Associated Students
Tuesday, 10/20/20, Zoom

CALL TO ORDER: 6:07, minutes recorded by Carissa

A. ATTENDANCE

<table>
<thead>
<tr>
<th>Name</th>
<th>Note: absent (excused/not excused) arrived late (time) departed early (time)</th>
<th>Name</th>
<th>Note: absent (excused/not excused) arrived late (time) departed early (time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeremy Francoeur Chair</td>
<td>present</td>
<td>Joelle CantoAdams Outreach Coordinator</td>
<td>present</td>
</tr>
<tr>
<td>Ethan Estrada Co-Chair</td>
<td>present</td>
<td>Duncan Edwards Outreach Coordinator</td>
<td>present</td>
</tr>
<tr>
<td>Jackie Rigley Undergraduate Rep</td>
<td>absent</td>
<td>Sarah Siedschlag Advisor</td>
<td>present</td>
</tr>
<tr>
<td>Rylee Pupa Undergraduate Rep</td>
<td>present</td>
<td>Carissa Stewart Administrative Assist</td>
<td>present</td>
</tr>
<tr>
<td>Mykala Listorti Undergraduate Rep</td>
<td>present</td>
<td>Gurleen Pabla Senate Liaison</td>
<td>absent</td>
</tr>
<tr>
<td>Phoebe Racine Graduate Student Rep</td>
<td>present</td>
<td>Fabian Oseguera</td>
<td>present</td>
</tr>
<tr>
<td>Michaela Sten Graduate Student Rep</td>
<td>present</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. COMMITTEE BUSINESS

1. Approval of Attendance and Proxies
   MOTION/SECOND: Jeremy/Ethan
   Motion language: Motion to approve attendance and proxies.
   ACTION: Consent
   Additional approval required: YES (Senate)

2. Approval of Minutes
   MOTION/SECOND: Jeremy/Ethan
   Motion language: Motion to approve minutes from Summer votes
   ACTION: Consent
C. PUBLIC FORUM
(Announcements, appreciations, concerns, requests to have items added to agenda)

- Ethan is wearing a Robin costume
- Jeremy bought a surfboard
- Some sort of oil barge is sinking off the coast of Trinidad
- California seaweed festival virtual on November 18th-21st

D. REPORTS

1. Advisor Report: Siedschlag
   i. Need to figure out the categorization
   ii. Need to figure out when we will have decision meeting

2. Chair Report: Francoeur
   i. NRS committee meeting is happening soon

3. Vice Chair Report: Estrada
   i. Phoebe suggested a superlative and Ethan is looking to take that on as a bonding exercise

4. Senate Report: Pabla and Oseguera
   i. No report

5. Administrative Report: Stewart
   i. All of the grants are sent out
   ii. Two still need scheduling—Robert Fitch will be scheduled for Week 4 hopefully
   iii. 14 total grants, $203,539 requested

6. Coastal Service Program Report: Stewart
   i. No report

   i. First meeting on Friday for Coastal

8. Sub-Committee Reports
   NRS scholarships
   i. All ready to go
   Long-term funding application
   i. Will send out next quarter
   External Communications
   i. Mykala, Sarah, Kaley
E. AGENDA

1. Approval of Agenda/Additions to Agenda
   MOTION/SECOND: motion to approve agenda and additions to agenda
   Motion language: Jeremy/Kaley
   ACTION:
   Additional approval required: YES (Senate)

F. OLD BUSINESS

G. NEW BUSINESS

CPABS Letter
   MOTION/SECOND: Jeremy/ Phoebe
   Motion language: Motion to Table discussion on CPABS letter
   ACTION: Consent
   Additional approval required: YES (Senate)

FALL 19-14 Extension Request – Inventory of the seaweeds of Santa Rosa Island, Santa Barbara County, California
   MOTION/SECOND: Jeremy/Mykala
   Motion language: Motion to approve extension request for FALL 19-14
   ACTION: Consent
   Additional approval required: YES (Senate)

SPR 20-04 Extension Request – Restoring Fuel Breaks to Promote Native Ecosystem Services
   MOTION/SECOND: Jeremy/Phoebe
   Motion language: Motion to approve extension request for SPR 20-04
   ACTION: Consent
   Additional approval required: YES (Senate)

H. DISCUSSION

I. PROJECT REVIEW
Summary:

This grant is to help Surfrider pay for the Environmental Defense Center (EDC) to provide legal services, policy analysis, and advice in our decades long battle to preserve the area commonly called “Naples” and officially Santa Barbara Ranch. This parcel is approximately 200 acres on both north and south sides of Highway 101 along what is commonly referred to as the Gaviota coast. Massive housing development has been proposed over the past few decades, but thanks to the efforts of many Surfrider volunteers, excellent legal representation by EDC, and generous grants from the Coastal Fund, we have been able to thwart the efforts to destroy one of the most beautiful coastal parcels in the entire County, and one that is popular with surfers, hikers, bird watchers, and is close enough to be easily accessible to the public.

This grant will allow us to continue efforts to prevent development at Naples, pursue a permanent conservation strategy, and restore the site.

Presentation Notes:

- Activist and on committee of surfrider for several decades
- Worked to save gaviota coast for a very long time
- 19th century the coast was acquired, and the owner wanted to sell 400 homes on the land
- It crashed and burned,
- 1970s zone for agricultural purposes
- Owners got approval so that they can build 71 houses
- Discovered that they were on environmental sensitive habitats
- EDC and surfrider has been fighting this for decades
- Been successful from stalling building
- Developer agreement- gave rights above environmental
- If by april of next year there is no significant progress, that developmental agreement will lapse
- Can open the floodgates for a whole host of new environmental objections
- Inland development agree expires in April

Board Questions:

- Inland development agree expires in April, how would you stop them from doing anything in april
  - Need to do restoration, claim they cannot, so they want to do it somewhere else
  - Trying to make case that a creek restoration has to be done there instead
  - Enforcing every detailed aspect of the three pieces of law that is required
  - Two applications- fighting that
  - Working with various partners to look at acquisition
Want to get developmental agreement cancelled
- Illegal disking

- What developments have occurred
  - Nothing of consequence, nothing that cannot be undone

- Who would be paying infrastructure for the development
  - Stopped the development from going forward
  - Expensive so that has been a barrier
  - Developers realized that all of the lawyer expenses will be a lot
  - If they build it, there will be more than just houses, it will cause a sprawl

Board Discussion:
- Don’t know how our funding would help
- Take millions of dollars to get into their way
- Don’t know how we would be able to help
- Might be better off using money for communications
- Would have loved to have heard how he would have used it
- Curious to see how he got the numbers and how the environmental researcher role will work
- Most of time is challenging eirs
- support project

MOTION/SECOND: Jeremy/ Phoebe
Motion language: Motion to table discussion on FALL 20-01
ACTION: Consent
Additional approval required: YES (Senate)

Project Title: FALL 20-02: What is the Future of Open Ocean Aquaculture in the Santa Barbara Channel?
Sponsoring Organization: Environmental Defense Center
Presenter Name: Kristen Hislop

Summary:
This project will allow the Environmental Defense Center (EDC) to update a 2007 report EDC authored that made recommendations on open ocean finfish aquaculture for the Channel Island National Marine Sanctuary (CINMS) managers, stakeholders, and the public. This report aimed to provide an overview of the potential environmental implications of open ocean aquaculture in the Santa Barbara Channel. Since 2007, advancements in the technology and science of open ocean aquaculture has changed how projects are developed and operated. In addition, most projects proposed along the California Coast have been for bivalve cultivation (e.g. mussels). In order to ensure EDC has an accurate and up to date understanding of the impacts of aquaculture, we will develop a report to supplement our past research. This report will help us better advocate for protection of marine resources during public review of aquaculture project proposals.
Presentation Notes:

● Wanted to understand impacts of aquaculture and legal issues surrounding aquaculture
● Understand any changes, want to update science piece
● Bigger and grander project
● Need to understand in order to respond on proposals coming at them
● Ventura shellfish enterprise wanted to start without getting a permit
● Will have a lot of local people join it
● Concerns about federal waters over state waters
● Push for open aquaculture currently
● Push from trump administration to increase aquaculture
● Want to come at it from an open perspective- want to know the impacts in the area
● Different ideas, want to be able to communicate with different stakeholders
● Update current ideas on current science
● Great success with ucsb students helping with projects
● Could be advocacy side or education side to it
● Could be intermingled with oil production

Board Questions:

● Is this project a revision of previous report or is it a culmination into a new report
  ○ Not going to update the report, use that report from legal and policy side, but will supplement with new science
● Widely covered by UCSB and a lot of general reporting on science of the channel, how would you like to update the work, feel like so much of the work can be done by talking with scientists at UCSB
  ○ Don’t have a total understanding will research with UCSB scientists, get research from other scientists, and is for their own use
  ○ Don’t have a stance on aquaculture right now
● Have heard EDC is anti-aquaculture, worried about objective overview and not just seeking out impacts
  ○ EDC may have been anti aquaculture to certain kinds of projects, but right now they do not have opposition
  ○ Signing on to the shellfish project just to make sure it is doing well
  ○ Concerned that they want to do it in less regulated waters
  ○ Not trying to skew science
● Heard there is a moratorium on aquaculture in state waters, what is that
  ○ Updating coastal commission guidance
  ○ They will get all of these requests and the state is working out who is going to lead the charge
  ○ The ocean council is trying to come up with a better method
  ○ Very convoluted process right now
  ○ Is a year delay right now
● what are the funds for communications for
  ○ Communications can go to tabling materials, potentially some kind of service that they need to come out with
  ○ Always have that budget item
- Can be overtime for communications committee
- **How will you ensure the quality to do litigation and science**
  - Lot of work is advocacy
  - Very little cases go to litigation
  - Used how they engage with public agencies
  - How they move forward with if they will support or oppose a project
  - Talking with environmental committees, politics, statewide fisherman groups
  - Bivalve aquaculture- possibility for restorative aquaculture
  - Want to make sure all of the environmental precautions are taken
  - Well aware about how to put a lit review together
  - Make sure they are talking to the right scientists and researchers
  - Not a lawyer-background in environmental science management
- **How are you recruiting interns**
  - Will send out listserv in multiple departments
  - Post internships on occasion

**Board Discussion:**
- Either which way, EDC is going to form an opinion and they will form that in a process
- Does coastal fund want to be an active part of that
- Heard that from directly from collaborators
- Heard that other environmental groups are banning together to push back aquaculture
- Found that their grant was misleading
- MPA’s are largely in rocky, forested, patches of seed
- Aquaculture is not allowed near those zones
- Fishermen have been restricted with loss of space so fisherman are afraid of that loss of space
- Concern for Kaley is that anyone can put together a literature review but it takes an expert to put together a good one
- There is a lot to gain in including experts in project to make quality of project better beyond literature review
- Element of including a higher level of involvement in a really sound scientific bases is really important
- Lack of concern in including that is a concern
- Sounded like they wanted to learn a lot from the intern themselves
- Highly prioritize internships
- If we only fund interns then they will not take the grant
- Have more influence if we do fund it than if you don’t
- Surface level it makes sense
- There are definitely people who can do the proper job and it feels like they are rushing it
- Not sure of the need of EDC doing the report when bigger entities are gonna do the same research
- Seems like they would do better hiring an expert instead of a student

*MOTION/SECOND: Jeremy/ Phoebe*
*Motion language: Motion to table discussion on FALL 20-02*
*ACTION: Consent*
*Additional approval required: YES (Senate)*
Project Title: FALL 20-03: Campus Lagoon Restoration & Transformation 2021  
Sponsoring Organization: CCBER  
Presenter Name: Lisa Stratton

Summary:
Funding will support student worker and CCBER oversight to conduct restoration work around the campus lagoon area that is only minimally funded by campus. The specific work includes completing the restoration of the 1/2 acre burn plot, expanding the transformation of the iceplant on campus point, expanding restoration adjacent to Pearl Chase park, enhancing the two coastal dune areas and previous burn plots, pulling the collars off all the oaks and conducting a 15 year post-acorn planting monitoring of the 1000 oaks.

Presentation Notes:
- Helping improve campus lagoon incrementally
- Proposal is primarily for student an a little bit of funding to help staff member manage them
- Have new land because trailers have been moved
- Will put in new picnic benches
- Will get rid of ice plant
- Did a fuel brake
- Will replace stairway cables
- Continuing to manage dune areas
- Working on ice plant area- coastal resources county fund will hopefully help with taking out asphalt and ice plant
- Have some big acorn trees
- Will like to monitor them all and cut away with all of the blue plastic tubes
- Will be able to hire students again

Board Questions:
- Is the hidden asphalt under random portions or are they outlets of road  
  - Whole area was used from the military, have a big ugly asphalt slab,
  - Can’t use solarization alone
  - Little path that most people don’t use
  - Currently pounding out edges of that
  - Can’t just bulldoze, have to break it out by hand
- What native plants are you planning to restore  
  - Spreading a ton of wildflower seeds
  - Coastal sage shrub- will keep biodiversity alive
- Are you getting any salt water intrusion form lagoon  
  - No salt intrusion because it is really high up
Board Discussion:
- Opposed to taking asphalt out because he used to skateboard there
- Not the best spot for fire anyways
- Sounds like a worthwhile project
- Like the idea of continuing this
- Seems like something that can be done in other funding cycles
- standard project

**MOTION/SECOND: Jeremy/ Mykala**  
*Motion language: Motion to table discussion on FALL 20-03*  
**ACTION: Consent**  
*Additional approval required: YES (Senate)*

Project Title: FALL 20-04: Restoring a Unique Coastal Seep to UCSB  
Sponsoring Organization: CCBER  
Presenter Name: Lisa Stratton

Summary:  
The south side of East Storke wetland is adjacent to CCBER offices and greenhouse and provides an amazing opportunity to bring back a unique seep-influenced plant community that could support several endangered plants including marsh sandwort (Arenaria paludicola) and Ventura marsh milk-vetch (Astragalus pycnostachyus var lanosissimus) as well as other unique plants. Funding would be matched by funding from USFWS for the marsh sandwort and would build on research and monitoring conducted by UCSB undergraduates on habitat suitability for this species currently underway.  
Project location provides a very accessible learning opportunity for outdoor teaching as part of multiple ecology and restoration-oriented classes taught at Harder South. The site is currently dominated by Eucalyptus and iceplant. The Coastal Commission has already approved the removal of these trees. A quote from a few years ago for the tree removal was $12,000 which we hope to split between funders.

Presentation Notes:  
- Work with endangered plant called marsh sandwort  
- Area dominated by ice plant  
- Can support endangered plant  
- Unique plant  
- Want to restore plant  
- Will propagate plant  
- Part of it for removal of invasive species  
- Grow different plants  
- Hoping that we will match the other grant  
- Will teach a lot at greenhouse,  
- Mapping vegetation, monitoring flow of water  
- Looking at hydrology
- Having a researcher
- Get ucsb students working with bringing back endangered plants

Board Questions:
- Can you clarify in what capacity the interns will be working on
  - Fish and wildlife service folks will just be enthusiastic people and will see projects
  - Students can prepare reports for them, handling plant
  - Fish and wildlife people will not be directing it
- How long do you think before you can plant the species
  - If they get our grant, they will probably be planting through the summer
  - Will be solarizing the ice plant while waiting for warmer weather
  - Will be working through june to remove weeds
- Are they cutting down all trees
  - They are leaving some alone, only removing 5 huge trees
- Does the seed extend fully in the trees
  - The student has been mapping out where the water is found
  - Extends 20 yards from the edge
- If the project is successful, do you think you will cut down the eucalyptus trees
  - The trees are dying so they will probably not grow
  - The oaks planted will just slowly replace those trees

Board Discussion:
- Really cool that they would be able to propagate new plants
- Can’t take out all trees
  - more expensive than typical

*MOTION/SECOND: Jeremy/ Ethan*
*Motion language: Motion to table discussion on FALL 20-04*
*ACTION: Consent*
*Additional approval required: YES (Senate)*

Project Title: FALL 20-05: Assessing E-DNA as a Restoration Tool
Sponsoring Organization: CCBER
Presenter Name: Lisa Stratton

Summary:
The goal of this project is to build on the great research work implemented by many UCSB undergraduate students and graduate students to understand how several restoration projects are progressing by evaluating how using environmental e-DNA techniques could work as a tool. Environmental DNA identifies organisms based on DNA fragments found in water and soil and other mediums. We would like to use this tool to study three interesting processes in restoration: 1) recovery of aquatic invertebrates in several types of newly constructed wetlands (compared to hand sorting and identifying); 2) Assess seedbank/plant presence in soils from coastal terraces to see how it could inform restoration (compared to growing out the soil in the greenhouse); 3) soil microbes and fungi in soil moved to a restoration area which had compost and biochar added in an experimental framework.
(compared to assays of microbial activity in those soils). UCSC will partner with us at a severely discounted rate.

Presentation Notes:
- Opportunity came in recently
- UCSC has been collecting environmental DNA and sent it through extraction process
- Extract different types of organisms
- Get identifying DNA to compare against DNA records
- Parallel studies
- Comparing taxonomy
- Sorting through organisms to see if they will come if we rebuild the wetlands
- Want to calibrate identification against EDNA
- Willing to put in 2500
- Different amendments on NCOS, have a student who is looking at microbial activity
- Will take comparable soil samples
- Growing out vegetation under ice plant
- Curious what is in seed bank when they remove ice plant
- Paying a student to extract samples and doing the work

Board Questions:
- How will you get the right signals for soil assessment ones
  - Only identified by dna
  - Seems like they have good library for soil samples and microbials
- In the future, are you planning on continuing the partnership/ will you be able to use that in the future
  - They would be evaluating to see if they can monitor in the future, will use it
- Can you talk about why its useful to know what species are in soil to begin with
  - Looking at biologic activity and decomposition
  - Academic interest to understand if the additions change the suite and function of species
  - Building database in understanding the who behind the story

Board Discussion:
- Helping ucs complete microbial library so they will give us cheaper rate
- Cheaper way to do the seed bank than manually
- Comparing areas that have biochar
- Biochar is a great carbon sequestration strategy
- Nitrogen fixation is done through microbes, 90% of plants will get certain nutrients to the plant and the plant will give them sugar

MOTION/SECOND: Jeremy/Kaley
Motion language: Motion to table discussion on FALL 20-05
ACTION: Consent
Additional approval required: YES (Senate)
ADJOURNMENT AT 9:37

MOTION/SECOND: Jeremy/Ethan
Motion language: MOtion to adjourn at 9:37 PM
ACTION: Consent
Additional approval required: NO