## ASsquare_logo.tif Coastal Fund Minutes

## Associated Students

Tuesday, 02/15/22, Zoom: <https://ucsb.zoom.us/j/89636182726?pwd=VU14ei8rQnVOV0xmR0xYeHh5MmhPUT09>

**CALL TO ORDER: 6:03 PM**  recorded by Carissa

1. **ATTENDANCE**

| **Name** | **Note:**  absent (excused/not excused)  arrived late (time)  departed early (time) | **Name** | **Note:**  absent (excused/not excused)  arrived late (time)  departed early (time) |
| --- | --- | --- | --- |
| **Ethan Estrada**  **Chair** | **present** | **Joelle CantoAdams**  **Outreach Coordinator** | **present** |
| **Mykala Listorti**  **Co-Chair** | **present** | **Visala Tallavarjula**  **Outreach Coordinator** | **present** |
| **Emma Swanson**  **Undergraduate Rep** | **present** | **Sarah Siedschlag**  **Advisor** | **departed early (7:00)** |
| **Erika Chan**  **Undergraduate Rep** | **present** | **Carissa Stewart**  **Administrative Assist** | **present** |
| **Anannya Deshmukh**  **Undergraduate Rep** | **present** | **Ethan Engler**  **Senate Liaison** | **absent (excused)** |
| **Austen Apigo**  **Graduate Student Rep** | **present** | **N/A**  **Senate Liaison Proxy** | **N/A** |
| **Michaela Sten**  **Graduate Student Rep** | **present** |  |  |

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

*MOTION/SECOND: Ethan/Austen*

*Motion language: Motion to approve attendance and proxies.*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. Approval of Minutes

*MOTION/SECOND: Ethan/austen*

*Motion language: Motion to approve minutes*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **PUBLIC FORUM** (Announcements, appreciations, concerns, requests to have items added to agenda)
2. Ice Breaker: Is shaved ice a worthy snack?

1. **REPORTS**
2. Advisor Report: Siedschlag
   1. haven’t heard much about fee
   2. Cindy is not coming tonight to talk about rollover
   3. leaving around 7 PM tonight- doing maintenance near her apartment
      1. johanna seen before
      2. have funded different phases of this project
      3. michael love we have funded
      4. liv we have not funded before
3. Chair Report: Estrada
   1. Budget confirmation last week
      1. got the budget confirmed and talked to finance and business committee
   2. Honoraria?
4. Vice Chair Report: Listorti
   1. sent out a new when to meet
5. Senate Report: Engler
   1. no report
6. Administrative Report: Stewart
   1. hired someone new
   2. emily zinn replied to your questions
7. Coastal Service Program Report: Stewart
   1. one unreserved restoration project
8. Outreach and Education Report: CantoAdams and Tallavarjula
   1. working on newsletter
9. Sub-Committee Reports
   1. Lock-in Fee
      1. No updates from AS
   2. External Communications
      1. looking at strategic plan from 2012 and using it to write a letter to the future board that justified the mission statement
      2. middle of writing letter to future board members
      3. on application might want to consider the question “How and where will students be recruited and are any special skills or qualifications needed or desired
   3. Equitable Compensation
      1. $5,000 increase for fall quarter if we pay $15/hour for students
      2. ccber are the ones who do stipends the most
      3. had some suggestions/questions for external communication and application
10. **AGENDA**
11. Approval of Agenda/Additions to Agenda

*MOTION/SECOND: Ethan/Erika*

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

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **OLD BUSINESS**
2. Scientific Dive Fee Support Approval

*MOTION/SECOND: Ethan/Mykala*

*Motion language: motion to approve up to $1,000 each for applicants 1, 2, and 3 for a total of $3,000 to cover fees related to the scientific dive training course*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **NEW BUSINESS**
2. Annual Canva Subscription

*MOTION/SECOND: Ethan/Mykala*

*Motion language: motion to approve $120 for Canva Pro Subscription Renewal*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **DISCUSSION**
2. Overview of tonight’s presenters
3. **PROJECT REVIEW**

**Project Title:** CF-202201-01422 | Assessing success of restored vernal pool ecosystems

**Sponsoring Org:** EEMB

**Project Leader:** Joanna Tang

**Summary:**

With only 5% of California’s endemic vernal pool wetland habitat remaining, restoration will play the primary role in preventing their extinction. Vernal pool restoration efforts began at UCSB in the 1980s, but the long-term success of these ecosystems is not well understood or documented. The majority of vernal pool studies focus on single-species restoration, but assessing success on the community and ecosystem level is important for restoring whole-ecosystem functionality. My research project develops a new methodology for quickly assessing community diversity of restored pools along California’s South Coast. Specifically, my goal is to quantify aquatic invertebrate species richness by using environmental DNA (eDNA) analysis that will allow for more time-efficient sampling and processing. This new methodology will provide a feasible assessment tool to encourage restoration practitioners to quantify ecosystem-scale functionality and measure the success of current restoration methods.

**Presentation Notes:**

* **Austen is recused**
* **started this project and it was spearheaded by an undergraduate named alyssa jain**
* **whole dissertation focus on vernal pools ecosystems**
* **in california floristic province which is a hotspot for biodiversity- also endangered area**
* **wild flowers are endemic to vernal pools**
* **seasonally flooded wetlands and the pools form in winter when we get rain-impermeable soil layer- small depressions in the landscape which allows it to pool**
* **in spring the vernal pools start growing and reproduce quickly before they dry up in summer**
* **have wet phase and dry phase**
* **popcorn flowers and dwarf wooly heads and thistles**
* **concentric rings of species- some adapted to a lot of water and some adjusted to less water**
* **focus a lot with plants and think that if she builds the wildlife with the plants then the wildlife will come**
* **microscopic animals, amphibians etc**
* **only 5% of native vernal pools are still active**
* **work with ccber which is creating and restoring the vernal pools**
* **Is vernal pool restoration successful and how do you determine success?**
* **samples maybe 15 vernal pools- happens really fast as they dry out super fast**
* **some invertebrates start germinate as soon as they feel water but some require a certain amount of water before they hatch**
* **trying to differentiate the dots that they see in the analysis phase**
* **takes in depth training**
* **want to see if there are endemic ostracods in the vernal pools- comparing different pools with different restoration phases**
* **can’t do it with just hand id-ing**
* **trying to think of a new rapid fire way of determining species level**
* **using environmental dna to see what they can find in the water sample**
* **use sequencing techniques to determine what micro invertebrates are in the vernal pools**
* **dna analysis says which species**
* **invertebrates are so under studied the ostracods have not been sequenced**
* **will create a genome library and take dna samples**
* **now have to create this genome library before they sequence the dna**
* **this part is expensive because it takes some money-but it has a lot of return for the money**
* **can use the library in perpetuity and share the data with others**

**Board Questions:**

* **how is your minor grant going and how does that fit into this grant and how does the timeline fit into this grant**
  + **just been getting e-dna samples with minor grant**
  + **need to create a library before sequencing**
  + **the minor grant ends this quarter and have already used up the money**
  + **will probably need more funding for interns and purchasing processing fee for dna analysis**
  + **the minor grant has already finished**
* **wondering about the timeline- do you think with the new data that it will be finished processing by June** 
  + **have all samples sitting in the lab and working through sorting**
  + **need to narrow down invertebrate dna and sending it to a lab**
  + **doing another dna analysis and that will take 2-3 weeks**
  + **sending to a facility takes about 1 week**
  + **definitely feasible to do this project in three months**
* **How did you gain access to twice as many vernal pools**
  + **was just going to do the vernal pools that they samples last time but collaborated with ccber to reach a lot of more pools**
  + **cool to see more data-haven’t finished analysis because the statistical data was not found enough with such a small sample size**
  + **able to make more robust analysis**
* **you plan on having the minor grant finished by this quarter?**
  + **yes**

**Board Discussion:**

* **sounded like she wasn't done with the minor project yet**
* **if we end up funding this project we just wouldn’t allow any extension requests**
* **want both of her minor grants to be done**
* **presentation and application seemed to have a different story**
* **a little worried that she is sending genetic material for sampling because covid has backed up the labs a lot**
* **project itself is good and we have funded projects like it before**
* **this project has merit**
* **bureaucracy is the only problem**
* **original grant was that they were going to analyze sampling after collecting**
* **will have to see what Sarah says**

*MOTION/SECOND: Ethan/Kaley*

*Motion language: motion to table discussion for CF-202201-01422*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

**Project Title:** CF-202201-01395 | Fate, Transport and Ecotoxicity Potential of Pharmaceuticals and Personal Care Products in Wastewater Treatment Plants and the Environment Using Modeling as a Guidance Tool

**Sponsoring Org:** Bren School of Environmental Science and Management

**Project Leader:** Violaine Desgens-Martin

**Summary:**

Pharmaceuticals and Personal Care Products (PPCPs) are anthropogenic pollutants that make their way into the environment via various pathways. Due to their potential environmental toxicity, it is important to include them at the forefront of monitoring and regulatory efforts to prevent further environmental and public health harm. Here, we collected water samples from 16 sites located in Southern California in order to determine sources of PPCPs and Per- and Polyfluoroalkyl substances (PFAS) to local freshwater sources and whether the detected levels are above known ecotoxicity risk concentrations. Additionally, we are implementing the use of models to assess the load to wastewater treatment plants in order to determine factors driving PPCP and PFAS inputs to the environment. This project was designed and put forth in the hopes of contributing to the monitoring and environmental health protection effort currently underway in the management of PPCP and PFAS releases to the environment.

**Presentation Notes:**

* **household trash, wastewater treatment plants etc make their way into the environment**
* **harming aquatic environments near the discharge area**
* **affecting water quality of water and aquatic organisms**
* **impacts local communities**
* **problematic when found in wells especially in drought stricken california**
* **took freshwater samples from 16 sites in socal**
* **looking at 61 PPCPS including 18 PFAS and 8 novel pharmaceutical agents**
* **assess factors driving release of these compounds**
* **use of the ChemFate modeling tool to predict the fate and transport of these compounds in the natural environment**
* **assess whether PPCP and PFAS burden is correlated with other pollutants using the CalEnviroScreen 4.0 tool**
* **the transport will be based on chemical properties and effectiveness of wastewater treatment**
* **planning to collect more data whether the PPCPS and PFAS should be monitored or regulated**
* **contribute data for stakeholders and decision makers**
* **might help accelerate decision making at the level necessary to regulate the PPCS and PFAS**

**Board Questions:**

* **wondering if you could elaborate the intern roles in this project**
  + **in the middle of meeting an undergrad that she connected with a colleague of hers**
  + **will a lot of data analysis and will use the EcoTox tool and will be responsible for tabulating the compounds that seem to be the ones they want to target in either concentration level or recurrence level**
  + **will compare with fresh water sample**
  + **lots of data collection, literature search, and some data analysis**
  + **sampling and analysis has already been done**
* **wondering if there is any compensation for the intern**
  + **have coastal fund funding from the previous cycle and in the plan to use that funding for spring quarter**
* **are you currently still on a coastal fund grant** 
  + **for spring-only asking for fees because already granted stipend and would carry that over and same for the salary and she would ask for a reallocation of funds to be carried over for spring**
* **based on application, is this project wrapping up**
  + **she hopes so**
  + **really hopeful to not have to TA spring and summer in order to finish it**
  + **the PFAS aspect of it is well underway but the PPCS sampling still needs to be done**
  + **having help of undergrad will help**
  + **hoping to graduate by fall**
* **could there be other obstacles**
  + **seriously hope this works out and there are no more setbacks**
  + **have clear goals for what she will do after with this**
* **would there be opportunities for second authorship for the student who is working with you?**
  + **definitely as a contributing person on the project**

**Board Discussion:**

* **funding is for different aspects of the project**
* **need to figure out administrative works for it**
* **the project itself is totally fine**
* **don’t know where the priority is for this project but its a solid project**

*MOTION/SECOND: Ethan/Mykala*

*Motion language: motion to table discussion for CF-202201-01395*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

**Project Title:** CF-202201-01392 | Acorns to Oaks

**Sponsoring Org:** Environmental Studies Program

**Project Leader:** Liv Macior

**Summary:**

Through UCSB's Environmental Leadership Incubator I have developed Acorns to Oaks, a program focused on the lack of outdoor access available to children in poor urban communities. Nature is essential for its great personal benefits and its ability to foster future environmental stewards. However, students in urban communities often lack access to the outdoors. Therefore, Acorns to Oaks will provide a fully subsidized after-school nature immersion program to disenfranchised students. I will focus on Harding Elementary, a local elementary school with a largely low-income student body. Once a month, volunteers will transport students to a natural open space, whether it be Devereux Beach or Ellwood Mesa, and facilitate an exploitative experience. Acorns to Oaks will provide disenfranchised Santa Barbara Students the opportunity to experience the physical and emotional benefits the outdoors has to offer, while also encouraging environmental protection from a young age.

**Presentation Notes:**

* **working with environmental leadership incubator**
* **program to focus integrate kids to nature in lower income communities**
* **facilitate after school programs for 1st and 2nd graders at one elementary school**
* **have nature deprivation tied into environmental injustice and systematic racism**
* **70% of low income and 76% non white low income people have nature deprivation**
* **for young children this is important**
* **in 2005, raised science test scores by 27% when given outdoor science programs**
* **beyond personal and developmental reasons this can impact science of the future**
* **partnering with ucsb adventure programs and hardy elementary school**
* **hope to use ucsb adventure program staff to facilitate**
* **have to undergo six months training program in order to become ucsb adventure program staff**
* **parents will be more comfortable with leaving children in the hands of qualified outdoor guides**
* **hoping to lead a program once a month**
* **large portion of grant is the vehicles to get to the open space**
* **hoping to model style of school with the wilderness youth project**
* **wilderness youth project works only with fourth graders**
* **want to bring fully subsidized program to younger students**
* **former wilderness youth project coordinator will lead a staff training for the volunteers participating in her program**
* **focusing in harding elementary school because they have a large low income student body**
* **has a large bipoc population**
* **UCSB has relationship with the elementary school already through girvetz school**

**Board Questions:**

* **can you elaborate on your experience with environmental education speciically and the individuals working with you**
  + **will be doing a staff training**
  + **all of volunteers and staff will have some experience working with environmental education**
  + **have been a camp counselor for 7 years**
  + **will be incorporating coyotes guide to experiencing nature into curriculum**
* **can you describe a day into the curriculum**
  + **hoping to use a non didactic approach**
  + **sensory games like modeling different animals**
  + **mirroring animals and natural species**
  + **wilderness youth project will make fake dams or finding huts or flowers like a scavenger hunt**
  + **open and close with a time of reflection and gratitude**
  + **will be based off of what the kids want to do**
* **wondering if you could expand on the relationship with this elementary school**
  + **working with a mentor through the environmental leadership incubator-works with Girvetz Elementary School**
  + **in communication with the principal**
  + **after school programming removes a lot of the red tape**
  + **in communication with principal hoping to advertise to student body**
  + **hoping to make pamphlets to advertise**
  + **the principal has been receptive to other ucsb programming the past**
  + **optimistic that she would promote programming**
* **described outdoor sessions would be pretty flexible, wondering if there was any consideration to use the california guidelines**
  + **spoke to advisor about incorporating guidelines into the programing**
  + **however want it to be the antithesis of school and have the decide what they want to learn**
* **could you talk about what type of leadership skills you want to develop and how you use this experience to develop career goals**
  + **want to see this project implemented in different UC schools and would love to see a collaboration with different outdoor clubs and local elementary schools**
  + **developed more interest in environmental policy and has taught her a lot about management, stakeholders, and red tape**
  + **lot of liability concerns and find the proper forms and making sure the safety of students are guaranteed**
  + **all of this will help her in the future**
* **how do you plan on dispersing the adventure program volunteers**
  + **hoping the stipend will help volunteers come help with the project**
  + **the stipend is not beneficial but might be used for an incentive**
  + **based on minimum wage for their time-each staff member will get around $100**

**Board Discussion:**

* **feel like we funded a lot of similar projects that are better and more put together**
* **based on book and provides a lot of different activities that mimic life and nature**
* **activities wise she does not have exact answer-do not think she has fully planned it out**
* **understand that it is not on the same level as the other groups**
* **part of program for undergrads and assume she has a lot of guidance**
* **she will evolve her project over time and understand that when she proposes her grant it needs to be at a certain level already**
* **asking for $1300 which is on the lower end**
* **has some things she needs to figure out**
* **have funded things in the past that hasn’t been very fleshed out**
* **these are 1st and 2nd graders so the model is fine**
* **wilderness youth project is pretty much as detailed**
* **okay with this project**
* **project feasibility it is perfectly fine**
* **the coyote guide is good**
* **kaley doesn’t like it because doesn’t think there is too much of a value for the kids and if we do fund it, it would be for the undergraduate students**
* **such a low ask its fine-don’t think there's a ton of value because there is no longevity**

*MOTION/SECOND: Ethan/Austen*

*Motion language: motion to table discussion for CF-202201-01392*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

**Project Title:** CF-202201-01383 | Return of the Wetland

**Sponsoring Org:** CCBER

**Project Leader:** Michael Love

**Summary:**

This project is a 60 minute film/video which highlights the salient milestones in the unprecedented restoration of the upper arms of Devereux Slough from what was until recently a golf course. Drawing on material filmed from the very early stages of the project in 2012 all the way to the present, prizewinning filmmakers Michael Love and Elliot Lowndes, will assemble a comprehensive portrait of this remarkable undertaking and of the people, faculty, and students who have had a part in creating this miraculous result. Mr. Love and Lowndes' previous short film on the topic "From Golf Course to Wetland" is an award winner. It has also served as a a fundraising tool for CCBER in furthering the NCOS project, educating the public, and attracting volunteers and media attention. "Return of the Wetland" aims to culminate in the grand opening in 2022 and serve to further the goal of continued funding for the project, as well as be an example of a successful restoration on a grand scale.

**Presentation Notes:**

* **culmination of work done with Lisa Stratton**
* **did a first film at the beginning of project while it was still a golf course- became instrumental in getting funding and raising awareness**
* **streamed 47,000 times**
* **filming process of ncos and building a bridge and planting native plants**
* **three year time lapse from the golf course all the way to now**
* **show what an amazing restoration process this is**
* **show what can be done on a grand scale**
* **lisa stratton has been an inspiration since the beginning as well as interns**
* **this is the pulling it all together stage of the film**
* **mostly will be editing materials they have already shot and create a great story between the films and do just a bit more filming**
* **shows part of one of the former films**

**Board Questions:**

* **could you elaborate on how many interns and the workload you envision**
  + **production assistant that will help with shooting-sometimes from the film department**
  + **interns help with editing or work on audio**
  + **collaborating with interns over several projects**
  + **has been harder with covid because the students weren’t there**
  + **working with students as second editor and sound assistant and social media**
* **wondering if there was any sort of creative liberties involved in a project like this**
  + **two different categories, some students help with actual shooting and their input is welcome**
  + **in other cases the second editor will have autonomy putting together something using his direction**
  + **some of the last film was shot by small intern production team**
  + **interns do end up playing an important creative role in the project**
* **do you anticipate any obstacles that could hinder the timeline**
  + **hesitate to say no, but covid is the most likely obstacle if something were to come up and delay the grand opening in may**
  + **project will continue for the rest of the year**
  + **will be able to work around or through the obstacles that present themselves**
* **going back to interns, could you elaborate on how you plan on dispersing the stipend**
  + **depends on needs of project**
  + **will be more editorial aspects of project**
  + **have sense of how this is going to break down but most of funds is going towards editorial section**
* **are you planning on including land acknowledgement in piece**
  + **yes considering that**
  + **have already included her reading native plants in chumash**
  + **also been talking to chumash about how they use the original reeds that grew on the property**
  + **intention to honor original indigenous intentions**
  + **lots of archeological sites near ncos**

**Board Discussion:**

* **maybe we can ask a follow up question for how many hours the interns will work and how many interns there will be**
* **think the film will come out in may with the grand opening**
* **something to consider in our decision to fund it**
* **this one is just slightly different from past projects-lots of editing, some filming, but mostly editing and they have a hard deadline**

*MOTION/SECOND: Ethan/ Anannya*

*Motion language: motion to table discussion for CF-202201-01383*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

**ADJOURNMENT AT 9:31 PM**

*MOTION/SECOND: Ethan/Mykal*

*Motion language: Motion to adjourn at 9:31 PM*

*ACTION: Consent*

*Additional approval required: NO*