

Technical Advisory Committee Notes
Wednesday, December 17, 2014
Meeting held at the Parks Department, 4th floor
455 County Center, Redwood City

Ramona Arechiga called the meeting to order at 1:30pm.

Attendees Present:

- Dr. Stu Weiss – Creekside Science
- Joseph Terry – U.S Fish and Wildlife Science
- David Nelson – Natural History of San Bruno Mountain
- Lech Naumovich – Creekside Science
- Christal Niederer – Creekside Science
- Doug Allshouse – California Native Plant Society
- Michael Forbert – West Coast Wildlands
- Joe Cannon – San Bruno Mountain Watch
- Iris Clearwater - San Bruno Mountain Watch
- Kris Jensen – San Bruno Mountain Watch
- Mark Heath – Shelterbelt Builders

Staff:

- Ramona Arechiga – Natural Resource Manager
- Sam Herzberg – Senior Planner
- Pat Brown – NFO Forward Outreach
- Elizabeth Dallman - NFO Forward Outreach
- Ashley Quintana - NFO Forward Outreach

I. Welcome

Everyone present introduces themselves

II. 30 Year Assessment

- An email copy of the presentation was requested by the group.
- Creekside Science was contracted to do a 30 year assessment.
 - Focus on what happened recently; set priorities of habitat management and maintenance to conserve habitat
- Mountain has changed and it's not a static situation
- Delivered a draft of report last month and the presentation will hit the highlights of the chapters
 - Looking forward for comments
- Aerial photo was put together by David Nelson – he has updated this regularly

Macro weeds

- There has been emphasis on macro invasive
 - Gorse for instance, has been largely been contained and controlled
 - The real macro weeds have been effectively contained and the maintenance of that containment is a priority.
- Oxalis is not able to be eradicated except for the small isolated patches

- Fennel- largely distributed locally very intensive campaigns to get rid of it
 - Weed control – once you start treating a spot, you must follow through.

Major Priority: scrub control

- Most effective monitoring is photo monitoring- before or after and documents very well and if there are areas of concern a field visit works.

Contractor Assessment

- Want easy and quick assessment- contractor self-assessment.
- Evaluation effectiveness scale
 - Post treatment scoring – seeing what was successful
- Relied heavily on habitat management review 2007
 - Tactical level- how you kill the weeds
 - Strategic level- identify priority areas
 - Operational level- get right people, right equipment and time

Butterfly Monitoring

- Habitat remained intact and with host plants- butterfly population is stable
 - Population on algorithmic scale
- Southeast ridge- mission blue population is stable
- Mission Blue generally distributed in the same areas they were 30 years ago, changes in abundance- important as a follow up of the host plants
- Data did show the repopulation of the owl & buckeye canyon post burn
- Callippe Silverspot- variable population, core areas and peripheral areas see declines in areas with scrub encroachment
- San Bruno Elfin larval surveys proven to be easier as they aren't weather dependent
 - Seems to be stable- presence and absence- short time count of density

Host Plants

- Must monitor host plant population
- Density of viola very critical for Silverspot
- Monitoring quarter method transect
 - Level of resolution adequate and good for viola densities
 - Standard method to do across the mountain
- Lupines census - survey in plots and conduct a size class inventory with permanent plots
 - Complete count - Twin Peaks on a 5 year interval and it was instructive for management
- Bay Checkerspot Butterfly : potential to reintroduce - but scattered and discontinuous

Grassland

- Historical trends reconstructed : Originally grasslands were hand drawn and at this point we cannot compare these to present day
- Aerial photos- be a great master student project

Vegetation mapping

- estimated 950 acres of grassland left on SBM

- 9.5-10 acres per year being lost. Ended up case studies doing some aerial photography
- Acres of grassland are very inflated

- Might need a shift need adjustment- 20-30% over estimating of grassland
- Currently in threshold

Nitrogen deposition

- Effects dropping off from 400 m from freeway in Edgewood- top of mountain is pretty clean air and when getting down the mountain- excessive growth of annual grasses
- 2014 worst year of grass growth – hard for mission blue to get in there
- Building up thatch
- Zone on the south slope and parts of the Northeast ridge that are really affecting the grass growth
- Fire volatilizes nitrogen - would more fire help remove nitrogen in the system?
 - Dr. Weiss doesn't think so

Climate change

- Might become a lot drier
- Intensity of the droughts during the summer
- There will be a lot more extreme heat days- increase in fire risk
- This should be a topic that is seriously considered in the next 30 year review

A comment on fog frequency was brought up- details are in the report

- San Bruno Mountain will always be a foggy place, but it may change in frequency

III. Discussion

Suggestions and recommendations

- Wanted to find critical grasslands areas and created a map (referencing it on the presentation)
- Minimize edge impacts and tried to provide habitat connections and contiguous habitat
- Immediate attention - next 5 years get rid of interior shrubs and get a containment line established; doing an assessment
- Scrub removal is important
- Need to reevaluate an invasive species priority list and creating sub species list
- Need more mapping of the mountain – perhaps get volunteers to move forward with that project
- Conceptual generic work plan- seeing all the invasive weeds are already there and need to control
- Relooking at fire plan would be very helpful – thoughts of fire plan

Most important plant propagation is *L. formosus*

- Patch on South east Ridge is the most stable and it is likely due to this plant population
 - Butterflies love it
- Repopulating the mountain with this- long run figuring out how we get it in by seed.
 - Finding seeding strategy is critical
- Effort of adaptive management experiments vs. seeds

Grazing

- Most effective would be cows
- Viola does grazed areas

- Conceptual approach proposal for 40 acre grazing
 - 6 cows which would be the minimum
 - Estimated cost 60K- mainly for fencing
 - 3 year trial
 - Controlled experiment

Fire fund

- Set aside annual budget every year- spend money and resources to benefit from that
- It would follow-up an unintended fire
- Viola loves fire
- Set up meeting with Calfire and TAC would be important

Future Assessments

- Manzanitas needs more attention- over the next 5 years, need an assessment
- Need an assessment of all rare plants and focus on these areas which have not been implemented historically
 - Looking at an abundance and local threats
- Spend time on the *project process assessment form*
 - Please provide feedback

Ramona Checks in with the group on how to move forward with the meeting:

- Spending next few minutes with 30 year assessment
 - Review McKesson at our next meeting

Provided comments by TAC members

- Written response to the draft assessment by members will be added to the appendix
- **DEADLINE for comments for Stu**
 - **Comments to Stu and Lech- early mid January**
 - **Final: Valentines Day- February 14th (mid February)**

Will be sending out Survey to all TAC members

- Please complete it to your earliest convenience

VII. Adjournment

The meeting was adjourned at 3:30pm.

Contact Ramona Arechiga with any questions and/or comments?
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