

## **Minutes**

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

Tony Hill Conference Room, Santa Cruz Civic Auditorium, 307 Church Street

**9:00 a.m. – 2:00 p.m. on November 10, 2015**

#### **PARTICIPANTS:**

Kate Huckelbridge, Ecologist, CA Coastal Commission

Kathy Lyons, Biotic Resources Group

Tim Hyland, Ecologist, CA State Parks

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

Grey Hayes, CNPS

Suzanne Schettler (CNPS alternate)

Melissa Farinha, Biologist, CDFW

#### **ABSENT:**

Susan Bainbridge, Researcher, University and Jepson Herbarium

Lena Chang, USFWS

Devii Rao, Livestock and Natural Resources Advisor, UC Cooperative Extension

#### **AGENDA ITEMS AND DISCUSSION TOPICS:**

##### **1. Resource Conservation District of Santa Cruz County**

Angie Gruys and Chris Coburn of the Resource Conservation District of Santa Cruz County presented on the work their organization has undertaken and plans to undertake to reduce sediment and erosion issues in the Arana Creek watershed. They described that they meet with a Technical Advisory Group and conduct watershed surveys to assess restoration priorities. They are constantly seeking grant funding to implement high priority projects. They provide outreach on riparian and drainage issues to property owners adjacent to the watershed and have worked to streamline the permit process to help shovel ready projects move forward. They are hoping that future mitigation dollars from projects can be spent in the local watersheds they directly affect. They explained that grant funding is difficult to obtain for the Arana Gulch watershed because it is not a high priority steelhead fishery. Salmonids prefer clean gravel and the sediment is too sandy. Some of their priorities for seeking projects are based on a high discharge, high sedimentation, and large number of project partners. They mentioned that the tsunami in 2011 created bank erosion and slumping within Arana Gulch. They indicated that much of the sediment coming from outside of the stream has been

controlled and that most is coming from erosion within the stream. They can help organize volunteers to help with Arana Gulch projects.

The AMWG would like to provide input to help RCD's work plan process. They would like to tour Arana Creek within the Arana Gulch Open Space and identify erosion issues that they can help the City address, such as invasive plant removals and erosion control projects. They asked for a follow-up from RCD as to whether or not there is tidewater goby habitat in Arana Gulch, the best timing to meet with them to help inform their work plan, and to schedule a time to walk the creek to identify erosion issues and other concerns.

## **2. Public Comments**

Michael Lewis has been watching the trails and there is increasing erosion from bicycle and foot traffic, a breakdown of trails, and potential for sedimentation during rains. He also described that there is an area on the bluff face near the RV park above the harbor with drainage issues.

Name unknown. A member of the public explained that the trails are widening because of the extensive amount of use and was hoping that cattle gates can be installed to allow public access into the grazing areas.

Jean Brocklebank presented photos showing the widening of the trails in high trafficked coastal prairie areas and asked if split-rail fencing can be placed to protect them. She also described that the ivy on the trees should be removed on the Marsh Vista Trail.

The AMWG discussed the comments. Kate explained that the project approvals required closing-off access to the cattle grazing areas, and opening-up access would require an amendment to the permit. Noah described his reservations for the City pursuing a time-consuming and costly amendment and questioned how the potential change would affect the restoration efforts. Grey described that Santa Cruz tarplant would not be adversely impacted if access is allowed in the grazing areas.

The group discussed potential techniques to improve the trail widening situations, such as laying down logs, adding d.g. to certain sections to clearly identify the trail, and avoiding mowing around those sections of the trail to keep the grass high and less desirable to walk on. Questions were also asked about increased enforcement, if hardening of the soil is good biologically, and if it was better to discuss these types of improvements with all potential projects that could occur to make sure they do not pull

funds away from high priority projects. A group member asked if adding d.g. was allowed. The permit allows some flexibility for maintaining trails.

**3. CCC Business (Kate)**

- Kate has not received any willing Wildlife Biologists to become part of the group. AMWG members provided the names of some potential candidates. A member mentioned it would be helpful if staff from RCD could attend any meeting when topics of erosion are discussed.
- The City recently received the Year One Annual Report comments. The City will be working towards finalizing the report. As soon as it is complete, City staff will begin work on the Year Two Annual Report which will be sent out to the group in January.

**4. Monitoring Results**

Noah described that the intention was to send the group the monitoring results and photo points before the meeting. Unfortunately, there were some issues and the report will need to be emailed out after the meeting. A summary of the monitoring results was provided. The grass heights were mostly meeting the 5-8 cm objective, but the amount of RDM data was higher than anticipated. The grass heights will need to be continually measured annually in February, April, and August (AMWG April 15, 2015 Meeting Minutes) to help establish a long-term trend. Sue Bainbridge's work on the seedbank viability and density study will be helpful to inform future management decisions and the creation of coastal prairie targets.

**5. Grazing and Invasive Plant Removal Summary for this Year to Date**

- Grazing—An overview of the first year of grazing was provided and the Number of Cattle and Grazing Season was summarized in a table. AMWG members would like the table updated to include Animal Unit Months and type of cattle, heifers. The table will be included in the Year Two Annual Report. A video was shown attempting to document the conditions of the grazing areas on July 18<sup>th</sup>, the day after the cattle had been removed.
- Lessons learned from the first year of grazing—It was evident early on that more cattle would be needed. Tommy was extremely responsive to the changing needs throughout the grazing period, and has been extremely flexible in trying to meet the goals outlined by the group. The group discussed whether or not it was necessary to screen SC tarplant from the cattle at the end of the grazing season. If there are large blooms of the SC tarplant, it would not be feasible to screen all the plants. There are also differences of opinion about whether or not the cattle would harm or help promote more branches

and flower heads from clipping the SC tarplant during its early growth stages. The proximity of the grazing trough in Area A to the Multi-Use Trail invites conflicts between cattle and dogs and the irrigation line will be extended 50-100 ft further into the grazing area.

- Approach for 2<sup>nd</sup> year of grazing--Kathy and Noah will provide the group locations where SC tarplant have been observed in the past but have not grown in recent years as well as areas where there are weeds. The mineral blocks will help create more bare ground from the cattle congregating around the mineral block location. After the cattle create bare ground, the mineral blocks will be shifted to other areas for the same effect. Since this approach is more experimental, mineral blocks will not be placed in the most recent SC tarplant locations to make sure there are no negative effects to those areas. They will neither be placed near steep slopes which could cause erosion issues, nor near the fence-line to ensure the bare ground area created by the cattle is maximized.
- Area B mowings and rakings--Area B was mowed on March 16<sup>th</sup> and May 8<sup>th</sup>. Jean and Michael volunteered to mow and rake Area B and 40 bags of biomass were removed and will be explained in more detail in the Year 2 Monitoring Report.
- Cotoneaster removal—The cotoneasters, ivy, and Himalaya blackberry were removed from the coastal prairie on the hillside near the Harbor entrance. The area will need further attention in future years to prevent the invasive species from reclaiming the area.
- Thistle head removal—In July, thistle heads were removed from approximately 75 percent of the thistles in Grazing Area A. The populations are not as prevalent as in Grazing Area C.

#### **6. Refining Coastal Prairie Targets (Kate)**

Kate provided a handout summarizing the objectives in the habitat management plan and the need for more informed targets. The group discussed the difficulties in finding a good reference site for a lower terrace coastal prairie. Noah inquired as to why targets are necessary at this point in time because the existing targets are not met and the focus should be on restoration work. Group members described that the existing targets should be refined to account for the differences in the type of strategies for coastal prairie and SC tarplant. Additionally, it may be better for some areas to have less diversity, such as a single species of native grass. It also may be good to identify the areas that are more difficult to restore and create more realistic targets. A group exercise of targeted mapping may be necessary. Tim offered to begin studying Twin Lakes in more detail to help. A group member suggested that the City may want to study its own coastal prairie open spaces to gather information to help inform the targets. The

potential for college students to help with the studies was suggested. Work should begin now to plan for an improved set of targets by 2020.

## **7. Goals and Actions for 2016**

- Grazing—Grazing will begin as soon as possible.
- Woody plant removal—The City is in the process of hiring a maintenance worker to help with the restoration effort. The worker will be trained on searching for bird nests and for identifying native species to avoid any impacts from the restoration work. The trees less than six inches in diameter which are encroaching into the coastal prairie will be removed in September-October. The worker will help implement the Weed Management Plan and cut ivy from trees in the Marsh Vista Trail and Hagemann Gulch areas.
- Implementation of the Weed Management Plan in the coastal prairie—Group members discussed whether or not the Weed Management Plan should be expanded to include Arana Creek. The City described its plan to implement the recently created Weed Management Plan for the coastal prairie which was set as a priority in past meetings, and questioned the practicality of creating another plan with another focus before the invasive weeds had been contained in the priority area. Some members believed that the weeds surrounding the coastal prairie would not take a lot of effort to control, with the exception of the thistles. Staff will monitor progress of the Weed Management Plan to see how much time is spent removing weeds within the coastal prairie area. Staff will also begin removing Ivy from trees within Hagemann Gulch and the Marsh Vista Trail.
- Perimeter mowing—Perimeter mowing will continue to occur in Late May and Early June. Bird nests and rare native plants will be flagged to avoid disturbance.
- Annual Monitoring Report for 2015—As soon as the Year One Annual Report is complete, the City will work towards completing the Year Two Annual Report.
- Vegetation monitoring—The City will continue to monitor the vegetation. Group members described that monitoring seedbank density/viability is too expensive and unnecessary to monitor annually. The City will send out Sue's seedbank viability/density study as soon as it has been completed.
- AMWG Meetings—The group discussed the scheduling of the meetings. January is a good time to meet onsite to check-out grazing conditions and erosion concerns and kick-start the new year. The April meeting is a good time to meet onsite to see the conditions of the grazing areas and help plan for the end of the grazing season as well as help staff prepare for future budgeting.
- Erosion Control—Jute netting and barley seed will be placed on the slope on the hillside near the harbor entrance. Hay wattle replacements will be installed on the slopes with bare ground near Hagemann bridge.

**Next Steps:**

- Noah will send out the monitoring report as soon as it has been submitted and will follow-up on the Seedbank Viability/Density Study.
- Noah and Angie will discuss how to best schedule meetings to assist RCD's work plan and schedule a walk of Arana Creek.
- Noah will send out a doodle request to help schedule the next AMWG meeting.
- Noah and Kathy will identify some areas for the placement of mineral blocks and send it out for AMWG comments.
- Noah will work with the rancher to begin cattle grazing.
- Noah will work with the maintenance worker on invasive plant removal and trough relocation in Area A.
- Noah and Kathy will complete the Year One Annual Report and send out a draft of the Year 2 Annual Report for review by AMWG members.
- Kate will continue to seek out a Wildlife Biologist to serve on the group.