

Hi Walt,

There has been a great study about what makes MPAs truly protected. We're interested if you can prove that your reserves will have at least 4 of the characteristics:

Hi (name withheld),

Thank you for the last email and link to the paper you suggested I read.

I have purchased that paper outlining the 5 key elements to a successful MPA and read through it thoroughly with the hope of discovering some enlightening facts or methods that could be useful in my planned environmentally beneficial project.

Unfortunately, the paper only dealt with the establishment of MPA development that had to do with large pelagic (open water) fish populations and had little to do with the refurbishment of coral reefs themselves as we outline in our program.

Although it was well written the parameters that they suggest to achieve a successful MPA are entirely impractical when dealing with the coral reef and its overall diversity in an **archipelago such as Fiji or any other major island group surrounded by closely related and integral coral reef systems that are certainly not isolated.**

**Some of the NEOLI requirements** (no take, well enforced, old (>10 years), large (>100km<sup>2</sup>), and isolated by deep water or sand.) are nearly impossible to establish while others are already in place. The no take policy is possible but it conflicts with old (>10 years) requirement since it is likely that the MPA will rotate within the Qoliqoli to maximize sustainability issues. The well enforced aspect is very easy to achieve through the traditional methods I will explain in better detail later. However, the "large" requirement is totally possible but it would conflict with the "isolated" feature since most of the MPA's we would be dealing with are close to shore and managed by the local wardens. I would also like to make note that the size suggested is more of an open water specification as this paper clearly stated and even under

those requirements they stated that “Of the 87 MPAs investigated, only four possessed all five NEOLI features, whereas five MPAs possessed four features”. This means that 78 out of 89 MPA’s actually fail to meet the standards you require for involvement and this is in open water dealing with large fish populations. It does not address the coral reef degradation facing us today where most life in the sea begins. These pelagic fish do not spawn on the reef they spawn in the open sea and that is why tracing their migratory patterns and populations over a large region is so crucial in this study. However, as important as this information is to understanding those patterns it has little to do with the fundamental goals of our program, reef restoration. In fact, the words “coral reef” did not appear in the entire report even once. At this stage it is important to understand the difference in goals and application of the process. True, an MPA is there to protect the well-being of the organisms that live within it, and a no take policy is an important element in their protection. It is also important to understand that we are not proposing to take anything but actually add to that area an amazing amount of biomass on the monthly bases.

Perhaps I can explain like this; if you look at a forestry model and consider a no take zone in the rainforest. This “no take zone” will be flourishing with new growth and an abundance of life forms. However, just adjacent to that zone is an area that has been recently harvested and lay barren of almost all life. In which of these two areas would you suggest need recovery assistance? Take that idea one step further and consider the fact that what you are about to plant has no commercial or human consumption value but greatly contributes to the benefit of the environment on its own unique merit. Would you not conclude that what you are about to plant would be safe from predator and depletion caused by humans yet still be of great value to the surrounding environment? This is how a coral re-propagation program will work.

Today's reefs are facing an onslaught of stresses unlike any they have previously encountered, and hence we might consider that ALL traditional reef management systems need to be recalibrated.

Speaking directly about how the Fijian indigenous people can become directly involved in protecting the future of their coral reef habitats I would like to share a better understanding of the people and their connection to their own environment from a report I recently read put out by the IUCN.

“In many coral reef systems, humans have been a part of that natural landscape for thousands of years. Indeed they have shaped, maintained and altered the 'natural' landscape since long before we established what a 'pristine' baseline might have been.

These indigenous people were also stewards of marine systems, for their livelihoods and cultural integrity depend directly on the ocean. As we erode the cultural landscape through globalization and other forces, I would suggest we are also contributing to the erosion of the ecological landscape as the knowledge for how to manage it is lost.

This is not to say I am advocating for keeping modernization away from indigenous Pacific islanders, for that's not a reasonable approach. But I am suggesting they can be our best partners, and in fact leaders, in studying and conserving these coral reef systems.

I suggest that 'protecting' these reefs with western management plans such as financially negotiated MPA's may in fact speed up their decline. We have in front of us the best conservationists with well tested management plans living right there, full time.

Imparting our idea of good management without consulting with them is naive at best and ineffective at worst.

Sometimes the answer to protection lies in the very people we think we need to manage. Maybe we need to try harder to listen and learn first rather than dictate the answer.”

The wide reaching and enormity of this ambitious project is possible today. We have an opportunity to impact a difference to the future of our understanding of many aspects of coral reef development today.

In my view we need to create a sense of urgency with the ideals of this project. There will come a time when we realize the usefulness and benefits this program creates and we will have to ask our self why hasn't this been done on a larger scale or, better put, why only one project or even twenty, why didn't we do more? We do not need to push this to the point of absolute desperation before we are forced to act. The question will be, did we wake up soon enough and in time or did we all just wake up together too late?

We have already learned a lot with our program but we can always go one step further. This proposal is about taking that next step. I am sorry to give you such a long detailed response to a simple question but I do not regret it. After meeting you both I know that you are concerned as I am about the future of this planet and feel it is my responsibility to clearly lay out the difference in approach in order to embark on a fruitful and meaningful relationship.

I will look forward to your always thoughtful reply.

Sincerely,

Walt Smith

Walt,

Thanks for your thoughtful and honest answer. While I am willing to bend on some of the NEOLI requirements, I thought their 'outcomes' measures of fish and shark biomass were interesting, and am unwilling to bend on those.

In terms of investing in coral reefs, We prefer to invest in areas with NEOLI and outcomes are both indicating that the area is protected, and that protection is effective.

I appreciate that you are up front about 'rotating MPAs' situation in Fiji. While others might be OK with that, I am not. I'd rather find areas that have fixed protections, large biomass, and invest further in those.

Your work with coral reefs is impressive - am sure you will find others who will support your work.

Thanks and Regards,

My response ....

