



DRAFT 2018 WORK PLAN FOR ONE TAM INITIATIVE

The following programs and projects are under consideration by the TLC in 2018 to improve the health of the mountain, enrich the experiences of its visitors, and cultivate and educate a new generation of stewards. They build from, and sustain successful 2017 work, and will be implemented as funding becomes available. Projects reflect partner agency priorities, and will include all necessary agency permitting, compliance, and community engagement and public review. Each adds capacity to existing partner programs and collectively increases the mountain-wide reach and impact. For more information, including the proposed *2018 TLC Approach to Community Engagement*, please visit: www.onetam.org.

Community & Conservation Programs

Volunteer Stewardship programs engage youth and volunteers in service-based habitat restoration, monitoring and trails projects.

- Lead 82 volunteer stewardship workdays for restoration and trail maintenance projects
- Join agency staff in leading approximately 20 volunteer stewardship workdays for restoration and trail maintenance projects
- Increase site-specific stewardship at volunteer work sites through monthly staff and intern follow-up work days
- Conduct a total of 4 Bioblitzes on MCP, NPS and/ or State Parks lands

Community (Citizen) Science programs authentically engage volunteers and youth in science-based research inventory and monitoring projects.

- Lead 38 community science program events
- Launch One Tam interactive website for cloud-based wildlife image cataloguing, image display, and sharing real-time analytics for the Wildlife Picture Index Project (WPIP)
- Analyze results from Phase One of the WPIP in the Lagunitas Creek Watershed, and sustain Phase Two image cataloguing in the Redwood Creek Watershed
- Integrate Phases One and Two into one comprehensive mountain-wide WPI program
- Train volunteers to catalog wildlife photos remotely using the interactive WPIP website
- Recruit and train 85 volunteers and 120 students, and sustain five community and academic partnerships to support WPIP cataloguing
- Double volunteer participation in wildlife camera project fieldwork
- Develop and pilot a high school (or middle school) science program to build awareness about Mt. Tam's wildlife
- Initiate the development of WPIP HS curriculum in partnership with Marin County Schools Superintendent's office
- Support the monitoring of re-introduced Western pond turtles in the Redwood Creek Watershed
- Support communication and outreach with Coho Jumpstart program.
- Initiate an assessment of existing agency community science, and inventory and monitoring programs to determine which could be supported by the One Tam Community Science Program

Conservation Management work strategically advances weed control, habitat restoration, ecological monitoring and sustainable practices at a mountain-wide scale.

- Evaluate and analyze 2017 early detection, grassland and rare plant monitoring results
- Hire and train 2 One Tam Conservation Management Team 6-mos Seasonal staff to perform field work mountain wide
- Continue mountain-wide rare plant monitoring program, and weed treatment and rapid response programs
- Expand support to help inventory an additional 25% of Mt Tam's priority weeds, treating all new detections
- Assess the feasibility of expanding the EDRR program to adjacent lands, specifically Samuel P. Taylor State Park.
- Sustain joint NPS-State Parks vegetation management program throughout the Redwood Creek Watershed
- Improve data sharing, storage and analysis with further software development with Calflora Database; provide technical support to other Ca. State Parks
- Document protocols for early detection and serpentine endemic occupancy project

Youth, Engagement & Community Programs provide educational, service-based, and career development opportunities for local youth, plus outreach, interpretive and naturalist programs for interested community members.

- Deliver 40 education, naturalist, community building events, and field trips to raise awareness and build stewardship
- Lead One Tam LINC (*Linking Individuals with Natural Communities*) program and provide advanced summer internships for 2015, 2016, & 17 LINC youth participants,
- Assess new vocation training program opportunities, pilot and evaluate through LINC and other youth development programs
- Coordinate and support youth and school participation in the Trout in the Classroom program
- Strengthen partnerships with 11 community organizations to engage youth in stewardship programs
- Lead, administer and evaluate 3 mountain-wide multi-agency volunteer days
- Strengthen One Tam Roving Ranger program, to include onboarding one additional staff member dedicated to outreach and community engagement, developing climate change programming, as well as participating in 40 events and activities in support of TLC partners
- Facilitate 10 naturalist walks involving multiple TLC partners, to include delivering programs in Spanish.
- Provide 45 presentations and outreach at local community events, meetings and trailheads.
- Increase College of Marin participation in Academic Internship Program
- Organize multi-agency volunteer tracking and event coordination through web portal on www.onetam.org and the Hands-on-Connect database to streamline volunteer registration and statistics analysis
- Support One Tam Backpack Program in partnership with Marin County libraries and Community Centers to facilitate equitable access

One Tam Wildlife Symposium & Measuring the Health of the Mountain: A Report of Mt. Tamalpais' Natural Resources (2016)

- Host a 1-day *Wild Side of Tam* Symposium(Oct 26, 2017)

- Plan a 1-day Symposium for fall 2018 – topic to be determined
- Publish 2 articles/papers on the findings from the *Measuring the Health of the Mountain* findings
- Maintain the information in How Healthy is Mt Tam? An Interactive Web Tool

Large-Scale Inventories provide a comprehensive, big-picture view of the mountain’s resources will allow managers to prioritize restoration and protection efforts and allocate resources in new ways.

- Complete initial seeps and springs inventory work; assess feasibility and capacity to expand to southern Redwood Creek Watershed
- Complete pilot pollinator study
- Complete Phase 1 and initiate Phase 2 of the bat inventory, to include radio telemetry and maternity/roosting colony assessment
- Initiate fundraising and planning for a mountain-wide (possibly County-wide) vegetation map

Initiate TLC Five Year Strategy Development (2019-2023) to guide the TLC’s goals and outcomes for the next five years.

- Review and evaluate 2014-2018 goals and outcomes
- Prepare draft goals, outcomes and identify potential programs and projects for implementation
- Initiate outreach and community engagement to solicit feedback
- Prepare draft Strategy

Complete Longitudinal TLC Partnership Research to include publishing a report and articles on the *Value, Impact & Benefit of Land Stewardship Partnerships*.

- Publish the final report on the findings from long-term study
- Deliver presentations on the findings of the final report
- Prepare academic and practitioner articles for local and national publications

Proposed Projects¹

TLC Projects are arrayed in the three themes below – Wetlands & Waterways; Legacy Projects; and Signature Trail Corridors. The following projects, specifically the associated bulleted actions are proposed for implementation in 2018.

Wetlands & Waterways

Redwood Creek Juvenile Coho Habitat Restoration - This project within will remove a portion of the rock riprap, allowing the creek to form natural habitat features so desperately needed for juvenile salmon survival. Rock removal will be targeted to maximize habitat benefits, protect sensitive resources, and avoid impacts to nearby trails.

- Continue fundraising for Phases 1 & 2

¹ Potential Projects are contingent on complete project-specific grant/foundation/agency funding and will only be implemented if funds are available & with appropriate board approval of agency budgets. Projects may be implemented by the Parks Conservancy and/or by agency partners. Projects either are, or will be further described on www.onetam.org.

- Provide communications support, facilitate community engagement and webpage development
- Initiate Phase 1 restoration

Bothin Marsh - Threatened by rising seas and strong waves caused by climate change, Bothin's shoreline is in danger of eroding and the marsh may convert to mudflats or become submerged. This project advances early planning necessary to address sea-level rise.

- Develop a working group and interdisciplinary team to support sea-level rise vision planning
- Initiate site analysis and community engagement through a series of interactive workshops
- Provide fund raising support
- Develop a vision document for the protection of natural resources, recreation and infrastructure in response to climate change and SLR that would include short and long-term adaptation measures, nature-based solutions, and pilot projects.

North End Wetland Enhancement and Sea Level Rise Adaptation Project at Bolinas Lagoon - restores critical wetland habitats and reconnect the lagoon to its upland creeks, benefiting numerous wildlife species, reducing flooding on local roads, and allowing the lagoon to shift and expand with storms and sea level rise.

- Increase community engagement and explore fundraising to support future implementation

Legacy Projects

West Peak – This project assesses the methods and extent of possible restoration of West Peak, and involves both developing and assessing potential alternatives. The study is engaging a range of stakeholders in developing options that represent ecological needs, community input, and technical constraints.

- Utilize technical studies to develop a range of restoration alternatives; share with the District Board and community for review
- Refine alternatives into a preferred project alternative based on Board and community input
- Continue to facilitate outreach and community engagement, working closely with the MMWD and community to build project interest and support.
- Increase fundraising

Log Cabin at Phoenix Lake - The storied and picturesque Log Cabin stands proudly above the shores of Phoenix Lake on Marin Municipal Water District's Mt. Tamalpais Watershed. This project offers an opportunity to save a rich cultural resource while also providing important environmental educational and volunteer service opportunities for Marin students, residents and visitors.

- Continue to assess fundraising feasibility
- Seek alternative rehabilitation support through agency and private in-kind programs

Forest Health & Resiliency - First seen in Marin County in the mid-1990s, Sudden Oak Death (SOD) has resulted in the death of millions of oak and tanoak trees in California and Oregon. This project will examine how different forestry practices affect carbon sequestration, water yield, and reforestation potential in SOD-infested areas.

- Seek funding in partnership with U.C. Davis for science-based pilot project assessment and revegetation
- Integrate community science opportunities for science-based activities, to include LINC involvement
- Provide propagation and revegetation support

Roy's Redwoods – Restoration & Sustainable Access - Long loved by the San Geronimo Valley community, Roy's Redwoods Opens Space Preserve offers visitors an immersive experience in an old growth redwood grove. This project will develop conceptual enhancement alternatives for the redwood grove and surrounding environs that maximize resource enhancement and protection opportunities, as well as ensure an engaging and sustainable visitor experience.

- Host third workshop, focused on sharing site inventory and analysis with a broad community of park users
- Complete visitor use survey; integrate findings into final site analysis report

Potrero Meadow Restoration – The health of this once-vibrant wetland has declined due to the spread of weeds, wear and tear from visitation, and poorly placed roads and trails that cut through the meadow, changing its hydrology and increasing erosion, sedimentation, and maintenance costs. The long-term goals of this project include revitalizing this unique wet meadow habitat and associated rare flora, reducing the footprint of the road, and re-aligning existing trails so that they circumnavigate the wetland, creating new vistas and areas for reflection.

- Initiate preliminary planning, scoping, cost development
- Develop an approach for future implementation, to include sequencing and project management
- Explore fundability and fundraising opportunities
- Assess approach for revegetation
- Provide communications support, facilitate community engagement, site walks and webpage development

Dipsea Bridge and Trail, and Deer Park Fire Road – The braided alignment of the storied and much-loved Dipsea Trail and Deer Park Fire Road weave in and out of Mt Tamalpais State Park and Muir Woods National Monument. This project will partially restore the natural drainage patterns throughout the trail corridor, reducing the sediment flowing into Redwood Creek as well as creating safe and sustainable trail alignments to protect natural resources and visitor access well into the future. It includes the installation of the Dipsea Bridge over Redwood Creek, which is tentatively scheduled for 2019-20.

- Continue Dipsea Trail tread and stone work improvements west of the Redwood Creek crossing
- Initiate Dipsea Bridge schematic design work, fundraising and community engagement

Signature Trail Corridor Projects

Redwood Creek Trail Re-alignment – The Redwood Creek Trail stretches between Muir Woods and Muir Beach. The proposed trail project, with 1.1 miles of realignment and two new bridges over the stream, will provide passage for horses and pedestrians and protect the creek and its inhabitants.

- Complete planning and compliance
- Initiate fundraising for Phase 1
- Replace washed out bridge

Azalea Hill - Rising above the shores of Alpine Lake, Azalea Hill's unique geology shelters many rare and sensitive plant species, and provides a critical recreational link between the popular Sky Oaks Ranger Station area and the more remote Pine Mountain and Carson Falls. This project will improve or remove the old roads and unofficial trails to reduce erosion and habitat fragmentation and improve the experiences of trail users. It will further protect and restore sensitive serpentine barrens and grasslands to improve rare plant habitat.

- Continue planning and environmental compliance (MMWD)
- Provide communications support, facilitate community engagement, site walks and webpage development
- Explore fundability and fundraising opportunities

Wayfinding/Signage - This project supports assessments, design, fabrication, and installation activities needed to realize a comprehensive signage system that provides the public a safer and more enjoyable visit.

- Continue to complete State Parks signage program; designing and installing remaining signs
- Design and fabricate a replacement kiosk and signage at Rock Springs