

A COLLABORATIVE VISION FOR THE RESTORATION OF MT SUTRO'S WOODLAND CANYON WATERSHED

DECEMBER, 2023









BACKGROUND

Woodland Creek flows through a steep canyon on San Francisco's Mt. Sutro during the wet season, rapidly transforming from a trickle near the summit to a powerful flow at the base. During the heavy rains of 2022 – 2023, the creek's raging flow blew out trails and overwhelmed drains to flood neighboring property, yet the creek channel dries up completely shortly after winter rains stop. Community-based nonprofit Sutro Stewards has been working in collaboration with land owners UCSF and SF Recreation and Parks to build access trails and begin replacing the invasive plants that cover the creekbed and surrounding area with native plants.

With this groundwork and these relationships in place, the time has come to restore the creek itself. There is an opportunity to slow and infiltrate stormwater, recharging groundwater and extending the flow season, improve habitat and provide better access for the community to the creek. Historic journals suggest that the creek once held pools supporting frogs and other wildlife into the summer dry season. In partnership with landowners and the community, we are inspired to restore the creek so that present and future San Francisco residents can experience riparian abundance in the City once more.





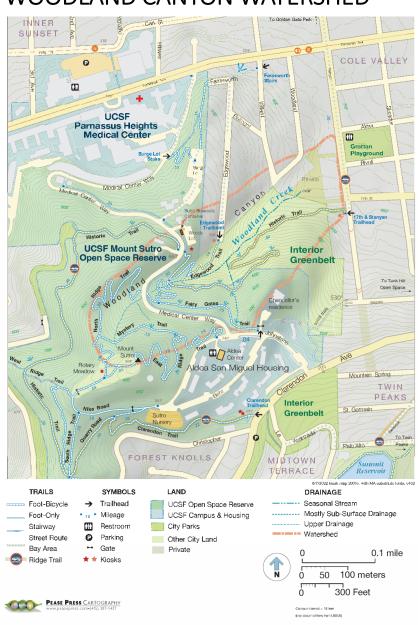


WINTER CREEK FLOODING IMPACTS
NEIGHBORING HOMES AND PUBLIC SPACE



VOLUNTEERS REMOVE INVASIVE PLANTS IN WOODLAND CANYON, SETTING THE STAGE FOR MORE COMPREHENSIVE RESTORATION

WOODLAND CANYON WATERSHED



COLLABORATORS IN RESTORATION

SUTRO STEWARDS + SF PARKS ALLIANCE



Founded in 2006, Sutro Stewards builds community, connects people with nature and protects and enhances Mount Sutro. We envision a thriving and biodiverse, nature oasis weaving through the fabric of urban life and accessible to all. With this in mind, we work with thousands of volunteers to build and maintain over 4.5 miles of trail, restore biodiversity and grow thousands of native plants. Our Health in Nature program provides healing, nature immersion experiences to communities who have historically been marginalized by socio-economic disparities. To make sure the work moves beyond Mount Sutro, we educate our community about San Francisco's local ecology, habitat restoration, and natural solutions to climate change through our crew leader trainings, our spring nature walks and our paid youth internship programs.

We are fiscally sponsored by the San Francisco Parks Alliance and are the largest organized independent volunteer pool in San Francisco, engaging over 1,000 volunteers each year and hosting six or more events a month. We work with city agencies and land managers to continue to expand the network of connectivity between San Francisco opens spaces and engage the community in the planning of improvements and long-term stewardship of each project. Sutro Stewards began working toward restoration of Woodland Canyon Creek in 2022.

UNIVERSITY OF CALIFORNIA. SAN FRANCISCO (UCSF)



UCSF is part of the 10-campus University of California, and the only of its campuses dedicated to graduate and professional education. UCSF is a collection of dedicated scientists, clinicians, students and staff who strive to make the world a better place through our singular focus on health. The original UCSF campus located at Parnassus Heights is made up of a tight network of buildings covering almost six blocks adjacent to Woodland Canyon.

In 1953, UCSF purchased a 90-acre parcel adding to a 13-acre parcel donated by Adolph Sutro to form the Mount Sutro Open Space Reserve. In 1976, UCSF designated 58 acres of the Reserve as permanent open space (later increased to 61 acres). This forms the upper Woodland Creek Watershed. UCSF is committed to maintaining the Reserve as an important natural resource for San Franciscans. To preserve the beauty, safety and accessibility of Mount Sutro, UCSF Facilities Services performs ongoing general maintenance throughout the Reserve and its trails. UCSF has two certified arborists on staff who are dedicated to preserving the beauty of the natural environment.

SAN FRANCISCO RECREATION AND PARKS (SFRPD)

The San Francisco Recreation and Park Department's Mission is to provide enriching recreational activities, maintain beautiful parks and preserve the environment for the well-being of everyone in our diverse community. SFDRPD administers more than 220 parks, playgrounds, and open spaces. The City and County of San Francisco purchased the Interior Greenbelt open space for the public in the 1950's and envisioned it as part of a collection of natural lands that would connect to one another in the heart of the city, creating a continuous greenbelt. This forms the lower segment Woodland Creek Watershed.



VISIONING PROCESS + WORKSHOP

Sutro Stewards convened a collaborative vision workshop with 30 participants including members of UCSF, SFRPD, private landowners where the creek culverts, Golden Gate Bird Alliance, California Native Plant Society, Nature in the City, SF Urban Riders, Livable City, the Presidio Trust, SF Environment Department and Sutro Stewards core volunteers. The group shared their goals for the creek, watershed and community, and brainstormed opportunities and solutions to challenges.

Leading up to and following the workshop, individual interviews have integrated additional important perspectives, such as participants in the GROWTH Health in Nature program, creek restoration scientists and longtime community members and land stewards, including Ramaytush Ohlone leadership.

This vision documents the high-level consensus outcomes of the workshop and vision process. For a more detailed record of workshop ideas and outcomes, please see the appendix.









A SHARED VISION



A HEALTHY SEASONAL CREEK GRACES WOODLAND CANYON



NATIVE FLORA AND FAUNA THRIVE IN EXPANDED DIVERSE HABITATS



WOODLAND CANYON IS A CITY-WIDE TREASURE ACCESSIBLE AND WELCOMING TO ALL



PEOPLE ENJOY HEALTH BENEFITS FROM AN IMMERSIVE NATURE EXPERIENCE IN WOODLAND CANYON



IN THE SPIRIT OF RECIPROCITY, WE GIVE BACK TO NATURE AND PROVIDE LONG-TERM STEWARDSHIP

- RETAIN AND SLOW WATER FLOW TO EXTEND THE CREEK'S SEASON AND REACH
- REDUCE DOWNSTREAM FLOODING TO NEIGHBORING PROPERTIES
- WATERSHED LEVEL ENGINEERING STUDY TO QUANTIFIABLY REDUCE FLOWS TO COMBINED STORM AND SEWER SYSTEM THAT CAN IMPACT CITY NEIGHBORHOODS AND BEACHES IN PEAK RAIN EVENTS
- CONSIDER MODIFYING DRAINAGE INFRASTRUCTURE THAT DIVERTS LOW FLOWS FROM THE CREEK

- CREATE RIPARIAN AND UPLAND HABITAT ZONES FED BY RESTORED CREEK
- INCREASE NATIVE PLANT COVER AND REDUCE INVASIVE PLANTS
- ENHANCE HABITAT FOR BIRDS, POLLINATORS, AMPHIBIANS AND OTHER WILDLIFE
- CONTRIBUTE TO CLIMATE CHANGE MITIGATION AND RESILIENCE THROUGH NATURE-BASED SOLUTIONS

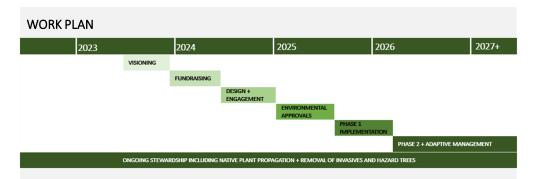
- INSTALL WELCOMING MULTILINGUAL SIGNAGE
- COMMUNICATE PUBLIC ACCESS AND TRAIL CHARACTERISTICS TO IMPROVE USABILITY
- OFFER WATERSHED
 EDUCATION AND SKILLS
 DEVELOPMENT PROGRAMS
- FACILITATE ACCESS TO WOODLAND CANYON BY MEMBERS OF UNDERSERVED COMMUNITIES
- SUPPORT OHLONE CULTURAL ACTIVITIES ON THE LAND

- RETAIN AND ENHANCE BIOPHILIC EXPERIENCE
- INCREASE FOREST OPENNESS AND PREVENT VEGETATION OVERGROWTH AROUND CREEK TO IMPROVE VIEWS AND SIGHTLINES
- ENHANCE SAFETY BY
 REDUCING RISKS FROM
 TREE/BRANCH FALL AND
 WILDFIRE
- BRING TRAILS TO THE WATER
- CONSIDER FUTURE CREEK DAYLIGHTING INTO URBAN FABRIC

- FAVOR HAND TECHNIQUES
 AND AVOID HEAVY
 MACHINERY FOR CREEK
 RESTORATION, INVOLVING
 VOLUNTEERS AND GREEN JOB
 TRAINING CREWS
- STRIVE TO SOURCE ALL MATERIAL FROM MT SUTRO, FROM REUSE OF REMOVED TREES TO NURSERY-GROWN NATIVE PLANTS
- ENSURE COMMUNITY AND INDIGENOUS VOICES ARE HEARD IN PLANNING AND IMPLEMENTATION
- PLAN AND RESOURCE FOR LONG-TERM STEWARDSHIP



BRINGING THE VISION TO REALITY



OPPORTUNITIES TO SUPPORT

Sutro Stewards is actively building the Woodland Canyon Watershed Restoration campaign. We welcome many forms of support, including:

- Volunteering at ongoing stewardship events in the canyon to clear invasive plants
- Donations
- Donations
 Grant research and fundraising
 Creek restoration design and hydrological analysis
 Graphic illustration
 Communications and PR
 Web design and social media

ACKNOWLEDGEMENTS

We would like to thank **everyone** who has worked over the years to support stewardship and restoration on Mount Sutro, and especially those who contributed their ideas to this vision:

Charlie and Rusty Reiter Sutro Stewards Board, Staff and Volunteers UCSF Staff SF Recreation and Parks Staff Arup WRA Galifornia Native Plant Society, San Francisco Chapter Golden Gate Bird Alliance Nature in the City SF Urban Riders Lew Stringer GROWTH Association of Ramaytush Ohlone



Woodland Creek flowing through plant restoration work area in 2022

Appendix Vision Workshop Documentation

INTRODUCTIONS

What is one thing you value or love about Mount Sutro? What does Mount Sutro mean to you? To the city?

- Kirstin Weeks/ Bio studio/ Woodland Canyon, you can be on stanyan st and suddenly be immersed in a nature experience
- Paul Bourbin / neighbor volunteer/ nature
- Edith / neighbor volunteer / calm
- Christopher campbell / SFRPD / interior greenbelt evolution from no trails to having improved access through trails with help from
- Anthony Copoli / SFRPD/ urban trails supervisor, plant palette and goldback ferns and elk clover
- Karen Duderstadt/ SS board member / new appreciation for whats possible in the canyon
- Jaclyn Drexler / CGR UCSF / Engagement with the mountain and partnership with SS, nature baths and pull yourself out of life and urban spaces
- · Whitney Grover/ SF Bird Alliance / oasis for humans and bird biodiversity, intimate connection with birds
- Chris Fang / WRA / Nature urban interface
- Emma / UCSF / intentional work to expand and maintain habitat
- Eli / UCSF / Storm management project
- Laura Castellini / NTC / Fascinated with all things water and creek restoration
- Nick Bear / Board member, SF Urban Riders, engineering / Volunteer with
- Charles Reiter / Reiter Property at drain point of WCC / love being next to the forest
- Rusty Reiter / Reiter Property / love living next to the forest
- Bridget llanes / SS HiN / Bringing people who normally doesnt have access to nature to the mountain
- Maryann Rainey / SS Board Member / Bird habitat on the mountain and thinking about long term management
- Morgan / FM UCSF / restoration has been on their mind for a long time, now is the right time
- Kelly Dodge / SS / Power of mount sutro to become a living ecosystem that can heal and biodiverse
- Abigail Alfonso / SS / Community that uses mountain, humans and wildlife
- Matthew / UCSF ARUP civil engineer storm management plan / diversity in vegetation and topography
- Geri / SS / refuge from city
- Steve Leodakis / SS board member / wild open space to regenerate and be in nature, wildflower blooms
- Ildiko Polony / SS / restoring a creek inspires and brings people together
- Gail Lee / UCSF sustainability director / natural habitat and open space, refreshing and soothing
- Tom / Livable City / Love fringecups and that can take the 33, walk a few blocks and be in the nature then walk up to Twins Peaks
- Bob Hall / CNPS / biodiversity, restoring the creek can help the doom loop become the bloom loop
- Peter Brastow / SFE / experiencing the continuity of all the effort of UCSF and SS to have this open space
- Pat Greene / neighbor and golden gate bird alliance / woodland canyon restoration is exciting

GOALS FOR WOODLAND CANYON CREEK

Picture success in 10 years...what does it look like?





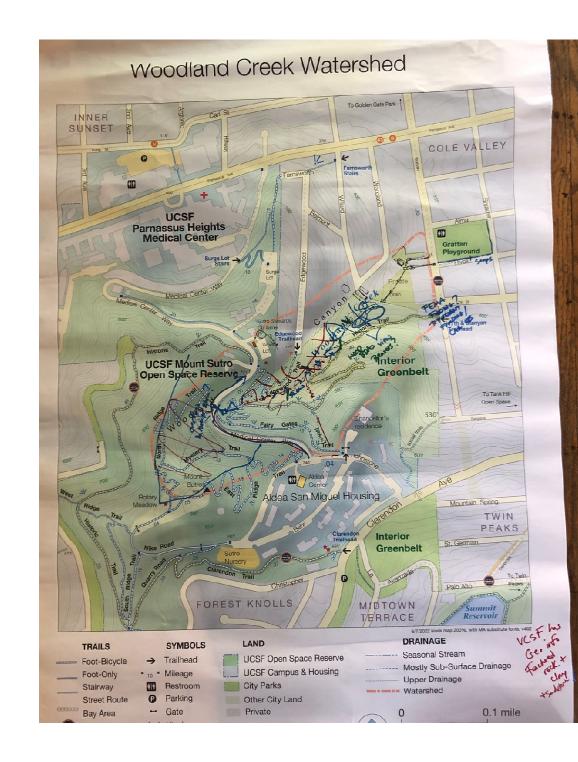
BREAKOUT GROUPS

WATER

How can we improve hydrology to meet the goals?

Can we identify likely locations for process-based interventions?

What kinds of interventions can be implemented by volunteers and avoid heavy machinery?



PLANTS, HABITAT, ECOSYSTEM

- Long term: fewer exotic plants > moving toward native plants
- One goal
 - Clear intentions around understory
 - o Longer game of tree overstory only native
 - o When do we remove the eucalyptus and when do we plant is this simultaneous?
 - Do we have a long term plan for tree removal in the canyon
 - Have viewpoints of the creek but still allow for the natural "classic" look of a riparian corridor
- Bird focus
 - Need all the different levels in the canopy understory bushes canopy
 - Also good for birds is open areas
 - Planning some upland area with more open area
 - Closer to woods lot WC-LC right at edgewood and MCW
- Habitat
 - Low lying, water loving plants around creek
 - o Medium sized shrubs building out from stream bed
 - o Tall plants to shield housing from creek (improve user experience
 - o Keep trails shielded but open line of site
 - o Management: fire mimicry based management
 - Plan on cutting back, intentionally over planting for thinning
 - Species specific
 - Right around the creek and water what type of species do we want to bring in there
- Species
 - o Make up is already much more diverse and more representative of the Bay Area
 - o Plant communities
 - Mix it up
 - Or be more deliberate and go into zones of species habitat
 - Decide what habitat make up we want to create
 - o Can we push for more oaks
- Collaboration between UCSF tree planting plans and Sutro Stewards understory planting planning
 - o Can we get Morgan's maps of where what tree species are there already
- Long term Management
 - Keeping viewpoints
 - Or have a high point for an overlook
 - How to avoid having people enter into the creek
 - Create foot bridges at the U where the creek crosses over the trails where people can interface with the creek but not create social trails down into the creek
- Need to make sure all invasives and roots are cleared out before planting
 - Weed thoroughly and mulch
 - o Plant native and know you are going to damage them
 - Start filling in plants
- Need to create 5-10 year plan of what water remediation is happening, what trail work and access work is happening, what tree removal so we can create a clear planting plan

ACCESS + EXPERIENCE

How can we create inclusive, equitable access?

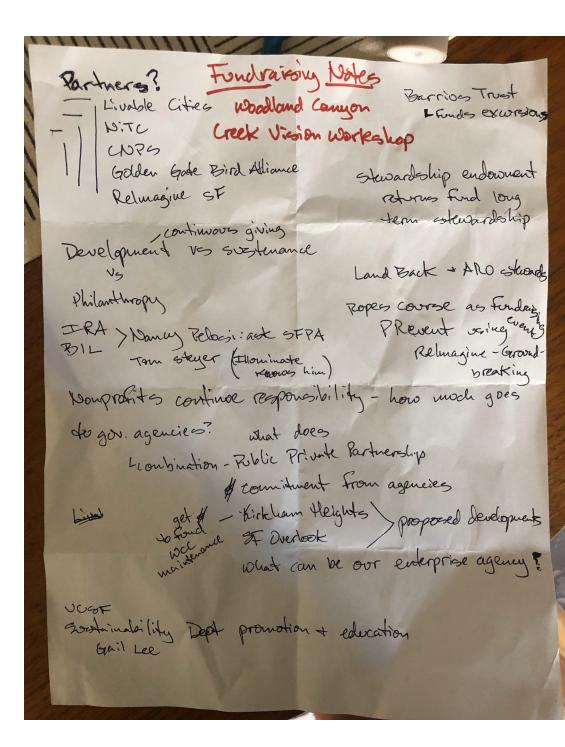
What makes you feel welcome in an urban nature setting?

What interventions are needed to improve access and experience?

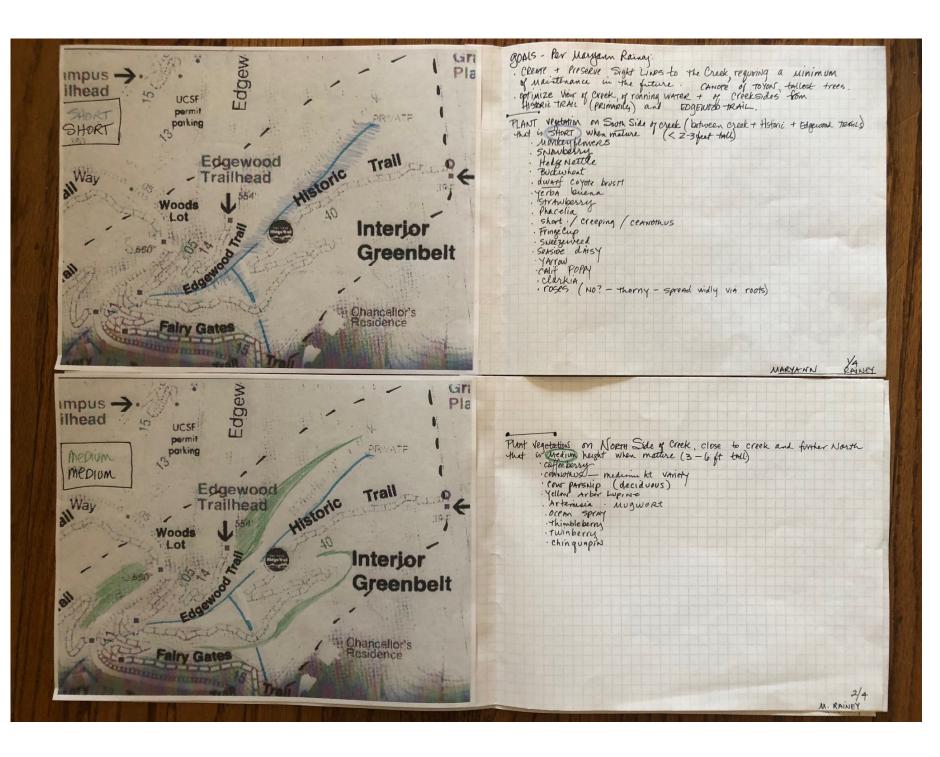
Where would the viewpoints be to a restored creek (marked on the map with "V")

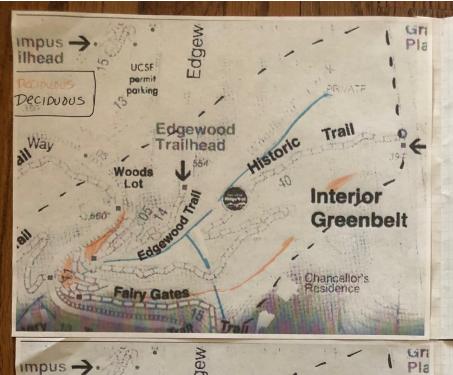


PARTNERSHIPS + FUNDING



DETAILED RESTORATION IDEA CONTRIBUTION Maryann Rainey





Plant Vegetation between medicine center way + lower WCC,
between Fairy gates + WCC

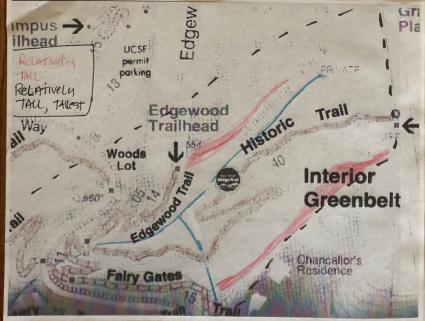
quat is decidumed and to the for south contour of canyon

red elderberry

that likes SHADE

rearran

M. RAINEY



PLANT Vegetation on the NORTH Side of creek (bothern Creek + buildings

That is relatively tall when mature (UP to 30 year tall)

(Willow) quaternible

(Willow) quaternible

(Was MyRTLE

(Red elderberry (deciduous)

(Red elderberry (deciduous)

(Red elderberry (deciduous)

(Respective

Plant Maple

Vines in trees

(Poison oak berrien provide find for Wiredits in Winter-can vine high in trees?)

(Nanzanita in fill son-can become very tall, certain Varities.

DO NOT PLANT trees that grow very goodly to die quickly. (Ugcy)

(Mantered Cuprus

(Mantered Cuprus

(Mantered Pine

(Massill)

(Mas

VISIONING 9/24/2023 goals per Maryann Rtiney · Create + presence sight lines to the Creek, requiring a Minimum of maintenance in the fecture. Canopy of toyon, trulest trees. · optimize view of creek of running water + of creek sides from Historic Trail (primarily) and Edgewood TRAIL: optimize Biodiversity using locally Native plants.
attract + provide homes for cavity nesters
(flicters, owls) by use of beoboxes + naintenance of rotting trees. Boxes need to be monitored to prevent infestation of Starlings. . What to say about RAVERS + crows ? Habitist Maintenance on an annual 3yr, syr, 10 yr timeline. · Prune shrubs + trees (And over time remove trees) to maintain sight lines, to preserve a view of the creek, So the hiter CAN see wens creekside . Pretend that FIRE passes through every 2-3 years to drastically then regetation, to allow sunlight to reach the soil, and to allow air circulation. · Pretend herbavores pass through every 6 months to drastically thin regetation, particularly speet and below within reach of deer or elk . Mulch plants in carryon with chipped + for composted prinings. · Create tunnels for opossoms, coyotes ... reptiles? . Monitor bid + mammal + reptile populations to evaluate . guccess: Summer Swainson's thrust Winter Hermit thrust. - populations maintaines -PACIFIC WIEN YEAR Round.

Examples of problems 5-10 years after habitat renewal.

El Polini Creek - The Presidio The pond at the North end is obstruted from
View by a dense, left tall thicket of
Coyote BRUSH. I resent this
in J.F., ponds And creeks are rare.
I want to be able to see the creatures
Visiting the pend.

of course, pond side vegetation growth will be Vigorous ... due to the sufficiency of water, PRUNITY annually ois essential, and Natural,

Bog TRAIL in SAM Bruno State PARK
The creek is CHOKED with vegetation.
Clearly water is present, but covered with vines.

Affects
Monteren cyprus, Monterey Pine, IVIES
COHONEASTER, EUCALYPTUS And Himiliam Blackberry
are promised taking the sunlight + water.

Set is also ugly, to my eye,

Redwood Creek in MVIR WOODS as seen from a trail

I recall seeing on many seperate days

a paigle when picking at the

mosses creekside, with terms above.

I also sow brown bats flying over the creek for hours! exting insects MIDDAY.

Maryann Ramay 9/25/2023

CLOSING THOUGHTS

What is one thing you are feeling inspired by or taking with you from the workshop?

- Tom: SFRPD and UCSF joining management plans, and engaging neighbors to manage their backyards differently
- Kelly: How can plants/habitat fits into each of the breakout rooms plans
- Whitney: WCC restoration can be a model for other restoration projects in the city
- Bridget: Taking the work we've done today back to the GROWTH project, what does accessibility mean to them? We can do things at Sutro

Stewards without UCSF

- Emma: Seeing how different players come together to restore the creek
- Ben: Seeing old friends
- Abigail: So many professionals at the table and inspired by 5 acres landback
- Edith: Inspired by how many people care about the creek
- Pat: Inspired by the water management and how it benefits the wildlife
- Maryann: Inspired by the hydrology, it was eye opening
- Paul: Everyone coming together with all of their knowledge
- Lew Stringer, Presidio Trust: Inspired by the shared vision
- Morgan: Inspired by the collaboration
- Charles: Inspired by the collaboration to bring attention and enhance the mountain. Everyone's taking care of the drainage problem
- Rusty: Feeling like there's a solution
- Laura: Counter-narrative of the doom loop, this is the bloom loop. Good vision to start
- Karen: inspired by the hydrology experts coming together to create a vision
- Matthew: Inspired by how all of this comes together
- Chris: Inspired by everyone coming together and looking at all of perspectives
- Bob: Will to provide a livable environment for wildlife and humans, this feels historic
- Steve: Opportunity for collaboration
- Nick: Collaboration
- Peter: Inspired by how far we've come
- Kirstin: Inspired by what we can achieve together