

NOVEMBER 2010

UCSF MOUNT SUTRO OPEN SPACE RESERVE

COMMUNITY PLANNING PROCESS SUMMARY REPORT



University of California
San Francisco

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AERIAL VIEW OF MOUNT SUTRO



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introduction

1



The Mount Sutro Open Space Reserve (the Reserve) is a unique urban resource in the San Francisco landscape. The 61-acre open space provides habitat, access to nature and a visual amenity that nearby residents and visitors cherish. Being able to enjoy this resource today and into the future requires active management and, in the coming years, UCSF will begin to implement a series of deliberate management strategies to preserve the visual and habitat qualities of the forest while ensuring the safety and enjoyment of people who visit the open space, in addition to the safety of the property in and around it.

This document summarizes the results of the UCSF

2009–2010 Community Planning Process for the Reserve. The process was designed to obtain community input for potential forest management demonstration projects as recommended in the 2001 Mount Sutro Open Space Reserve Management Plan.

This document further describes the commitments that UCSF has made for on-going management of the forest based in large part on the comments and ideas of San Francisco community members.

As UCSF moves forward, this document will serve as a reference for the university and the community as they work together to manage the Reserve.



2009 COMMUNITY WALKING TOUR

history and background

2



SUTRO'S LEGACY

Named for its former owner and San Francisco Mayor Adolph Sutro, the Reserve has a history of transition, much like many San Francisco neighborhoods.

A successful engineer and real estate investor, Adolph Sutro served as San Francisco's Mayor from 1894 to 1896. Sutro's many land holdings included Mount Parnassus, now named Mount Sutro in his honor. Like most of San Francisco's higher terrain in the 1800s, the hill was covered primarily with native grasses, wildflowers and shrubs. In celebration of San Francisco's first Arbor Day in 1886, Sutro began planting the hill with imported blue gum eucalyptus, Monterey pine, Monterey cypress and possibly other species. The eucalyptus quickly adapted to the new location and soon became the predominant tree species on the hill.

PERMANENT OPEN SPACE DESIGNATION

Sutro donated 13 acres of land on Parnassus Avenue to the UC Board of Regents in 1895 for the purpose of developing the UCSF Parnassus Heights campus. It wasn't until 1953 that UCSF purchased a 90-acre parcel to the south, which included a portion of Mount Sutro. Most of this land is now the Mount Sutro Open Space Reserve. Fifty-eight acres of the Reserve were designated as permanent open space in a 1976 UC Board of Regents-approved resolution. UCSF's 1996 Long Range Development Plan (LRDP) updated the boundaries of the Reserve to reflect re-measuring, which found the area to contain an additional 3 acres, for a total of 61 acres.

2001 MOUNT SUTRO OPEN SPACE RESERVE MANAGEMENT PLAN

The 1976 UC Board of Regents' resolution ensured that the Reserve would remain open space. However, management guidelines for the Reserve were not developed at that time. The Reserve, now an aging eucalyptus forest, has become a concern for many nearby residents, specifically regarding forest health and safety.

As recommended by the 1996 UCSF LRDP, the 2001 Mount Sutro Open Space Reserve Management Plan (2001 Plan) was initiated. With substantial community input, this plan identified potential maintenance and restoration actions for the Reserve. The plan integrated neighborhood and UCSF interests using the following seven planning principles, or goals, as a framework:

- Ensure public safety and property protection;
- Improve the health of the forest;
- Protect and expand native plants;
- Enhance wildlife habitat values;
- Maintain scenic quality;
- Improve public access; and
- Implement the [2001] Resource Management Plan.

The 2001 Plan also identified 5 near-term management actions to be pursued over the next 10 years, including:

1. Hazardous tree removal near buildings and pavement: approximately 18 acres averaging approximately 15 trees per acre.
2. Eucalyptus thinning in 2 demonstration areas totaling approximately 2.5 acres, including fuel load removal.
3. Eucalyptus thinning and conversion planting to native species in 8 demonstration areas totaling approximately 6.6 acres.
4. Native plant enhancements in three areas.
5. Trail system improvements.

MANAGEMENT PLAN ACTIONS TAKEN SINCE 2001

The 2001 Plan identified three ten year management priority areas and related management actions for each area; these priority areas are identified on Figure 1 (page 7). As of 2010, over half of these actions have been completed as described below:

Priority Area 1

- Crestmont-Christopher and Lower Medical Center Way Hazardous Tree removal.
- Installation of Rotary Meadow, a native plant demonstration area on the summit; funded by \$100,000 grant from Rotary Club (combination of 3 Management Plan actions).
- Aldea Screen Planting.
- Cleared and improved trails through the efforts of Mount Sutro Stewards.

Priority Area 2

- Edgewood, Surge Hazardous Tree removal.

Priority Area 3

- Upper Medical Center Way, East Aldea and Chancellor's Residence Hazardous Tree removal.

Additional Actions Completed:

- Slope stabilization and native planting on hillside slide site (due to water pipe break) above Medical Center Way.
- Tree and brush removal for construction of Regeneration Medicine Building.
- UCSF/Mount Sutro Stewards' historical trail restoration.
- Non-UCSF project: SF Public Utilities Commission.

FEMA GRANT APPLICATIONS

In 2007 and 2008, UCSF applied for money from the Federal Emergency Management Agency (FEMA) to fund work in two areas to reduce the risk of a

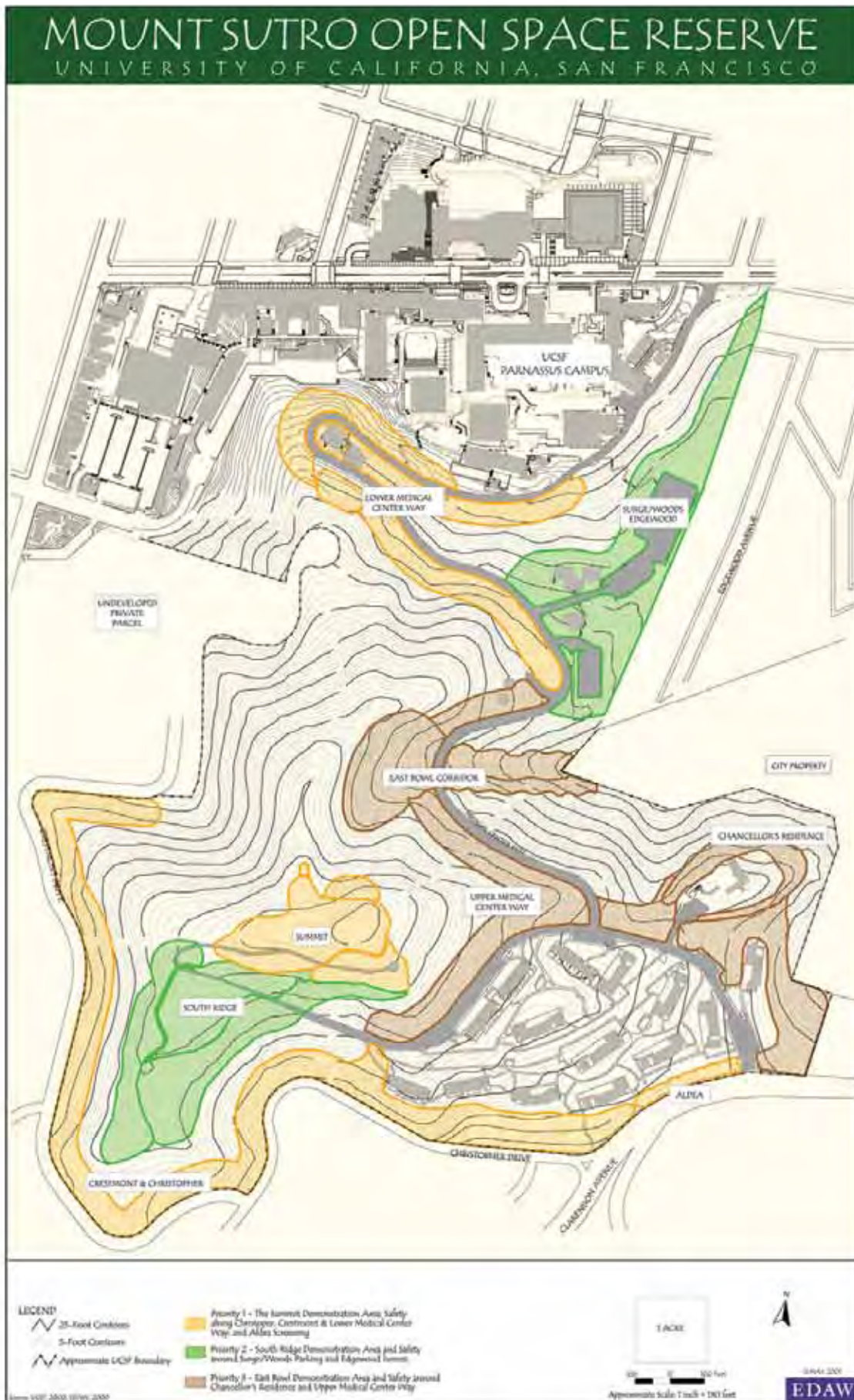


Figure 1: Ten Year Management Priority Areas, 2001 Mount Sutro Open Space Reserve Management Plan

devastating high intensity, fast-moving wildfire and to improve the health and safety of the remaining trees. UCSF withdrew these grant applications, which, due to significant changes in the initial timeline for review, would have further delayed forest management work and inhibited UCSF's ability to do small demonstration projects in advance of the proposed fire mitigation projects. However, UCSF remains fully committed to reducing the risk of wildfire and improving the health and safety of the forest while maintaining its scenic quality.

COMMUNITY INVOLVEMENT

In response to community concerns regarding the FEMA grants and in recognition of the need to maintain ongoing dialogue with the community regarding the management of the Reserve, UCSF initiated a new round of community meetings in 2009 that carried into 2010. The 2010 activities are described in Figure 2 (page 9). The purpose of the process was to define demonstration projects and evaluation criteria for the Reserve.

In the Fall of 2009, UCSF hosted a community meeting to discuss the FEMA applications and two walking tours on Mount Sutro to discuss issues related to management of the Reserve.

In May, June, and July, 2010, UCSF held three community workshops. Community members met with UCSF staff to plan the workshop agendas. During each workshop, community issues and concerns were discussed as they related to the potential demonstration projects and evaluation criteria.

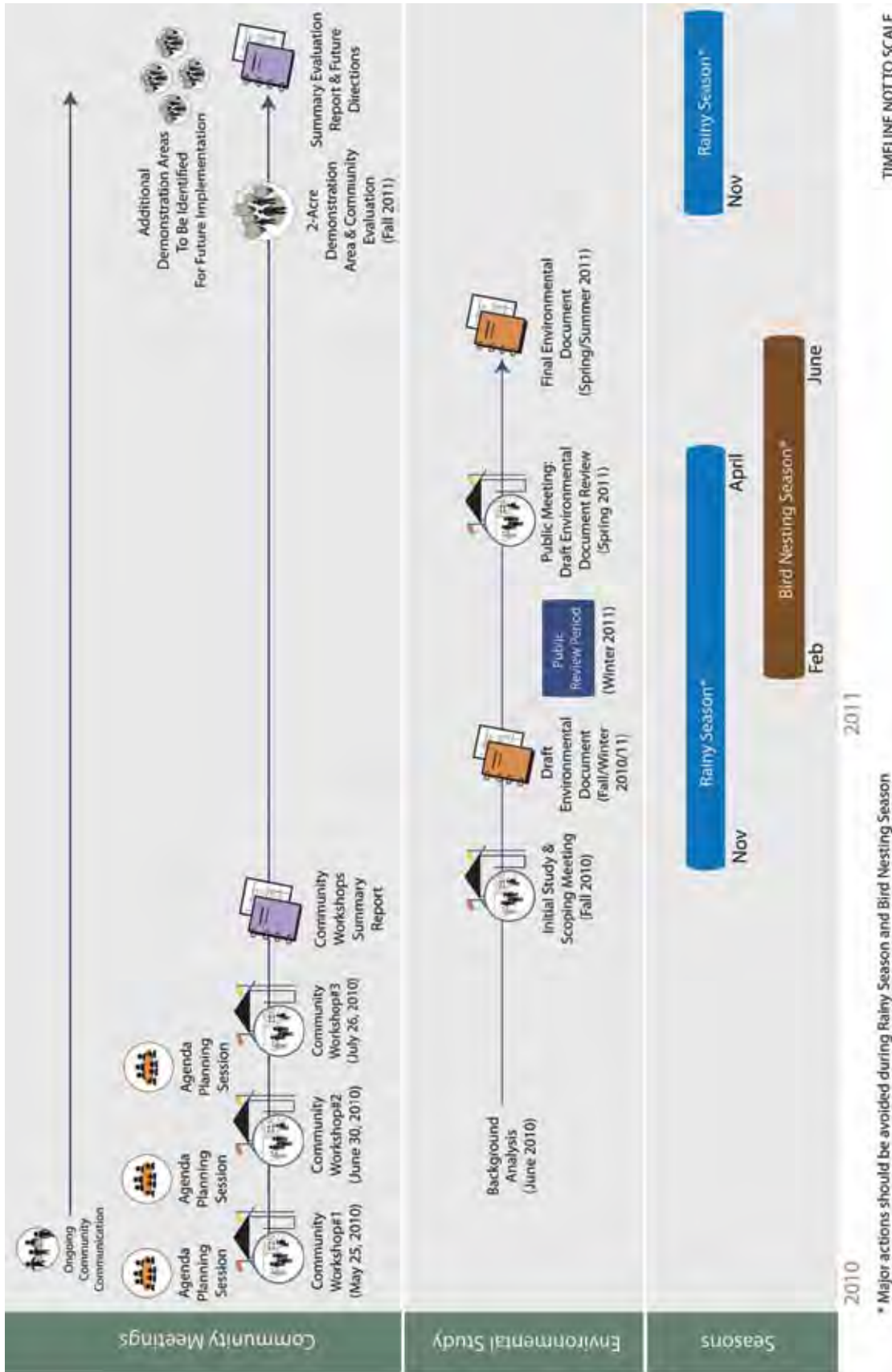
Summaries of all of these events are available online at UCSF's Community and Government Relations Mount Sutro website at www.community.ucsf.edu.

RESULTS OF COMMUNITY INPUT

Community input received in 2009-2010 resulted in the following changes to UCSF's original proposals:

- Withdrawing applications for Federal Emergency Management Agency (FEMA) grants which would have inhibited UCSF's ability to implement small demonstration projects in advance of the proposed fire mitigation projects;
- Convening an expansive community involvement process to gather input on the design of potential demonstration projects. The process included two community meetings, two on-site walking tours led by professional foresters, and three community workshops; the workshops were preceded by agenda planning sessions where neighbors worked with staff to plan workshop agendas;
- Reducing the size of the areas proposed for near-term management actions from 14 acres (FEMA grant applications) to less than 7.5 acres (the four demonstration projects);
- Eliminating the use of herbicides for ongoing maintenance of the Reserve pending an evaluation of an herbicide commonly known as "Roundup." UCSF is evaluating Roundup as a result of recent studies on the active ingredient in Roundup and similar glyphosate-based herbicides such as Garlon;
- Minimizing use of herbicides in demonstration projects to spot-application only as needed on just 1 acre. Results of herbicides on this single area and other re-growth control methods used on other acres will be compared and evaluated before developing a policy for the remainder of the Reserve;
- Extending the demonstration project evaluation schedule;
- Delaying Demonstration Project 4 for one year to provide more time for evaluation of results from Demonstration Project 1;
- Adding two demonstration projects as suggested by community members.

Figure 2: 2010 Community Planning Process Graphic





VIEW IN THE RESERVE

forest management goals

3



Based on the goals of the 2001 Plan and community concerns expressed during the FEMA grant application process, UCSF developed a series of Forest Management Goals. These goals, grouped into four broad categories of safe, healthy, aesthetic and usable, were reviewed and discussed by the community during the 2010 planning process and are listed below.

SAFE

- Reduce fuel load and potential for devastating wildfire;
- Provide emergency response access;
- Remove hazardous trees near trails, roads and structures;
- Improve trailside visibility; and
- Provide long-term maintenance.

HEALTHY

- Reduce competition among trees (increase growing space, soil/plant moisture and fertility);
- Remove diseased and unhealthy trees;

- Create a variety of tree ages;
- Increase tree species diversity;
- Remove vines from tree trunks; and
- Monitor and sustain health of forest.

AESTHETIC

- Maintain a forested setting;
- Maintain attractive, healthy trees;
- Improve visibility within forest; and
- Provide views beyond forest.

USABLE

- Maintain adequate path and trailside clearance;
- Place logs for seating along trails and to close unauthorized trails;
- Modify steep trail segments with switchbacks; and
- Enrich habitat and outdoor experience.



VIEW OF MOUNT SUTRO FROM TANK HILL

demonstration project program 4



Four demonstration projects, totaling less than 7.5 acres, are proposed for implementation in the Reserve. The projects were designed with different characteristics to allow for study and evaluation of the varying management techniques. Demonstration project characteristics include:

- Tree spacing;
- Amount of undergrowth removal;
- Re-growth control strategies;
- Native plant restoration; and
- View corridor development.

Evaluation criteria and principles have been developed to guide the evaluation process, which will take place one month after implementation for visual impacts and one year after implementation for re-growth control and new plant survival.

UCSF has committed to limit herbicides to 1 acre in demonstration project 1; no herbicides will be used in the other 2011 projects. Different vegetation re-growth control methods will be employed in Demonstration Project 1, including herbicide, tarping, mechanical cutting, and/or grazing.

In accordance with the commitment to Adaptive Management from the 2001 Plan, Demonstration Project 4 will be developed based on the evaluation and findings from Demonstration Project 1. Re-growth control methods for Demonstration Project 4 will be selected based on evaluation of Demonstration Project 1.

The size, location, target implementation date and desired future condition of the demonstration projects are indicated in Figures 3 and 4 (pages 14, 15). Full detail on the proposed demonstration projects is included in Appendices 1 and 2.

FIGURE 3: DEMONSTRATION PROJECT SUMMARY

| Demonstration Project | Size | Area | Target Implementation Date | Desired Future Condition |
|-----------------------|-------------|----------------------|----------------------------|--|
| 1 | 3 acres | South Ridge | Sept. 2011 | Forest with open understory. |
| 2 | 2 acres | Edgewood Avenue | Sept. 2011 | Forest with open understory. |
| 3 | < .05 acres | North side of Summit | Sept. 2011 | Healthy grassy area and clear view corridor of city. |
| 4 | 2 acres | East Bowl/Corridor | Sept. 2012 | More open canopy with space for new redwood, willow, and bay trees and small sunny meadows with native forbs and shrubs. |



DEMONSTRATION PROJECT 1

This three-acre area located along the South Ridge of Mount Sutro was selected because of the variable field conditions, good accessibility, high wildfire risk and proximity to residential areas in the event of a wildfire, and because thinning is expected to have very little visibility from off-site. The density and size of eucalyptus trees vary from one end to the other, as do the understory and soil conditions (at the most southern end,

mature trees are typically much less than ten inches in diameter and only a few feet apart, understory is sparse and bedrock is shallow as compared to the remainder of the area). To reduce the fuel load and to create a forest with an open understory, trees would be thinned to an average overall spacing of 30 feet, and vines climbing up the first ten feet of the trees and most of the understory would be removed mechanically.

To determine the best method for long-term control of vegetative re-growth, the demonstration plot would be divided into three one-acre areas. In one acre, eucalyptus stumps would be covered with tarps to prevent re-sprouting, in another, herbicides would be painted onto the stumps and in the third, trees and subsequent new sprouts would be mechanically or hand removed. Herbicides may be used to spot-treat certain plants, such as poison oak along trails and vine and blackberry stems, within the one-acre area where it would be used on the eucalyptus stumps.



Evaluation Principles

Principles guiding decisions made after information is gathered from this demonstration project are:

- If there is general acceptance of the 30-foot tree spacing, this standard will be applied to up to 40 acres of Reserve where slopes are not too steep and there is accessibility; otherwise, spacing will be modified with community input;

- If doing nothing to or tarping tree stumps is determined to be effective and financially feasible by UCSF, then herbicides will not be used on stumps elsewhere in the Reserve;
- If understory re-growth can be controlled at reasonable cost without herbicides, then they will not be used elsewhere; otherwise, UCSF will use herbicides judiciously and consistent with City standards.



DEMONSTRATION PROJECT 2

The purpose of this two-acre demonstration project near Edgewood Avenue is the same as Demonstration Project 1, but it was selected to evaluate potential increases in noise, light and wind on concerned neighbors. It was also selected as a contrast to Demonstration Project 1, as few trees would be removed in this area and understory removal would be generally limited to large shrubs and acacia trees that are scattered throughout the area. The focus would be on the removal of dead material and safety pruning with undergrowth removed mechanically. Cut stumps would be tarped.

Evaluation Criteria

In addition to the evaluation criteria listed for Demonstration Project 1, success for this demonstration

project will be demonstrated if there is no noticeable increase in noise, wind or light exposure for residents along Edgewood Avenue, as determined by a resident survey.

Evaluation Principles

Principles guiding decisions made after information is gathered from this demonstration project are the same as for Demonstration Project 1. In addition, if residents believe there are noticeable increases in noise, wind or light exposure, then an agreement with interested residents will be reached on future work in the area.



DEMONSTRATION PROJECT 3

This demonstration project was requested by community members to serve two purposes: to restore an existing native grass area and to create a view of the city from the north side of the summit of Mount Sutro. A minimum number of trees would be removed to prevent shading of the small Nootka Reed Grass area and to allow for a narrow view corridor through the forest. Stumps would be tarped and non-natives would be hand-removed from the grass area.

Evaluation Criteria

Evaluation criteria for this demonstration project will consider success to be control of non-natives in grassy areas, expansion of the native plant community, and whether 85% of the tree stumps have no sprouts.

Evaluation Principles

Principles guiding decisions made after information is gathered from this demonstration project will be that, if there is general community acceptance, additional view corridors elsewhere in the forest will be created with community input. Also, other remnant native plant communities will be enhanced in accordance with the accepted techniques for controlling vegetation re-growth.



DEMONSTRATION PROJECT 4

In the fall of 2012, where there is a two-acre bowl and intermittent drainage area on the eastern side of the mountain, non-native understory and trees at an average overall spacing of 60 feet would be removed. This would allow more sunlight to penetrate the forest floor in support of native plant growth, greater biodiversity

and wildlife habitat. A year later, native shrubs and trees would be planted in the openings if non-native vegetation can be adequately controlled. Methods of control are dependent on the outcomes of Demonstration Project 1. To test the need for irrigation, one acre would be irrigated; the other would not be irrigated. While the forest canopy would be maintained, the tree density would be reduced in this area. In addition, some native shrubs and trees would be planted in Demonstration Project 1.

Evaluation Criteria

Evaluation criteria for this demonstration project will consider success to be that 85% of tree stumps have no sprouts, that poison oak, blackberry, vines and possible other understory plants can be controlled at a reasonable cost, and that two-thirds of new plants survive after the first year of planting and in subsequent years survival rates remain at 50% or higher.

Evaluation Principles

Principles guiding decisions made after information is gathered from this demonstration project are:

- In addition to the re-growth control implications for Demonstration Project 1, the spacing of remaining trees may be increased in this demonstration area if it is determined to be necessary to minimize shade and ensure new plant survival;
- Any new spacing will be used as the standard for any additional “conversion planting” areas that may be planned if this project is successful (with and without irrigation).

See also Chapter 6, F. “Hands-Off” Management Area, page 24.

A photograph of a forest trail, heavily overlaid with a semi-transparent yellow filter. The trail is narrow and covered in low-lying vegetation and ferns. Tall, slender trees line the path, with their trunks visible through the foliage. In the bottom right corner, there is a solid yellow rectangular box containing the text "MOUNT SUTRO TRAIL" in white, uppercase letters.

MOUNT SUTRO TRAIL

community feedback

5



Over the course of the three community workshops held in 2010, UCSF staff presented the history of Mount Sutro, reviewed recent management actions and discussed potential management strategies for the Reserve. The workshops were designed to define demonstration projects and evaluation criteria for the Reserve. The community response to key management issues is described below.

HAZARDOUS TREES

There was a clear consensus that hazardous trees should be addressed through removal or pruning, especially near residences, campus buildings, parking lots and trails.

FOREST HEALTH

Concerns about forest health were the same concerns that were expressed and identified in the 2001 Plan.

The primary issues are:

- Large amounts of dead and dying trees;
- A eucalyptus monoculture condition that suppresses the growth of other species;
- English ivy climbing up the trees along with peeling eucalyptus bark and brushy understory form a “fuel ladder”;
- Accumulation of forest debris; and
- Hazardous trees.

FIRE

Most community members generally accepted that documented conditions related to forest health present a potential fire hazard that needs to be managed. The overwhelming majority of community members supported the development of management practices and evaluation criteria for four initial demonstration projects to meet the goal of improving safety and forest health. A small minority of community members contended that

the risk of fire in the Reserve is slim to non-existent, questioned the validity of a City and County of San Francisco wildfire hazard map, and suggested that wildfire risk reduction activities could increase the risk of fire in the Reserve.

VEGETATION MANAGEMENT AND HERBICIDE USAGE

A number of community members expressed concern about the use of herbicides to manage vegetation re-growth because of perceived possible long-term impacts to human and environmental health. They requested that UCSF consider the use of alternatives such as plastic tarping or removal by hand. Some community members urged that if herbicides are necessary, UCSF should use them judiciously in a direct-application method. A fire specialist from the National Park Service said that it is an unfortunate reality that herbicides are a must when maintaining a eucalyptus forest. A neighbor who volunteers in the Reserve said that controlling underbrush re-growth by hand is a losing battle. Some community members urged UCSF not to rule out herbicides completely.

HABITAT AND WILDLIFE IMPACTS

Community members noted that the Reserve provides for a diversity of plant and animal species and requested a thorough flora and fauna species study. Community members offered to collaborate with UCSF by sharing their own documentation of biological activity on the Reserve and also encouraged UCSF to conduct inventory and observation activities during the daytime and evening hours.

VISUAL IMPACTS

Community members appreciate the sense of nature and forest enclosure provided in the Reserve. Some expressed a desire for management actions to minimize visual impacts. Some urged UCSF to respect views from and to Mount Sutro. Some members requested that long-distance views from the Reserve be created, especially at the summit and along the historic trail. Community members also identified a need for management activities to consider views of Mount Sutro from key locations around the city.

TRAIL USE GUIDELINES

Since the development of the 2001 Plan, the Mount Sutro Stewards—a community-based organization comprised of volunteers—have spearheaded a successful trail maintenance effort that has encouraged an increased number of walkers and mountain bikers to visit the Reserve. Due to the increase in usage, community members requested that UCSF encourage proper trail etiquette to ensure that different types of trail users are aware and respectful of each other. Community members voiced broad support for the installation of trail markers, and mixed support for a proposed additional trail on the south side of the Reserve near the Aldea housing complex.

ONGOING COMMUNITY ENGAGEMENT

During the course of five community meetings and two walking tours held during 2009 and 2010, most community members expressed appreciation for UCSF's efforts and provided specific input that was integral to the development of the four proposed demonstration projects and demonstration project evaluation

criteria. A few participants expressed concerns about the authenticity of the process, wondering if UCSF was really “listening.” Community members are interested in continuing to be kept informed of UCSF’s plans for the Reserve and participating in demonstration project evaluation activities.

COMMUNITY PARTNERSHIPS

Community participants applauded the efforts of the Mount Sutro Stewards, who work closely with the UCSF Facilities Management Department on trail building and vegetation management activities. Community members encouraged UCSF to continue this successful partnership and to develop others where appropriate.

DEMONSTRATION PROJECT TECHNIQUES AND APPROACHES

Community participants requested that UCSF develop demonstration projects to showcase a variety of management techniques, given the varying terrain and conditions of the Reserve. Suggestions included:

- Developing varying sized demonstration project areas with different vegetation re-growth control methods (i.e., with herbicide and without herbicide) and frequency (i.e., annually or every other year);
- Observing the re-growth of native species following the removal of non-natives before committing to planting activities;
- Increasing habitat for wildlife;
- Restoring native grasses in one area;
- Creating views from the summit and historic trail;
- Waiting a year before implementing demonstration project #4 to benefit from the knowledge gained from the outcome of project #1.

EVALUATION ACTIVITIES, CRITERIA AND TIMING

The majority of community participants agreed that improving forest health while maintaining habitat would be a successful outcome of the demonstration projects. Community members expressed concern that the originally proposed evaluation periods for the demonstration projects may not allow enough time for accurate evaluation.



MOUNT SUTRO TRAIL

ucsf commitments for managing the mount sutro open space reserve

6



Based on the community input and feedback, UCSF makes the following commitments to the San Francisco community for the long-term management of the Reserve.

A. MOUNT SUTRO OPEN SPACE RESERVE AS AN URBAN FOREST

UCSF is committed to preserving the Reserve as an urban forest and as a resource for all of San Francisco.

B. UCSF AS RESPONSIBLE PARTY

As the owner of the Reserve, UCSF is responsible for actively managing the resource (consistent with funding availability) for forest safety, health, aesthetics and usability for generations to come.

C. MANAGING FOR MULTIPLE GOALS

As an urban forest surrounded by dense residential development and the UCSF campus and UCSF Medical Center, the Reserve requires special management considerations. Multiple goals must be pursued simultaneously. UCSF remains committed to the seven goals of the 2001 Plan:

1. Ensure public safety and property protection;
2. Improve the health of the forest;
3. Protect and expand native plants;
4. Enhance wildlife habitat values;
5. Maintain scenic quality;
6. Improve public access; and
7. Implement the [2001] Resource Management Plan.

D. ADAPTIVE MANAGEMENT

UCSF is committed to the principle of adaptive management as defined in the 2001 Plan. Adaptive management provides for the scientific and public evaluation of the success of proposed actions in the demonstration projects and allows for necessary adjustments before application to other areas of the forest in future phases of management.

E. FOCUS ON DEMONSTRATION PROJECTS

Subject to California Environmental Quality Act (CEQA) review, UCSF will limit near-term implementation of the 2001 Plan to the four demonstration projects that have been proposed, discussed, and modified during the 2010 community process. UCSF and neighbors will evaluate the demonstration projects using evaluation criteria developed in the 2010 community process. Vegetation management activities for the remainder of the forest will be based on these evaluation results. [Activities that are exempt from CEQA will continue in the Reserve. These activities include pruning, shrub and weed removal, trail maintenance and improvements, hazardous tree removal, maintenance and plantings at Rotary Meadow, and installation of accessory structures such as trail markers.]

F. HANDS-OFF MANAGEMENT AREA

UCSF has identified a 2-acre area of the Reserve to serve as a space in the forest for “hands-off” management (Figure 5, top of page). Maintenance will be performed to remove and prune hazardous trees near homes and trails for the safety of residents and visitors and to keep trails clear (including trash pick-up). This area would exist for the one-year duration of the demonstration project time frame.



Figure 5: “Hands-Off” Management Area

G. VERY LIMITED USE OF HERBICIDES

UCSF will restrict the use of herbicides to one acre in Demonstration Project 1 (i.e., 1 of 61 total Reserve acres). After cutting, targeted spot-application methods will be used on eucalyptus stumps, vine, blackberry, and broom stems, and on poison oak base, root collar, or stumps. Results of herbicides on this single acre and other re-growth control methods used in the remainder of the demonstration project areas will be compared and evaluated before developing a policy for the remainder of Reserve.

H. TREE SPACING

It is UCSF’s intention that the Reserve retain the look of a forested mountain following tree thinning because many trees will remain. UCSF is committed to tree spacing that will allow healthy trees to flourish, thus retaining a dense forested appearance. In all four demonstration projects, all dead, dying, unhealthy, and hazardous trees will be removed. Where trees must be removed to achieve desired spacing, the next priority will be trees smaller than 12 inches in diameter. While the goal tree spacing in demonstration projects 1 and 2 is an average of 30 feet between trunks to allow

trees to access needed nutrients and moisture, infinite variability in spacing and arrangement can exist in a managed forest just as it does in unmanaged forest. In some places, the mature trees are already at the desired spacing and just the dead and unhealthy trees would be removed. In some locations there is a dense thicket of unhealthy trees where a larger number of trees will be removed to create a healthy environment.

In Demonstration Projects 3 and 4, where the respective desired outcomes are a view corridor and a more open canopy with space for new trees and small sunny meadows with native plants, the trees will be removed strategically to achieve these outcomes. Very few trees would need to be removed in Demonstration Project 3 to provide a clear view of the City and to minimize shade on the Nootka Reed Grass. In Demonstration Project 4, the goal spacing will be 60 feet between trunks on average to allow for planting of Redwood, Willow and Bay trees and shrubs.

I. BIOLOGICAL RESOURCES STUDY

In connection with the CEQA analysis being performed for the project, UCSF will prepare a biological resources study that will provide more than enough information to assess impacts of the project in accordance with CEQA guidelines and mandatory findings of significance.

J. RESPONSIBLE TRAIL USE

UCSF will address the issue of trail user conflicts by installing two bulletin boards in the forest that convey the rules and etiquette to educate trail users (bicyclists, dog owners, and pedestrians) on proper use of the trails.

K. MODEST TRAIL ENHANCEMENTS

UCSF agrees to implement modest trail improvements and extensions in accordance with the proposed trail map (Figure 6, page 26) as revised in response to the community workshop held in July 2010.

L. COMMUNITY INVOLVEMENT IN ALL CURRENT AND FUTURE PLANNING

UCSF commits to continuing community engagement in the planning and management activities associated with the Reserve. Engagement activities may include, but are not limited to, community workshops, walking tours, web sites, email information distribution, and Mount Sutro workdays. UCSF further commits to continuing to give serious consideration to all input received that is consistent with its overall ownership responsibilities regarding the planning and management of the Reserve.



Figure 6: Mount Sutro Open Space Reserve Trail Map

next steps and opportunities for involvement

7



The 2010 community planning process informed the development of four unique demonstration projects and a renewed focus on community engagement as a key strategy for successful management of the Reserve.

Public participation will be encouraged throughout the entire environmental review (CEQA) process as described below:

A. PUBLICATION OF INITIAL STUDY

The project description and checklist of environmental topics to be analyzed will be published in December, 2010.

B. SCOPING MEETING

Members of the public will be asked to recommend additional environmental topics to be analyzed in the EIR; anticipated to be held early January, 2011.

C. DRAFT ENVIRONMENTAL IMPACT REPORT (EIR)

The 45-day public comment period will begin in Winter 2011.

D. EIR PUBLIC HEARING

Verbal and written comments on the Draft EIR will be accepted during the 45-day public comment period.

E. FINAL EIR

The Final EIR will be available during Spring/Summer 2011.

F. CONSIDERATION BY UC BOARD OF REGENTS (OR DESIGNEE)

Spring/Summer 2011.

UCSF will conduct periodic community meetings on topics related to the Reserve while the EIR is being prepared.

A photograph of a street lined with large, mature trees, likely oaks, with a yellow text box in the bottom right corner. The trees are dense and fill most of the frame. In the lower left, a street lamp is visible. In the lower right, a dark-colored car is parked on the street. The overall scene is a quiet residential or park-like area.

EDGEWOOD AREA ON MOUNT SUTRO

appendices



PROPOSED DEMONSTRATION PROJECTS

Appendix 1: Proposed Demonstration Projects and Maintenance

Appendix 2: Proposed Demonstration Project Evaluation

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APPENDIX 1: PROPOSED DEMONSTRATION PROJECTS AND MAINTENANCE

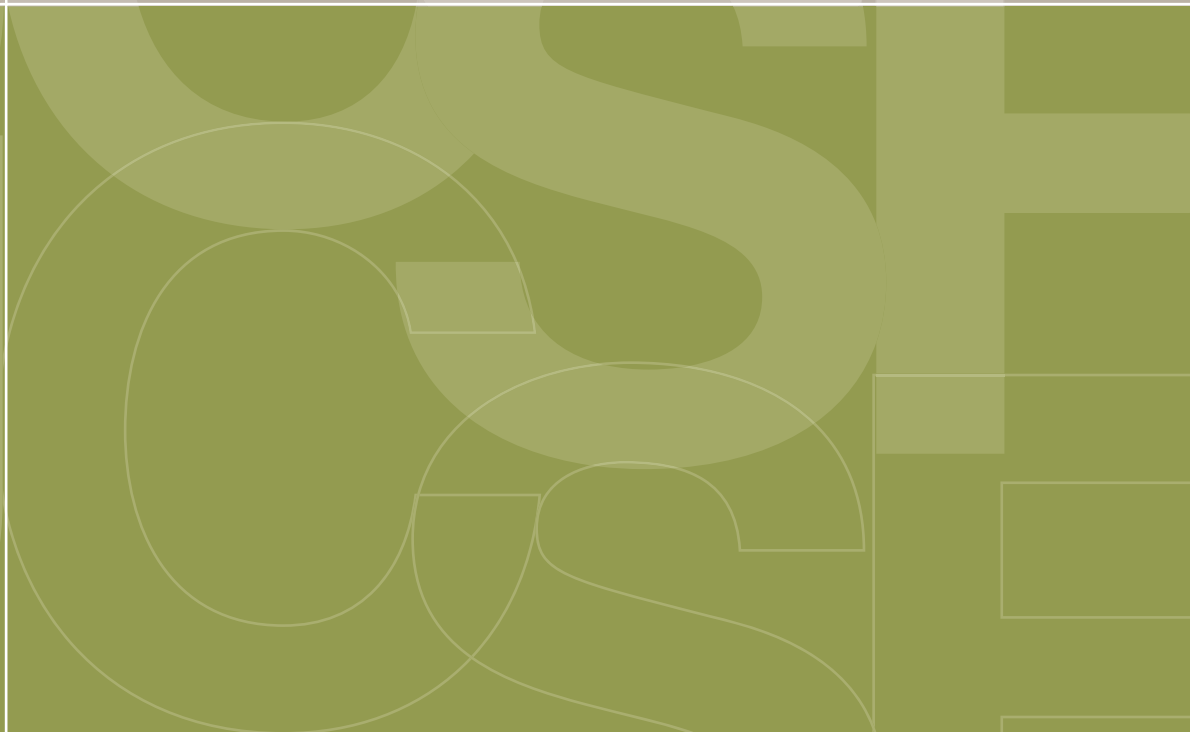
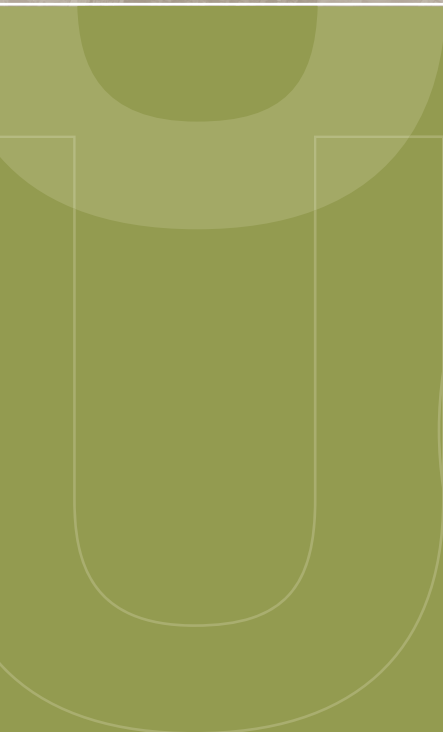
| Project Name/Location <i>Desired Future Condition</i> | Management Purpose/ Objective | Tree Spacing | Initial Undergrowth Removal | Initial Branch Pruning | Initial Eucalyptus Re-Growth Control | Initial Planting/ Irrigation | Initial Target Date | Maintenance (Re-Growth Control) | Maintenance Frequency |
|---|--|--|--|---|--|--|--|--|--|
| Demonstration Project 1: 3 Acres South Ridge Area <i>Managed forest with open understory</i> | Short-term: Visual effects of tree spacing; trail views. Long-term: Vegetation re-growth. | 30' Average between trunks | Mow up to 90-100% (excluding natives) spot-treat tree vine and blackberry stems with herbicide in 1-acre; 100% removal of vines on tree trunks | As needed to remove fire ladders and hazards. | 1 AC- Rely on maintenance 1 AC-tarp 1 AC- herbicides | None | September 2011 | Undergrowth: Mow, graze and/or use herbicides (1 acre only) consistent with city standards Sprouts: Cut mechanically or graze | Undergrowth: Annually or every other year for 5 years, depending on re-growth. Sprouts: 1-2 times per year for 3-5 years in “maintenance” AC, depending on re-growth. |
| Demonstration Project 2: 2 Acres Edgewood Avenue Area <i>Managed forest with open understory</i> | Short-term: Visual effects of tree spacing; noise, light and wind impacts. Long-term: Vegetation re-growth. | 30' Average between trunks (minimal removal- mostly acacias) | Mow up to 90-100% (excluding natives); 100% removal of vines on tree trunks | As needed to remove fire ladders and hazards. | Tarp tree stumps. | None | September 2011 | Undergrowth: Mow and/or graze Sprouts: Maintain tarps until trees are dead | Undergrowth: Annually or every other year for 5 years, depending on re-growth. |
| Demonstration Project 3: <0.5 Acre North Side of Summit <i>Healthy grassy area and clear view of city</i> | Short-term: Create view corridor from summit Long-term: Restore Nootka Reed Grass | Minimal removal to prevent shade on Grass & provide view | Hand remove non-natives from grassy area as needed. | As needed to prevent shade & clear view corridor. | Tarp tree stumps. | None | September 2011 | Undergrowth: Hand remove non-natives Sprouts: Maintain tarps until trees are dead | Undergrowth: As needed to control non-natives in grassy area. |
| Demonstration Project 4: 2 Acres (East Bowl/Corridor) <i>More open canopy with space for new native tree plantings & sun for native forbs and shrubs</i> | Short-term: Vegetation re-growth. Long-term: New plant survival/growth rates. | 60' Average between trunks | Up to 90-100% (including eucalyptus litter & excluding natives); 100% removal of vines on tree trunks. | As needed to remove fire ladders and hazards. | Depends on outcome of Demonstration Project #1. | Planting of native shrubs & trees. 1 acre irrigated; 1 acre not | September 2012 to remove December 2013 to plant | Undergrowth and Sprouts: Depends on outcome of Demonstration Project 1 | Undergrowth and Sprouts: As needed to ensure native plant survival. |

APPENDIX 2: PROPOSED DEMONSTRATION PROJECT EVALUATION

| Project Name/Location <i>Desired Future Condition</i> | Management Purpose/ Objective | Tree Spacing | Initial Undergrowth Removal | Initial Eucalyptus Re-Growth Control | Target Evaluation Date | Evaluation Criteria | Principles |
|--|--|--|---|--|--|--|--|
| Demonstration Project 1: 3 Acres South Ridge Area <i>Managed forest with open understory</i> | Short-term: Visual effects of tree spacing; trail views. Long-term: Vegetation re-growth. | 30' Average between trunks | Mow up to 90-100% (excluding natives) spot-treat tree vine and blackberry stems with herbicide in 1-acre; 100% removal of vines on tree trunks. | 1 AC- Rely on maintenance 1 AC-tarp 1 AC- herbicides | October 2011 for public feedback on visual effects. October 2012 for re-growth control. | Success: tree spacing is generally acceptable to interested community members. Success: 85% of stumps above the percent of natural failure have no sprout re-growth. Success: Understory of poison oak, blackberry and vines can be controlled at a reasonable cost (after 1 year of maintenance, costs for each method will be determined & extrapolated to 40 acres of Reserve & potential revenue assessed to determine long-term financial feasibility). | If there is general acceptance of the 30-foot tree spacing, this standard will be applied to up to 40 acres of Reserve; otherwise, spacing to be modified with community input. If doing nothing to or tarping tree stumps is determined to be effective and financially feasible by UCSF, then herbicides will not be used on stumps elsewhere in the Reserve. If understory re-growth can be controlled at reasonable cost without herbicides, then they will not be used elsewhere; otherwise, UCSF will use judiciously, consistent with City standards. |
| Demonstration Project 2: 2 Acres Edgewood Avenue Area <i>Managed forest with open understory</i> | Short-term: Visual effects of tree spacing; noise, light and wind impacts. Long-term: Vegetation re-growth. | 30' Average between trunks (minimal removal- mostly acacias) | Mow up to 90-100% (excluding natives); 100% removal of vines on tree trunks. | Tarp tree stumps. | October 2011 for public feedback on visual effects. October 2012 for re-growth control. | In addition to above, success will be demonstrated if there is no noticeable increase in noise, wind or light exposure for residents along Edgewood Avenue (as determined by resident survey). | In addition to above, if residents believe there are increases, then an agreement will be reached on future work in the area with interested residents. |
| Demonstration Project 3: <0.5 Acre North Side of Summit <i>Healthy grassy area and clear view of city.</i> | Short-term: Create view corridor from summit Long-term: Restore Nootka Reed Grass | Minimal removal to prevent shade on Grass & provide view | Hand remove non-natives from grassy area as needed. | Tarp tree stumps. | October 2011 for public feedback on view corridor. October 2012 for grassy area. | Success: Control of non-natives in grassy area and expansion of native plant community. Success: 85% of tree stumps have no sprouts. Success: Tree removal for trail view is generally acceptable to community members. | If there is general community acceptance, additional view corridors will be created with community input. |
| Demonstration Project 4: 2 Acres (East Bowl/Corridor) <i>More open canopy with space for new native tree plantings & sun for native forbs and shrubs.</i> | Short-term: Vegetation re-growth. Long-term: New plant survival/ growth rates. | 60' Average between trunks | Up to 90-100% (including eucalyptus litter & excluding natives); 100% removal of vines on tree trunks. | Depends on outcome of Demonstration Project #1. | October 2013 for re-growth control. Annually in December 2013-2018 for plant survival. | Success: 85% of tree stumps have no sprouts. Success: Poison oak, blackberry, vines & possibly other understory plants can be controlled at a reasonable cost. Success: Two-thirds of new plants survive after first year of planting and in subsequent years, survival rates remain at 50% or higher. | In addition to the re-growth control implications for Demonstration Project #1, the spacing of remaining trees may be increased in this demonstration area if it is determined to be necessary to minimize shade and ensure new plant survival, and will be used as the standard for any additional “conversion planting” areas that may be planned if this project is successful (with and without irrigation). |

**For further reference, go to
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