

Darwin Initiative Main/Post/D+ Project Half Year Report (due 31st October 2017)

Project reference	22-014
Project title	Maximizing Benefits of Marine Reserves and Fisheries Management in Belize
Country(ies)/territory(ies)	Belize
Lead organisation	Wildlife Conservation Society
Partner(s)	Belize Fisheries Department, Environmental Defense Fund, The Nature Conservancy, University of Miami
Project leader	Nicole Auil Gomez
Report date and number (e.g., HYR3)	HYR3
Project website/blog/social media etc.	www.belizewcs.org

1. Outline progress over the last 6 months (April – Sept) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up to end September).

The last year of the project has seen successful and shown movement towards our project outcome. The following highlights the progress against the four Outputs.

Output 1: For GRMR and SWCMR, sustainable fishing regulations are implemented through no-take zones and license-based MA programs that employ total allowable catch (TAC) quotas.

- The fisherfolk licence database is being updated to include fisher vessel licencing cards, merging the unique QR codes for boat owners / captains. The legal conditions of the licences will also be printed on the back of the card for easy reference by both fishers and authorities, additionally supporting successful prosecution for non-compliance of conditions. This will be introduced for the 2018 licencing period, commencing in December 2017.
- Our independent catch data collection has continued regularly each month, with three days each at Glover's Reef Marine Reserve and South Water Caye Marine Reserve.
- A Fishers Forum was held at WCS's Research Station at Glover's Reef Atoll (March 31 - April 1). The objective of the forum was to provide fishers with the knowledge of MPA management and sustainable fishing practices in Belize, and to foster dialogue on their role in securing the fishing industry. Sixteen fishers from Sarteneja, Chunox, and Hopkins villages attended the two-day session. UNDP Small Grants, the Fisheries Department, and WCS also attended. The managed access system, replenishment zones, and importance of fishing associations were also components of the discussion. A Fishers' Round Table closed off the session, as fishers discussed among themselves what they considered to be the most important issues that affect them and offered recommendations. They highlighted the following issues: 1) Need for strategic patrols instead of the routine patrols being conducted. They felt that patrols were very predictable and ineffective. 2) Need for more meetings, such as this forum, in order to have better communication between managers and stakeholders. 3) Support from partners to secure opportunities for value added products.

Output 2: Spatial Monitoring and Reporting Tool (SMART) is implemented in order to improve targeted enforcement efforts aimed at reducing illegal, unreported, and unregulated fishing.

- Nationally, WCS has been streamlining data collection on all MPAs, and is currently upgrading from SMART 4.1 to SMART 5.1, which should eliminate some connectivity issues between devices and the centralized database. Patrol data queries and a general patrol report have been developed with the Fisheries Department, and are now automatically generated from the recorded patrols and can be sorted by preset or custom-entered date ranges. This has made patrol briefing and report submissions within the Department much more efficient for the officers.
- WCS made SMART presentations for protected area conservation compliance to the National Intelligence Committee as well as to the Chief Executive Officer of the Ministry responsible for Forestry and Fisheries. WCS is working with the Ministry to set up a national SMART Task Force, that will holistically strategize and confirm SMART use in all protected areas in Belize.

Output 3: Benefits of no-take zones and MA programs on coral reef ecosystems and resource-based livelihoods are better understood, strengthening adaptive management and community support.

- The enhanced Long-term Atoll Monitoring Program (LAMP II) conducted at GRMR between 2009 and 2013 generated results that were analyzed and presented in a peer-review paper published in the September 2017 issue of the Marine Ecology Progress Series (MEPS). The publication, titled "*Benefits of a replenishment zone revealed through trends in focal species at Glover's Atoll, Belize*", describes the increases in density, biomass, and size of small-scale fisheries targets within replenishment zones, as well as the stable or increasing catch rates beyond these boundaries. Protected areas strongly benefit some species, such as conch, lobster, and parrotfish (that have limited movement) although other species like snappers and groupers (that are widely dispersing) display more limited recovery.
- The SMART platform was used to design the final socioeconomic survey instrument for this project. The surveys will be completed before December, targeting 50% of the 117 licensed fishers for the GRMR.

Output 4: With the widespread support of fishing communities and the general public, new or expanded no-take zones are established in Belize's network of marine reserves.

- In order to draft cartographical descriptions for statutory instruments, WCS contracted a consultant to carry out the in situ ground-truthing exercise for the deep sea areas being proposed as replenishment zones. Complementary funds for field work are being provided by our partner TNC, along with other support from Government entities such as the Fisheries Department, Coast Guard, and Lands Department. The ground-truthing / verification exercise was completed in July 2017 and, with data from the Lands Department, the consultant is finalizing the description. We anticipate that we can have a final description sent to the Ministry by early November 2017, and the Minister and CEO will be invited to learn the details of the entire process by the NRZE Steering Committee thereafter. In a speech given at the UN Oceans Conference in June by the Minister responsible for Fisheries, Hon. Dr. Omar Figueroa, a commitment was made to "Expand no-take zones from 3% to 10% of territorial waters by 2020". As such, WCS's next step will be to commence the consultation process for the inshore areas still

viewed as a gap in the national replenishment zone expansion. This will ensure a representation of all of Belize's marine habitat types is included for protection.

2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

- While catch data have been consistently collected for three days at both MPAs, GRMR and SWCMR, the compiled analysis and report for 2016-2017 has been delayed. We expect these to be completed before the final report.
- Despite our efforts in expanding SMART, providing consistent troubleshooting to Fisheries Departments and the MPAs, and conducting multiple trainings, our enforcement results are not where we expected them to be. This is in large part due to overall high staff turnover at MPA sites, limited staff capacity, and a lack of strong supervision. WCS has recognized that this is challenging to effective MPA management, and has hence begun working closely with managers to develop strategies to overcome these obstacles, such as developing monthly station plans to be vetted against monthly patrol reports using SMART.

2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?

Discussed with LTS: Yes/No

Formal change request submitted: Yes/No

Received confirmation of change acceptance Yes/No

3a. Do you currently expect to have any significant (e.g., more than £5,000) underspend in your budget for this year?

Yes No Estimated underspend: £

3b. If yes, then you need to consider your project budget needs carefully. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project, please submit a rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget so please ensure you have enough time to make appropriate changes if necessary.

4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document. Additionally, if you were funded under R23 and asked to provide further information by your first half year report, please attach your response as a separate document.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also** be raised with LTS International through a Change Request.

Please send your **completed report by email** to Eilidh Young at Darwin-Projects@ltsi.co.uk . The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g. Subject: 22-035 Darwin Half Year Report**