## ASsquare_logo.tif Coastal Fund Agenda

## Associated Students

Tuesday, October 23, 2018, Nati Conference Room

**CALL TO ORDER** 6:02 by Jordan Gallagher, minutes recorded by Rebecca and Emily

1. **ATTENDANCE**

|  |  |  |  |
| --- | --- | --- | --- |
| **aName** | **Note:**  absent (excused/not excused)  arrived late (time)  departed early (time) | **Name** | **Note:**  absent (excused/not excused)  arrived late (time)  departed early (time) |
| **Jordan Gallagher**  **Chair** | **Present** | **Jem Unger Hicks**  **Outreach Coordinator** | **Present** |
| **Maria McCausland**  **Co-Chair** | **Present** | **An Nguyen**  **Outreach Coordinator** | **Present** |
| **Lauren Enright**  **Undergraduate Rep** | **Present** | **Sarah Siedschlag**  **Advisor** | **Present** |
| **Angela Chu**  **Undergraduate Rep** | **Present** | **Rebecca Nishide**  **Administrative Assist** | **Present** |
| **Kate Mcleod**  **Undergraduate Rep** | **Present** | **Emily Orr**  **Administrative Assist** | **Present** |
| **Alana Ayasse**  **Graduate Student Rep** | **Present** | **Alex Funk**  **Senate Liaison** | **Present** |
| **Juliette Verstaen**  **Graduate Student Rep** | **Present** | **Alli Adam**  **Senate Liaison** |  |

1. **COMMITTEE BUSINESS**
2. **Approval of Attendance and Proxies**

*MOTION/SECOND: Jordan/Alana*

*Motion language: Motion to approve attendance and proxies*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **Approval of Minutes**

*MOTION/SECOND: Jordan/Juliette*

*Motion language: Motion to approve Minutes*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **PUBLIC FORUM**

Site Visits - Alana

* made a spreadsheet in current business
  + look through and pick visits at will
* Greg really wants us to go to the museum
* Jordan will go with Benny
* Sign up by next week if you want to do a site visit

Can organize group trip to nature center

* Lauren will organize

1. **REPORTS**
   1. **Advisor Report: Siedschlag**

* Gaviota coast got approved
  1. **Chair Report: Gallagher**
* nothing to report
  1. **Senate Report: Funk & Adam**
* Passed resolutions supporting worker strike
  1. **Administrative Report: Nishide**
* nothing
  1. **Coastal Service Program Report: Orr**
* Normal week
  1. **Outreach and Education Report: Unger Hicks & Nguyen**
* Working on brochure
* need some diving pictures - maria and jordan have
  1. **Sub-Committee Reports**

1. **AGENDA**
2. **Approval of Agenda/Additions to Agenda**

*MOTION/SECOND: Jordan/Juliette*

*Motion language:Motion to approve Agenda and additions to agenda*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **OLD BUSINESS**
2. **(item)**

*MOTION/SECOND: (name)/(name)*

*Motion language:*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **NEW BUSINESS**
2. **Winter 18-21 Extension Request**

*MOTION/SECOND: Jordan/Maria*

*Motion language: Motion to approve Winter 18-21 Extension Request*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **Dive Fee Support Spring**

*MOTION/SECOND: Jordan/Lauren*

*Motion language: Motion to fund the Dive Fee Support Program to the amount of $3000*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **DISCUSSION**
   1. Subcommittee on co-sponsorship?
   2. Jordan - We have tons of rollover, let’s talk about **slightly** increasing advertising, expanding existing programs(CSP, sci dive class) , creating new programs (CF summer scholar, special projects, quarterly banquet, other skill programs like dive safety class?)

* student scholar: model after REU for any project that fits mission statement
  + going to figure out who will be in subcommittee next week
* three year renewable for grant applications that apply regularly
  + need to figure out logistics
  + make a subcommittee
    - lauren, jordan, alex, juliette are interested
* pay students more
* Alana: likes things that money goes back to students
* conference fees, wilderness class fees, classes with field trips
* expanding CSP
  + res halls? to help RA’s put on events
  + have events for individuals to give volunteer hours
  + something in addition to beach clean ups and restoration
  + Coastal Service Beach Clean Up Guides
  + Maybe doing monthly
  + maybe pay more for CSP beach cleanups
  + adopt a block partnering? Or fund them more?
  + sponsor outreach posts on facebook to boost
* special projects
  + recycling bins along sabado and DP - installation and collection - Alex
  + the board can take on projects for community benefit
* Dive class
  + expand it to a maximum of three and open it to grad students?
  + better outreach to encourage those who are not interested because of cost to apply
* subcommittee for CF Scholar?
  1. Time to recruit new board members
     1. maria would like to be one of hiring subcommittee members

1. **PROJECT REVIEW**

Project Title: **Fall 18-02**

Sponsoring Organization: MSI

Presenter Name:Nick Nidzeikoa

Summary:

Presentation Notes:

* Brought a poster board and props
  + Brought in wave buoy
* Wave made rough sea state, brings in swell
* Waves: cause erosion, are fun, move beach around, material in kelp forrest
  + Stokes drift: friction in wave orbitals
* We want to know waves are going, breaking ect,
* Proposing to deploy a wave buoy offshore off campus point
  + Wave buoy sends data to satellite to see real time wave data
* Brought a buoy from NSF that he uses for research
* Proposal is to buy/anchor wane buoy to anchor off shore campus point to give wave conditions
* UCSB Ocean Portal
  + Mobile friendly website, would combine data with wind off Ellison hall
* Simple user-face to give conditions for recreational activity
* Grow into forecasts, pictures to rate for over time evolution
* Initiate a high resolution wave model, cameras
* “Gaucho wave buoy”
* Asking for money to buy buoy, put in water, two interns
  + Social media
  + Buoy stuff

Board Questions:

* How much maintenance and what are the lifespans?
  + Over a year it is maintenance free
  + Paint with bottom point
  + Check on every 3-6 months
  + Mooring hardware: reasonable to expect new every year
  + Like would be maybe $200
  + Long term survivability is unsure
  + Company is new, not sure how long they will actually last
  + Been at mavs for a year
  + GPS capability means if it goes adrift, we know where it is as long as it is floating
  + Self contained as far as power goes → has enough solar panels for fog condition
  + Data plan is $150 a year
  + Hopes to build community where donations/merch could support buoy and projects/growth
  + Wants to sell “shwag” to cut costs
* Do you have plans to use data for research
  + Wave exercise in coastal pollution
  + Could integrate into campus curriculum
  + Valuable for LTER from research standpoint, especially with wind waves
  + This one could lead to other funding
* How good do you think the data is?
  + Plots are outstanding
  + Spot on
* Could you talk about collaboration?
  + No reason why we could not increase mooring to put instruments on
  + In middle of MPA
* Are there any legal things about putting out a buoy?
  + Definitely going to be a permitting process since it is an MPA
  + Usually easy to aquire
* Is the student setting up the website going to be updating it?
  + Behind the scenes component- gathering all the data from the buoy and ellison hall
  + Script that is always running
  + Only front end work is accessing text file, one student task to write automated part and then be able to back off and let it run
  + One student is going to do do social media
* Who will the students be?
  + Want a nerdy person doing programming and artsy person doing social media
  + Open minded
  + Trying to keep initial scope modest
* How easy is it to share data from this?
  + Spoondrift has a website
  + All the data goes to spoondrift server, different websites can be given API scripts to grab scripts
  + Wouldn’t have to just be for them, could be on geography page
* Could any random person grab the data?
  + Yeah
  + Eventually it could be rolled into LTER and served with other fitting data
  + Free for anyone to download online
* Stearns wharf has different water?
  + This does not have space for peripherals
  + Goleta pier would be better but is less modest start
* Could you potentially see this being so long term that it can connect with other UC/College campus, or would it be through science communities?
  + Main goal is to promote UCSB, make it unique to gauchos
  + Does not have region wide ambitions
  + Southern California Coastal Ocean Observing Program has automated shore stations
    - Could see them serving parallels to automated shore stations

Board Discussion: Board goes into Closed Discussion

*MOTION/SECOND: Jordan/Maria*

*Motion language:Motion to table discussion for FALL 18-02*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

Project Title: **Fall 18-16**

Sponsoring Organization: BREN

Presenter Name: Erin Winslow

Summary:

Presentation Notes:

* Juliette and Jordan are recusing themselves
* Wants her career in management or research for restoration
* Brought her undergrad- this experience is critical to his future
* Large populations stress out ecosystems
* Coastal development really prominent in southern california
* Olympia oyster is the only one native to CA coastline
  + Populations exist along coastline but are getting sparser
  + Ever since gold rush
  + Over-harsted
  + They aren’t farmed or sold anywhere in California
* Oysters extremely important to ecosystems
  + Erosion control, water quality, food/habitat are big 3
* Carpinteria Salt Marsh - UC natural reserve
  + Site of her masters, has large population of oysters
* Due to Thomas Fires and Montecito Mudslides, all oysters dead
* Trying to look at recovery of oyster and salt marsh as a whole
  + Relevant because we are expected to have higher frequency of natural disasters
* Have the oysters recovered one year post disturbance?
  + Is surrounding broodstock enough to repopulate salt marsh
  + Going to do surveys a year after, a year and 6 months after, 2 years after
* What are peak months of oyster recruitment
  + No studies in this region/most strategic time to put out substrate for restoration
  + Have a paper to follow from newport
  + More collaborative effort, want to restore them along coast
* Could salt marsh be feasible location for oyster restoration
  + Understanding ecosystem response to disturbance fosters successful restoration and management
* Personally invited to international fish conference!
  + Brandon will be doing a poster
  + Cool opportunity to discuss
  + Will be interesting because of restoration in Chesapeake bay
* AOP Oyster Restoration Forum was where they all got together and decided that we needed to save the oysters
* Trying to connect with other researchers

Board Questions:

* What would volunteers do?
  + No idea what recruitment is gonna be or how long putting tiles will take
  + Want volunteers to physically go with her to put tiles out and figure out where to put them and score tiles (looking for recruits)
  + Would take volunteers with lab experience to train new people or have Brian train them
  + Carp is not that far from campus
  + Could be used in labs or in fields
* Is there any reason you would prefer volunteers to a paid intern?
  + Didn’t want to ask for too much money and get turned down
  + If she was to do a followup to this it would be a good time to ask for iterns
  + Can give more people experience without paying them
* In terms of the restoration, how big is the conference for you?
  + Science and conference are equal
  + Noticed in ecological career that science is not collaborative sometimes especially with restoration
  + Research should be shared and she could use feedback because she’s a new scientist
* Do you guys see yourself continuing after the listed objectives?
  + She has already spent two years, would love to see more come out of this
  + This is a side project from her dissertation
  + Would be cool to pass project off
* What do you hypothesize the recovery will be like?
  + Does not have a hypothesis because Olympia Oyster populations are so sparse
  + She thinks we will find them
  + Probably wont see recruitment spike in one year, but believes there will be some
* Both of you want to go to conference?
  + McNair will give Brandon money to travel, and he already got accepted to do a poster so McNair will fund him completely

Board Discussion: Board goes into closed discussion

*MOTION/SECOND: Alana/Lauren*

*Motion language: Motion to table discussion for FALL 18-16*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

Project Title: **Fall 18-10**

Sponsoring Organization: MSI

Presenter Name: Tanika Ladd

Summary:

Presentation Notes:

* Advisor is on a coastal fund grant
* Brought satellite pictures of smoke
* ACIDD cruise went out in december led by 2 people in same program as her, happened to occur during fire
* Didn’t get any samples before the fire
* She is using controls to look at unaffected community and add ash to it at different times in year
* Not really anything done on fires impact on coastal environments
  + Is literature on freshwater systems
  + Sources on volcanic ash - more heavy metals
* California fire frequency and intensity increasing
* Hoping to inspire other work to be done
* Phytoplankton proxy
* Will have undergrads whether or not they get paid
* Previous undergrads have gotten a lot of good research experience because they have few grad students
* One of their undergrads just finished a Coastal Fund Project, got a paper out of it
  + Beneficial for undergrads, wants to give more experience
* Brought in some ash

Board Questions:

* Can you give us a rundown of what you will be measuring?
  + We don’t really know what adding ash to the seawater does to it
  + Just looking at dissolved portion of it
  + Turns the water yellow after its all filtered out
  + Is it helping or harming the environment?
  + Want community composition and growth
  + Doing quantitative analysis (micrsoscopy)
  + Measuring nitrates/nitrites- limiting
  + Ammonium, phosphate, silica, organic nutrients (dissolved carbon and nitrogen, phosphorus)
  + DNA sequencing to measure DNA
  + Particulate sources/chlorophyll for organic/biomass, carbon fixation, nitrogen fixation
  + Bacteria → see if bacteria are utilizing dissolved ash components, do bacteria compete with phytoplankton?
* Are all these be things that you can compare?
  + Hard to compare because we do not have pre-catastrophe data, there are many other uncontrollable conditions
  + Saw large amount of bioluminescence on cruise where there is normally not a lot
  + Maybe that type of phytoplanktn benefits from this ash, a way to tie in situ to field
* How do you know how much you should dilute the ash?
  + Really hard to figure out how much, especially in seawater when some floats and some sinks
  + Based it on previous experiments that look at volcanic ash
  + Reasonable value within range of what was probably experienced
* Do Plumes and Blooms have any data you can use?
  + Their lab goes on Plumes and Blooms, boat was supposed to go out in December 5 days before ACIDD cruise but boat got cancelled
  + Have data from a couple months earlier but not right before
  + No microscopy counts
  + Data to compare but no exact comparisons
* Where will you be getting water samples from?
  + Techs go out on boat every wednesday to sample different kelp forests, maintenance
  + Focusing on offshore communities
  + Near station 3 on SB side of chanell but far offshore
* Is the undergrad student picked out?
  + Have a couple in lab, have not picked anyone specific but have talked to them
  + Will depend on availability: water collection is on wednesday
  + Undergrads are training, one will take lead but all undergrads can be involved if they wish
  + Hoping that the same person will continue through both quarters, all second years so hopefully they can continue with project
* Have you done mass spec composition on ash
  + Yes, Dave Valentine’s lab and maybe some stuff in Bren, but not sure of results/ if the results are back yes
* How much training will interns get?
  + Take pieces of experiment after major sampling
    - Some right after sampling
    - Some later
  + Split up work once initial sampling is all done together
  + Will try and see if interns can do what they’re more interested in
  + Last undergrad focused on bacteria counts, oil fluorescence, microscopy
  + Interns know general lab cleaning/maintenance, sampling method
* How much of this is part of your dissertation?
  + Full chapter of dissertation, about one third
  + This project stemmed from ACIDD, became major part of thesis
  + This is her separate project from ACIDD for her thesis

Board Discussion: Board goes into Closed Discussion

*MOTION/SECOND: Jordan/Kate*

*Motion language: Motion to table the discussion of FALL 18-10*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

**ADJOURNMENT AT 8:36PM**

*MOTION/SECOND: Jordan/Kate*

*Motion language: Motion to adjourn meeting at 8:36*

*ACTION: Consent*

*Additional approval required: NO*