**Important information:**

-Costello’s Github account name: christophercostello

-JC has added him to our Github

-Costello will be gone Monday and Tuesday of next week (May 2nd and 3rd).

**Agenda:**

-Set up meetings

-Discuss status of external advisors

-Discuss trip to El Rosario

-Outline tool design

-Data concerns

-Future concerns

-End of the quarter deliverables for advisor

-Permanent assignment of tasks for GP

-Task assignment for things due in the next week

**Meetings:**

-Ask Costello for a date he is available for the Spring Review Meeting

-16th at 12:30pm = Monday. Check with Gavin and Mar and COBI

-At meeting, Costello wants us to spell out logic of whole project: these are the questions COBI wants to answer, these are the data that they are current collecting; this is data they should be collecting; produce a tool that does real-time analysis (used in fishermen presentations, have graphs)

-Agreed to have a meeting with Gavin on 16th with Costello; want spring review meeting to be a diff date, maybe Monday May 30th same time -> \*Jael will clarify this misunderstanding with Costello

-Reserve room for both meetings. \*Who books room?

**External Advisors:**

-Mar has accepted invitation to external advisor. Gavin is willing. Waiting on Jono.

**Trip to El Rosario:**

-Trip to Mexico: will go during lobster season. Talk to fishermen and then go out fishing for lobster the next day. Interest in going to El Rosario. November/October. Costello kind of wants to Cancun. Two full days there. Drive up on one day, have two full days there and drive back late the next day.

**Tool Design:**

-Import different .csv files: one for biophysical, governance, socioeconomic; build these database in the background. Program will rename column headings in the background. Have a joint in the background that connects the three .csv files together into a huge database and run analyses.

-Make a .csv standard; program will check if it is in the standard format and if not, rejects it.

-Different possible formats of the data: when upload the .csv, they will have to specify the format of the data (monthly data vs. annual, has control sites or not).

-Since inputs are standardized, analyses can be standardized.

-Have control variables in our analyses. User can check box what controls what to use. Select when the reserve when it place.

-Run whole time series. Compare before and after implementation of reserves or compare between control and reserve data. Difference and difference analysis is how would do this.

-Difference and difference analysis: \*Costello will ask professor here to send over notes to us.

-Have plots as outputs.

-Shiny: plot their data for them. Conducts the analysis and project forward so see what it will look like if trends will continue.

-COBI had tried to hire someone to do something like that, but it was too diff to use. Now only use Excel and is hard to generate the graphs each years.

-\*Costello wants these presentations. JC has one example now that showed to Costello.

-\*Don’t focus on Shiny app for now, focus on what analyses we will do and what graphs would look like.

**Data:**

-Data: Costello wants it. Everything has to be exactly right to determine what variables to include so need the data.

-JC: Meeting in Mexico City will get data, have metadata, work on JC’s data for now.

-Use Natividad data for now because no gaps in data, long data set

-\*Non disclosure agreement: Should not sign any agreement for COBI for data in guidelines. Be careful what we say, can’t have control over our thesis, write up a draft and send it to Costello before sign it.

-COBI’s focus: equal weight in interest amongst data types but do not have socioeconomic and governance data, have only biophysical data.

**Future concerns:**

-Costello concern: ex. what if have been collecting fish counts with no control sites, can do before and after and not; type of data will come in will be different in future than now because we will be informing what data to collect/indicators to focus on -> thus, our analyses in the Shiny app may not be applicable.

-Would not have known there was a hypoxia event, but won’t know to include in analysis. Uncertainty. Things that won’t know ahead of time.

-Control sites in TURF, fishermen can only fish within reserve; can’t fish outside of reserves; reserve within TURF; may not be a big diff between reserve and TURF but a huge diff between TURF and outside.

**By end of quarter:**

-Costello wants list of analyses and analyses run on example data before end of quarter.

-Costello: wants an example data set (maybe JC’s Natividad Island data?), do a preliminary analysis of this data set (difference and difference analysis and see what results are/if it works), and over the summer get more data and fix up the analysis.

-Here is result will look like if COBI is more interested in doing the evaluation themselves: 1) Here is a tool. If you upload the right data and do the analyses, you will know how the reserve is doing. 2) Tell them what indicators they should be measuring (control sites, variables, how often).

-Have a sub team on what to measure and one team on how to do the analyses: done

**Permanent Task Assignments:**

-Who will be writing the R code?: JC

-What have been measured/what should measure: indicators – Jael, Caio

-What to do with those indicators: analyses –JC, Melaina

**For this Friday, April 29th:**

**-**Finalize list of indicators for COBI. Everyone does this.

-JC: email list of indicators to COBI.

-\*Someone remind Costello to email Bren professor to give us information about difference and difference analysis.

**For next Wednesday, May 4th:**

-Calendar: JC create calendar with due dates on it -> Jael manage the calendar after initial set up.

-Website: Short descriptions on home page. Will be done on Thursday, April 28th by Jael and JC. Melaina will review website to make sure no mistakes.

-Data Presentation: For Costello by next Wednesday. \*Who will present this? Who will help work on it?

-Goal: Give a sense of what COBI is trying to learn/things COBI wants to know about the reserves. Give a better sense of what information/data COBI is gathering now to answer those questions.

-Ex. monitoring for abundance and all they are doing to measure that

-Frequency of monitoring, what they monitor, where they monitor.

-Paper by COBI posted on our Dropbox by JC has some information on COBI’s monitoring data.

-Ask COBI if they have catch data. \*Who will ask COBI this?

-Ask COBI for presentations they have made to fishermen (like the one JC has). \*Who will ask COBI for them?

-Emails:

-Caio: email Mar, invite her to Spring Review Meeting tentatively on May 30th

-Jael: email Gavin about meeting with him and Costello; email Costello about misunderstanding (the meeting on May 16th at 12:30pm is not the Spring Review meeting; it is just a meeting with Gavin. Ask Costello if it is okay to schedule the Spring Review meeting tentatively on May 30th).

-\*Whoever is going to email COBI about giving us their past presentation slides, if they have catch data, what questions they want to ask/things they want to learn, what they measure to learn the answer to those questions.

-JC: invite client to Spring Review Meeting/ask if COBI is tentatively available on May 30th

-Room reservations for meetings: \*Who will do this?

-Nondisclosure agreement:

-Caio: report to us what Casey says; send us a link with former GP non-disclosure agreements

-Melaina write up the non-disclosure agreement. Other members check to see if it is okay.

-\*Someone send nondisclosure agreement to Costello for final approval.

**For next Friday, May 6th:**

-Work plan: Next portion of work plan due next week due next Friday.

-Background: Expand upon what was written in the proposal to include no-take reserves, focus on no-take reserves (protect environment and enhance benefits to fishermen)

- Technical approach: difference and difference analysis (look up papers that have used that analysis, use information from Bren professor provided to us by Costello).

-Revise list of indicators: after hear back from COBI

-Caio and Jael: revise list

**Running list of things to do:**

-Blog: First blog post: Jael write who we are, what we are going to do, write a short blog post, one paragraph. Second post: what sites will be working on (interactive map of location of sites), number of reserves, how big they are, about where they are, area protected, what fishers fishing; blog post every two weeks.

-Logo: Caio asked a friend, Melaina should ask a friend, Jael will come up with a design too.

-Find examples of guidebooks (doesn’t matter if it is for a different field).

-Jael and Caio: make list of deficiencies in the data COBI collects. Write a suggestion for what COBI what they should do this to improve data collection.

-Melaina and JC: create list of analyses.

-Melaina and JC: Start working on running analyses on Natividad Island data.

**Running Questions:**

-What is difference-difference analysis?

-Double check with Jael that we will be able to keep website we created instead of having to use a different platform

-When will get data from COBI? Get raw data/metadata from COBI for each reserve and control site, catch data, before and after socioeconomic data, how frequently sites and control sites are monitored

-How does COBI chose communities?

-Is COBI’s goal to use the guidebook/tool to inform changes in management or to say yes/no this reserve is successful? Is this tool to help COBI or the fishermen?