Project Update: September 2013

Study Area

The site of the present project is Tamandaré municipality, Pernambuco State, north-east Brazil. The map below show the position of the area within a Brazilian map.

Tamandaré is located 110 km from Recife, capital of Pernambuco State and is under a climate regime that involves two distinct seasons, the rainy season, which occurs from September 2012 to April 2013, with average air temperature of 20 °C and sea of 22 °C and dry, from August to April, in which air temperatures and sea reach the average of 28 ° and 27 °C, respectively. The reef complex studied is extends over 135 km of coastline from Tamandaré, southern State of Pernambuco, to the city of Paripueira, north State of Alagoas, within the limits of the coordinates 8th 42'16 "S and 35 º 04'40" W; 8th 47'44 "S and 34 º 47'20" W; 9th 46'30 "S and 35 º 25'00" W; 9th 32'51 "S and 35 º 36'59" W.

The zoning area will be proposed and implemented for a reef area at the extreme north of the coral site (red in the map).

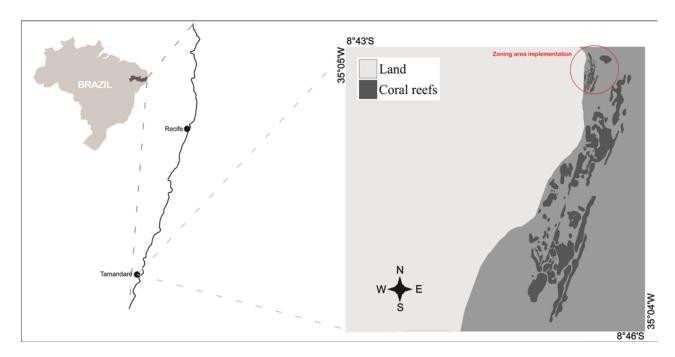


Fig 1 – Map of the area of the present project in Tamandaré municipality, Pernambuco State, Northeast Brazil.

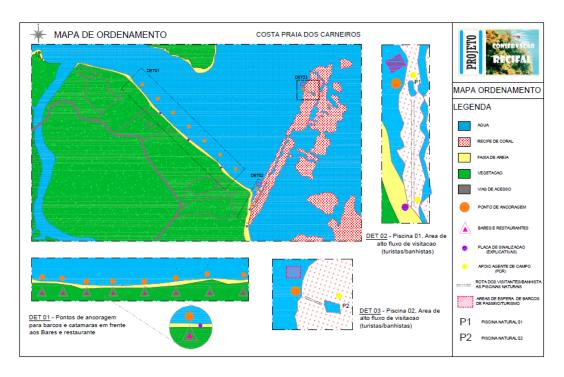
How will the zonation itself be conducted? The methodology (including the information in the attached response documents) has few details in this regard, with much more of a focus on talking about activities surrounding local community awareness. There is budget specified for "Zoning Maps Preparation — Autocad" but in the breakdown there is some budget for a specialist's time and three diving expeditions for habitat analysis. Is zoning likely to be based solely on (point) mapping of these survey data, or are the surveys to be

used in conjunction with remote sensing data to map areas of reef and subsequently designate users?

The preparation of the zone maps and zone implementation is a critical step of our project. Therefore, we have been thinking specifically the best way to do this and connected the entire stakeholder to achieve the best success after and during implementation. From that, the zoning maps elaboration will be divided in three main fronts.

- (1) Dive expeditions in the area we already know a lot about the area, however we still need to consider some limits of coral distribution, locations of sand and patch reefs and also depth of the area during low and high tides. Therefore, few dive expeditions will be necessary to achieve this level of information quality.
- 2) Meeting and consultations with local community member and also local trades (that we already started) will be performed to best adapt the zoning maps for the locals use and avoid subsequently problems with them after implementation.
- (3) Official meeting with government partners to make sure all steps are approved by local legislation (it is important to highlight here that the plan is already approved by local agencies due the extreme urgency of the case, once the local reefs are being damaged quickly). In summary, surveys will be used in conjunction with remote sensing data to map areas of reef and subsequently designate users as mentioned to make sure all the process will be beneficial for the local community.

After all the steps, the zoning maps will be designed by a professional (AutoCad) that will include geographic coordinates, scales, colour by designate uses and also marking buoys and signs. We have a first scheme (very preliminary) on how the zoning plan will look like.



The project will facilitate the development of zoning maps intended to support spatial management of tourism activities. However, the proposal does not set out information on the stakeholder consultation processes that will be undertaken to build support and compliance for the proposed zoning, nor the framework under which the zoning plan could be implemented and enforced over the longer term (or where the costs/ownership for this is coming from). The lack of involvement of government partners may preclude or complicate uptake of any proposed zoning outputs generated as a result of this project.

Stakeholder consultation will be an important tool for the project that we will extremely consider during initial phase and also during the whole project. We know that will be impossible to achieve coral reef conservation without the support of the entire stakeholder, and we need them to build support and compliance for the proposed zoning, therefore; we are also using their knowledge during this process.

Just as an example, of how we already have their support and also how relevant the first steps of a zoning plan is important for the local community. Few months ago during the activities of our 1st Rufford Small Grant project some representatives of the local trades and fishers suggested us during one meeting that is already time to start to control and organise the tourism in the area once all the coral and species are been affect by this uncontrolled exploitation.

Thus, with the local community (fishermen, boat drivers, and local trades) we will perform meetings with voting process associated with some questions for them to give opinions about the zoning maps. A series of questions are already organised for the voting process such as:

- 1. Which is the most important site for coral reef species in the area?
- 2. What time of year species are more fragile?
- 3. Which is the best area to restrict touristic visitation?
- 4. What is the appropriated number of visitor per reef per day?

Is it worth to mention that this data will be used in conjunction with habitat and fish-coral surveys.

Considering the of government partners, they will also be attending the meetings and will provide licenses and help with zoning maintenance.

Over long term, we have the support of city council, that will likely to help with zoning material maintenance and also future projects from our NGO (Reef Conservation Project – http://www.conservacaorecifal.com/) will also be used to support the zoning implementation.

Ownership for the zoning equipment is not identified and more information is requested on how this equipment will be maintained, repaired etc. and who will bear the on-going costs of this.

As mentioned in the above questions, the equipments will be acquired with 2nd RSG and will be based on low cost implementation and low maintenance avoiding a lot of money to be spent in the post zoning process.

The materials and cost will be the following

- a) Zoning Implementation materials (ropes, boys, signs) Total of £1,250.00
 - At least 500 m of rope = £100.00
 - 100 buoys = £350.00 (£3.50 each)
 - 15 small signaling boards for the zoning area = £300.00 (£20.00 each)
 - 8 big zoning boards for the anchoring area in the beach following the image below = £500.00 (£62.50 each)

In a long-term analysis for maintenance and repairs of the zoning we will try to receive support from a diversity of institutions such as: Tamandare City council, Brazilian marine environment ministry, another NGO in the north-east Brazil and also by a series of funding opportunities that we are applying for.