**Comments During the Presentation:**

Jorge: the framework needs to be able to be applied to indirect no-take zones, like security zones for oil and electric plants. All no-take zones. Not just refugio pesqueros

Fio: The scorecard is not clear how positive and negative is not significant and different from zero. Suggests light green with a significance of <0.1. Sample size not large. Therefore, there might be a trend but at a less conservative significance level than 0.05.

Costello: We should use 0.05 and 0.01 for different colors

-Gov: should be same color scheme but different interpretation. Hard data and survey data require different analysis

-Guidebook: interpretation of results, how organize data and upload it, and how to walk the user through analysis using examples

**Comments After the Presentation:**

Fio: how use app? Can upload data from the app

Jorge: COBI tried and failed to make an app. How to update/replicate/future of app, only use for just COBI or for other organizations as well?

Us: appendix with what equations are and analyses are in guidebook. We will have our entire thought process in the guidebook, so we can replicate the process even if the technology is not there/is different. **We will archive the whole process so can be replicated in the future**

Fio: what indicators tell us about current state of reserves? She wants insight into performance of reserves (Jael infographic)

Costello: Our project is not to provide an analysis of all reserves. We will do analysis to illustrate how to use the framework (example analyses). Our aim is not doing an entire analysis, which would be outside the scope of our project. **However, maybe after our defense in March we will do it.**

Mar: **Schedule another call with Mar to go over governance indicators**. It will require a different analysis than biophysical indicators.

Costello: We are interested in questions like “In communities where people do not think there is illegal fishing, is that where there is an increase in biomass?” There is also the issue with governance indicators that these indicators were chosen, not randomly assigned. This makes it difficult to say that the governance indicator causes biological abundance, for example.

Overall, Fio and Jorge like and are happy with our project.

Costello: Remind people what is happening, overall objective, major steps in analysis (do not be in the weeds). **We want feedback on our selection of indicators and data analysis at the defense, so avoid focusing on the Shiny app.**

**After meeting/Data Analysis:**

Costello: with 12-24 transects, we can do year dummies (df=23).

Us: See if beta is significantly different from one another

Sean: **let Sean know when are meeting with analysis**

Costello: has an issue with averaging. **Do not average the data, because will lose data points**. If have 24, data points, will have a smaller SE. Plantiga is worried that may have a steep slope and then a flat slope. Keep 24 data points as individual rows. Maybe do a squared term in case it is not linear.

-See picture below for proposed equation. I=indicator. T=treatment. Yt is continuous. Beta3 is the DID estimate. If treated= 0, Beta1; When T=1, Beta1+Beta3 If square, have Beta5\*Yt^5 and/pr the interaction term. I

-Run same model but do not do averaging first. Even if add Beta4 for temperature, will still have Beta3 as estimate.

-**Year is continuous, not a dummy**. Do not do year squared at first.

Note: The equation written in black in the box is the correct equation.

