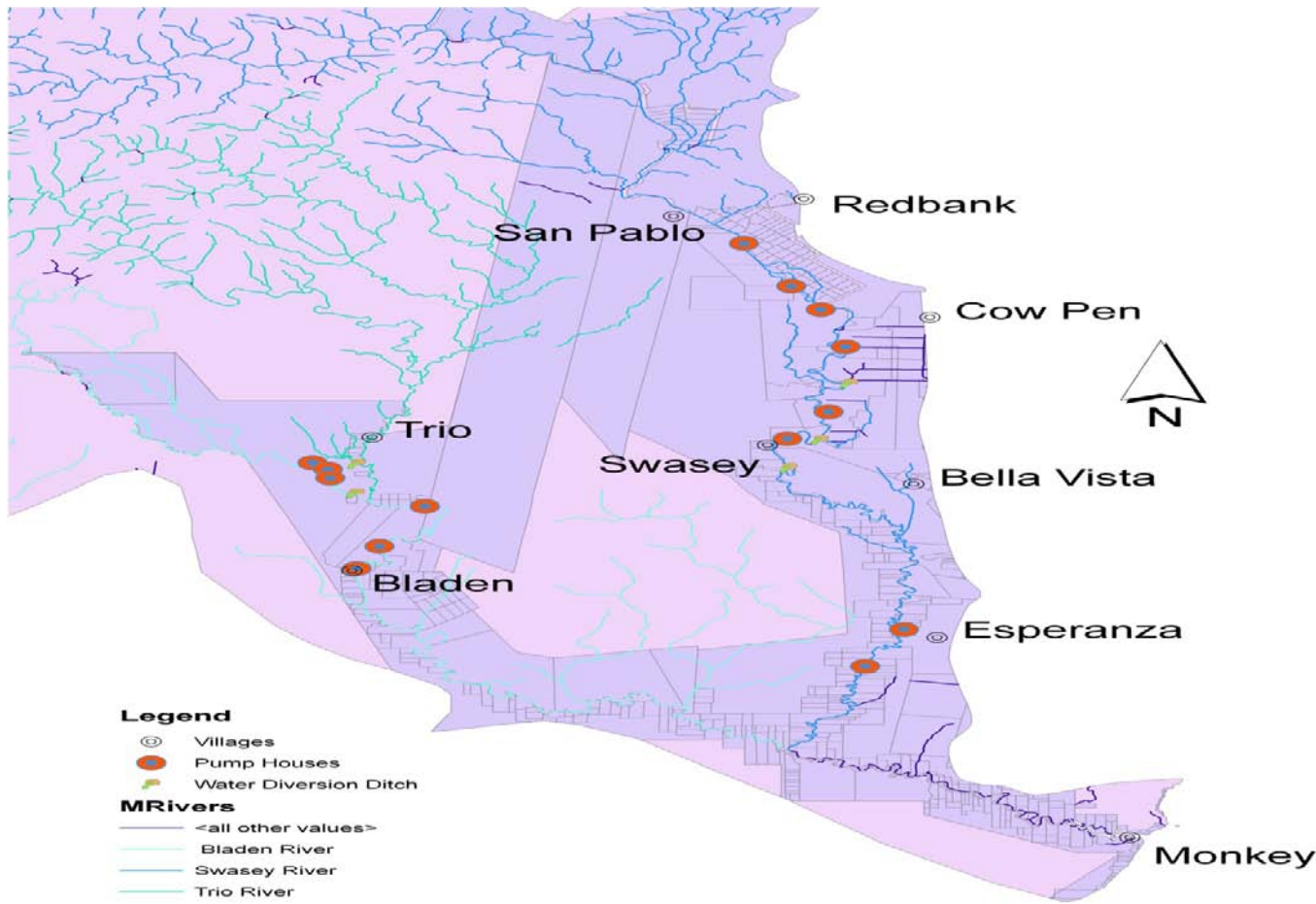
The Problem of Climate Change!

- Bladen and Swasey Rivers conjoin to form Monkey River.
- Bladen River is composed of lava, cretaceous limestone (referred to as the Bladen Volcanic Member). [Esselman 2006]
- Swasey River is comprised of metamorphosed sedimentary rocks, has high quality sand and numerous sand bars , mined for commercial use .

Locations of Mining Clusters on Swasey River



Water Extraction Stations in MRW



Water Pumps and Water Diversion Ditches
On the Branches of the Monkey River

Esselman and Buck (2007)

The rivers were dammed and canals built to divert their natural flow.

Water Extraction Pump on Swasey



Adaptation Measure

- After the earthquake in 2009 and the loss of 500' of the beachfront; an adaptation measure was taken using botan and tires to stop the erosion.
- Since then, 30' (approx.) of the shoreline has been recaptured.

Recommendations/Conclusion:

- A holistic approach and Long-term Development Plan.
- Environmental Laws put in place and enforced.
- Sustainable Ecotourism Plan
- National Development trumps local politics.
- Zoning and Building Codes.
- Climate Change and Individual Responsibility inserted into the School Curriculum.