

## **Minutes**

### **Arana Gulch Adaptive Management Working Group Meeting**

Planning Conference Room 809 Center Street, Room 107 Center Street Santa Cruz, CA

**9-4 pm January 28, 2015**

#### **Participants:**

Kate Huckelbridge, Ecologist, CA Coastal Commission  
Tim Hyland, Ecologist, CA State Parks  
Kathy Lyons, Biotic Resources Group  
Suzanne Schettler (CNPS alternate)  
Susan Bainbridge, Researcher, University and Jepson Herbarium  
Lena Chang, USFWS  
Sheila Barry, UC Cooperative Extension Range Specialist  
Alison Stanton, Research Botanist, Facilitator  
Noah Downing, Planner, City of Santa Cruz Dept of Parks and Recreation  
Mike Ferry, Planner, City of Santa Cruz Dept of Planning and Community Development  
Mauro Garcia, Parks Superintendent, City of Santa Cruz

#### **ABSENT:**

Grey Hayes, CNPS  
Melissa Farinha, Biologist, CDFW

**OBSERVERS:** Jean Brocklebank and Michael Lewis, FOAG; Richard Stover, Debbie Bulger CNPS, Paul Schoellhamer

### **SUMMARY OF ACTION ITEMS**

1. New quorum was adopted (5 of 11 members).
2. CCC- Kate will renew search for a wildlife biologist and request info on candidates via email. Suzanne has a potential candidate
3. The group will schedule a meeting in April to finalize the grassland delineation. Before meeting Suzanne agreed to visit the UCSC library/USGS website to obtain old images of Arana. LIDAR data needs processing
4. Kathy will continue weed mapping according to AMWG recommendations
5. Alison will conduct April vegetation monitoring
6. The City will implement a mowing recommendation and document the number of times the site gets mowed
  - Mow the 7-8 foot spaces between the paths and the fences to a 4inch height, “as needed”, from now until the April meeting. Arana is first site in the daily schedule, so that the equipment is clean.

7. Action items for gathering data on reference prairies:
  - Sue/Lena will look for data availability for tarplant hill
  - Debbie Bulger offered to get the CNPS plant list for Arana
  - Alison will digest the data from the YLR study.
  - Kate will look into the compliance issue of establishing grazing enclosures.
8. The grazing will begin when there has been one more inch of rain/more grass growth.
9. Tommy Williams is working with Grey to hold a neighborhood meeting on Feb 7<sup>th</sup>.
10. The City will issue a press release after the cattle settle into the site.
11. Alison will incorporate comments from today and send a paragraph on grazing for quick AMWG review before it is posted on the website.
12. Agendas will be sent to AMWG 3 weeks in advance and posted on website 1 wk before meetings.
13. The City will implement the following during FY2016
  - CCC Annual Reporting
  - Vegetation monitoring
  - AMWG facilitation
  - Woody plant removal
  - Weed control
  - Grazing program
  - Fuel break and other mowing

### **Agenda item detail**

#### **1. Quorum and decision-making rules**

Sheila Barry has joined the group as a technical advisor but Devii Rao will take over in March. As of the January 28 2015 meeting there are now 11 members, but one previously voting member (Kathy Lyons) has withdrawn from voting. The group first clarified that in practice there are only 5 voting members: Kate from CCC, and the 4 technical advisors. Lena and Melissa will generally not vote.

The group adopted the following new quorum by unanimous vote:

A quorum is 5 of 11 members including

- 1 of 3 regulatory agencies: Kate for CCC, Lena for USFWS, and/or Melissa for CDFW,
- 2 of 4 technical advisors: Sue, Tim, Grey or Suzanne for CNPS, Sheila/Devii
- 2 of 4 non-voting members: One from City and Alison as Facilitator

The decision making process remains informal consensus. If consensus cannot be reached support from 3 of 5 voting members will be sufficient to decide any issues. As previously adopted, every effort will be made to obtain advance input from all members via email on any issues requiring a decision on a recommendation. If this approach leads to conflict or inaction then it can be modified within the group, as necessary, without CCC Exec Director approval.

## **2. CCC Business**

Kate reported on the status of the Year One Annual Report. She is working with the City to agree on how to best incorporate AMWG comments. Once the City has completed a new draft, Kate will review again and determine if additional AMWG review is needed. A specific timeline has not been set.

Kate will renew search for a wildlife biologist and request info on candidates via email. Suzanne has a good candidate and will inquire about willingness to participate before she forwards the contact info.

## **3. Prioritize goals of the HMP**

The AMWG completed a group exercise to develop a broad prioritization of the existing HMP goals for all 3 management areas. The objective was not to revise any goals or to develop a specific management recommendation, only to get a sense of where the entire group would like to focus through FY2016. First, we learned that the Santa Cruz County Resource Conservation District (RCDSCC) are actively pursuing funding for restoration projects in the tidal reach and the eroded gully. For now, we agreed to define the 2 goals to “engage” the RCDSCC as having a representative come to an AMWG meeting each year to provide us with an annual update on their activities. Since these goals could be addressed with an action item to issue an invitation, we removed them from the ranking process, leaving 11 goals to prioritize.

We discussed how the goals to increase appropriate use in the park had largely been met by the completion of the project itself. Additionally, the City intends to partner with the Natural History Museum to lead tours or conduct other educational programs. Alison also reminded the group that some of these goals are very specific to required mitigation i.e. the wildlife objectives for Hagemann Gulch. During the exercise, the group agreed that the goals for Arana Creek and Hagemann Gulch need to be revised at an appropriate time. When people were done, we took an informal hand vote. All but one person raised their hands in response to “Were your top 3 goals in the Coastal prairie”? There was some discussion about how people prioritized. A total of 9 worksheets were submitted anonymously at the end of the meeting. The goals are listed below by priority (1<sup>st</sup> to 11<sup>th</sup>) along with the number of votes cast for that goal to be ranked at that rank OR HIGHER. Therefore, the priority of each goal reflects majority opinion (at least 5 of 9 votes).

- |  |         |
|--|---------|
| 1) Increase SCT population size  | 7 votes |
| 2) Restore disturbance regime with grazing                                       | 6 votes |
| 3) Reduce non-native species in Coastal prairie                                  | 6 votes |
| 4) Increase seedbank   | 5 votes |
| 5/6th tie  |         |
| Reduce sedimentation and improve steelhead habitat on the property               | 6 votes |
| Control non-native understory in riparian area                                   | 6 votes |
| 7) Reduce non-native understory in Hagemann                                      | 6 votes |
| 8/9 <sup>th</sup> tie  |         |
| Maintain SF dusky woodrat nests and sensitive bird and bat nesting features      | 7 votes |
| Provide educational opportunities and increase appropriate uses in riparian area | 7 votes |
| 10) Reduce fire hazard in Hagemann   | 6 votes |
| 11) Increase appropriate use in Hagemann   | 9 votes |

The informal process revealed that increasing the SCT population and restoring the coastal prairie are the top priority of the AMWG for the next year and a half. The next priorities lie in addressing sedimentation and invasive plants in the Arana Creek riparian zone. Kate mentioned that even though these areas are lower priority, there still may be activities we want to pursue towards achieving these goals in the near future. For instance, the weed removal recommendation for spring 2015 may include some species in the riparian area. The group also agreed in the discussion that educational outreach on management for Arana as a whole is a high priority which is not an existing goal. Hagemann Gulch is clearly the lowest priority for now. Tim stated that he thought the fire hazard there is very low and the goal to increase appropriate use needs clarification so quite a few people said that it was easy to place these as 10 and 11<sup>th</sup>.

**4. The City will implement these AMWG recommendations for grassland management in 2015**

- Alison will conduct April vegetation monitoring
- The group wants to schedule a meeting in April to finalize the grassland delineation prior to woody plant removal in late-April, May
- Kathy will continue weed mapping according to AMWG recommendations
- Weed removal after April meeting
- Grazing will begin ( see item 8)
- Mowing will occur (see item 6)

Most of the items were mentioned only as updates. The group agreed to provide guidance on mowing after public comment.

**5. Public Comments**

Five members of the public offered comments. These are summarized below. Most of the audience left after the break and the AMWG agreed that having public comment early in the meeting worked really well. During the break there was an opportunity for members to directly interact with the public and address specific concerns. The AMWG also agreed that we want members of the public to feel heard and that taking comment early in the meeting and then having a break facilitated that process.

- How will the City fulfill other elements of the Master Plan? Is there going to be continued construction?
- There needs to be more education on Himalaya berry.
- The first interpretative sign near Agnes St has been perceived as racist by one person because the native people are not fully formed and lack faces while the current users were white and have full facial features.
- The Watsonville airport mowing regime of mowing weekly or bi-weekly for 6 weeks in mid-April through May results in millions of SCT in many years. The plants are most dense on the edges of the runways and in areas with the greatest amount of disturbance. It should be possible to test this at Arana with an experimental approach.
- There is a need for baseline data for Hagemann Gulch and Arana Creek.
- It would be a good idea to fence off the SCT within the grazed area.
- The AMWG needs a wildlife biologist (also an avian ecologist and an entomologist) to join the group.
- Cape ivy needs attention.
- Erosion on the hillside between the Coastal Prairie Loop trail and Arana Creek from visitors using ad-hoc trails is going to continue- is it possible to close them?
- People have started walking the fence lines in the prairie. And several fences have been cut.
- Hand mowing will be required along the fences to get underneath and in areas the machines can't reach.
- The soil at the western intersection was profoundly disturbed and offers an opportunity to observe primary succession.

**Break 10:30 -10:45**

**10:45- 12:00**

### **Response to public comment**

Mauro explained that it is difficult to close-off trails connecting the loop trail to Arana Creek because the community members will continue to use them and blocking them may lead to

additional issues. The AMWG said that they should discuss solutions to the erosion concerns onsite during the April meeting.

Mowing was discussed later in the agenda.

#### **6. Clarify HMP grassland Goals and Objectives (part 2) 55 min**

The AMWG began the discussion on the goals and objectives for the grassland by returning to the issue of the delineation. The AMWG then wanted to address mowing that could occur before the April meeting.

##### **Grassland delineation**

Tim said that the problematic sections were in the south where large oaks had died and now it is no longer grassland and in the NE corner. These are the areas where the AMWG can focus in the April site visit. Tim and Noah showed the group a map of what has already been delineated on 2005 NAIP imagery which was the oldest available (need to send map to AMWG). Several said they would like to see the grazing fences on this map and all agreed it would be good to obtain even older images of the site from the UCSC library. Suzanne agreed to visit the library. LIDAR data exists for the site and might be very useful if it was processed. This should be able to be done by city GIS staff.

##### **Spring 2015 mowing**

Mauro told us that there is a City crew that mows parks every week and he can easily assign them to mow Arana with any frequency we specify. The group developed the following recommendation for mowing:

- Mow the 7-8 foot spaces between the paths and the fences - keep low to prevent invasives
- Rest of site - Mow to a 4inch height, "as needed", from now until the April meeting
- Arana should be the first site mowed at the beginning of the day when the equipment is clean
- Document the number of times the site gets mowed
- The date of the first mow is not critical, but the last mow needs to coincide with the end of the annual grass growing season to be most effective in reducing seed set.
- Most native plants and especially any SCT that might germinate will be less than 4 inches and will not be harmed by the mowing. However, some native species ( e.g annual lupinus) will be >4" if they recruit.

##### **Coastal Prairie Goals and Objectives**

The following questions included in the agenda came out of the review of the HMP annual report.

- What is the target cover of a reference coastal prairie system?
- What is the appropriate species richness of a functioning coastal prairie system?
- Which management actions will increase the density of viable ray achenes in the soil seedbank?

The outstanding need in the objectives is to identify appropriate reference coastal prairie sites for Arana Gulch. We need to begin the process of determining targets for the variables covered by the objectives under Goal 3: canopy height, % cover of native species, species richness, and % bare ground and also for RDM.

A canopy height of 0.5m is way too high. Target is 2-3 inches.

RDM of 1,200 lbs is way too high. Target is 500-650lbs/acre.

Is there a site on the first terrace that is similar and can we monitor it in the same year? Could we get trend lines on %cover of native species and species richness values? Monitoring does not need to be annual.

Suzanne said that she had conferred with Grey about reference sites and he offered 3 sites as potential references:

- Porterville ranch- grazed
- Pt Lobos- not grazed but burned
- Whitehouse Cyn in Ano Nuevo

Moore Creek was also offered, it is being monitored for Ohlone Tiger beetle and has both grazed and ungrazed areas, but it is on the 2<sup>nd</sup> and even 3<sup>rd</sup> terrace.

Tarplant Hill is also a very degraded site like Arana. The group Watsonville Wetlands Watch has conducted some mowing and scraping and observed SCT in response. The site has been managed for 6-7 years and we need to get data if there is any.

Sheila described that a small section of coastal prairie at Arana Gulch could be sectioned-off and retained as a no-management comparison. Many in the group thought that this would be a good option. Kate noted that this approach may be problematic with respect to permit compliance. The HMP requires Arana to meet targets/goals that are similar to an appropriate reference site. Terrace Point, the addition to the Younger Lagoon Reserve might also be a good site. The AMWG wants to use the same process as the YLR Scientific Advisory Committee to use

our expert opinion to arrive at the target values for Arana for the metrics already mentioned. To do this we need some data.

Action items for gathering data on reference prairies:

- Sue/Lena will look for data availability for tarplant hill
- Get the plant list for Arana from the EIR- Alison has it
- Debbie Bulger offered to get the CNPS plant list for Arana
- Alison will digest the data from the YLR study. It is referenced in the HMP but not at the level of detail that we need.
- Kate will look into the compliance issue of establishing some grazing enclosures as a reference “no management zone”. If it is possible to have no management as an interim reference, then we could compare progress with grazing while we work on developing more specific metrics.

#### **7. Grassland monitoring 20min**

Vegetation transects and photo points- How do we effectively monitor to meet the goals and objectives?

- How often to measure canopy height and who will do it? – It needs to be measured monthly from Nov-May. We can train City staff on the paper plate method and specify a sample size.
- RDM methodology- Sheila has the most experience with this and will confer with Alison. Permanent monitoring points are not necessary. The data is best represented as a color map, i.e. green polygons are meeting the target RDM and red ones are not.
- Photopoint placement-Sheila also has the most experience with this and will advise Alison. Alison will go to Arana tomorrow and at least get photos in areas that could get mowed before April.

12-12:30 lunch

**12:30-2:00**

#### **8. Grazing program: 60min**

Noah introduced Tommy Williams and each member introduced themselves. Members asked many questions in the discussion. We learned the following about the initial grazing strategy:

- Water lines need to be pressure tested before everything is connected. System should be ready in one to two weeks.



- The curb on Agnes St near the entrance to the corral will be rolled and painted red. Tommy will back his rig (20 ft truck with 30ft trailer) over the curb to offload the cattle.
- Cattle will remain in the grazing area near Agnes Street for 2 to 3 days to settle before moving to Area A.
- Cattle will be 5 Black Angus weighing 500-650 lbs each, marked with a large tag in right ear.
- Cows with calves weigh 1200 -1400 lbs and are very protective of the babies and need large quantities of forage or supplemental hay so Tommy does not want to use them for now.
- Tommy has been working the 5 animals with dogs to get them used to dog interactions. He does herd with dogs so more dog-trained cattle are available if we need to increase the number of cattle on site in the future.
- Ideally we wait until there is another inch of rain and more grass growth before the start of grazing. That way Tommy can avoid bringing the cattle in and out if there is not enough to eat.
- The fence between area C and D will be open by default and only closed if needed to prevent negative impacts under very wet conditions.
- Heavy rains in February and March would not trigger automatic removal of the cattle. Everyone agreed that lots of rain would be great!

The AMWG wanted Tommy to know that we are in no way wanting to micro-manage his operation and we all want to make sure that his operation is viable. Our management objectives are: plant height of 2-3 inches, RDM of 500-650lbs, and an increase in bare ground. Cows could be removed in May or June before SCT bolts. There was also a lot of discussion about the use of supplemental feed. If it is dispersed then it has no noticeable impact. If concentrated it can be used as a way to get bare ground. It can also be used to target weeds, but with limited results. For instance, cattle will only eat thistles from the root up once they are dead and knocked down so we cannot expect them to control the infestation of the Italian thistle in the north part of Area C. Likely, no supplemental feed will be needed until the end of the grazing period, but it totally depends on the weather.

Mauro shared with the group that the fences had already been cut several times. They have been quickly repaired. We can only speculate about whether the fences will get cut when the cows are inside. Obviously, it will be a big problem if the cows are getting out 3 times a week. Alison cautioned the group about spending too much time addressing a contingency. She has installed several fences on the beaches of Lake Tahoe and expected them to be vandalized and they were not. The process at Arana is in place to contact Tommy if the cows do get out. Tommy is willing to deal with it if it happens occasionally, and if it does become a problem, the AMWG will re-visit the subject.

**Break 2:00-2:15**

**2:15-4:00**

**9. Communications with the public 30 min**

**Community outreach over grazing**

The signs on cattle/dog/human interaction are at the printer. Several members pointed out that the animal on the sign is a dairy cow and that sends an inaccurate message. Noah described that the dairy cow was selected as a tribute to the history of the dairy farm which used to be at Arana Gulch and described conversations with members of the public who remember visiting the dairy cows there during their childhood. We discussed that we need to get better information on the website about the purpose of grazing. The public does not generally understand how disturbance can benefit native plants due to messages in the public conscious like “take only photos. Leave only footprints”. Grazing also has a negative image from the “old days” when over-grazing was more common.

The City has implemented several community outreach measures regarding the cattle grazing:

- the brochure was mailed to surrounding property owners
- the brochure was emailed to a citywide Arana Gulch distribution list,
- the grazing was announced to 450 attendees at the ribbon cutting ceremony and staff distributed the brochure at the event
- the brochure is available onsite and on the AMWG webpage.
- Tommy mentioned that he was working with Grey to hold a neighborhood meeting on the 7<sup>th</sup>.
- a press release will be planned for after the cattle settle-in to the site.

**Action item:** Alison has already written a paragraph on grazing and will incorporate comments from today and send that out for a quick AMWG review.

**Arana Gulch webpage- updates and recent comments from website/email for AMWG**

The City’s standard procedure is to respond to comments from the website or email and only solicit AMWG response if needed for a technical reason. Two comments were discussed. One commenter offered to help plant the sides of the trails with “wildflowers”. The AMWG agreed this is not a good idea. The other comments centered on how people and bikes are now compressed on one trail. Mauro said he is working on getting clearer signs and will monitor the situation.

**Agenda development and posting**

Alison proposed a 4,3,2,1 strategy and the AMWG accepted.

- 4 weeks before a meeting, Alison will confer with City on agenda items
- At 3 weeks, the AMWG receives a draft agenda
- At 2 weeks comments are due to Alison. She will re-confer with the City
- One week before a meeting, the final agenda is sent to the AMWG and posted on the webpage.

**10. Looking ahead to FY 2016: 45 min**

The City has agreed to implement the following over the next year and a half.

- CCC Annual Reporting
- Vegetation monitoring
- AMWG facilitation
- Woody plant removal
- Weed control
- Grazing program
- Fuel break and other mowing

Several AGWG technical advisors indicated ballpark information about the cost of management and the budget is useful for understanding limits and prioritizing tasks. Alison explained that the AMWG is expecting a process where Mauro gives us a dollar amount to work with and we develop recommendations for how to best use the funds. However, the funding comes from multiple funding streams which are decided upon through the budget process. While Mauro has dollar amounts specified for most of the above items, they are not necessarily line items and are instead embedded within a large budget package that he will take forward to the City Manager and Finance Director within the next two weeks. With the completion of the project, the status of Arana Gulch has changed within the budget framework. In addition to habitat management actions, additional staff time and maintenance will need to be funded to maintain park.

Kate re-iterated that it is not within the purview of the AMWG to ask for detailed accounting and review the City budgeting process. As an advisory group, we make recommendations on management actions for Arana Gulch and assign priorities to those actions. If the City runs out of funding, the lower priority actions may be delayed. Mauro assured the AMWG that all of the items listed above will be funded in FY2016 and additional items could be added if necessary.

**11. Time of learning 15 min**

- What went wrong with the Area C soil salvage and how can we improve outcomes of recommended management actions?

At the July 16, 2014 meeting Mauro explained that when the contractor was asked in the field to implement the AMWG recommendation to “thinly spread” the top 6 inches of soil by hand the contractor demanded a contract amendment. The City was not willing to do that and so instead the decision was made in the field to proceed with spreading the soil with a skip loader. Kathy’s measurements of the soil revealed that it varied from 1.5 to 6 inches deep. To improve the outcome, the recommendation could have been more specific. Kathy was not at the March meeting and “Thinly spread” could have been stated as “one inch deep or less” to give her numeric guidance.

Several members stressed that the minutes are very important for communicating recommendations and for annual reporting. All agreed that members are obliged to closely review the minutes for accuracy and specificity and this will help ensure better management outcomes.

**12. Debriefing of objectives and outcomes and timing for next AMWG meeting-** Please see action items.

Adjourn meeting at 3:45