

Meeting Minutes

Arana Gulch Adaptive Management Working Group

ABC/Tony Hill Room; Santa Cruz Civic Auditorium 307 Church Street Santa Cruz, CA

9-1pm March 26, 2014

Participants:

Susan Bainbridge, Researcher, UC Jepson Herbarium

Mike Ferry, Planner, City of Santa Cruz Dept of Planning and Community Development

Mauro Garcia, Parks Superintendent, City of Santa Cruz

Grey Hayes, Consulting Botanist, CNPS

Kate Huckelbridge, Ecologist, CA Coastal Commission

Tim Hyland, Ecologist, CA State Parks

Suzanne Schettler (CNPS alternate)

Alison Stanton, Research Botanist, Consultant (facilitator)

ON PHONE:

Lena Chang, Biologist, USFWS

ABSENT:

Melissa Farinha, Biologist, CDFW

Kathy Lyons, Biologist, Biotic Resources Group

OBSERVERS:

Jean Brocklebank, FOAG

Debbie Bulger, CNPS

Noah Downing, Planner, City of Santa Cruz Dept of Parks and Recreation

Michael Lewis, FOAG

Richard Stover, FOAG

SUMMARY OF RECOMMENDATIONS AND ACTION ITEMS

The following management recommendations were developed with support from all voting members present:

- **Re-habilitation of the construction road and the volunteer paths:** areas should be allowed to come back passively without any hydro-seeding or scarification. Other rehabilitation measures should address erosion and runoff on steep areas only, or where otherwise minimally necessary. Use weed-free hay bale wattles.

Action: Mike and Kate will check with Susan Craig to find if this recommendation can be included in the construction plans as a plan revision.

- **Need for hydrological monitoring:** Developing a recommendation to assess potential impacts from the paved trail is within the purview of the AMWG and should be addressed.
- **Livestock water troughs:** add two connector points at one third and two thirds the total distance of the municipal water line extending from Agnes in enclosure C. Add two additional connectors in enclosure A. These points were marked on a map.

Action: Mauro will coordinate with Chris to get the connectors into the plans

- **2014 mowing:** Two test areas of 100 x 100 feet were identified on a site map to test the timing of mowing. The test areas will be located on the central terrace, south of the east-west trail that is under construction. The first flail mowing of the entire site will occur in late April. One of the test areas will be left un-mowed. A second mowing will occur of the entire site about one month later. The remaining un-mowed test area will be mowed at that time. Volunteers will hand rake and remove biomass in July at four points that have infestations of velvet grass or other invasive species.

Action: CNPS will coordinate volunteers to remove thatch after the second mowing.

ADDITIONAL ACTION ITEMS

Action: Mauro will check on the status of the website and get a page running within two weeks

Agenda item 7: Alison will send out a doodle poll for availability for a next AMWG meeting in July or August. Primary topics will be the grazing program and woody plant invasion into the grassland.

Action: Re-sampling of the 2013 baseline assessment vegetation transects and installation of photo monitoring was not discussed. Address by email.

Action: Develop recommendation to address herbaceous weed infestations in the grassland by email.

All AMWG process-oriented decisions are addressed within the agenda items below.

AGENDA ITEMS

1. View progress on construction and assess site conditions to inform management recommendations for 2014

The meeting convened at 9am at the Agnes Street entrance to Arana Gulch. It rained the whole time! The group learned about elements of the construction infrastructure including the ribbon stress bridge and how the construction access road was built. The main points of discussion relating to prairie management will be addressed in sections below:

- Re-vegetation of the construction access road and user trails
- Changes in hydrology from the paths and the need for hydrological monitoring
- Water trough placement
- Mowing locations and need to remove thatch
- Herbaceous weed infestations in the grassland
- Woody plant invasion into the grassland

10:30 Meeting re-convened at the Santa Cruz Civic Auditorium

2. Re-cap of July 16 2013 meeting and subsequent actions

The seed bank density assessment proposal was accepted by AMWG (Sue abstained) and funding was approved by City. The 2081 Collecting permit was issued in November 2013 and work completed in December. Analysis will occur sometime this spring. The HMP was approved in September 2013. CDFW determined that a 2081(a) CA Endangered Species Act (CESA) Scientific, Educational, or Management Permit was required. The MOU was issued in January with an effective date through 2023.

Q: Was there hydro monitoring as part of the permit?

No one at the table was familiar enough with the MOU to say definitively. During the field visit there was discussion about the groups concerns over changes in hydrology associated with the paths. The group agreed that the slope near area B around Hagemann Bridge would likely get drier. Most of the rest of the area contained within the main paths on the top of the terrace is flat and likely to experience less change.

Note* Hydrological monitoring is NOT mentioned in the permit- [Hydro monitoring was not a mitigation measure in the EIR; I checked after the meeting. Potential Hydro impacts were to be addresses in the path design which was completed. In addition, we changed from asphalt paving to permeable concrete during the coastal permit process. – Mike Ferry](#)

Decision: developing a recommendation for **hydrological monitoring** is within the purview of the AMWG and should be addressed.

3. Clarify AMWG decision making process

Decision making process

- There are 7 voting members: CCC, CDFW, USFWS, four technical advisors
- There are three non-voting members: Two from the City of Santa Cruz (Mauro, Mike) and the Facilitator (Alison)
- A meeting quorum includes: two regulatory agencies, two technical advisors, City of Santa Cruz (one), Facilitator

Agency participation

Kate made it clear she will vote in almost all cases. Lena said she can vote but may abstain over any management that could potentially take SCT. Prior to the meeting Melissa told Alison that she was unfamiliar with the MOU and therefore unprepared to discuss how it may or may not affect her ability to vote.

Decision: The group will operate as if there are 6 voting members until we hear from CDFW.

Action: Alison will follow up with Melissa and assess her willingness to participate and vote.

The feeling in the room was that with 6 or 7 voting members we think it is perfectly reasonable to work together on recommendations to obtain unanimous support from those who do not abstain from the decision. We will utilize the gradients of agreement approach to measuring support. However, we are willing to go with a simple majority.

Decision: recommendations can be moved forward to the City with support from four voting members

Out-of-meeting recommendations

Decision: Recommendations can be developed via email. Alison will facilitate. All email discussion of recommendations shall be shared among the entire group. Whole group may decide to delegate recommendation to a subcommittee. Email recommendations must be responded two within two weeks. Lack of response will equal support.

Meeting Minutes

Decision: Alison will distribute minutes and AMWG will have two weeks to comment. All comments received will be incorporated and the minutes will be considered final. Minutes will be posted to the Arana Gulch website.

Action: Mauro will check on the status of the website and get a page running within two weeks

4. Conflict of interest

Mauro handed out guidelines on conflict of interest that he obtained from the City Attorney. There was discussion that the AMWG had already successfully resolved a potential conflict of interest issue over the seed bank density assessment when Sue abstained from the vote.

Decision: Utilize a case by case approach to address conflict of interest. If a member votes to move forward a management recommendation and that vote results in a request to perform work at a later time, the member is not barred from bidding on the work. If the member believes they might be interested in work that might arise as a direct result of the vote they should abstain.

6. Implementation of Grazing Program (agenda item 5 moved to lunch discussion)

Livestock water trough placement

Mauro produced a construction map and explained that the water troughs will be supplied with municipal water lines extending from Agnes Street. The plans showed only one coupling unit near the central connector trail for extending lines into the other grazing enclosures. The AMWG discussed how impacts from cows congregating around troughs can be significant and difficult to reverse. It is much better to have flexibility on where troughs are placed so they may be moved as conditions change.

Recommendation: add two connectors at one third and two thirds the total distance of the line extending from Agnes in enclosure C. Add two additional connectors in enclosure A. These points were marked on a map.

7. Schedule next AMWG meeting in July-August to focus on the Grazing Program

Action: Alison will send out a doodle poll for availability. At that meeting we will meet the selected grazing contractor and hear about his operation. We will also discuss woody plant invasion and weed control.

12:00 Break (15 minutes) and lunch delivered

5. 2014 Management recommendations: mowing, baseline assessment, photo monitoring

Re-vegetation of the construction access road and user trails

The construction road and volunteer path rehabilitation measures included on the construction plans are as follows:

Sheet PL-1.01 “Planting Plan” (sheet 31 of 32): All areas to be hydro-seeded shall have the top 12” of grade scarified and grades smoothed out in order to assist in establishment of hydro-seed.

The AMWG discussed this treatment and agreed that this approach would lead to the recruitment of weeds and very few native species. These areas should be allowed to re-establish naturally and this would result in greater productivity and include more native species.

Recommendation: the re-habilitation of the construction road and the volunteer paths should be allowed to come back passively without any hydro-seeding or scarification. Other measures should address erosion and runoff on steep areas only, or where otherwise minimally necessary. Weed-free hay bale wattles should be used for erosion.

Action: Mike and Kate will check with Susan Craig to find if this recommendation can be included in the construction plans as a plan revision.

2014 Mowing

The AMWG discussed that mowing at the site before the start of grazing could take advantage of the drought conditions to reduce the canopy height and biomass and potentially help increase the efficacy of grazing in the near term. Flail mowing chops the pieces small and the smaller pieces can have a fertilizing effect. Smaller pieces can be achieved with multiple passes of the mower.

Mauro said a mowing could begin as soon as it was dry enough. While at the site, the group observed that the ground was not even close to saturated and would dry very quickly from the storm. The City allocated funds to mow the entire site, but not to remove thatch or rake. The AMWG wants to test timing of mowing to help inform the management of the fire break mowing that will continue to occur outside of the fences. Volunteers could be utilized to conduct raking and hand removal of thatch.

The timing of a first mowing should be soon in order to cut off the developing inflorescences of rip gut brome and other dominant non natives. Tim will observe phenology at the site and inform the AMWG about timing. A second mowing could further reduce seed output for the season of some species. To test timing, several patches could be left un-mowed the first time. The size of the test areas needs to be sufficient to accommodate some of the processes on the prairie such as the movement of voles. Voles move seed caches around up to 25 m from their home burrow. Therefore a 100 x 100 ft test area would be appropriate to test mowing timing.

Recommendation: Two test areas of 100 x 100 feet were identified on a site map to test the timing of mowing. The test areas will be located on the central terrace, south of the east-west trail that is under construction. The first flail mowing of the entire site will occur in late April. One of the test areas will be left un-mowed. A second mowing of the entire site will occur about one month later. The remaining un-mowed test area will be mowed at that time. Volunteers will hand rake and remove biomass in July at four points that have infestations of velvet grass or other invasive species. These areas were recorded as dots and were scattered around the meadows in the vicinity of recently documented SCT and on the outskirts of velvet grass, so as to catch the velvet grass invasion front while removing thatch in areas where we might expect to see tarplant germinate. The dots were mapped where the biomass removal would begin; biomass removal should be concentric to those dots and progress as far out from those dots as possible, depending on the available labor.

Action: Coordinate volunteers to remove thatch after the second mowing.

Action: Re-sampling of the 2013 baseline assessment vegetation transects and installation of photo monitoring was not discussed. Address by email.

Action: Address woody plant invasion at next meeting and herbaceous weed control in the grassland.

9. Public comment period

Jean: is concerned about the impacts of the water troughs and the disturbance created by trenching for the water for the live stock troughs. She also is concerned about trampling of the SCT area right now and thinks the area should be fenced off.

1:30 Adjourn meeting