

2017 QUARTERLY REPORT

TAHOE REGIONAL PLANNING AGENCY
Third Quarter: July – September 2017



**TAHOE
REGIONAL
PLANNING
AGENCY**



Photo by Drone Promotions

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TRPA STRATEGIC INITIATIVES

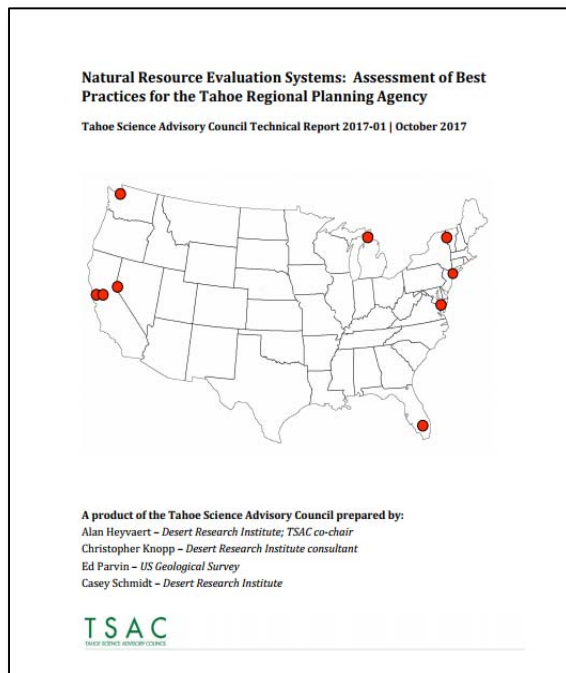
The Tahoe Regional Planning Agency (TRPA) is moving forward with strategic initiatives the Governing Board identified in 2015 as priorities over the next five years. These initiatives align directly with the four objectives in the agency's Strategic Plan.

THRESHOLDS UPDATE STRATEGIC INITIATIVE

Most of the threshold standards TRPA adopted in 1982 are based on science that is now over 30 years old. The cost of fully and consistently monitoring and measuring the existing threshold system has also proved unsustainable. A broad bi-state consensus supports considering updates to the thresholds and monitoring systems. TRPA is working with the new Bi-State Tahoe Science Advisory Council and science community to create a sustainable, prioritized, and relevant monitoring plan, and to review and consider modifying the threshold standards to reflect the latest science and the significant values in the Lake Tahoe Region.

Strategic Initiative Desired Outcomes: *Relevant and scientifically rigorous threshold standards and a cost-efficient, feasible, and informative, comprehensive monitoring and evaluation plan.*

TRPA and partners completed phase one of the threshold update initiative in September, a comprehensive assessment of the existing threshold standards against best practices for formulating measures of progress and change. The assessment methodology was developed in collaboration with the Tahoe Science Advisory Council and findings were presented to TRPA's Advisory Planning Commission (APC) in May and June. By September, the Governing Board directed staff to embark on the second phase and endorsed the direction for the initiative. Phase two involves working with Tahoe Science Advisory Council and other partners to critically review the existing standards in each focus area and identify opportunities to strengthen the standards.



The threshold update will use an iterative approach to work through all 178 standards, beginning with the highest priority areas. The assessment identified where improvements might be needed and provided an evidence base for strategic prioritization of where to begin. Through consultation with partners, four threshold areas were identified as priorities: the two recreation standards, the forest health standards, the vehicle miles traveled standard, and the stream environment zone (SEZ) restoration standard. In addition, the assessment identified 46 standards as overlapping with others in the system. The phase two work is underway to address duplicative standards and the four priority areas. TRPA will work with the Tahoe Science Advisory Council to examine options for addressing these first priorities.

As a reference for use throughout the comprehensive update, the Tahoe Science Advisory Council completed an examination of resource management programs around the country, surveying their measurement and evaluation programs. From the San Francisco Bay Delta to the Everglades, the report identifies methods and best practices that could be applied to improve the Tahoe Region's threshold evaluation system. The council presented an overview of its findings at the September Governing Board meeting. The full report is available on the council's website at <https://www.tahoesciencecouncil.org>.

SHORELINE PLAN INITIATIVE



TRPA launched the shoreline initiative to enhance the recreational experience along Lake Tahoe's shores while protecting the environment and responsibly planning for potential future development in the shorezone. TRPA and partner agencies initiated planning by engaging the Consensus Building Institute (CBI), a third-party mediation firm, to convene stakeholders and complete a stakeholder issue assessment. The assessment aided the development of a planning process and work program accepted by the TRPA Governing Board in April 2016.

The shoreline plan's scope of work focuses on the extent of allowed development of shoreline structures (marinas, piers, buoys, slips, and boat ramps) to support water-dependent recreation and effective resource management to ensure threshold attainment. The scope of work is detailed in the scope memo on www.shorelineplan.org.

Strategic Initiative Desired Outcomes: *The shoreline plan initiative will result in updated goals and policies in TRPA's Regional Plan and new regulations in the TRPA Code of Ordinances (Chapters 80 to 86) aimed at enhancing recreation and protecting the 72 miles of Lake Tahoe's shoreline.*

A steering committee is guiding the Shoreline Plan. Committee members include:

- Jennifer Lucchesi, California State Lands Commission
- Robert Larsen, Lahontan Regional Water Quality Control Board
- Bob Hassett, Lake Tahoe Marina Association
- Darcie Goodman Collins, League to Save Lake Tahoe
- Charlie Donohue, Nevada Division of State Lands
- Jan Brisco, Tahoe Lakefront Owners' Association
- Joanne Marchetta, Tahoe Regional Planning Agency

Environmental Review of the Lake Tahoe Shoreline Plan

In July, TRPA initiated phase three of shoreline planning, the environmental review phase. A public notice of preparation for an environmental impact statement (EIS) solicited input from other agencies and interested parties to guide the scope and content of the Lake Tahoe Shoreline Plan EIS. The plan's update of goals, policies, and regulations predominantly addresses development of new structures to support water dependent recreation and affects five policy areas: boating, access, marinas, piers, and low lake level adaptation. Scoping comments received at the TRPA Governing Board meeting in July, APC meeting in August, and 30 written comment during the scoping period.

Supplied viewpoints, in combination with the steering committee's work, to develop five EIS alternatives:

- Alternative 1 – Shoreline Plan (Preferred Alternative): This alternative is the proposed plan developed through consensus negotiations of the steering committee and endorsed by the Regional Plan Implementation Committee (RPIC). The goal of this alternative is to enhance the recreational experience along Lake Tahoe's shores while protecting the environment and responsibly planning for the future. This alternative aims to harmonize a range of organizing principles: 1) protect and where feasible enhance the environment, 2) provide a fair and reasonable system of access, 3) adapt to changing lake levels, 4) preserve quality recreation and public safety, and 5) implement predictable and consistent rules.
- Alternative 2 – Maintain Existing TRPA Shorezone Regulations (No Project): This alternative would retain the existing Regional Plan Shorezone Subelement Goals and Policies and the existing TRPA Shorezone Code (Chapters 80–86). The goal of this alternative is to balance access and environmental protection by applying the approach that was developed under the 1987 Regional Plan.
- Alternative 3 – Prioritize Access Development: The goal of this alternative is to increase opportunities for private and boater access recreation by increasing the number of allowable shoreline structures. This alternative would allow for more structures and fewer constraints than the Shoreline Plan preferred alternative and thereby increase total boating access.
- Alternative 4 – Limit New Development: The goal of this alternative is to reduce the risk of environmental impacts by limiting new shoreline development. Motorized watercraft access would be concentrated at marinas and public facilities.
- Alternative 5 – Expand Public Access and Reduce Existing Development: The goal of this alternative is to expand public access, reduce existing shoreline development, and increase restoration to minimize the risk of environmental harm.

In September, RPIC endorsed these alternatives to be analyzed in the Shoreline Plan EIS. Work is underway on the draft EIS.

DEVELOPMENT RIGHTS STRATEGIC INITIATIVE

Private investment in environmentally beneficial redevelopment is vital to implementing the Regional Plan. The development rights strategic initiative is evaluating the effectiveness of the existing transferable development rights system in accomplishing Regional Plan goals. The initiative is considering potential changes to the development rights system to better manage growth, support environmentally beneficial and economically feasible redevelopment, and improve the effectiveness and predictability of the development rights system. This initiative is evaluating commercial, tourist accommodation, and residential development units; the timing of development rights allocations; and related codes and policies. It will also examine alternative systems to implement Regional Plan policies while considering existing development rights. Affordable housing and vacation home rentals are being addressed primarily by local governments and in this TRPA initiative will be addressed only in terms of the quantity and type of development rights and allocations available.



***Strategic Initiative Desired Outcomes:** Facilitate greater understanding of Tahoe's growth management system. Assess and update the commodities growth management system with the goal of encouraging environmentally beneficial redevelopment of legacy properties and removal of development from sensitive lands. Involve relevant stakeholders with the goal of mutual and inclusive engagement.*

Over the summer, a report was completed evaluating five options for changes to the development rights system. The report assessed the economic implications of each using an innovative pro forma analysis, fiscal impacts for the City of South Lake Tahoe and Placer County, and the achievement in meeting an extensive list of goals and criteria identified by the working group. In addition, the project team met with different stakeholders such as the California land bank to solicit input on the opportunities associated with each of the five options.

In September, TRPA staff gained approval from the Development Rights Working Group on a recommended alternative to improve the transferable development rights system. This recommendation was guided by feedback from the working group and shaped by the evaluation of alternative development rights systems and ongoing stakeholder input. Selecting a recommended alternative was the final milestone for phase two of the Development Rights Strategic Initiative, a project that has consistently achieved all milestones on time.

The recommendation selected is a hybrid of various provisions including the transition to an exchange rate between different types of development rights. The local jurisdiction veto ability that prevents interjurisdictional transfers will be eliminated. These modifications will enable development rights to move more freely and be more responsive to the market and community needs. Regional land banks, local jurisdictions, and non-profits can set up a development right bank to offer fees for applicants not wishing to deal with the complex process of acquiring development rights. The banks can purchase, transfer, and gain donations of development rights and separate the rights from the original parcel. The recommendation also includes reducing upfront requirements in the permitting process by not requiring development rights until the final permit stage.

The Development Rights Working Group in September convened for a fifth meeting to discuss the findings of the evaluation of alternative systems, the results of the economic and fiscal analyses, and the project team's recommendation for moving forward.

The project team has drafted and finalized the scope of work for phase three to ensure the work and associated milestones are delivered on time. This next phase will focus on developing the policy, code, memorandums of understanding, and operational changes needed to implement the recommended alternative and prepare the appropriate environmental documentation. Work on this phase will extend through the end of 2018.

More information about the development rights strategic initiative is available online at <http://www.trpa.org/about-trpa/how-we-operate/strategic-plan/development-rights/>.

TRANSPORTATION STRATEGIC INITIATIVE

TRPA's transportation initiative will enhance Lake Tahoe's transportation system with improved trails, transit, and technology. The approval of the 2017 Regional Transportation Plan, Linking Tahoe, was the first essential step.

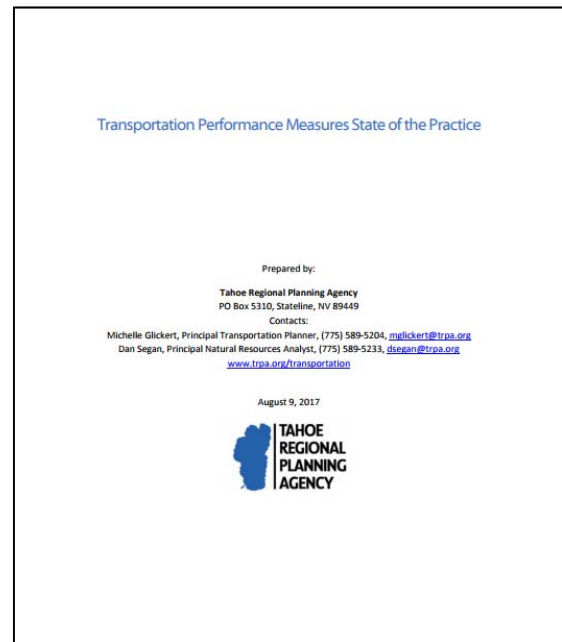
***Strategic Initiative Desired Outcomes:** Accelerate threshold attainment by implementing the Regional Transportation Plan, reducing air pollution, improving water quality, enhancing recreational opportunities and mobility, and shifting people to biking, walking, and transit use.*

Transportation Performance – Using Data to Make Dynamic Decisions

A transportation system is only effective if it functions to meet the goals set for its performance. Setting, selecting, and adapting those metrics is an essential part of building a world class regional transportation system. The transportation measures white paper was completed in August with guidance from the APC Performance Measure Working Group. The report identifies over 200 measures, organized based on Regional Transportation Plan goals:

- Economic vitality and quality of life,
- safety,
- connectivity,
- operations and congestion management, and
- environment and system preservation.

Measures were derived from a review of statewide transportation plans, congestion management plans, monitoring reports, and regional transportation plans. The report includes evaluation criteria to narrow the landscape of relevant measures. The report itself does not answer which measures best align with TRPA goals but provides a valuable resource from which partners in Tahoe can draw to find answers. The key to using the report is to clearly define what we want to achieve and measure. During the process of developing this report, Ron Milam from the transportation consulting firm Fehr and Peers, one of the experts in the field who provided perspectives to the working group, framed the relevant questions as, “What is it you're trying to create? What is it you're trying to protect? And, what is it you're trying to avoid?”



This survey of performance measures in the report is available for:

- Input on threshold standards that utilize transportation measures,
- Continuing to track Environmental Improvement Program project results,
- Selecting projects for discretionary transportation grant funding,
- Regional Transportation Plan Annual Performance Monitoring, and
- Development of the newly required Congestion Management Plan.

FOREST HEALTH STRATEGIC INITIATIVE

TRPA's forest health strategic initiative includes two objectives consistent with the Lake Tahoe Basin Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy: Completing fuels reduction treatments in the wildland-urban interface and extending forest management actions into the general forest to accomplish large, landscape-scale, multi-benefit restoration through a collaborative multi-agency process. Other objectives include building a shared vision for forest management in the Tahoe Region, making Tahoe a good investment for the public and private sector for forest/watershed restoration, and identifying and addressing current and future threats to Tahoe's forest and watersheds.

Strategic Initiative Desired Outcomes: Reduce the threat of fire in the wildland-urban interface and implement forest restoration at a large-landscape scale.

Lake Tahoe West Partnership: Major Progress on Multiple Teams in the Planning Process

This quarter, the Lake Tahoe West project team began coordination on the required environmental analysis and documentation. A collaboratively developed memorandum of understanding will serve as the shared agreement of roles and responsibilities of the different agencies during environmental review. Using lessons learned from past projects, best practices to streamline and strengthen the environmental document will be incorporated in the multi-agency agreement to serve as model for future landscape-scale projects in the Tahoe Basin. The teams also started to analyze project implementation challenges that might be encountered in a large-landscape project so that Lake Tahoe West may address these challenges in the environmental review and potentially surface solutions that can be used for future projects.

The overall goal of the Lake Tahoe West Partnership is to improve the resilience of Tahoe's forests in the face of more extreme disturbance such as drought, fire and changing climate. The Interagency Design Team is near completion of the Landscape Resilience Assessment (November projected completion). This team completed an exceptional amount of work over the summer to share information across boundaries and agencies and develop baseline information on the current conditions of the West Shore. TRPA's GIS analyst, Mason Bindl, has been a key contributor on this team in gathering the best available data related to each of the indicators of resilience (e.g., LiDAR derived data for vegetation indicators). The most recent work has been in combining indicators spatially to determine resilience to disturbances and resilience of landscape values across the project area. This analysis has allowed the team to identify "hotspots" across the landscape where work will be prioritized to achieve the desired conditions.

Implementation of 30-Plus Forest Fuels Reduction Projects

As you traveled around the Region this summer, you could not help but notice a transformation of our forested landscapes is underway. Indeed, thousands of acres of thinning and forest restoration occurred on public lands this summer in aid of reducing the threat of catastrophic wildfire in the wildland urban interface, that dangerous area where human development abuts Tahoe's forestland (final numbers will be reported after the field and reporting season). Major projects include:

- South Shore Hazardous Fuels Reduction Project (U.S. Forest Service),
- Carnelian Hazardous Fuels Reduction Project (U.S. Forest Service),
- D.L Bliss Hazardous Fuel Reduction Project (California State Parks), and
- 20-plus community workdays performed by the Tahoe Douglas Fire District to help community members with defensible space.

Caltrans Hazardous Tree Removal Project in Response to Tree Mortality. The tree mortality throughout the greater Sierra Nevada range continues to spread with a vengeance. And tree mortality is spreading in Tahoe as well, although at a slower pace, with dead trees now estimated at 136,000 basin-wide according to the U.S. Forest Service. The TRPA Governing Board in August approved a Caltrans permit to remove dead, dying, and diseased trees that pose a hazard to life, property, and vital infrastructure along all highways on the California-side of the Tahoe Basin. Caltrans has prioritized hazardous tree removal in the basin in response to Governor Brown's declared state of emergency for tree mortality in the State of California. The area designated for treatment is within the Caltrans right-of-way, which extends 100 feet from the centerline of the highway in both directions. The project includes an outreach campaign to private property owners, where hazardous trees within the right-of-way on their property will be removed at no cost. This project is a necessary step in addressing public health and safety as well as tree mortality in the Tahoe Basin.

Urban Forestry/Tree Removal Permits on Private Property

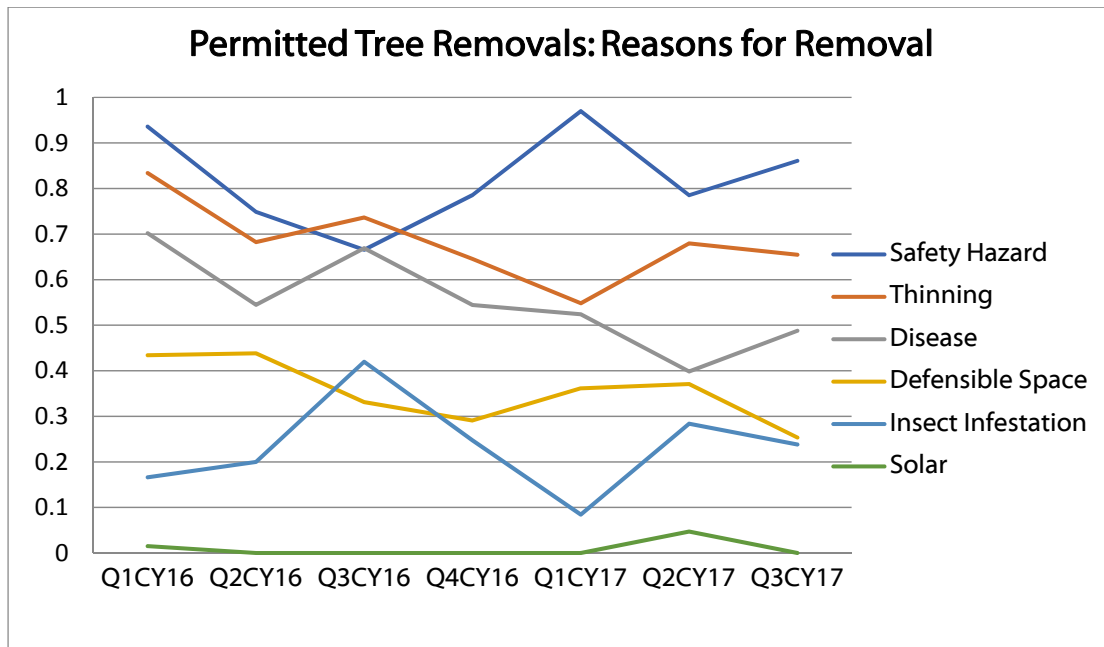
TRPA foresters are part of the network of forestry and fire professionals who help private landowners keep their property defensible from wildfire devastation and safe. TRPA's staff forester provides expertise in tree risk assessment and serves private property owners in the Tahoe Basin with thorough tree evaluations. The table below summarizes tree removal applications by quarter since the beginning of 2016. In the third quarter of 2017, TRPA received 338 removal applications. Trees removed due to safety hazard continue to be the primary reason for marking trees for removal.



Front of Caltrans door hanger notice of hazardous tree identification.

**Summary of TRPA Tree Removal Application and Permitting Activity
Q1 2016 through Q3 2017**

	Q1 CY2016	Q2 CY 2016	Q3 CY2016	Q4 CY2016	Q1 CY2017	Q2 CY2017	Q3 CY2017
Tree Removal Applications Received	57	250	262	120	47	270	338
Number of Trees Permitted for Removal	265	1,022	1,225	489	166	1,127	1,164
Percent Applications Submitted Online	58%	64%	58%	60%	49%	61%	60%
<u>Source:</u> TRPA Accela Permit Records							



AQUATIC INVASIVE SPECIES STRATEGIC INITIATIVE

Control of existing aquatic invasive species (AIS) is one of three core AIS programs, complementing the well-known prevention program as well as early detection/rapid response. Last year, TRPA successfully filled the AIS prevention program funding gap by securing stable funding from California and Nevada to continue the boat inspection prevention program. The primary need going forward is to secure AIS control program funding to implement Tahoe's science-based AIS Control Implementation Plan and prioritize effective projects to push back existing populations of AIS.

Strategic Initiative Desired Outcomes: Secure funding for the AIS control program, implement the prioritized implementation plan, and align control projects to reduce existing AIS. Control is important to enhance and restore Tahoe's unique ecosystem impacted by the introduction of invasive weeds, clams, and fish. In addition to environmental protection, the program protects Tahoe's recreation and tourist-based economy.

Aquatic Invasive Species Program Funding

Multiple AIS partners including the Tahoe Resource Conservation District, TRPA, and UC Davis were collectively awarded approximately \$1.3 million for AIS control from the California Tahoe Conservancy through California's Proposition 1 grant program. A portion of the funding will go towards environmental analysis of control methods that include the use of ultraviolet light and dredging to control invasive aquatic plants, and electroshocking for control of invasive warm water fish. Funding will also go towards research of control strategies for curlyleaf pondweed to assess if existing technologies are effective on that species as its biology may make it more resistant to control strategies currently in use. Funding was awarded to UC Davis for a pilot project hypothesized to improve lake clarity to test methods of reducing mysid shrimp populations in Emerald Bay.

Funding was also awarded from the California Division of Boating and Waterways Quagga Prevention Grant in the amount of \$21,450 to continue implementation of the quality control ("Secret Shopper") evaluation of the boat inspection prevention program.

AIS Control and Prevention Implementation

- Work continued this summer on multiple control projects including Asian clam control at Sand Harbor State Park, ultraviolet light pilot testing at Lakeside Beach and Marina, plant control at Fleur du Lac homeowner's marina and along the southeast shore of Lake Tahoe.
- TRC Solutions, a consultant selected by TRPA and Lahontan Regional Water Quality Board, began work developing the joint environmental documentation necessary for the Tahoe Keys Property Owners Association's integrated control measures project that includes testing the use of aquatic herbicides.
- Watercraft inspection numbers are being finalized, but inspection staff performed approximately 5,500 boat inspections and 3,300 decontaminations this boating season. Inspectors intercepted 19 vessels contaminated with known and visible AIS, including three with quagga/zebra mussels.
- TRPA staff coordinated with the U.S. Laser Sailboat National Championship race held in Tahoe in July to inspect and decontaminate over 120 laser sailboats from across the country before the event.
- Quality control (Secret Shopper) evaluations of the boat inspection prevention program were performed by an independent party to ensure program protocols are being followed and good customer service is provided at boat inspection stations and launching facilities.
- Tahoe Boat Inspection Stations are closed for the 2017 summer boating season. The Truckee/Tahoe Station closed on September 4 and the other three stations closed on September 30.

ONGOING INITIATIVES AND ANNUAL ACTIVITIES

LONG RANGE & TRANSPORTATION PLANNING DIVISION

Long range planning priorities are established by TRPA's Governing Board annually and reviewed based on evaluations of progress toward achieving and maintaining environmental threshold standards every four years.

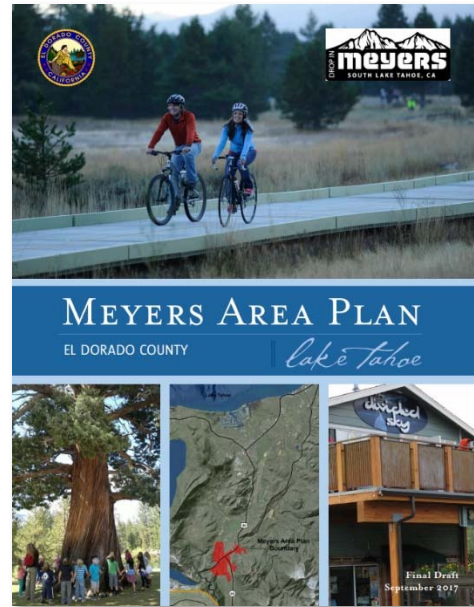
Transportation Program Updates

TRPA's transportation staff supported local agencies on project development, design, and stakeholder collaboration for a number of projects including El Dorado County's intersection improvement at Pioneer Trail and U.S. 50, the City of South Lake Tahoe's Sierra Boulevard project, and Ski Run to El Dorado Beach bike path projects.

TRPA also helped secure Federal Highway Administration (FHWA) technical assistance to coordinate and participate in a road safety audit along U.S. 50 from the South Tahoe "Y" to Trout Creek. The audit brought together FHWA, Caltrans, City of South Lake Tahoe, Tahoe Transportation District, and community members to walk the area, discuss challenges and opportunities, and brainstorm recommended safety improvements. Outcomes will inform the current Caltrans project underway along U.S. 50, longer-term improvement projects, and enhance coordination among partners.

Final Draft of the Meyers Area Plan Released

El Dorado County released the draft Meyers Area Plan for public comment this quarter. This is the first area plan from El Dorado County and updates the 1993 Meyers Community Plan. The area plan aims to improve traffic flow, increase walkability, feature recreational resources, and create a more cohesive community. The area plan is available online at <https://www.edcgov.us/Meyers/>. This area is going to the TRPA Regional Plan Implementation Committee in October.



Sustainable Recreation

In the face of long term population growth projections for both northern California and Nevada, Tahoe stakeholders are recognizing that managing visitation travel and visitor behavior are areas needing strategic attention. TRPA staff is continuing to build agency alignment around a sustainable recreation work program. This quarter, in partnership with the US Forest Service, we expanded the sustainable recreation multi-agency working group and started drafting vision and goals for the emerging program. TRPA's recreation threshold standards are severely dated and do not reflect the current state of knowledge or practice. Other land management agencies at the federal level have developed and are implementing frameworks for thinking about visitor management. To tap this expertise, TRPA applied for and received a National Park Service Rivers, Trails, and Conservation Assistance grant for 300 hours of technical assistance to support sustainable recreation planning and definition of recreational values for the Tahoe Region. Additional resources have been secured through the U.S. Forest Service, Tahoe Fund, and Tahoe Science Advisory Council.

Electric Vehicle Readiness

Making Tahoe e-vehicle ready is consistent with the policies of both California and Nevada, which are encouraging and actively incentivizing the transition from carbon fueled to electric powered vehicles. TRPA and partners continued implementation of the Tahoe-Truckee Plug-In Vehicle Readiness Plan this quarter by spearheading regional permit streamlining and coordination activities leading to the installation of 16 new electric vehicle DC fast charge stations including 14 at the Hard Rock Hotel & Casino's parking garage. Coordination of charging infrastructure leads to higher utilization and greater electric vehicle adoption is a critical component in reducing regional greenhouse gas emissions.

University of Nevada, Reno 2017 Global Climate Change Conference

Staff represented TRPA at the University of Nevada, Reno 2017 Global Climate Change Conference. Sustainability Program Coordinator Devin Middlebrook spoke on the local government in climate change panel for the conference, which was moderated by John Hester, TRPA's chief operating officer. The panel featured several elected officials, appointed officials, and staff who have worked to develop and implement public policy to address climate change at the local and regional government level in Nevada.



John Hester and Devin Middlebrook during the local government in climate change panel at the University of Nevada, Reno 2017 Global Climate Change Summit in September. Source: <https://www.facebook.com/GCCSummitNLP/>

CURRENT PLANNING DIVISION

TRPA achieves environmental threshold benefits through project implementation by the public and private sectors. The Current Planning Division reviews applications in a timely and consistent manner to serve the public and help facilitate environmental improvement and economic investment in Lake Tahoe communities.

Permit Application Review

The number of permit applications received this quarter is slightly down compared to the same time in 2016, largely in the categories of verifications, banking, and transfers, which tend to be precursor activity to future project applications.

**Summary of TRPA Application and Permitting Activity
Q1 2016 through Q3 2017**

	Q1 CY2016	Q2 CY2016	Q3 CY2016	Q4 CY2016	Q1 CY2017	Q2 CY2017	Q3 CY2017
Applications Received¹	166	235	291	187	152	234	242
Residential Projects ²	37	38	45	27	34	42	46
Commercial Projects ²	2	2	3	1	3	4	5
Recreation/Public Service Projects ²	16	10	9	5	10	9	9
Environmental Improvement Construction Projects	2	3	1	2	6	5	1
Shorezone/Lakezone Projects ²	2	14	6	5	9	7	7
Grading Projects	4	14	18	2	3	10	16
Verifications and Banking ³	78	116	166	119	63	132	123
Transfers of Development	6	20	25	6	10	10	5
Other ⁴	19	18	18	20	14	15	30

Notes:

- 1 Does not include Exempt projects, Qualified Exempt declarations, Tree Removal applications, or Administrative applications.
- 2 Includes New Development and Additions/Modifications
- 3 Includes Soils/Hydrology Verifications, IPES, Land Capability Verifications, Land Capability Challenges, Verifications of Coverage, Verifications of Uses, Site Assessments and Standalone Banking Applications
- 4 'Other' includes Historic determinations, Lot Line Adjustments, Temporary projects, Scenic, Underground Tank Removal, Subdivision of Existing Uses, Sign, Allocation Assignments, and other miscellaneous project types

Source: TRPA Accela Permit Records

Hearings Officer Meetings

The Hearings Officer this quarter reviewed four project applications:

- Three projects that involved additions or modifications to historic structures,
- A garage addition to an existing residence in an avalanche hazard area,
- A shoreline protective structure to stabilize 240 linear feet of shoreline that was eroding into Lake Tahoe,
- And three land capability challenges.

Major Development Projects Under Review or in Construction

The Gondola Vista Estates project broke ground this summer. The project is along Lake Parkway within the City of South Lake Tahoe's most active Tourist Core Area Plan and adjacent to Van Sickle Bi-State Park. The project will include 20 market rate whole-ownership residential condominiums within ten duplex structures.

Ten of the residential units were transferred from the former Colony Inn and converted to residential units. The tourist accommodation units were eligible to be converted to residential units because the Colony Inn was located in a stream environment zone that has since been restored. The two- and three-story structures will each have four bedrooms and a two-car garage. Building exteriors will be a combination of cedar siding and cedar shingle sidewalls and stormwater will be contained



Rendering of a finished condominium building in Gondola Vista Estates.

Source: <http://gondolavista.com/>

on-site by BMPs. Concentrating development in active commercial centers, the transfer of development from sensitive lands, and up to date BMP implementation make this project a showcase for the environmentally beneficial redevelopment concepts of the 2012 Regional Plan.

ENVIRONMENTAL IMPROVEMENT PROGRAM DIVISION

TRPA's Environmental Improvement Division leads the Lake Tahoe Environmental Improvement Program (EIP), a collaborative public and private, multi-jurisdictional capital investment program to conserve and restore Lake Tahoe's environment and enhance public recreation opportunities. The division leads the development of new financing strategies for future projects and programs, sets

priorities so limited funding achieves maximum threshold gain, and builds new associations beyond the Tahoe Region to improve implementation and leverage new funding sources.

2017 Lake Tahoe Federal Summit

TRPA led the coordination of all the EIP accomplishment reporting presented at the Lake Tahoe Summit on August 22. The accomplishment report is available in Appendix A of this quarterly report. The EIP Project Tracker, part of LT INFO, was widely used by project partners to collect performance measure data and program expenditures to show the collective impact of the EIP by its 50-plus partners. The Tahoe Interagency Executives Steering Committee worked to develop key messages to convey to elected officials including changing lake conditions because of climate change, tree mortality, and the continued emphasis on seeking appropriations for the 2016 Lake Tahoe Restoration Act.

Lake Tahoe Total Maximum Daily Load 5-Year Targets Met

For decades, Lake Tahoe's clarity has been among its most valued and recorded qualities. The collaboratively developed Lake Tahoe Total Maximum Daily Load Program (TMDL) provides a roadmap for local jurisdictions to reduce the flow of fine sediment and nutrients into the lake to ultimately achieve the goals laid out in the Lake Tahoe clarity challenge. Through implementation of major erosion control projects and other control projects such as reducing road abrasives, the local governments exceeded their first five-year clarity restoration target and reduced fine sediment loads by 12 percent, nitrogen loads by 6 percent, and phosphorus loads by 8.5 percent.

BMP Certificates Issued

TRPA issues best management practices (BMP) certificates to recognize a parcel's compliance with BMP requirements in TRPA's Code of Ordinances. The Stormwater Management Program targets priority properties for BMP compliance in coordination with the local jurisdictions to achieve local government's required pollutant load reduction. This includes concentrating on commercial and large multi-family (six units or more) properties that the Total Maximum Daily Load Program shows generate more pollutant load compared to single-family residential properties. This quarter, TRPA issued 85 BMP certificates: 80 for single family residential parcels, three for multi-family residential parcels, and two for commercial parcels.

BMP Certificates issued from January 1 to September 30, 2017					
California	Land Use	Total Certificates Issued Year to Date	Certificates Issued Through Permitted Projects	Certificates Issued Through Voluntary Compliance	Certificates Issued Through Enforced Compliance
	Single Family Residential	75	45	28	2
	Multi-Family Residential	13	10	3	0
	Commercial	5	4	1	0
	California Total	93	59	32	2
Nevada	Single Family Residential	39	17	12	10
	Multi-Family Residential	7	0	7	0
	Commercial	1	0	0	1
	Nevada Total	47	17	19	11
	Total Certificates Issued	140	76	51	13

Stormwater Strategic Initiative

The California “Road to Blue” initiative consultant team this quarter presented polling results from the Road to Blue survey to the Stormwater Funding Partnership. The survey gauged property owner interest in different funding mechanisms for stormwater operations and maintenance and supported a stormwater only property-related fee. Based on the polling results, a combined measure with transportation and snow removal was determined to be not feasible.

EIP Project Implementation

A number of important EIP projects started construction or were completed this summer and are highlighted below:

State Route 89/Fanny Bridge Community Revitalization Project – Highway Improvements and Dollar Creek Shared-Use Trail: Tahoe Transportation District is implementing the highway improvements and Placer County will implement the shared-use trail. Construction of this multi-year project in Tahoe City began this summer on both the highway improvements and the shared-used trail.

When complete, the project will reduce traffic congestion, improve bicycle and pedestrian safety, implement BMPs to reduce the amount of pollutants reaching Lake Tahoe from the local roadways, and be a catalyst for community and economic revitalization of the surrounding region.



Simulation of the proposed roundabout at the “Wye” in Tahoe City to be constructed as a part of the State Route 89/Fanny Bridge Community Revitalization Project (Source: Tahoe Transportation District).

Placer County is implementing the Dollar Creek Shared-Use Trail, a 2.2-mile section of trail. It is one of the last gaps for completing the North Lake Tahoe trail system and contributes to the goal of having a shared-use trail going all the way around the Lake Tahoe.

El Dorado Beach to Ski Run Boulevard Bike Trail: The City of South Lake Tahoe implemented this three-quarter mile Class 1 shared-use trail in 2017. The trail is significant because it fills a gap in the trail network in South Lake Tahoe adjacent to U.S. 50. The project implements both air quality and recreation threshold improvements.



Sand vault treating stormwater before it discharges to Lake Tahoe, constructed as part of the State Route 89 water quality improvement project. (Photo credit: Caltrans)

State Route 89 Water Quality Improvement Project - El Dorado County Line to State Route 28: Caltrans completed this multi-year project this summer. The project retrofitted five miles of roadway in Placer County with BMPs to reduce stormwater pollution from roadways. Improvements include stormwater infiltration and filtration, curb and gutter, stabilized shoulders, and widening the road to provide more space for bicyclists using the roadway.

Zephyr Cove Water Quality Improvement Project:

This project started in 2016 and was completed this quarter. Nevada Department of Transportation and Douglas County implemented this project to reduce the amount of fine sediment particles, nitrogen, and phosphorus delivered to Lake Tahoe generated from roadways. Untreated stormwater from city and county roadways is directly linked to Lake Tahoe clarity declines. Specific improvements include a large infiltration basin to reduce the volume of stormwater discharged to Lake Tahoe and improved collection and conveyance to reduce erosion.



Large infiltration basin to treat stormwater runoff as a part of the Zephyr Cove Water Quality Improvement Project. Photo credit: NTCD

Nevada Stateline to Stateline Bikeway – Incline Village to Sand Harbor: This bike trail is a three-mile segment from Incline Village to Sand Harbor. The Stateline to Stateline Bikeway will eventually be a Class 1 trail along the entire Nevada side of Lake Tahoe. Nevada Department of Transportation is the lead implementing agency for this project, which received both public and private funding. The project implements both air quality and recreation thresholds by improving trails in Lake Tahoe. Construction started in 2017 and the project will be completed in 2018.



Photo of active construction in summer 2017 for the Incline Village to Sand Harbor trail. Photo credit: NDOT

RESEARCH & ANALYSIS DIVISION

TRPA monitors hundreds of environmental threshold standards, performance measures, and management actions for progress and effectiveness. The agency formed a Research and Analysis Division to strengthen its relationship with the science community and provide the best possible information for policy decisions, operations, and accountability.

LakeTahoeInfo.org Development <https://laketahoeinfo.org/>

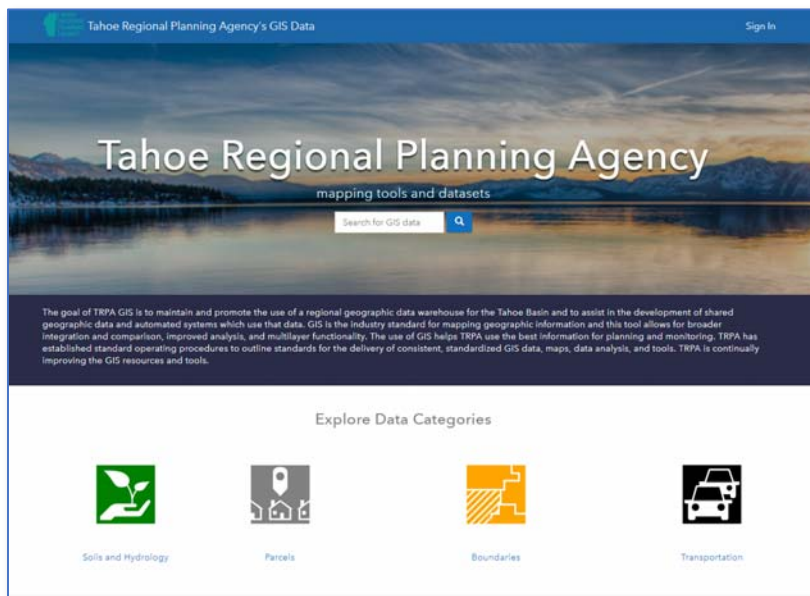
TRPA continued to develop the laketahoeinfo.org website this quarter with enhancements to make it more accessible, user friendly, and valuable to the user. Highlights and new features include:

- The initial steps to integrate the urban upland TMDL software into LT INFO was completed this quarter. This allows TMDL implementers to easily register catchments and report activities. <https://stormwater.laketahoeinfo.org/>
- Projects were identified and categorized within the system to allow for separate EIP and transportation project lists.
- The EIP Tracker homepage was redesigned to give it a consistent look with newer portals in the system. <https://eip.laketahoeinfo.org/>
- Navigation menus were updated throughout the site to ensure a consistent and predictable user experience. The updated menu structure makes it easier to move throughout the different portals and makes it clear which portal the user is in.
- The EIP Tracker on the LT INFO platform was recognized with a Best in Basin award at the TRPA Governing Board meeting in September.

GIS Open Data Hub

This quarter, TRPA launched a new TRPA GIS interface for the public to download GIS data from TRPA's website. Data can be downloaded by searching by name or browsing by category, making it easier for visitors to find the data they need.

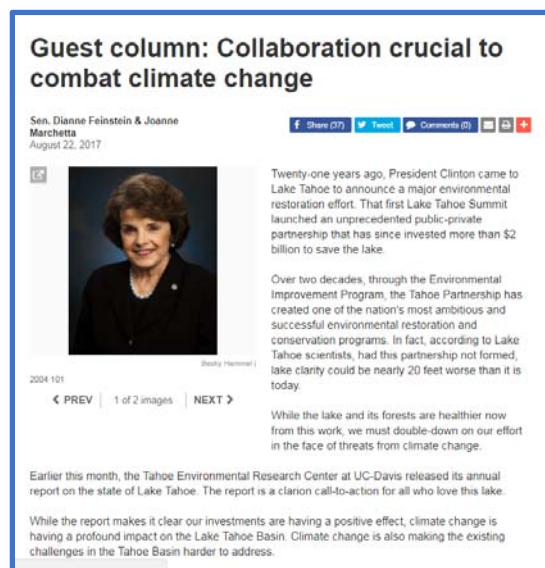
The goal is to maintain and promote the use of a regional geographic data warehouse for the Tahoe Basin. It also aims to assist in the development of shared geographic data and automated systems which use that data. The website can be found at <https://data-trpa.opendata.arcgis.com/>.



Screenshot of the home page of <https://data-trpa.opendata.arcgis.com/>

EXTERNAL AFFAIRS

TRPA supports a culture committed to public education, outreach, and community engagement to implement the 2012 Regional Plan. The External Affairs team leads public engagement initiatives in collaboration with a wide variety of agency and nonprofit stakeholders. This quarter, TRPA continued ongoing education and outreach in the Lake Tahoe Region to raise public awareness about issues at Lake Tahoe and improve public understanding about the role of TRPA.



2017 Lake Tahoe Summit: The External Affairs team played an integral role in the 2017 Lake Tahoe Summit, hosted by U.S. Sen. Dianne Feinstein in August at the Tallac Historic Site. The annual event brought national media attention to Lake Tahoe and the threats it faces from climate change. TRPA staff reached hundreds of event attendees through the Agency's informational display and also assisted with numerous activities leading up to and following the Summit. Two of those activities included Joanne Marchetta's Summit address and a follow-up media column co-authored with Senator Feinstein.

Legislative Affairs: External Affairs continued working with local, state, and federal offices to support TRPA's mission including funding requests for high-priority restoration projects. Ahead of the Summit, the team hosted a lake tour with more than 10 partner agency representatives from Nevada's Department of Conservation and Natural Resources. The team also organized field tours for various congressional offices to grow awareness of TRPA's mission and to garner support for implementation of the Lake Tahoe Restoration Act of 2016.



TRPA staff members Dennis Zabaglo and Julie Regan hosted an educational lake tour in August for Trevor Dean, staffer for US Senator Catherine Cortez Masto.



From left, Steve Teshara, Darcie Goodman Collins, Julie Regan, and Andrew Strain represented the Tahoe Partnership on Capitol Hill in Washington D.C. in September. The team met with members of Lake Tahoe's congressional delegation on priority programs authorized under the Lake Tahoe Restoration Act of 2016.

International Visits: Two landscape architects from Panguipulli Lake, Chili, visited Lake Tahoe for a week in September. Led by TRPA staff, the architects heard presentations from Lake Tahoe scientists, planners, planners, and representatives from nonprofits and government agencies. The architects plan to extend the reach of Lake Tahoe internationally by incorporating the information they learned into a demonstration project designed to encourage more sustainable development in their Andes range community.

Best in Basin Awards: In September, TRPA presented the annual Best in Basin awards program to the TRPA Governing Board, publicly recognizing 15 exceptional public and private projects around the lake completed in 2016.

Fire Fest: TRPA staff attended Fire Fest 2017, an annual event that brings together dozens of fire and land management agencies to interact with the public and help educate people about wildfire risk and preparedness at Lake Tahoe.



Dennis Zabaglo leading a boat tour for Tahoe In Depth readers.

Tahoe In Depth Boat Tour: External Affairs staff and Aquatic Resources Program Manager Dennis Zabaglo led a boat tour for four readers and subscribers to Tahoe In Depth. The boat tour was offered as a raffle prize to boost subscriptions to help publish the award-winning environmental newspaper. Through the tour, the readers got to spend a morning on the lake and learn more about environmental issues facing Tahoe, from forest health to lake clarity, aquatic invasive species, transportation, and community revitalization.

FINANCE, INFORMATION TECHNOLOGY, & FACILITIES

Finance Update

Comparing the first quarter of the current fiscal year (2018) versus last fiscal year, state revenues are up almost \$400K due to supplemental funding from both states to support TRPA's Shoreline Initiative. This is a one-time supplemental appropriation. Fees for service have declined, primarily in planning fees. Other revenues are within normal variations based on timing and payment. Compensation is up slightly due to the timing of payroll periods. Contracts are down, but this is not unusual during this time of the year. TRPA receives revenue from both states during the first quarter of the year, resulting in a substantial net fund balance. That will decrease to zero as we spend down against those funds during the balance of the fiscal year.

Current assets increased by \$5.6M during the quarter due to annual funding received from the States of California and Nevada. This represents funding for operations for the full fiscal year and will decline over the balance of the year. Long term assets reflect the net book value of TRPA's office building.

Tahoe Regional Planning Agency			
First Quarter Revenue vs. Expenses			
	FY 2018	FY 2017	Change
Revenues			
State Funding	6,825,441	6,427,187	398,254
Grants	140,474	179,359	(38,884)
Fees for Service	796,343	963,636	(167,293)
Other	235,401	235,030	371
Total	7,997,659	7,805,212	192,447
Expenses			
Compensation	1,336,375	1,237,309	99,065
Contracts	318,309	525,913	(207,604)
Financing	10,315	9,445	870
Other	382,387	369,205	13,182
Total	2,047,386	2,141,873	(94,486)
Net Fund Balance	5,950,273	5,663,339	286,934

Current liabilities decreased by \$1.4M due to accounts payable (A/P). Since the beginning of the quarter was the end of fiscal year 2017, we accrued significant contract costs to ensure they were properly recorded against fiscal year 2017. This kind of accrual is only made at fiscal year-end. The accrued invoices have been paid, so the A/P balance has dropped. The related expenses will show up in fiscal year 2017's financial statements. Mitigation funds and securities have increased due to ongoing permitting activity. Both are agency funds, meaning the monies are held in trust and not

available for TRPA operations. The substantial deferred revenue balance is largely comprised of Proposition 1B transportation funding. We receive that funding in advance of expenditures.

TRPA continues to work with the State of California on the budget for fiscal year 2019. We have requested a small supplement to match Nevada funding for an employee cost of living adjustment (Nevada budgeted for those funds last year). TRPA's Finance Department has completed all fiscal year 2017 fourth quarter invoices and status reports for grantors. The department's current focus is supporting the financial audit.

Tahoe Regional Planning Agency				
First Quarter Change in Net Assets				
	Beginning	End	Change	
Assets				
Current Assets	23,359,464	28,912,143	5,552,679	
Long Term Assets	9,594,629	9,594,629	0	
Total	32,954,093	38,506,772	5,552,679	
Liabilities				
Current Liabilities	1,924,262	493,802	(1,430,460)	
Deferred Revenue	2,121,867	2,126,483	4,616	
Deposits	442,357	442,957	600	
Long Term Debt	8,445,000	8,445,000	0	
Mitigation Funds	9,646,494	10,010,456	363,962	
Securities	4,681,850	5,138,042	456,192	
	27,261,830	26,656,739	(605,090)	
Net Fund Balance	5,692,263	11,850,033	6,157,770	

Facilities & Information Technology Update

During the past quarter, we completed BMP maintenance and repaired the parking lot at the TRPA office building. IT continues to support staff by upgrading systems for usability and reliability.

HUMAN RESOURCES

The pay system at TRPA has been undergoing a redesign. This quarter, all remaining pay ranges were reviewed and approved by the Governing Board. A working group of senior staff and managers designed the process to deliver merit-based pay increases, which begins to close the gap toward competitive, market-based pay. The group will continue to work on new pay practices and policies for future merit pay delivery and the bonus pay program.

The Senior Leadership Team completed work on a new set of core competencies for the agency:

- Self-Development
- Critical Thinking and Continuous Improvement
- Collaborative Relationships and Teamwork
- Initiative and Results Focus
- Communication
- People Leadership
- Agency Leadership

These new core competencies have been rolled out to agency staff and are being incorporated into the agency's processes and systems, including performance reviews and interviews.

Three new staff members started with the agency this quarter. See the "New TRPA Staff" section below for details on what these new team members will be working on. There have been a few promotions of current agency staff this quarter. Adele Gerz with the Research and Analysis Division was promoted to research technician and Joan Douglas with the Stormwater Management Program

was promoted to environmental technician. Mason Bindl with Research & Analysis was promoted to the associate level, focused on GIS and data analysis. Katy Waldie was promoted to the senior management assistant level, supporting legal and other departments.

The Research and Analysis Division welcomed Emily Ulrich as a new GIS intern, the last intern to join TRPA this year after a successful and productive summer of interns. Originally from Dayton, Nevada, Emily has a bachelor's degree in environmental science from University of Nevada, Reno and a master's degree in biological studies from South Dakota State University. She joins TRPA after working at the Nevada Land Trust and has worked as a University of Nevada, Reno research assistant on aquatic invasive species.

New TRPA Staff

Kira Smith, Long Range and Transportation Planning

Kira Smith started with TRPA in July as an assistant planner with Long Range and Transportation Planning. Kira interned with TRPA's Transportation Department in 2015 and helped produce the 2015 Community Outreach Report. She will assist with implementation of the Regional Transportation Plan, including improving transit, enhancing the transportation demand management programs, and providing expert GIS support. Kira grew up in Meyers and has a bachelor's degree in geography and environmental studies from UCLA with a double minor in GIS and film and television. Most recently, Kira worked as an assistant planner for Transportation Management & Design, Inc., in Carlsbad, California focusing on transit and GIS.



Sarah Traiman, Stormwater Management Program

Sarah Traiman joined TRPA in September as an environmental improvement technician in the Stormwater Management Program. Sarah will facilitate implementation and maintenance of best management practices (BMPs) on developed properties. Sarah has a forestry degree from the University of Northern Arizona in Flagstaff and most recently worked with the U.S. Forest Service Urban Forestry Management Program as a hazard tree removal inspector.

Alyssa Bettinger, Long Range and Transportation Planning

Alyssa Bettinger joined TRPA in July and moved to Tahoe from Seattle where she worked as a data analyst with the transportation planning team at the Puget Sound Regional Council. Alyssa has a bachelor's degree in environmental studies from Western Washington University and studied biology, tropical ecology, and Spanish in Costa Rica. Alyssa will work on a number of long-range planning projects such as the shoreline plan, development rights, code of ordinance updates, and other research projects.



APPENDIX A

Environmental Improvement Program Handouts from the 2017 Lake Tahoe Summit



Photo by Drone Promotions

Lake Tahoe

LAKE TAHOE SUMMIT • 2016 ACCOMPLISHMENTS
Environmental Improvement Program

August 2017



2016

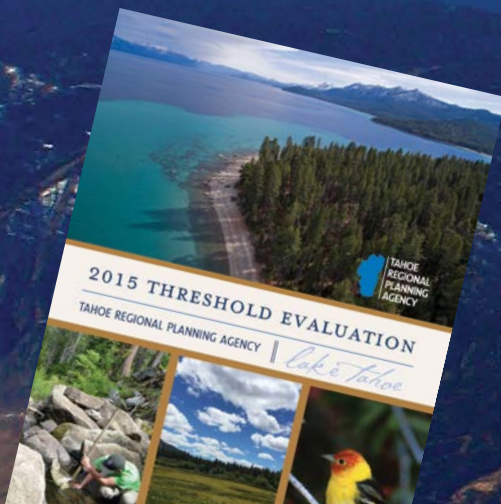
AT A GLANCE

Launched in 1997, the basin-wide Lake Tahoe Environmental Improvement Program (EIP) is one of the nation's most ambitious and successful conservation and restoration programs. Partners completed 20 EIP projects in 2016.

TMDL 5-Year Targets Achieved: The Total Maximum Daily Load (TMDL) Program exceeded its first 5-year clarity restoration target and local governments reduced fine sediment loads by 12 percent, nitrogen loads by 6 percent, and phosphorus loads by 8.5 percent. With this first round of reductions, approximately 268,000 pounds of fine sediment is no longer washing into the lake with stormwater each year.



Forest Health Funding: Tahoe Fire and Fuels Team partners secured more than \$25 million to reduce wildfire risk, improve forest health, and help people create defensible space around their homes.



Thresholds: TRPA published its latest Threshold Evaluation Report which found continued progress toward threshold attainment and evidence of the long-term recovery of the Tahoe Region.

Lake Tahoe Summit: Former U.S. Sen. Harry Reid hosted the 20th annual Lake Tahoe Summit featuring President Barack Obama. The event put a national spotlight on 20 years of collaboration, conservation, and restoration through the EIP.

Lake Tahoe Restoration Act: Congress passed bipartisan legislation authorizing up to \$415 million for conservation and restoration projects at Tahoe over the next seven years.



THE TAHOE PARTNERSHIP

The EIP is an unparalleled partnership working to achieve the environmental goals for the Region. Local, state, and federal government agencies, private entities, scientists, and the Washoe Tribe are all collaborating to restore the clarity and environmental health of Lake Tahoe. The collective impact of 50-plus organizations this past year resulted in improved forest and ecosystem health, progress on lake clarity, restored fish and wildlife habitat, and better public access for recreation at Lake Tahoe. Emerging threats from climate change, invasive species, and wildfire risk are challenging this partnership in unprecedented ways.

2016 EIP ACCOMPLISHMENTS HIGHLIGHTS:

10,750

feet of **stream channel** restored

33

miles of **roadway upgraded** to reduce erosion and stormwater pollution

4,331

acres of treatment to clear **forests of hazardous fuels**

7,869

boats inspected for **aquatic invasive species**

39

boats containing AIS **intercepted**
(4 with zebra/quagga mussels)

69.2

feet average annual **lake clarity**

4.9

acres treated for **aquatic invasive plants**

120

acres of **SEZ** restored

425

feet of **public shoreline** added





WATER QUALITY



Photos by Drone Promotions (left) and Nevada Tahoe Conservation District (right).

The 1960s building boom in the Tahoe Basin caused a precipitous decline in the lake's clarity because of increased stormwater runoff carrying fine sediment, nitrogen, and phosphorus into the lake. Much work is being done to capture and treat stormwater runoff and to restore important natural filters like meadows and wetlands. Warmer temperatures caused the growth of tiny algae that thrive in warmer conditions and reduced clarity in summer 2016 to 56 feet. But winter clarity improved, showing that environmental improvement projects around the lake are working.

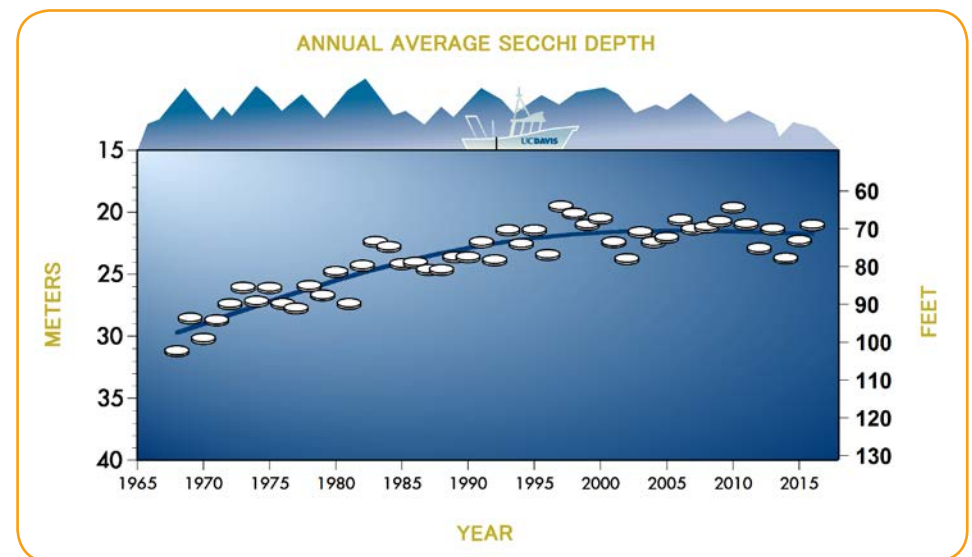
2016 ACCOMPLISHMENTS

- Upper Truckee River Reach 5 Restoration: The U.S. Forest Service restored 7,340 feet of stream channel and 120 acres of stream environment zone.
- Highway 89 Water Quality Project: Caltrans completed the last two major segments, including technical terrain in the roadway switchbacks leading to Emerald Bay.
- Burke Creek Highway 50 Crossing and Realignment: Nevada Tahoe Conservation District removed 8,712 square feet of coverage from a sensitive stream area and restored 750 feet of stream channel.
- Sierra Tract Erosion Control: The City of South Lake Tahoe completed the final phase resulting in road drainage upgrades and stream zone restoration.

- TMDL: Met the first 5-year target for lake clarity, reducing fine sediment pollution by 268,000 pounds each year going forward.

FUTURE PRIORITIES

- Meet the 2021 TMDL pollutant reduction targets.
- Continue Upper Truckee River Watershed restoration.
- Secure funding for operations and maintenance of water quality infrastructure to ensure ongoing effectiveness of projects.



Graphic courtesy of UC Davis: <http://terc.ucdavis.edu/stateofthelake>



AQUATIC INVASIVE SPECIES

Photos by Novus Select

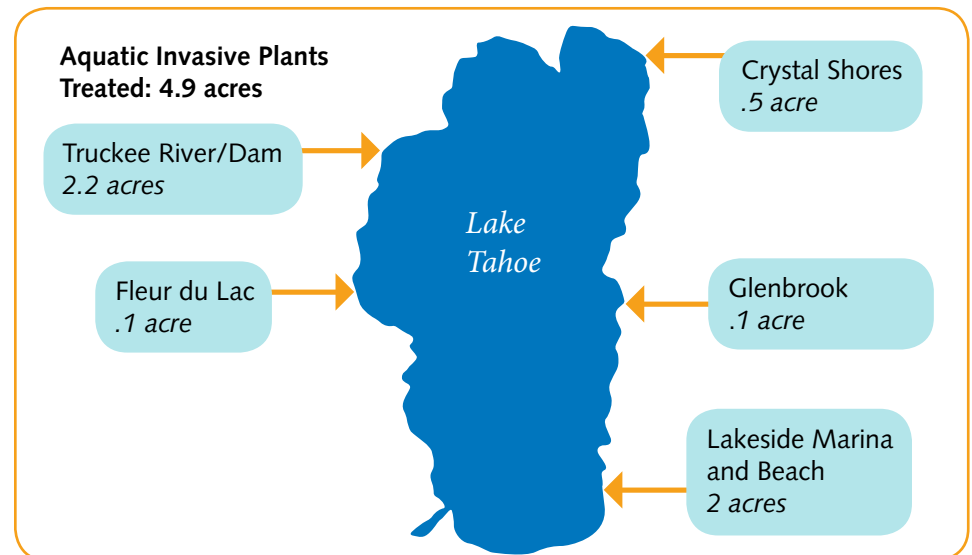
The nationally recognized Tahoe Aquatic Invasive Species (AIS) Program has prevented the introduction of quagga and zebra mussels and the spread of other harmful invasive species into Lake Tahoe since 2008. The program, led by TRPA and the Tahoe Resource Conservation District, also implements projects to control and reduce populations of invasive plants, clams, and warm water fish through a science-based, prioritized plan. The treatment of these AIS populations helps to improve lake clarity and restore habitat for native species. Managers and scientists continue to work together to monitor lake conditions and complete research to prevent the introduction and spread of invasive species in Lake Tahoe.

2016 ACCOMPLISHMENTS

- Inspected 7,869 boats for AIS.
- Intercepted 39 boats carrying AIS, four with quagga or zebra mussels.
- No new AIS invasions detected in Lake Tahoe.
- Treated 4.9 acres of lake for aquatic invasive plants.
- The League to Save Lake Tahoe's Eyes on the Lake program uses trained volunteers to detect and monitor locations of AIS. Certified 105 new members in 2016.
- Registered 624 new Tahoe Keepers to ensure non-motorized watercraft are not spreading AIS.

FUTURE PRIORITIES

- Contain and treat invasive plants in the Tahoe Keys.
- Implement a lake-wide invasive species monitoring plan in partnership with nearshore water quality monitoring.
- Explore emerging techniques to treat existing invasive species such as Asian clams and Eurasian watermilfoil.
- Enhance implementation of the western regional AIS inspection mobile application.
- Continue to work with the boat industry to promote innovative boat design to lower the risk of AIS.





TRANSPORTATION & CONNECTIVITY

Fanny Bridge rendering courtesy of Tahoe Transportation District (left). West Shore Tahoe Trail ribbon cutting. Photo by Morgan Beryl (right).

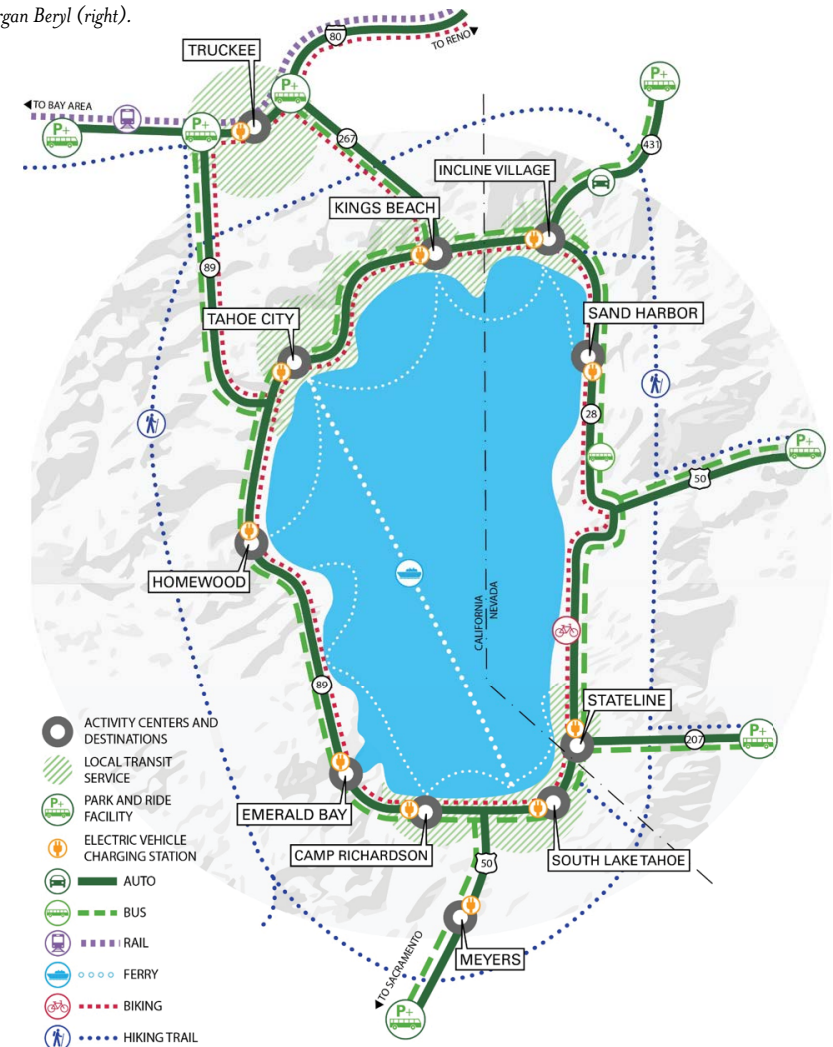
Lake Tahoe is within driving range of three large urban centers—the San Francisco Bay Area, Sacramento Valley, and Reno metropolitan area—making it a highly sought after vacation destination. Implementing local and regional transportation solutions are a high priority to improve connectivity and safety, address resident and visitor travel needs, and reduce environmental impacts. The 2017 Regional Transportation Plan lays out a blueprint to transform transportation at Lake Tahoe.

2016 ACCOMPLISHMENTS

- Incline to Sand Harbor Multi-Use Path groundbreaking (expected completion 2018).
- SR89/Fanny Bridge Community Revitalization groundbreaking (expected completion 2019).
- Completed 1.1 miles of the West Shore Tahoe Trail at Homewood.

FUTURE PRIORITIES

- Enhance transit to provide more frequent service on all main routes.
- Link North and South Shore transit services.
- Improve delivery and access of real-time travel information to the public.
- Continue implementation of a fully connected path around the lake.





CLIMATE CHANGE AND SUSTAINABILITY



Photo courtesy of Edgewood Tahoe (left). Tahoe City Lodge rendering courtesy of Tahoe City Lodge (right).

Climate change is confronting mountain communities throughout the American West, and Lake Tahoe is no exception. Increasing temperatures threaten everything from Lake Tahoe's famous water clarity to the health of its forests and recreation-based economy. Local, state, federal, and private sector partners at Lake Tahoe are working to strengthen the resiliency of the Region's environment, create sustainable communities, and reduce greenhouse gas emissions.

TRPA's Regional Plan is spurring sustainable redevelopment that creates walkable, bikeable communities and restores marshes, wetlands, and streams. The plan plays an important role in Tahoe's ability to mitigate the effects of climate change.

2016 ACCOMPLISHMENTS

- With a new plug-in electric vehicle readiness plan, Tahoe-Truckee partners are working to improve charging infrastructure and make the region a leader in the deployment of zero-emission electric vehicles.
- TRPA's award-winning Sustainability Action Plan outlines steps organizations and individuals can take to reduce greenhouse gas emissions and improve Tahoe's sustainability. Progress is tracked online through the Sustainability Dashboard at laketahoeinfo.org.
- Award-winning Placer County Area Plan and LEED-level Tahoe City Lodge approved.
- Edgewood Tahoe invested over \$1 million toward environmental restoration of the Edgewood Lodge and property.

FUTURE PRIORITIES

- Vail Resorts has made an "Epic Promise" to reduce their environmental footprint by committing to zero net emissions and zero waste to landfills by 2030.
- The City of South Lake Tahoe committed to getting 100 percent of its electricity from renewable sources by 2032.
- UC Davis, with funding from the California Tahoe Conservancy, is studying the impacts of climate change and extreme weather events on major existing and future restoration and storm water projects in the Lake Tahoe Basin.
- Lahontan Water Board has been working with stakeholders since November 2014 to develop a climate change adaptive management strategy for the Lahontan Region. The strategy focuses on ensuring the Water Board regulations protect water quality and maintain ecosystem resiliency, and is anticipated for Water Board consideration in 2018.





laketahoeinfo.org web site. Photo by Drone Promotions (left). Citizen Science App. Photo by UC Davis (right).

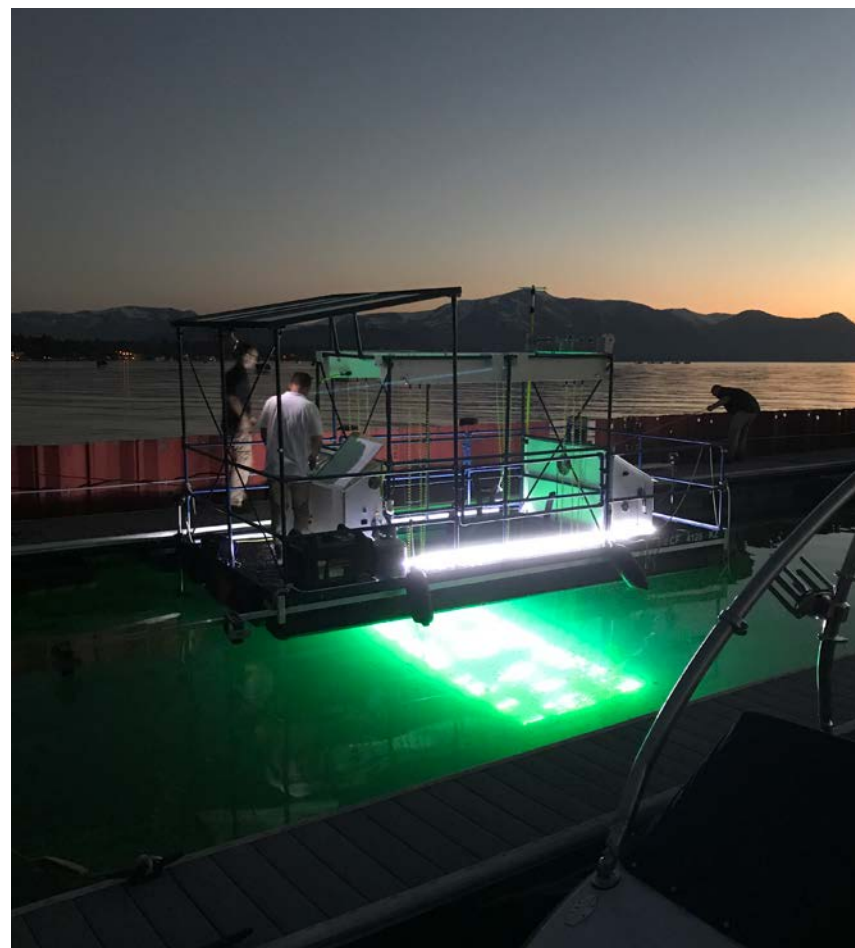
The Tahoe Basin continues to be a national leader in implementing new technology and spurring innovation. EIP partners are finding new and better ways to share information with the public and implement new tools and methods in the field.

2016 ACCOMPLISHMENTS

- It's all online at laketahoeinfo.org. All EIP accomplishments and expenditures are now available real-time on the LT Info platform. The platform has become the go-to place for Tahoe Basin information, progress, and results.
- Citizen scientists at Tahoe can now help lake researchers by recording observations of water clarity, water color, algae, invasive species, litter, and more at the UC Davis Citizen Science App. This "perceptual data" will help lake researchers better understand Lake Tahoe's fragile nearshore.
- Tahoe managers and scientists are collecting real time data through underwater sensors, drone and aerial photography, and computer modeling.

FUTURE PRIORITIES

- Continue to expand LT Info with the Environmental Threshold Dashboard, Sustainability Dashboard, and Transportation Tracker.
- Test new restoration methods with pilot projects. UV light is currently being tested in Lakeside Marina to determine its effectiveness in treating aquatic invasive weeds.



UV Light test in action. Photo by: Inventive Resources Inc.



SCIENCE AND MONITORING

Lake Tahoe is becoming the “world’s smartest lake” with its long-term data record; real-time measurements from over 25 stations around the Tahoe Basin, including the addition of underwater nearshore sensors, remote sensing from autonomous underwater vehicles, satellites, aerial drones and the use of computer modeling. These new approaches and tools are all focused on quantifying the changes that are happening and helping managers to understand what actions will be most effective for the EIP.

2016 ACCOMPLISHMENTS

- Full membership of the Tahoe Science Advisory Council established.
- New multi-institution research on drivers of periphyton (nearshore attached algae) growth.
- Analysis of the impacts of drought on Tahoe’s forests.

FUTURE PRIORITIES

- Update the Tahoe Basin Environmental Threshold Standards to incorporate new science and evaluation methods.
- Continue research and monitoring of the nearshore environment.
- Continue research on the effects of climate change to inform management actions.
- Continue research and modeling of air quality effects from wild and prescribed fires.

Photos: Drone Promotions (left) and Novus Select (right).

MONITORING SITES

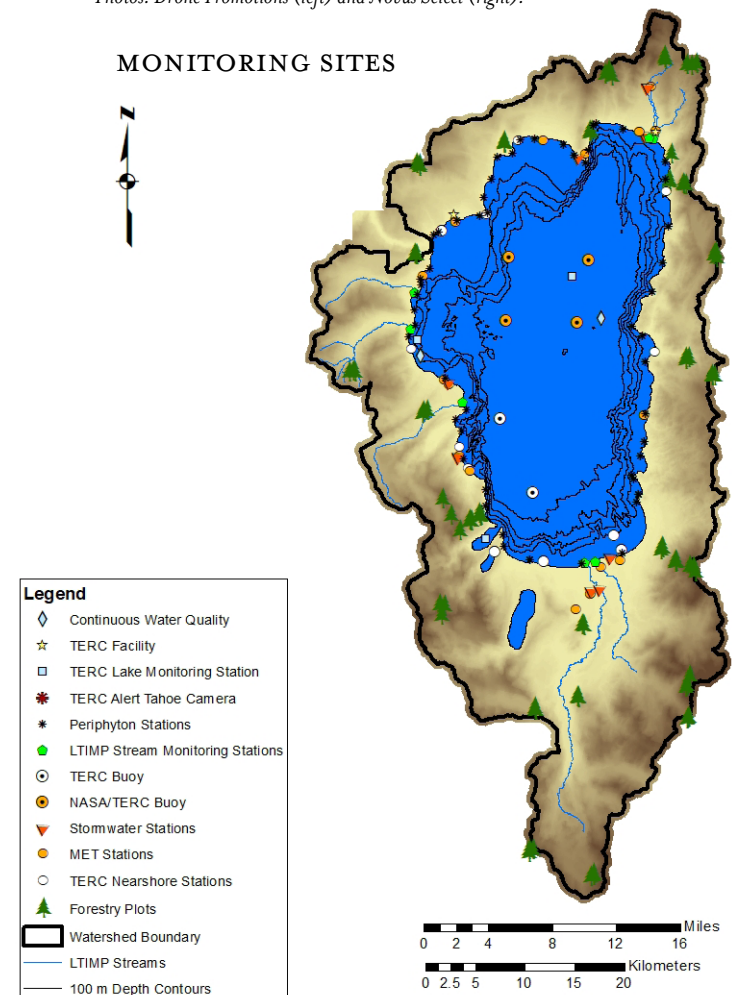


Figure courtesy of UC Davis.



FOREST HEALTH & FUELS REDUCTION



Photos: Drone Promotions (left) and Tom Lotshaw (right).

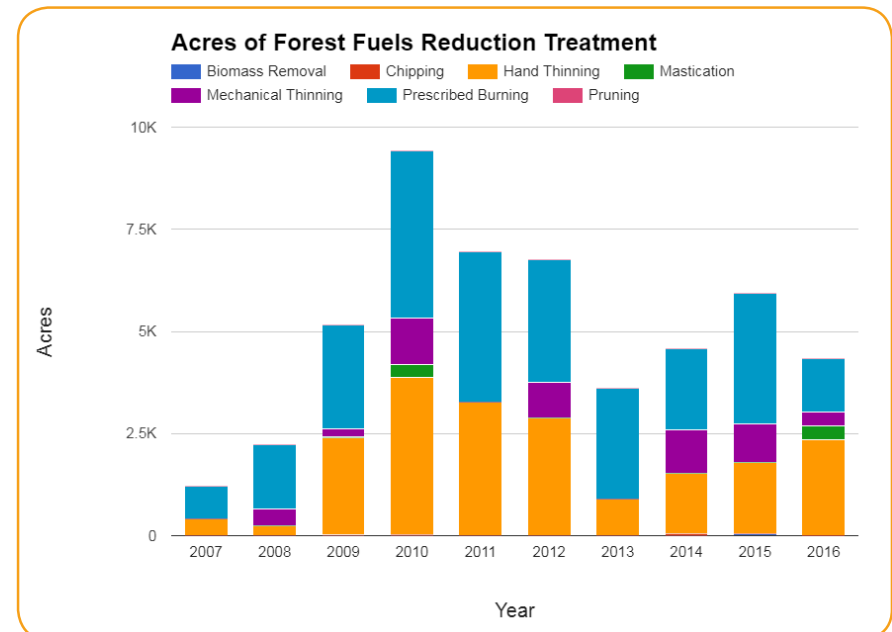
Treating the wildland urban interface to protect the Tahoe Basin from catastrophic wildfire and building fire-adapted communities remains a top priority for the Tahoe Fire and Fuels Team. At the same time, new ideas and approaches are beginning to take shape when it comes to restoring and maintaining forest health. The Tahoe Fire and Fuels Team is working to increase the pace and scale of forest treatment projects by developing large-landscape projects that can serve as a model throughout the Tahoe Basin.

2016 ACCOMPLISHMENTS

- Updated the 10-year Multi-Jurisdictional Fuel Reduction Strategy to include large-landscape projects.
- Revised the U.S. Forest Service Lake Tahoe Basin Management Unit Forest Plan.
- Completed four urban forestry thinning projects on California Tahoe Conservancy land.
- Treated 1,408 acres of forest through the U.S Forest Service South Shore Hazardous Fuels Project.
- Treated 1,008 acres of forest through the U.S Forest Service Incline Hazardous Fuels Project.
- Secured more than \$25 million for future projects to reduce hazardous fuels in Tahoe forests.

FUTURE PRIORITIES

- Complete initial treatments of the wildland urban interface basin-wide.
- Update indicators and standards to better monitor and evaluate forest health.
- Mobilize the newly formed Lake Tahoe Tree Mortality Task Force to address dead and dying trees in the basin.



LAKE TAHOE WEST

Photos: Drone Promotions (left) and Mason Bindl (right).

The forests, lakes, and alpine peaks of Lake Tahoe's West Shore make it one of America's most iconic and heavily visited landscapes. Yet persistent drought, climate change, overstocked forests, and a potential bark beetle epidemic threaten its ecology, economy, and culture.

The goal of the Lake Tahoe West Restoration Partnership is to restore the resilience of the West Shore's forests, watersheds, recreational opportunities, and communities to such threats. The planning area includes 59,013 acres of federal, state, local, and private lands, from Emerald Bay to Squaw Valley. The resilience and restoration strategy will serve as a model for other forests both in and outside the basin.

2016 ACCOMPLISHMENTS

- Completed a stakeholder assessment and charter.
- Formed interagency planning teams including an integrated science team.

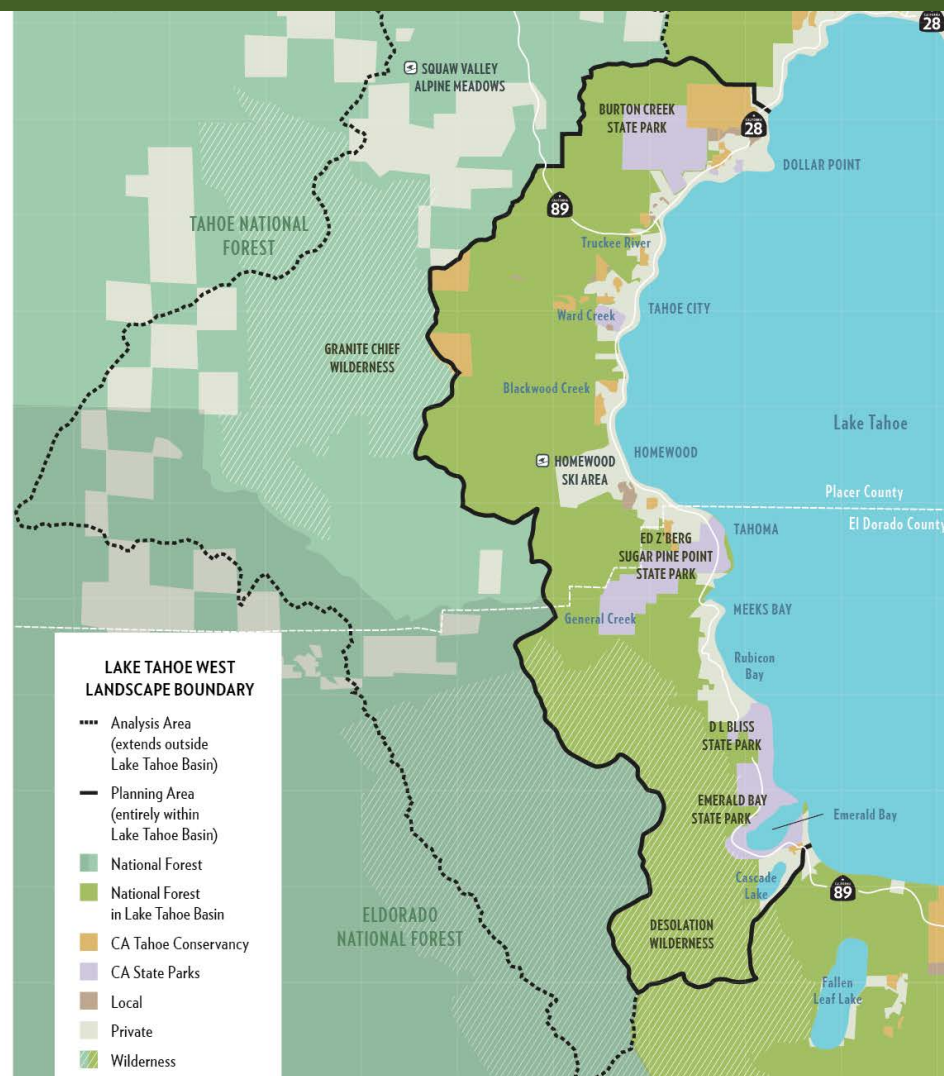
FUTURE PRIORITIES

- Complete the Landscape Resilience Assessment and Restoration Strategy.
- Complete scientific modeling and economic analyses.

PARTICIPATING AGENCIES

- National Forest Foundation
- U.S. Forest Service
- California Tahoe Conservancy
- California State Parks
- Tahoe Regional Planning Agency
- Tahoe Fire and Fuels Team

www.nationalforests.org/laketahoewest



SUSTAINABLE RECREATION

Lake Tahoe is experiencing increased recreation-based visitation. Between 2010 and 2015, National Forest visits within the Tahoe Basin increased by 33 percent, from 5.78 million in 2010 to more than 7.72 million in 2015. Economic and demographic shifts have placed recreation as the future driver of Lake Tahoe's changing economy. The Tahoe Partnership is working together to implement strategies that help meet visitor demand while protecting the basin's unique natural resources.

2016 ACCOMPLISHMENTS

- The U.S. Forest Service and Tahoe Area Mountain Bike Association built the new Kingsbury Stinger Trail by decommissioning and restoring eroded areas of the old trail.
- Improved 25 miles of the Tahoe Rim Trail.
- Improved seven recreation facilities including Sand Harbor State Park, Cave Rock State Park, and Heavenly Mountain Resort.

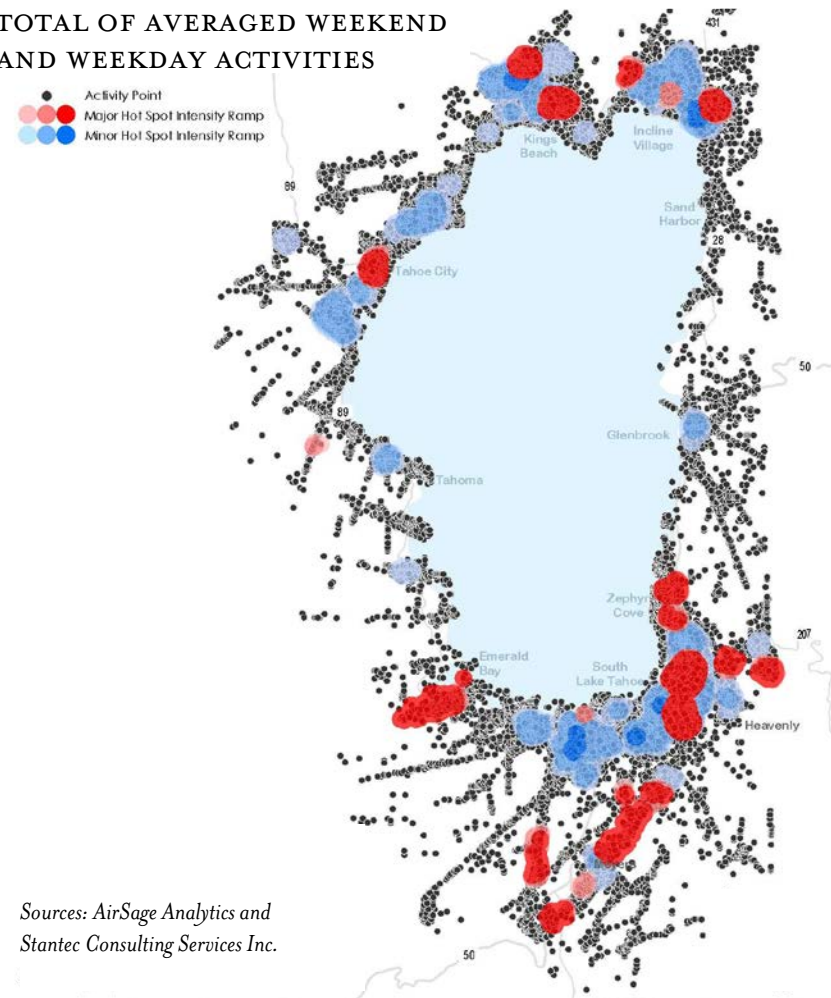
FUTURE PRIORITIES

- Develop the SR 89 Recreation Corridor Plan to address congestion and safety around Emerald Bay.
- Complete the U.S. Forest Service winter recreation plan.
- Improve transit linkages between town centers and recreation sites.
- Identify high-priority areas for increased public access and facility improvements.
- Update shoreline regulations to enhance recreation access.



Amy Fish rides the new Kingsbury Stinger Trail. Photo by TAMBA (left). SR 89 rendering courtesy TRPA. (right).

TOTAL OF AVERAGED WEEKEND AND WEEKDAY ACTIVITIES



Sources: AirSage Analytics and Stantec Consulting Services Inc.

LOOKING FORWARD

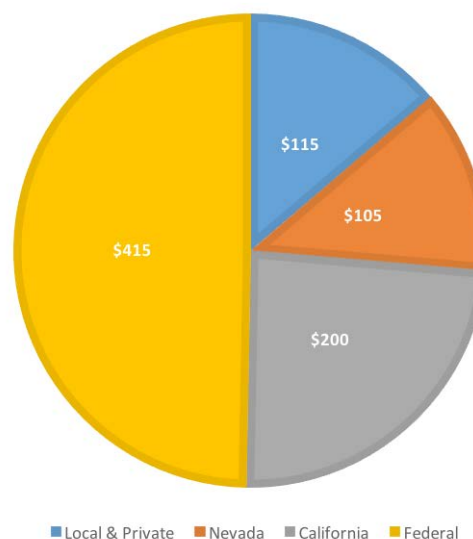
Photo by Drone Promotions

Future support of the Environmental Improvement Program is crucial to protecting the investments and accomplishments of the state, federal, and local governments along with the private sector and the Washoe Tribe. With emerging threats from climate change, wild-fire, and invasive species, continuing the commitment to Lake Tahoe is more important than ever.

EIP FUTURE FUNDING TARGETS

- **Federal:** Seek \$415 million in appropriations for the newly authorized 2016 Lake Tahoe Restoration Act.
- **Nevada:** Access remainder of \$105 million in authorized bond funding.
- **California:** Seek \$200 million from bonds and other sources.
- **Local:** Work collaboratively across jurisdictions to seek funding for basin-wide operations and maintenance costs.
- **Private:** Incentivize environmentally beneficial redevelopment in town centers and engage local citizens and visitors in conservation and stewardship activities.

EIP FUTURE FUNDING TARGETS
IN MILLIONS



EIP INVESTMENT BY SECTOR: 1997-2016

- **Federal:** \$655.2 million
- **State of California:** \$813 million
- **State of Nevada:** \$131 million
- **Local Government:** \$108.5 million
- **Private:** \$353.9 million

*Thank you to Lake Tahoe's
Congressional Delegation*

The 2016 Lake Tahoe Restoration Act authorizes up to \$415 million over 7 years for key EIP Programs including Forest Health, Aquatic Invasive Species, Watershed Restoration, and Performance and Accountability.



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